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

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INTERNATIONAL

SIMULTANEOUS METEOROLOGICAL OBSERVATIONS

INCLUDING A MONTHLY SUMMARY WITH DAILY BULLETINS AND ACCOMPANYING CHARTS.

FOR THE MONTH OF MAY, 1881.

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PRINTED FOR EXCHANGE WITH CO-OPERATING OBSERVERS.

WASHINGTON, D. C.:
JUNE, 1882.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 1, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco	‡		30.07	763.6	70.9	21.6	77	NE			1		2			0	0	Fair	Dr. Ollive.
Nemours	‡		29.91	759.6	67.5	19.7	80	N			3		4			0	0	Cloudy	Raynard.
Algiers	‡		29.95	760.7	76.3	24.6	57	NNE			2		4			0	0	Cloudy	Nicolas.
La Calle	‡		30.04	762.9	77.0	25.0	47	S			4		2			0	0	Fair	Fonfrède.
Tunis	‡		30.15	765.7															Jacques.
Sfax	‡		30.13	765.2															Gau.
Saida	‡		30.01	762.3	84.2	29.0	89	NW			1		6			0	0	Cloudy	Dumas.
Tebessa	‡		30.13	765.4	72.0	22.2	16	W			1		0			0	0	Clear	Watrin.
Geriville	‡																		Lonchamp.
Laghouat	‡		30.18	766.6	69.8	21.0	19	E			2		0			0	0	Clear	Herbin.
Biskra	‡		30.17	766.4															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.38	771.6	30.47	773.9	48.7	9.3	87	S	4	1.8			0			0	0	Very fine	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.51	749.6	30.05	763.3	65.1	18.4	54	SW			2		1			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.19	741.3	29.94	760.4	63.0	17.2	45	SW	4.3	1.9			6			0	0		Dr. Wierzbicki.
Eperies	29.15	740.4	30.02	762.6	55.6	13.1	43	SE			3	ics	0			0	0		Julius Mikolik.
Gratz	‡ 28.73	729.6	29.95	760.7	63.9	17.7	51	SE			2		0			0	0		Andreas Rospini.
Hermannstadt	28.71	729.2	30.16	766.0	52.5	11.4	52	NW			2		4			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.57	725.6	29.87	758.7	64.9	18.3	45	N			1		3			0.177	4.5		The Staff.
Lemberg	29.03	737.4	30.03	762.7	50.7	10.4	53	SW			2		1			0	0		Dr. T. Stanecki.
Pola	30.04	763.1	30.16	766.0	59.2	15.1	61	SE			2		7			0	0		I. R. Hydrographic Office.
Szathmar	29.67	753.5	30.13	765.4	54.3	12.4	52	SE			2		2			0	0		Beicht Peter, S. J.
Szegedin	29.84	757.9	30.12	765.1	54.7	12.6	46	SW			1		0			0	0		Karl Stancel.
Trieste	30.08	764.1	30.19	766.7	59.2	15.1	49	NW			1		5			0	0	½ Clear	Secco.
Vienna	29.25	743.0	29.95	760.8	65.7	18.7	38	SE			2		2			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed May 1, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.40	746.7	29.50	749.3	42.0	5.6	98	NE	15	6.7			10			0.265	6.7	Raining	W. Boswell.
Armagh, Observatory	29.23	742.4	29.46	748.3	51.6	10.9	77	SW	4	1.8									S. Call.
Bidston, Liverpool Obs'y			29.53	750.0	54.2	12.3	54	SW	26	11.6			5					D. clouds	John Hartnup.
Bolton, Sharples	29.00	736.6	29.53	750.0	49.7	9.8	73	W	18	8.0			6					D. clouds	Thomas Mackereth.
Bradford, Yorkshire																0.01	0.3		J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.91	759.7	29.94	760.5	82.0	27.8	71	NE			2		4					D. clouds	Corpl. J. Surgener, A.H.C.
Cardington			29.61	752.1	62.0	16.7	56	SW			2.0		5					D. clouds	John McLaren.
Chatham, School M. E.	29.62	752.3	29.75	755.6	54.4	12.4	70	SW			4		5					D. clouds	Lance Cpl. R. Tear, R.E.
Falmouth, Observatory	29.45	748.0	29.68	753.9	53.6	12.0	68	SSW			4		10					Overcast	The Staff.
Fort Napier, Natal	27.45	697.2	29.67	753.6	85.2	29.6	98	NW			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.58	751.3	29.81	757.2	88	31.1	88	SE			1		4					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College					54	12.2	74	N			2		4			0	0	Blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	29.98	761.5	30.04	763.0	68.6	20.3	78	NE			1		0					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.27	743.4	29.48	748.8	46.5	8.1	94	E			1		10					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.50	749.3	29.67	753.6	52.3	11.3	79	SW			1		10					Overcast	The Staff.
Guernsey	29.52	749.8	29.74	755.4	55.5	13.1	71	SW			2		5					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.64	752.8	29.68	753.9	55.9	13.3	63	SW	25	11.2			5					D. clouds	The Staff.
Leicester, Museum	29.34	745.2	29.60	751.8	54.9	12.7	62	SW			2		3					D. clouds	J. E. Carryer.
Malta, Mediterranean	30.15	765.8	30.23	767.8	64.0	17.8	69	SE			3		2			0	0	Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	30.03	762.7	30.08	764.0	79.0	26.1	78	E			2		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.08	738.6	29.60	751.8	52.8	11.6	72	SSW			4		9					Showery	Robert Pate.
Oxford, Radcliffe Obs'y	29.42	747.3	29.65	753.1	54.5	12.5	64	SW			6		10					Threatening	The Staff.
Plymouth	29.62	752.3	29.69	754.1	54.3	12.4	79	S			2		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.64	752.8	42	5.6	96	E	30	13.4			10					Drizzling	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.04	763.0	30.10	764.5	47.8	8.8	88	WNW			2		10			Blank		Misty	Serg't W. H. Lyne.
Sheffield	29.29	744.0	29.56	750.8	57.9	14.4	54	SW			2		5			0.01	0.3	D. clouds	W. F. Cooper.
Silloth Rectory	29.47	748.5	29.50	749.3	47.7	8.7	91	W			4		10			0	0	Overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.54	750.3	50.0	10.0	67	WSW	19	8.5			6					D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	29.46	748.3	29.68	753.9	57.1	13.9	53	SW			2-3		7					Squally	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	29.62	752.3	29.66	753.4	57	13.9	75	SW			6		10					Gloomy	W. Newcombe.
Valencia, Observatory	29.49	749.0	29.52	749.8	53.0	11.7	69	SW	25	11.2			7					D. clouds	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.16	766.1	30.20	767.1	37	2.8	52	W	9	4.0		0	s		NW	0	0	Fair	H. J. Cundall, C. E.
Chatham, N. B.*	30.19	766.8	30.26	768.6	35	1.7	50	W	14	6.3		2k	0	W		0	0	Fair	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.28	769.1	30.30	769.6	34	1.1	84	NW	15	6.7			10n		Calm	0	0	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.17	740.9	30.02	762.5	34	1.1	79	NW	24	10.7		5k	5n	NW	NW	0.180	4.6	Cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.11	764.8	30.25	768.3	38	3.3	63	NW	9	4.0		0	0			0	0	Clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	30.02	762.5	30.37	771.4	40	4.4	78	S	6	2.7		5k	0	W		Inap	Inap.	Clear	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.18	766.6	30.39	771.9	40	4.4	48	S	4	1.8		8ck	2s	NW		Inap.	Inap.	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.55	750.6	30.27	768.8	39	3.9	47	SE	20	8.9		5k	5ks	W	W	0	0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.59	751.6	30.30	769.6	41	5.0	75	SE	4	1.8		2c	0	SW		0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.62	752.3	30.28	769.1	42	5.6	65	E	17	7.6		8ck	0	W		0	0	Cloudy	M. Payne.
Quebec, Quebec*	30.05	763.3	30.39	771.9	32	0.0	69	NW			1	0	2s		NW	0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.84	757.9	30.33	770.4	30	— 1.1	79	SE	2	0.9			10s		N	Inap.	Inap.	Cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.48	748.8	30.23	767.8	35	1.7	90	SE	18	8.0			10ks			0	0	Cloudy	K. Stewart.
St. Andrews, N. B.	30.24	768.1	30.29	769.4	35	1.7	53	NW	1	0.4		0	0			0	0	Clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.11	764.8	30.15	765.8	38	3.3	58	W	9	4.0		0	8ks		W	0	0	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.95	760.7	30.35	770.9	38	3.3	76	E	6	2.7		2c	0	W		0	0	Clear	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.21	767.3	30.27	768.8	39	3.9	65	W	6	2.7		0	0			0	0	Clear	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.72	754.9	29.98	761.5	45	7.2	92	W	3	1.3		5k	5k			0	0	Fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.66	753.4			69.7	20.9	71	WSW	14.3	6.4			9ks			0	0	Threatening	John Duthie.
Cape Town, C. G. H. Obs'y	29.82	757.4	29.86	758.4	65.0	18.3		Calm	15.3	6.8		5	5n			0.658	16.7	Raining	The Staff, for D. Gill.
Worcester *†	28.61	726.7			69.4	20.8	57	NW			7	1	5			0.10	2.5		C. Stokes.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.93	760.2	29.95	760.6	58.5	14.7	85	ENE	3.8	1.7			10			0.19	4.8	Covered	M. Marc Dechevrens, S.J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

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

San José	26.21	665.7	29.93	760.2	65.3	18.5	90	SE			3	30;ck	0			0.59	15.	Clear	Amand Maison.

DANISH SERIES.

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

Copenhagen	29.55	750.5	29.60	751.7	46.6	8.1	95	S	16	7			10					Raining	Oversergent Fischer.
Faröe	29.58	751.3	29.60	751.8	46.6	8.1	89	W			4		1						Overloerer Lauridsen.
Godthaab, Greenland	29.81	757.1	29.85	758.2	36.5	2.5	79	NNE			4		1						S. Kleinschmidt.
Stykkisholm, Iceland	29.84	758.0	29.89	759.1	48.6	9.2		SE			4		2						A. O. Thorlacius.
Thorshavn	29.87	758.7	29.91	759.6	41.5	5.3	60	NE	20	9			10						Overloerer Bergh.
Vestervig	29.42	747.2	29.51	749.6	41.9	5.5	99	E			4		10					Raining	Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.26	743.2	29.90	759.5	63.3	17.4	76	SSE			2	ck	0	S	NW	0.04	1.		M. Labroue, Director.
Alençon Normal School	29.30	744.3	29.85	758.3	61.0	16.1	79	S			1		5kn		NW	0	0	Cloudy	M. Nicot, Director.
Arras, Engineer School	29.53	750.1	29.79	756.7	57.9	14.4	61	SW			1	ck	2n		SW	0	0		M. Klein, Commandant.
Avignon, Normal School	30.03	762.7	30.11	764.7	67.3	19.6	34	S			3		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.37	746.0	29.93	760.1	56.3	13.5	83	SSW			2		10		SW	0	0	Covered	M. Saillard, Director.
Beauvais, Normal School	29.58	751.3	29.84	757.8	62.4	16.9	44	W			2		8		WSW	0	0	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.11	739.3	29.98	761.6	54.1	12.3	76	S			1		10n		S	0.106	2.7	Raining	M. Gobin, Director.
Bordeaux, Observatory	29.59	751.5	29.84	758.0	66.0	18.9	64	S			1		10		ESE	0.004	0.1	Covered	M. Rayet, Director.
Bourges, Normal School	29.35	745.6	29.90	759.5	57.2	14	78	S			2		kn		S	0	0		M. Postel, Director.
Brest, Naval Observatory	29.56	750.7	29.80	756.9	55.0	12.8	79	SW			1		10		SW	0.047	1.2	Raining	M. de Rermaree, Dir.
Caen, Normal School	29.69	754.0	29.76	755.9	61.0	16.1	79	WSW			1		8		WSW	0.08	2.	Very cloudy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.58	751.2	29.89	759.2	63.5	17.5	39	SSW			2		8	WSW	WSW	0	0	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.34	745.1	29.84	757.9	63.3	17.4	68	SSE			2		1			4	0		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.52	724.5	29.85	758.2	62.8	17.1	53	SE			3		8			0	0	¼ covered	M. Alluard, Director.
Cluny, Normal School	29.13	739.8	29.97	761.3	53.6	12.0	87	S			1		10		SW	0.335	8.5		M. de Villemontée, Dir.
Commercy, Normal School	29.06	738.0	29.91	759.8	56.1	13.4	64	SW			2		8kn	SW	SW	0	0	Very cloudy	Dr. Coulet, Director.
Gap, Normal School	27.56	700.0	30.05	763.3	62.6	17.0	52	SE			3		2nk			0	0	¼ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	29.04	737.7	30.19	766.7	62.4	16.9	22	S			3		5		S	0	0	½ covered	M. Kina, Director.
Grenoble, Normal School	29.22	742.3	29.98	761.4	64.0	17.8	41	NW			3	cs	kn			0	0		M. Ablard, Director.
Guéret, Normal School	28.33	719.5	29.89	759.1	58.1	14.5	67	SW			1		5		NE	0.087	2.2	Raining	M. Rivoire, Director.
Lamballe, Normal School	29.59	751.5	29.85	758.3	58.1	14.5	57	SSW			2				SSW	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.32	744.6	29.98	761.5	58.6	14.8	66	W			1	ck	0	W		0.04	1.		M. Chauvin, Director.
Lorient, Naval Observatory	29.74	755.4	29.84	758.0	57.6	14.2	65	S			4		10			0	0	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.93	734.8	29.98	761.6	55.8	13.2	55	S			1		10			Inap.	Inap.	Raining	M. André, Director.
Mans, Normal School	29.56	750.8	29.86	758.5	59.9	15.5	61	S			3		8		S	0	0	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.85	758.1	30.11	764.9	64.6	18.1	19	SE			2		4		SW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.80	629.8	30.03	762.8	56.3	13.5	53	SW	16.8	7.5			8		S	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.97	761.1	30.08	763.9	63.0	17.2	81	SSE			4		8		SE	0	0	Very cloudy	M. P. Galzin, Director.
Nancy, Normal School	29.16	740.6	29.92	760.0	55.4	13.0	76	SW			2		10kn		SW			Rainy	M. Hasse.
Nantes, Observatory	29.70	754.4	29.86	758.5	59.4	15.2	70	S			1-2		10n		WSW	0	0	Covered	M. Larocque, Director.
Nice	30.14	765.5	30.17	766.4	63.0	17.2	59	W			3		0			0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.82	757.5	29.93	760.2	66.2	19.0	54	S	18.6	8.3			5		NW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.45	570.2			42.3	5.7							10		SW	0.035	0.9	Snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.02	737.2	30.09	764.2	59.7	15.4	45	S			4		2	N	S	0	0	Slightly cl'dy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.06	636.6			45.7	7.6	85	SSW			3		8			0	0	¼ covered	M. Alluard, Director
Rochefort, Naval Obs'y	29.87	758.6	29.90	759.4	65.5	18.6	64	S			1		8		SE	0.67	17.	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.71	754.6	29.92	759.9	63.3	17.4	68	WSW			1		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.80	706.2	29.96	760.9	49.5	9.7	74	SE			3		10		S	0	0	Covered	M. Richard, Director.
Rouen, Normal School	29.73	755.1	29.82	757.3	60.4	15.8	58	SSW			3		5		SSW	0.059	1.3	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.64	752.9	29.80	756.9	57.0	13.9	60	SW			1		8		SW	0.138	3.5	Very cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.69	754.1	29.85	758.3	61.3	16.3	47	SSW			3		7	SW	SW	0	0		M. Renou, Director.
Toulouse, Observatory	29.21	741.9	29.93	760.2	68.5	20.3	53	SSE			4					0	0		M. Baillard, Director.
Tours	29.64	752.8	29.84	757.8	65.5	18.6	41	SW			3		8		SW	0	0	Stormy	M. de Tastes.
Versailles, Observatory	29.36	745.7	29.85	758.2	62.2	16.8	50	SW			2					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			

GERMAN SERIES.

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

Bamberg	29.04	737.5	29.89	759.3	61.5	16.4	55	SW			3		5k	W		0	0		Prof. Dr. Hoh.
Berlin	29.61	752.2	29.78	756.5	63.9	17.7	41	SW			1		5	W		0.059	1.5		Prof. Dr. Arndt.
Breslau	29.36	745.8	29.89	759.2	65.1	18.4	29	SSW			2		10			0	0		Royal University Obs'y.
Carlsruhe	29.51	749.5	29.93	760.2	60.1	15.6	71	SW			1		10	SW		0	0		Albert Senz.
Cassel	29.06	738.1	29.78	756.3	60.1	15.6	35	S			3		7	S		0.008	0.2		Dr. H. Möhl.
Frankfort on the Main	29.54	750.4	29.90	759.4	66.2	19.0	34	SW			2		7			0	0		Physical Society.
Friedrichshafen	28.54	724.8	29.95	760.6	62.1	16.7	56	SW			5		7	W		0	0		Wilhelm, Chief Tel.
Hamburg	29.67	753.7	29.74	755.5	55.9	13.3	68	WSW			4		7			0.142	3.6		Dr. R. Kleeman.
Kiel	29.65	753.2	29.67	753.6	47.5	8.6	58	SW			6		5			0.043	1.1		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.39	746.5	29.80	756.9	66.2	19.0	38	SW			4		7	W		0.071	1.8		Prof. Dr. Bruhns.
Magdeburg	29.51	749.5	29.80	756.8	60.4	15.8	71	WSW			7	5cs	0	WSW		0.043	1.1		Dr. Assmann.
Memel	29.85	758.2	29.90	759.4	45.1	7.3	68	SSE			4		10n						Reinbrecht & Issermann.
Munich	28.11	713.9	29.97	761.1	66.6	19.2	36	W			2		2	W		0	0		Central Station.
Neufahrwasser	29.76	755.8	29.77	756.2	61.2	16.2	55	SSE			3		10			0.224	5.7		A. Lothes.
Neustadt, Palatinate	29.30	744.1	29.82	757.4	60.1	15.6	73	W			4		10			0	0		Dicknether.
Stuttgart	28.98	736.2	29.87	758.7	57.7	14.3	70	SW			1		10			0.035	0.9		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.45	722.6	29.93	760.3	58.6	14.8	64	W			4		10	W		0.039	1.0		Prof. Kemlein.
Wustrow	29.66	753.3	29.68	753.9	49.8	9.9	89	SW			5		3s			0.008	0.2		Prof. J. Reimer.

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

GREEK SERIES.

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

Athens	29.79	756.6	30.17	766.4	64.8	18.2		W			1.0		5					½ Clear	A. Wourlisch.

INDIAN SERIES.

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

Kurrachee	29.76	755.8	29.81	757.1	91.0	32.8	34	WSW	24.0	10.7			0			0	0	Misty	
Deesa	29.26	743.2	29.72	754.8	99.3	37.4	18	NW	9.5	4.2			0			0	0	Blue sky	
Bombay	29.73	755.2	29.77	756.1	85.5	29.7	72	WNW	11.0	4.9			0			0	0	Blue sky	
Poona, Yarrowda	27.90	708.7	29.69	754.2	96.3	35.7	16	W	16.0	7.2			0			0	0	Blue sky	
Belgaum	27.23	691.7	29.72	754.9	84.5	29.2	64	NNE	11.0	4.9			0			0	0	Misty	
Lahore	28.94	734.9	29.67	753.5	86.0	30.0	14	W	2.4	1.1			8			0	0	D. clouds	
Roorkee	28.74	730.0	29.61	752.1	93.8	34.3	16	SW	3.6	1.6			0			0	0	Misty	
Agra	29.09	738.8	29.63	752.7	97.1	36.2	27	W	6.9	3.1			0			0	0		
Nagpur	28.60	726.5	29.59	751.6	105.3	40.7	17	NNW	3.9	1.7			6		W	0	0	D. clouds	
Jubbulpore	28.35	720.0	29.64	752.9	100.9	38.3	11	W	2.9	1.3			3			0	0	D. clouds	
Lucknow	29.21	742.0	29.57	751.2	98.0	36.7	24	WNW	1.9	0.8			0			0	0	Blue sky	
Allahabad	29.30	744.1	29.59	751.6	104.4	40.2	18	NW	2.9	1.3			3			0	0	D. clouds	
Patna	29.42	747.4	29.60	751.7	103.9	39.9	15	N	1.7	0.8			5	N	N	0	0	D. clouds	
Hazaribagh	27.67	702.8	29.59	751.6	99.3	37.4	11	NW	8.7	3.9			9		W	0	0		
Cuttack	29.64	752.8	29.72	754.9	91.1	32.8	51	S	6.0	2.7			6			0	0	Threatening	
Calcutta, Alipore	29.66	753.2	29.68	753.8	88.4	31.3	71	SSW	7.0	3.1			0			0	0	Blue sky	
Dhubri	29.51	749.5	29.63	752.5	88.7	31.5	62	SW	6.8	3.0			3		SW	0	0	D. clouds	
Chittagong	29.68	753.9	29.77	756.1	83.7	28.7	76	SSW	5.9	2.6			2			0	0	Blue sky	
Sibsagar	29.40	746.7	29.74	755.3	75.1	23.9	92	NE	3.2	1.4			10	W	W	1.29	32.8	D. clouds	
Zanzibar, Africa			29.87	758.7	84.6	29.2	72	SSW	9	4.0			3		S	0.01	0.3	D. clouds	

ITALIAN SERIES.

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

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

Udine	29.76	755.8	30.17	766.2	60.4	15.8	49	SW	0.7	0.3			8			0	0		Prof. Giovanni Clodig.
Milan	29.61	752.0	30.12	765.0	61.3	16.3	60	E	4.3	1.9			9			0	0		Prof. Schiaparelli.
Padua	30.04	762.9	30.15	765.7	63.0	17.2	47	SE	3.1	1.4			10	SSW		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.20	741.6	30.10	764.4	61.0	16.1	56	NW	3.1	1.4			9	NE		0	0		Prof. P. F. Denza.
Genoa	29.99	761.8	30.19	766.7	59.4	15.2	64	S	9.4	4.2			8	S		0.004	0.1		Prof. G. M. Garibaldi.
Mondovi	28.19	716.0	30.10	764.4	58.1	14.5	61	N			4		9			0	0		Prof. D. C. Bruno.
Pesaro	30.11	764.7	30.15	765.9	61.2	16.2	46	NE	10.5	4.7			2			0	0		Prof. Luigi Guidi.
Florence	29.91	759.8	30.17	766.2	63.9	17.7	46	W			2		8	SW		0	0		Prof. Costantino Pitter.
Leghorn	30.10	764.6	30.19	766.8	64.0	17.8	64	SSW	1.3	0.6			10			0	0		Prof. P. Monte.
Rome	30.02	762.6	30.20	767.0	67.3	19.6	30	SSW	3.1	1.4			2			0	0		Prof. P. S. Ferrari.
Lecce	29.97	761.2	30.22	767.6	62.2	16.8	43	NNE	6.3	2.8			2			0	0		Prof. C. de Giorgi.
Cosenza	29.31	744.5	30.19	766.8	63.7	17.6	74	SSW	1.8	0.8			3	SW		0	0		Prof. D. Conti.
Cagliari	29.96	761.0	30.15	765.9	65.1	18.4	47	SE			4		1			0	0		Prof. A. Pacinotti.
Palermo	29.97	761.3	30.22	767.7	61.9	16.6	37	NE	7.4	3.3			0			0	0		Prof. G. Ciacciatore.
Syracuse	30.20	767.0	30.24	768.1	65.5	18.6	54	SE	3.8	1.7			1	W		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.69	754.1	30.22	767.5	62.1	16.7	52	SSW	1.8	0.8			1	W		0	0		Prof. F. Brioschi.
Stelvio	22.19	563.6			35.8	2.1	62	SW			2		4s	S		0	0	Fair	Prof. P. F. Denza.
Valdobbia	22.22	564.4			36.9	2.7	74	E			2		Fg			0	0	Foggy	Prof. P. F. Denza.

JAPANESE SERIES.

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

Hiroshima, I. M. Obs'y †	29.93	760.3	29.94	760.5	65.8	18.8	80	WSW	7.8	3.5			10ks;s			1.596	40.5	Overcast	K. Sasaki.
Kioto	29.83	757.7	30.00	762.0	65.1	18.4	76	NNE					8ckjcs	0		0.020	0.5	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.72	754.9	29.92	759.9	70.2	21.2	91	S	16.9	7.6			10n			4.250	108.0	Raining	S. Takehnyashi.
Tokei Obs'y, Yeddo	29.95	760.7	30.02	762.5	59.7	15.4	97	S	6.3	2.8			10s			0.010	0.2	Covered	The Staff.
Wakayama	29.96	761.0	30.01	762.2	67.5	19.7	77	S	9.4	4.2			0			0.007	0.2	Clear	Y. Kuwamuca.

MAURITIUS SERIES.

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

Mauritius Obs'y, Mauritius	29.80	756.9	29.99	761.7	78.7	25.9	69	E	14.0	6.3		0	4		E	0.06	1.5	Fine	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

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

Guadalajara																			Prof. L. Perez.
Guanaxnato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.65	753.2	29.92	759.8	69.0	20.6	97	ESE	0.9	0.4		7ck	0	W		0	0	Cloudy	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.

NETHERLANDS SERIES.

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

Flushing	29.79	756.6	29.79	756.6	54.7	12.6		W			4					0.024	0.6		
Groningen	29.67	753.5	29.72	754.9	54.1	12.3		SW			5					0	0		
Helder	29.70	754.4	29.70	754.4	50.9	10.5		SW			5					0	0		
Hellevoetsluis	29.76	755.8	29.76	755.8	55.2	12.9	75	WSW			5					0.047	1.2		
Utrecht	29.73	755.2	29.78	756.4	56.3	13.5	72	SW			4		5			0.028	0.7	Cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES.																			
Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.62	752.3	29.68	753.9	49.3	9.6	42	NNW	3.8	1.7			2			0	0		
Christiania	29.56	750.8	29.71	754.5	47.7	8.7	38	ENE	13	6			5			0	0		
Gjæsvær	29.98	761.5	30.00	762.1	29.3	— 1.5		SSE			2		0						
Lodingen	29.87	758.6	29.91	759.8	31.8	— 0.1	63	ENE			2		1			0	0		
PORTUGUESE SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.06	763.5	30.22	767.5	63.0	17.2	73	NNE	17.4	7.8			1			0	0		Dr. J. A. Sampaio.
Campo Major	28.95	735.3	29.93	760.1	68.7	20.4	50	WSW	5.6	2.5			4			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.04	762.9	30.12	765.1	66.2	19.0	52	SW	0.7	0.3			8			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.65	753.2	30.01	762.3	63.0	17.2	54	WNW	9.4	4.2			7			0.520	13.2		The Staff.
Ponta Delgada, Azores	30.16	766.0	30.23	767.8	64.0	17.8	69	NNE	14.3	6.4			3			0	0		
RUSSIAN SERIES.																			
Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski																			Capt. Lasarew.
Archangel	29.78	756.4	29.80	756.9	43.7	6.5	72	E	9	4			10						Capt. Sseliwerstow.
Astrakhan	29.90	759.5	29.82	757.4	72.9	22.7	41	S	11	5			10s;n						Capt. Wisganow.
Barnaul ‡	29.66	753.3	30.16	766.0	46.4	8.0	42	Calm	0	0			10						Meteorological Obs'y.
Dorpat	29.80	756.9	30.05	763.3	43.2	6.2	42	W	4	2			3k						Observatory. *
Ekaterinburg	29.08	738.5	30.00	762.0	71.2	21.8	25	SSE	13	6		9c	0					Light clouds	Meteorological Obs'y.
Kasan	29.60	751.9	29.86	758.5	69.4	20.8	36	SE	13	6			7					Solar corona	Observatory.
Kertch	29.82	757.3	29.84	757.8	55.0	12.8	96	NW	7	3			4						Lagorio & Sastyrez
Kieff	29.36	745.8	30.01	762.2	46.4	8.0	64	NNE	7	3			6ks						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.58	751.4	29.78	756.5	69.6	20.9	39	WNW	4	2			6						Meteorological Obs'y.
Moscow	29.37	746.1	29.93	760.1	52.2	11.2	67	N	4	2			6ks						Meteorological Obs'y.
Nertchinsk	27.41	696.1	29.72	754.9	34.9	1.6	34	NW	11	5			4						Meteorological Obs'y.
Nikolaiev	29.91	759.7	29.98	761.5	58.8	14.9	69	N	18	8			5kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	29.75	755.6	29.90	759.4	63.7	17.6	70	Calm	0	0			2k						Physical Observatory.
St. Petersburg	29.98	761.4	29.99	761.8	39.2	4.0	66	NW	13	6			1ks						Central Physical Obs'y
Tashkend, Laboratory	28.45	722.7	29.99	761.8	66.9	19.4	59	Calm	0	0			0			Blank			Teich, A. M.
Tiflis	28.41	721.6	29.78	756.4	70.3	21.3	55	SE	9	4			10s					Light clouds	Physical Observatory.
Warsaw	29.51	749.5	29.93	760.1	61.2	16.2	40	S	18	8		ck	10ks					Solar corona	Astronomical Obs'y.
Wilna	29.62	752.4	30.04	763.1	50.4	10.2	47	S	11	5			9						Berg, Assistant.
Yeniseisk	29.96	760.9	30.26	768.5	32.2	0.1	42	N	2	1			0						M. O. Marks.
SCOTTISH SERIES.																			
Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.51	749.5	43.2	6.2	100	NE			1		10n			0.40	10.2	Raining	Andrew Gibb.
Monach Lt. House, Hebrides			29.57	751.1	48	8.9	92	ENE			4	3	3	ENE		0	0		J. Youngclause.
North Unst, Shetland Isl'ds			29.75	755.6				E			6	0	2						Robert Burnet.
SPANISH SERIES.																			
Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.93	760.2	30.04	762.9	63.5	17.5	68	ESE	4.3	1.8			1			0	0	Clouds	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.75	755.7	29.81	757.1	78.1	25.6	48	S	2.5	1.1		2	0	SW		0	0	Almost clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.93	683.9			67.6	19.8	50	S	6.3	2.8		0	5			0	0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.69	703.4	29.84	757.8	73.2	22.9	47	S	12.5	5.6		0	7			0	0	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.84	757.8	29.98	761.6	69.4	20.8	59	NE	6.7	3.0		3	4	SW		0	0	Cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.88	733.6	29.74	755.3	58.1	14.5	62	SSW	21.0	9.4			10			0	0	Covered	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.98	761.6	30.05	763.2	74.6	23.7	78	ENE	8.1	3.6		1ck	8			0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.82	757.5	29.87	758.8	86.0	30.0	70	SE	6.6	3.0		0	0			0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.92	759.9	30.01	762.3	67.5	19.7	69	S	15.2	6.8		0	4		SSW	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.93	760.2	30.02	762.5	77.7	25.4	87	SE	7.4	3.3		2cs	2k	SE	SE	0	0	Clear	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.75	755.6	29.89	759.3	83.1	28.4	70	WNW	2.6	1.3			1s		W	0	0	Fair	José L. Fastovra.
SWEDISH SERIES.																			
Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.77	756.1	29.81	757.1	39.2	4.0	61	N			2		5			0	0		
Umea	29.78	756.4	29.83	757.7	31.6	— 0.2	89	NE			2		10			0	0		
Hernosand	29.80	757.0	29.85	758.3	35.1	1.7	73	SSE			2		10			0.012	0.3		
Stockholm	29.44	747.8	29.62	752.3	38.1	3.4	83	SE			4		10			0	0		
Wisby	29.70	754.3	29.76	755.8	37.8	3.2	93	SE			4		10			0.091	2.3	Rain & snow	
Sub-Series.																			
Upsala	29.72	755.0	29.81	757.2	45.7	7.6	60	SSE	7.4	3.3			8		[illegible]	0.055	1.4		Nils Ekholm
SWISS SERIES.																			
Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva																			The Observatory.
Zurich ‡	28.35	720.1	29.96	761.0	63.0	17.2	56	W			2		6			0	0	Cloudy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —— mm.; Ther. ——° cent.; Hum. —— per cent.																			
TURKISH SERIES.																			
Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.13	765.2	47.7	8.7	85	NNW	15	6.5			10		NNW	0.189	4.8		The Observatory.
Valona			30.24	768.2	62.2	16.8		NW			1		0			0	0	Clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.02	762.5	69.8	21.0	74	WSW			1		10ks		SW	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instru-m'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.38	771.6	30.47	773.9	47	8.3	55	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Alpena, Michigan	29.49	749.0	30.15	765.8	40	4.4	73	S	10	4.5	.....	.....	10n	.....	.....	0.01	0.3	Light rain	
Atlanta, Georgia	29.10	739.1	30.24	768.1	62.0	16.7	71	E	12	5.4	.....	1c	0	Calm	.....	0	0	Clear	
Atlantic City, New Jersey	30.47	773.9	30.48	774.2	48	8.9	56	E	17	7.6	.....	0	0	.....	.....	0	0	Clear	
Attou Id., Alaska	30.54	775.7	.....	.....	40	4.4	82	S	7	3.1	.....	.....	10s	.....	S	0	0	Cloudy	
Augusta, Georgia	30.13	765.3	30.33	770.4	65.0	18.3	63	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Baltimore, Maryland	30.45	773.4	30.50	774.7	49	9.4	44	N	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Barnegat, New Jersey	30.45	773.4	30.48	774.2	49	9.4	51	E	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Bismarck, Dakota	28.38	720.8	30.24	768.1	37	2.8	71	W	16	7.2	.....	8ck	0	W	.....	0	0	Cloudy	
Boise City, Idaho	27.26	692.4	30.22	767.6	42	5.6	74	W	2	0.9	.....	5cs	0	Calm	.....	0	0	Fair	
Boston, Massachusetts	30.28	769.1	30.44	773.2	43.5	6.4	48	W	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Brackettville, Texas	28.82	732.0	29.84	757.9	70	21.1	90	E	10	4.5	.....	.....	10s	E	.....	0	0	Cloudy	
Brownsville, Texas	29.94	760.5	29.99	761.7	72	22.2	95	Calm	0	0	.....	2c	5s	.....	SE	0	0	Fair	
Buffalo, New York	29.58	751.3	30.31	769.9	40	4.4	56	E	6	2.7	.....	0	Hz	.....	.....	0	0	Clear	
Burlington, Vermont	30.32	765.0	30.42	772.7	40.0	4.4	65	S	1	0.4	.....	5cs	0	W	.....	0	0	Fair	
Cairo, Illinois	29.76	755.9	30.15	765.8	62	16.7	61	Calm	0	0	.....	8ck	0	E	.....	0	0	Fair	
Campo, California	27.36	694.9	29.93	760.2	47	8.3	85	W	3	1.3	.....	.....	8s	.....	W	0	0	Cloudy	
Camp Thomas, Arizona	27.13	689.1	.....	.....	51	10.6	59	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Cape Henry, Virginia	30.40	772.1	30.41	772.4	56	13.3	81	SE	4	1.8	.....	5c	0	.....	.....	0	0	Fair	
Cape May, New Jersey	30.44	773.2	30.46	773.7	50	10.0	64	E	19	8.5	.....	0	0	.....	.....	0	0	Clear	
Castroville, Texas	29.24	742.7	29.92	760.0	71	21.7	85	S	4	1.8	.....	.....	10s	.....	S	0	0	Cloudy	
Cedar Keys, Florida	30.16	766.1	30.19	766.8	70	21.1	90	NE	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Champaign, Illinois	29.30	744.2	30.11	764.8	50	10.0	86	SE	17	7.6	.....	.....	10n	.....	SE	0.21	5.3	Light rain	
Charleston, S. Carolina	30.22	767.6	30.27	768.8	69	20.6	75	NE	14	6.3	.....	0	0	.....	.....	0	0	Clear	
Charlotte, N. Carolina	29.50	749.3	30.31	769.9	59.5	15.3	59	NE	3	1.3	.....	5ck	5s	W	W	0	0	Cloudy	
Chattanooga, Tennessee	29.46	748.3	30.27	768.8	57	13.9	75	NE	3	1.3	.....	8ck	Fg	W	Calm	0	0	Fair	
Cheyenne, Wyoming	24.07	611.4	30.01	762.2	42	5.6	83	NW	2	0.9	.....	.....	10s	.....	NW	0	0	Cloudy	
Chicago, Illinois	29.39	746.5	30.08	764.0	51.4	10.8	86	SW	11	4.9	.....	.....	10n	.....	.....	0.05	1.3	Light rain	
Chincoteague, Virginia	30.42	772.7	30.44	773.2	49	9.4	93	NE	19	8.5	.....	2k	0	NE	.....	0	0	Fair	
Cincinnati, Ohio	29.57	751.1	30.23	767.8	54	12.2	55	E	3	1.3	.....	2c;cs	0	.....	.....	0	0	Clear	
Cleveland, Ohio	29.53	750.0	30.28	769.1	42	5.6	50	S	16	7.2	.....	8c	0	NW	.....	0	0	Fair	
Coleman City, Texas	28.21	716.5	29.84	757.9	62	16.7	88	S	4	1.8	.....	5c	0	SW	.....	0	0	Fair	
Columbus, Ohio	29.39	746.5	30.24	768.1	51	10.6	40	E	4	1.8	.....	10cs	8k	.....	.....	0	0	Cloudy	
Concho, Texas	28.09	713.5	29.72	754.9	67	19.4	84	S	10	4.5	.....	.....	10s	.....	SE	0	0	Threatening	
Corsicana, Texas	29.62	752.3	30.08	764.0	67	19.4	64	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Davenport, Iowa	29.41	747.0	30.04	763.0	55	12.8	68	SE	8	3.6	.....	8cs	0	W	.....	0.07	1.8	Fair	
Dayton, Washington T'y	28.41	721.6	30.15	765.8	34	1.1	79	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Deadwood, Dakota	25.57	649.5	.....	.....	37	2.8	71	NE	3	1.3	.....	.....	10s	.....	.....	0	0	Cloudy	
Decatur, Texas	28.87	733.3	30.02	762.5	66	18.9	79	SE	12	5.4	.....	.....	10s	.....	.....	0	0	Cloudy	
Delaware Breakwater, Del	30.44	773.2	30.46	773.7	49	9.4	71	NE	19	8.5	.....	0	0	.....	.....	0	0	Clear	
Denison, Texas	29.28	743.7	30.05	763.3	70	21.1	61	S	8	3.6	.....	8cs	0	Calm	.....	0	0	Fair	
Denver, Colorado	24.81	630.2	30.03	762.7	51.0	10.6	59	W	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Des Moines, Iowa	29.11	739.4	29.98	761.5	55	12.8	87	E	2	0.9	.....	.....	10s	.....	.....	0.05	1.3	Cloudy	
Detroit, Michigan	29.54	750.3	30.24	768.1	50.0	10.0	52	SE	8	3.6	.....	.....	10s	.....	W	0	0	Cloudy	
Dodge City, Kansas	27.37	695.2	29.60	751.8	60	15.6	77	SE	17	7.6	.....	5k	0	SE	.....	0	0	Fair	
Dubuque, Iowa	29.33	745.0	30.02	762.5	54	12.2	67	SE	3	1.3	.....	.....	10s	.....	S	0	0	Cloudy	
Duluth, Minnesota	29.25	742.9	29.93	760.2	45	7.2	76	W	11	4.9	.....	0	2s	.....	W	0.02	0.5	Clear	
Eagle Pass, Texas	29.21	741.9	29.91	759.7	74	23.3	76	SE	10	4.5	.....	.....	10s	.....	SE	0	0	Cloudy	
Eagle Rock, Idaho	25.30	642.6	29.95	760.7	36	2.2	53	S	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Eastport, Maine	30.24	768.1	30.31	769.9	36	2.2	45	NW	12	5.4	.....	0	0	.....	.....	0	0	Clear	
El Paso, Texas	26.17	664.7	.....	.....	59	15.0	38	NW	1	0.4	.....	0	5s	.....	.....	0	0	Fair	
Erie, Pennsylvania	29.54	750.3	30.25	769.1	46	7.8	47	SE	16	7.2	.....	2c	0	W	.....	0	0	Fair	
Escanaba, Michigan	29.32	744.7	29.98	761.5	39	3.9	73	S	6	2.7	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
Florence, Arizona	28.34	719.8	29.94	760.5	60	15.9	34	NE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Fort Apache, Arizona	24.99	634.7	30.44	773.2	42	5.6	50	NE	5	2.2	.....	1c	0	Calm	.....	0	0	Clear	
Fort Assinnaboine, Montana	27.41	696.2	.....	.....	33	0.6	51	N	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Fort Bennett, Dakota	28.60	726.4	.....	.....	46	7.8	47	NW	6	2.7	.....	.....	10ks	.....	.....	0	0	Cloudy	
Fort Benton, Montana																			
Fort Buford, Dakota	28.27	718.0	30.22	767.6	33	0.6	89	NW	15	6.7	.....	5cs	0	NW	.....	0	0	Fair	
Fort Custer, Montana	27.10	688.3	.....	.....	39	3.9	63	SE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Fort Davis, Texas	25.17	639.3	30.13	765.3	55	12.8	68	SW	3	1.3	.....	0	5s	.....	SW	0	0	Fair	
Fort Elliott, Texas	27.18	690.4	29.42	747.3	52	11.1	79	SE	24	10.7	.....	5c	0	SE	.....	0.06	1.5	Fair	
Fort Gibson, Indian T'y	29.48	748.8	30.00	762.0	70	21.1	70	SE	8	3.6	.....	5c	0	S	.....	0	0	Fair	
Fort Grant, Arizona	25.19	639.8	29.99	761.7	57	13.9	20	Calm	0	0	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Fort Griffin, Texas	28.68	728.5	29.90	759.4	70.1	21.2	66	E	6	2.7	.....	5cs	0	.....	.....	0	0	Fair	
Fort Keogh, Montana	27.78	705.6	.....	.....	38	3.3	62	NW	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Fort Macon, North Carolina	30.32	770.1	30.34	770.6	63	17.2	67	E	15	6.7	.....	0	Hz	.....	Calm	0	0	Clear	
Fort McKavett, Texas	27.86	707.6	29.74	755.4	67.3	19.6	84	E	6	2.7	.....	.....	10s	.....	.....	0	0	Cloudy	
Fort Missoula, Montana	26.87	682.5	.....	.....	38	3.3	81	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Fort St. Michaels																			
Fort Shaw, Montana	26.59	675.4	.....	.....	21	— 6.1	71	E	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Fort Sill, Indian Territory	28.73	729.7	29.81	757.2	65	18.3	84	S	21	9.4	.....	.....	10n	.....	.....	0.04	1.0	Light rain	
Fort Stevenson, Dakota	28.35	720.1	.....	.....	36	2.2	80	W	15	6.7	.....	.....	10s	.....	W	0	0	Cloudy	
Fort Verde, Arizona																			
Fredericksburg, Texas	28.29	718.6	29.82	757.4	56	13.3	46	W	1	0	.....	0	0	.....	.....	0	0	Clear	
Galveston, Texas	30.04	763.0	30.08	764.0	66	18.9	84	SW	10	4.5	.....	.....	10ks	.....	SW	0	0	Cloudy	
Grand Haven, Michigan	29.44	747.8	30.09	764.3	70	21.1	85	S	4	1.8	.....	8cs	2s	.....	.....	0	0	Cloudy	
Hatteras, North Carolina	30.34	770.6	30.36	771.1	53	11.7	61	SE	7	3.1	.....	.....	10s	.....	SW	0.03	0.8	Threatening	
Helena, Montana	26.00	660.4	.....	.....	65	18.3	54	E	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Henrietta, Texas	29.01	736.8	29.91	759.7	45	7.2	46	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Indianapolis, Indiana	29.34	745.2	30.12	765.4	66	18.9	70	SE	6	2.7	.....	.....	10s	.....	.....	0	0	Cloudy	
Indianola, Texas	30.05	763.3	30.08	764.0	72.1	12.2	49	SE	1	0.4	.....	8cs;ck	0	W	.....	0	0	Cloudy	
Jacksboro, Texas	28.88	733.5	29.99	761.7	63	22.3	90	SE	4	1.8	.....	5k	5s	SE	SE	0	0	Cloudy	
Jacksonville, Florida	30.16	766.1	30.21	767.3	72	17.2	83	S	4	1.8	.....	5c	0	NW	.....	0	0	Fair	
Keokuk, Iowa	29.34	745.2	29.98	761.5	55.0	22.2	90	NE	6	2.7	.....	0	8s	.....	NE	0	0	Cloudy	
Key West, Florida	30.06	763.5	30.09	764.3	77	12.8	78.9	S	8	3.6	.....	5cs	5s	W	.....	0.01	0.3	Cloudy	
Kittyhawk, North Carolina	30.39	771.9	30.41	772.4	56	25.0	73	NE	12	5.4	.....	2k	0	NE	.....	1.04	26.4	Fair	
Knoxville, Tennessee	29.26	743.2	30.27	768.8	57	13.3	81	N	8	3.6	.....	0	0	.....	.....	0.16	4.1	Clear	
La Crosse, Wisconsin	29.28	743.7	30.00	762.0	55	13.9	69	Calm	0	0	.....	10cs	0	W	.....	Inap.	Inap.	Cloudy	
La Mesilla, New Mexico	26.03	661.2	30.18	766.6	61	12.8	68	SW	2	0.9	.....	.....	10s	.....	.....	0	0	Cloudy	
Laredo, Texas	29.54	750.3	29.87	758.7	73	16.1	31	SE	1	0.4	.....	1c	5s	.....	.....	0	0	Cloudy	
Leavenworth, Kansas	29.11	739.4	29.92	760.0	64	22.8	90	SE	4	1.8	.....	.....	10s	.....	SE	0	0	Cloudy	
Lewiston, Idaho	29.38	746.2	30.06	763.5	36	17.8	73	S	6	2.7	.....	.....	10s	.....	.....	0.10	2.5	Cloudy	
Little Rock, Arkansas	29.78	756.4	30.10	764.5	67	2.2	45	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Los Angeles, California	29.61	752.1	29.97	761.2	55.0	19.4	95	NE	6	2.7	.....	0	8s	.....	SW	0.08	2.0	Fair	
Louisville, Kentucky	29.61	752.1	30.17	766.3	55.0	12.8	81	NE	7	3.1	.....	.....	10s	.....	Calm	0	0	Cloudy	
Lynchburg, Virginia	29.76	755.9	30.45	773.4	58	12.8	68	NE	3	1.3	.....	10cs	0	.....	.....	0	0	Cloudy	
Madison, Wisconsin	29.04	737.6	30.02	762.5	53	14.4	27	NE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Marquette, Michigan	29.20	741.7	29.90	759.4	48	11.7	73	S	10	4.5	.....	10cs	0	W	.....	Inap.	Inap.	Cloudy	
Mason, Texas	28.37	720.6	30.08	764.0	68	8.9	78	W	16	7.2	.....	5c	0	W	.....	0.09	2.3	Fair	
Memphis, Tennessee	29.79	756.7	30.12	765.0	67	20.0	84	S	4	1.8	.....	4cs	4s	W	S	0	0	Cloudy	
						19.4	60	Calm.	0	0	.....	5cs	Hz	NW	Calm	0	0	Fair	

MAY 1, 1881.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
United States Series—Continued.																			
Milwaukee, Wisconsin	29.33	745.0	30.05	763.3	52	11.1	73	SW	4	1.8			10s			Inap.	Inap.	Cloudy	
Mobile, Alabama	30.07	763.8	30.14	765.5	69.0	20.6	85	N	2	0.9		5cs	Hz			0	0	Fair	
Montgomery, Alabama	29.96	761.0	30.19	766.8	69	20.6	75	E	2	0.9		8c	0			0	0	Fair	
Moorhead, Minnesota	29.10	739.1	30.07	763.8	40	4.4	73	W	10	4.5		5k	0	W		0.06	1.5	Fair	
Morgantown, W. Virginia	29.30	744.2	30.31	769.9	47	8.3	70	N	3	1.3		2cs	0			0	0	Fair	
Mt. Washington, N. H.	23.84	605.5	30.20	767.1	9	—12.8	57	NW	44	19.7		0	0			0.13	3.3	Clear	
Nashville, Tennessee	29.66	753.4	30.19	766.8	56.8	13.8	75	NE	2	0.9		4c;ck	0	N		0	0	Fair	
New Haven, Connecticut	30.35	770.9	30.47	773.9	42	5.6	50	N	6	2.7		0	0			0	0	Clear	
New London, Connecticut	30.44	773.2	30.49	774.4	48	8.9	43	N	3	1.3		0	0			0	0	Clear	
New Orleans, Louisiana	30.07	763.8	30.13	765.3	68.7	20.4	94	Calm	0	0			Fg			0	0	Dense fog	
Newport, Rhode Island	30.39	771.9	30.45	773.4	45.6	7.6	58	N	4	1.8		0	0			0	0	Clear	
New River, N. Carolina					65	18.3	48	E			2	Hz	0			0	0	Clear	
New Shoreham, Rhode I'd	30.42	772.7	30.45	773.4	45.0	7.2	61	N	5	2.2		0	0			0	0	Clear	
New York, New York	30.30	769.6	30.49	774.4	47.5	8.6	45	NE	7	3.1		0	Fg			0	0	Clear	
Norfolk, Virginia	30.36	771.1	30.42	772.7	57	13.9	75	NE	6	2.7		Hz	0			0	0	Clear	
North Platte, Nebraska	27.12	688.8	29.66	753.4	52	11.1	73	NE	14	6.3			10ks		NW	0.01	0.3	Threatening	
Olympia, Washington T'y	30.10	764.5	30.14	765.5	34.0	1.1	90	NE	2	0.9		0	0			0	0	Clear	
Omaha, Nebraska	28.84	732.5	29.91	759.7	60	15.6	85	SE	4	1.8		2cs	8s			0.18	4.6	Cloudy	
Oswego, New York	30.06	763.5	30.40	772.1	42.0	5.6	54	S	6	2.7		0	0			0	0	Clear	
Pensacola, Florida	30.12	765.0	30.15	765.8	73	22.8	85	SE	6	2.7		5c	0			0	0	Fair	
Philadelphia, Pa	30.43	772.9	30.49	774.4	45	7.2	61	E	8	3.6		0	0			0	0	Clear	
Phœnix, Arizona	28.71	729.2	30.49	774.4	60	15.6	65	E	3	1.3		0	0			0	0	Clear	
Pike's Peak, Colorado	17.88	454.1	30.09	764.3	25	— 3.9	62	NE	12	5.4		5k	2ks	N		0.11	2.8	Cloudy	
Piocho, Nevada	23.97	608.8	29.74	755.4	46	7.8	33	S	1	0.4		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.49	749.0	30.32	770.1	45	7.2	59	NE	2	0.9		0	0			0	0	Clear	
Port Eads, Louisiana	30.13	765.3	30.14	765.5	68.8	20.4	95	S	3	1.3		6c;cs	0	Calm		0	0	Fair	
Port Huron, Michigan	29.55	750.6	30.23	767.8	41.7	5.4	57	S	8	3.6			10s		S	0	0	Cloudy	
Portland, Maine	30.35	770.9	30.40	772.1	43	6.1	51	NW	5	2.2		0	0			0	0	Clear	
Portland, Oregon	30.00	762.0	30.07	763.8	47	8.3	62	NW	8	3.6		1cs	0			0	0	Clear	
Portsmouth, N. Carolina					62	16.7	83	NE	14	6.3		0	0			0	0	Clear	
Prescott, Arizona	24.70	627.4	30.06	763.5	48	8.9	49	Calm	0	0		5k	0	SE		0	0	Fair	
Punta Rassa, Florida	30.08	764.0	30.10	764.5	74	23.3	76	NE	10	4.5		1k	0	E		0.01	0.3	Clear	
Red Bluff, California	29.55	750.6	29.89	759.2	58.5	14.7	88	S	3	1.3		0	2s		S	0	0	Clear	
Rio Grande City, Texas	29.82	757.4	30.04	763.0	73	22.8	90	SE	6	2.7			10s		SE	0	0	Cloudy	
Rochester, New York	29.74	755.4	30.38	771.6	42	5.6	66	S	3	1.3		1c	0			0	0	Clear	
Roseburg, Oregon	29.42	747.3	30.00	762.0	42.5	5.8	83	Calm	0	0		0	0			0	0	Clear	
Sacramento, California	29.84	757.9	29.91	759.7	54	12.2	87	SE	5	2.2		0	0			0	0	Clear	
St. Louis, Missouri	29.50	749.3	30.07	763.8	55.0	12.8	71	S	3	1.3			10n			0.17	4.3	Light rain	
St. Paul, Minnesota	29.15	740.4	29.98	761.5	49	9.4	85	SW	1	0.4		5c	0	W		0.04	1.0	Fair	
Salt Lake City, Utah	25.58	649.7	29.91	759.7	52	11.1	54	Calm	0	0		5k	0	W		0	0	Fair	
San Antonio, Texas	29.35	745.5	30.03	762.7	72	21.7	85	SE	2	0.9			10s		SE	0	0	Cloudy	
San Diego, California	29.85	758.2	29.93	760.2	61	16.1	71	NW	4	1.8			10s			0	0	Cloudy	
Sandusky, Ohio	29.55	750.6	30.23	767.8	47	8.3	55	SE	13	5.8			10s			0	0	Cloudy	
Sandy Hook, New Jersey	30.44	773.2	30.47	773.9	46.5	8.1	54	NE	9	4.0		0	0			0	0	Clear	
San Francisco, California	29.91	759.7	29.97	761.2	55	12.8	77	SW	4	1.8			10s		SW	0	0	Cloudy	
Santa Fé, New Mexico	23.30	591.8	29.84	757.9	50	10.0	32	NE	4	1.8		0	5s			0	0	Fair	
Savannah, Georgia	30.18	766.6	30.27	768.8	68.5	20.3	84	NE	4	1.8		0	0			0	0	Clear	
Shreveport, Louisiana	29.87	758.7	30.11	764.8	69.7	20.9	80	SE	4	1.8		2k	0			0	0	Fair	
Silver City, New Mexico	24.23	615.4	30.36	771.1	50	10.0	32	S	1	0.4		2k	0	Calm		0	0	Clear	
Sitka Alaska																Inap.	Inap.		
Smithville, North Carolina	30.29	769.4	30.33	770.4	64	17.8	89	NE	12	5.4		5c	Hz			0	0	Fair	
Socorro, New Mexico	25.38	644.6	29.45	748.0	55	12.8	33	SE	8	3.6		0	0			0	0	Clear	
Spokane Falls, Wash. Ter.	28.18	715.8	30.12	765.0	29	— 1.7	46	NE	1	0.4		0	0			0	0	Clear	
Springfield, Illinois	29.42	747.3	30.09	764.3	55	12.8	81	W	3	1.3			10ks;n		WNW	0.13	3.3	Thnd'r str'm	
Springfield, Massachusetts	30.33	770.4	30.46	773.7	42	5.6	83	SW	3	1.3		0	0			0	0	Clear	
Stockton, Texas	26.90	683.2	29.90	759.4	61.6	16.4	94	SE	4	1.8		0	8s		Calm	0	0	Fair	
St. Vincent, Minnesota	29.20	741.7	30.01	762.2	35	1.7	90	NW	30	13.4			10s		Calm	0.29	7.4	Cloudy	
Thatcher's Island, Mass	30.31	769.9	30.37	771.4	49	9.4	78	N	11	4.9		5cs	0	Calm		0	0	Fair	
Toledo, Ohio	29.53	750.0	30.22	767.6	47	8.3	62	S	1	0.4			10s			0	0	Cloudy	
Tucson, Arizona	27.34	694.4	29.89	759.2	59	15.0	38	SE	2	0.9		0	0			0	0	Clear	
Umatilla, Oregon	29.88	758.9	30.39	771.9	34.5	1.4	79	SE	6	2.7		0	0			0	0	Clear	
Uvalde, Texas	29.05	737.9	29.85	758.2	70	21.1	85	S	2	0.9			10s		Calm	0	0	Cloudy	
Vicksburg, Mississippi	29.88	758.9	30.13	765.3	70	21.1	75	SE	6	2.7		1c	0			0	0	Clear	
Visalia, California	29.52	749.8	29.88	758.9	57	13.9	81	NW	1	0.4		0	0			0	0	Clear	
Washington, D. C.	30.38	771.6	30.50	774.7	49	9.4	51	E	6	2.7		0	0			0	0	Clear	
Wickenburg, Arizona					56	13.3	35	Calm			0	2ck	0	S		0	0	Clear	
Wilmington, N. Carolina	30.28	769.1	30.34	770.6	65	18.3	63	E	7	3.1		2c	Hz	Calm	Calm	0	0	Fair	
Winnemucca, Nevada	25.58	649.7	29.94	760.5	47	8.3	48	NE	12	5.4		0	0			0	0	Clear	
Wood's Holl, Mass	30.42	772.7	30.46	773.7	43	6.1	75	NW	4	1.8		0	0			0	0	Clear	
Yankton, Dakota	28.82	732.0	30.11	764.8	52	11.1	73	NE	8	3.6			10s			0	0	Cloudy	
Yuma, Arizona	29.64	752.8	29.78	756.4	66	18.9	55	SE	5	2.2		0	0			0	0	Clear	
Sun-Series.																			
Bogota, U. S. Columbia	22.08	560.8			55.5	13.1	85	Calm	0	0		5cs	5ks			0.39	9.9	Cloudy	Thomas Herran.
Buff Bay Town, Jamaica.‡	29.78	756.4	30.10	764.5	73	22.8	90	E				8k	8k						
Havana, Cuba, W. I.	30.04	763.0	30.09	764.3	78	25.6	72	SE	1.2	0.5		0	0			0	0	Clear	A. Van Caneghem, Ass't.
Jakobshavn, Greenland	30.04	762.9	30.09	764.2	33.3	0.7		N			4		4			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	29.97	761.2	29.98	761.5	78.3	25.7	71	N	2	0.9		20s	2s	E	E	0.38	9.7	Fair	Robert Johnstone
Navassa, W. I.	29.90	759.4	29.98	761.5	80	26.7	78	E				5k	5s	SE	E	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	29.98	761.5	29.98	761.5	80	26.7	87	E			2		8ks	E		0.260	6.6	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.46	748.3	30.02	762.5	76	24.4	94	S			1		10ks		S	0.27	6.9	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					77.0	25		NE			3	0	2ks		NE	0	0		Earl Flint.
Santiago de Cuba, W. I.	29.96	761.0	29.99	761.7	76	24.4	81	Calm	0	0		40s	2ks			0.95	24.1	Fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.23	767.8	30.28	769.1	8.0	—13.3	89	NW	10	4.5		2k	2s	E	NW	Inap.	Inap.	Fair	J. Fortescue & W. Wood.

BRITISH NAVAL SERI[illegible]

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r.	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross, N. 34° 19′, E. 135° 00′	29.99	761.7	65	18.3		SSE			3		1					2	S	Blue sky	Comm A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Villafranca, France	30.14	765.5	63.7	17.6	67	S			1		6							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab,																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 25° 44′, E. 57° 47′	29.86	758.4	84	28.9	71	SSW			1-2		0							Misty	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			52	11.1		NNW			2		8	NNW				1	NNW	Showery	Capt. E. B. Pusey.
H. M. S. Blanche, N. 13° 05′, W. 59° 36′	29.98	761.5	80	26.7	82	ENE			3		9					1	S	Squally	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.69	754.1	75	23.9	77	ENE			1-2		0					1	NE	Blue sky	Com. F. W. Richards.
H. M. S. Champion, Elmina, Gold Coast, Africa.	29.82	757.4	81	27.2	91	S			2		7	Calm				3	SSE	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 24° 27′, E. 118° 04′	29.84	757.9	76	24.4	95	SSW			3		0							Misty	Capt. J. W. East.
H. M. S. Condor, Tunis Bay, N. Africa	30.13	765.3	65.5	18.6	71	SE			4		0					4	SE	Blue sky	Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer, Corfu, Ionian Islands	30.14	765.5	70	21.1		ESE			1		0							Blue sky	Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 22° 16′, E. 114° 09′	29.73	755.1	80	26.7	87	SW			1-2		7	SW						D. clouds	Capt. S. Long.
H. M. S. Danae, S. 30° 51′, W. 16° 00′	30.10	764.5	73	22.8	85	NNW			3		3	NNW				2		D. clouds	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Eliott.
H. M. S. Dido, S. 27° 21′, E. 33° 11′	29.86	758.4	76	24.4		NW			2		0							Misty	Capt C. Domville.
H. M. Dock-Yard																			Capt. J. Barnardisten.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 29′, W. 55° 27′	29.91	759.7	35.5	1.9	90	WSW			2-3		5	WSW						Squally	Capt. W. R. Kennedy.
H. M. S. Dryad, N. 19° 00′, E. 57° 48′	29.82	757.4	83	28.3		SSE			1		2	SW				4	S	D. clouds	Capt. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 20° 40′, E. 108° 54′	29.61	752.1	79	26.1		SSE			2							3	SW	Misty	Comm. C. Johnstone.
H. M. S. Emerald, S. 24° 22′, E. 177° 00′	29.99	761.7	75	23.9	90	NW			1		9							Showery	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Trincomalee, Ceylon, India.	29.71	754.6	87	30.6	76	E			2-3		9							D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo, Turks Island, W. I.	30.07	763.8	82	27.8	83	E			1-2		3	SE						D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish, Hong-Kong, China	29.82	757.4	81	27.2	82	SE			2		6	SE				1	SE	Misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 19° 58′, W. 118° 00′	30.01	762.2	67	19.4	74	NNW			1-3		10					3	NW; S	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 34° 28′, W. 57° 52′	29.96	761.0	60	15.6	82	WSW			3		0							Blue sky	Capt. L. F. Jones.
H. M. S. Griffon																			Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 15° 44′, W. 54° 06′	30.02	762.5	81	27.2		E			4		5	E				3	E	D. clouds	Capt. J. L. Way.
H. M. S. Inconstant, S. 39° 00′, E. 80° 30′	29.78	756.4	56	13.3	87	WSW			3		7	WSW				5	wsw	Showery	Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. IronDuke, N. 24° 28′, E. 118° 03′	29.85	758.2	76	24.4	86	SW			1-3		4	NE				2	NE	D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Coinm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	29.91	759.7	72	22.2	90	SSW			6		10	SW						Raining	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Hong-Keng, China	29.86	758.4	81.3	27.4	80	SE			1		8							Misty	Capt. A. Carpenter.
H. M. S. Midge																			Capt. W. N. Lang.
H. M. S. Minotaur, Madeira Island, Africa.	30.07	763.8	65	18.3	71	SSW			1		8	Calm						D. clouds	Capt. H. H. Rawson.
H. M. S. Modeste, N. 5° 16′, E. 115° 15′	29.74	755.4	83	28.3	87	W			1-3		3	W						Thund'r st'm	Capt. J. G. Mead.
H. M. S. Monarch																			Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda Islands, W. I.	30.16	766.1	69.5	20.8	95	SSE			2		10	SSE						Misty	Capt. E. B. Drummond.
H. M. S. Orontes, S. 34° 50′, E. 21° 50′†	29.83	757.7	65.5	18.6	92	SW			2–3		9	SW				5	SW	Showery	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.87	758.7	77	25.0		NW			1		4							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, N. 19° 41′, W. 79° 47′	29.96	761.0	80	26.7	78	ENE			2		1					1	SE	Blue sky	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A.C.Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	30.21	767.3	36	2.2		Calm			0		4							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.88	758.9	82.4	28.0	77	ESE			2		3							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis, N. 14° 58′, E. 42° 15′	29.79	756.7	88	31.1	62	Calm			0		0					Sm'll		Blue sky	Capt. G. O. Twiss.
H. M. S. Shannon, S. 31° 41′, W. 45° 29′	30.05	763.3	66.5	19.2	71	WSW			3		3	WSW				4	wsw	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb, N. 40° 50′, E. 14° 16′	30.21	767.3	61	16.1	82	SSW			2		1	Calm						Blue sky	Capt. T. L. H. Ward.
H. M. S. Tenedos, N 20° 09′, W. 61° 45′	30.07	763.8	77	25.0	73	ENE			3		2					4	ENE	D. clouds	Capt. C. G. Fane.
H. M. S. Thetis, S. 19° 22′, W. 147° 10′	29.90	759.4	80	26.7	91	Calm			0		2					2	S	D. clouds	Capt. P. W. Stephens.
H. M. S. Thunderer, Fort Augusta, Sicily	30.29	769.4	64.5	18.1	48	ESE			2		1					1		Blue sky	Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A	30.05	763.3	56	13.3	87	NNE			1–2		10	Calm						Misty	Capt. A. H. Markham.
H. M. S. Turquoise, Callao Bay, Peru	29.96	761.0	65	18.3	97	Calm			0		10							Foggy	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 8° 10′, E. 72° 25′	29.77	756.1	85	29.4	79	WNW			3		6	Calm				1	W	D. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I			78	25.6		Calm			0		4							Showery	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, S. 40° 30′, E. 173° 50′	29.55	750.6	58	14.4		SSE			7–9		10					7	SE	Thund'r st'm	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, N. 19° 22′, E. 71° 00′	29.77	756.1	86.5	30.3	90	WNW			3–4		2	NW				3	NW	Misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Santiago, Cape Verd I'ds.	29.92	760.0	78.8	26.0	80	NE			4		2					1	SE	D. clouds	S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't.
Tamega																			P. I. R. de Carvoatllo, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡ N. 36° 16′, W. 6° 48′	29.98	761.6	66.9	19.4	70	SSW			2		1							Blue sky	Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.18	766.6	73	22.8	90	SE	5	2.2			8		SE	0	0			Fair	
N. Yard. Portsmouth, N. H.	30.38	771.6	43	6.1	67	Calm	0	0			0			0	0			Clear	
Naval Hospital, Yokahama, Japan	29.92	760.0	63	17.2	97	SW			4		10		W	Slight				Threatening	
Adams, Callao, Peru	29.79	756.7	66	18.9	94	SSE			1		10					Long	W	Cloudy	
Alaska, S. 11° 35′, W. 77° 37′	29.92	760.0	66	18.9	94	SE			2		10		S			Long	SE	Overcast	
Alert, Port Lloyd, Bonin Id. *	30.00	762.0	73	22.8	60	ENE			2		2		ENE			Sm'h		Clear	
Alliance, Hampton Roads, Va.	30.40	772.1	56	13.3	87	NNE			1		8		NNE	0	0	Sm'h		Fair	
Ashuelot, N. 31° 38′, E. 124° 50′	29.84	757.9	58	14.4	88	N			3		10		N			Mod.	N	Raining	
Colorado, New York, N. Y.	30.48	774.2	52	11.1	54	NE	1	0.4			0			0	0			Clear	
Constitution, Piney Point, Md.	30.43	772.9	55	12.8	50	E	14	6.3			0							Clear	
Franklin, Norfolk, Va.	30.35	770.9	58	14.4	76	NNW	4	1.8			0			0	0			Clear	
Galena, Piraeus, Greece	30.16	766.1	64	17.8	53	SE			3		8		SE			Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal.	29.94	760.5	55	12.8	87	SW	1.2	0.5			10		SW	0	0			Overcast	
Jamestown, Sitka, Alaska *	30.38	771.6	36	2.2	90	ENE			1		5			0	0			Fair	
Kearsarge, Hampton Roads, Va.	30.47	773.9	55	12.8	87	N			2		8		W			Sm'h		Cloudy	
Lackawanna, Valparaiso, Chili †	30.20	767.1	56	13.3	87	SE			1		2		SE					Fair	
Marion, Montevideo, Uruguay	30.00	762.0	57	13.9	87	WNW			3					0	0	Sm'h		Light fog	
Michigan, Erie, Pennsylvania	30.20	767.1	45	7.2		S	4	1.8			0							Clear	
Minnesota, Newport, R. I.	30.47	773.9	48	8.9	85	NNW			1–2		0					Sm'h		Clear	
Monocacy, Shanghai, China	29.89	759.2	61	16.1	88	NE			2		10		Calm					Cloudy	
New Hampshire, Port Royal, S. C.	30.20	767.1	75	23.9	100	ENE	16	7.2			8		Calm	0	0			Fair	
Nipsic, N. 38° 22′, E. 11° 47′	30.26	768.6	61	16.1	48	S			2		0					Sm'h		Blue sky	
Onward, Callao, Peru †	29.95	760.7	65	18.3	94	Calm			0		10		NNW			Long	W	Foggy	
Palos, Yokohama, Japan	30.06	763.5	60	15.6	100	SSW			2		10							Overcast	
Passaic, Washington, D. C.	30.49	774.4	46	7.8	92	N			1		0			0	0			Clear	
Pensacola, Honolulu, Sandwich Ids.	30.05	763.3	74	23.3	95						0			Slight		Sm'h		Clear	
Portsmouth, Alexandria, Va.	30.47	773.9	52	11.1	73	NE			2		5		E					Clear	
Powhatan, New York, N. Y.	30.45	773.4	53	11.7	48	Calm			0		0							Clear	
Quinnebaug, Cadiz, Spain	29.98	761.5	68	20.0	74	SW			4		2							Clear	
Ranger, N. 17° 52′, W. 102° 34′ *	29.90	759.4	77	25.0	77	E			2		0			0	0	Sm'h		Clear	
Richmond, N. 32° 55′, E. 126° 06′	29.88	758.9	56	13.3	94	S			2		10		NW	0.12	3.0	Long	SE	Cloudy	
Saratoga, Washington, D. C.	30.48	774.2	49	9.4	44	NNE			1–2		0			0	0			Clear	
Shenandoah, Montevideo, Uruguay *	29.98	761.5	56	13.3	94	WNW			3		2		W			Mod.	W	Fair	
St. Louis, League Island, Pa.			45	7.2	84	NE	2	0.9			0			0	0			Clear	
Swatara, Shangbai, China †*	29.90	759.4	63	17.2	83	WNW			1		10		Calm					Overcast	
Tennessee, Hampton Roads, Va.	30.42	772.7	58	14.4	82	N	6	2.7			5		NNW	0	0	Sm'h		Fair	
Ticonderoga, S. 25° 20′, W. 129° 47′	30.01	762.2	75	23.9	95	NNE			1		2		NNE	0	0	Light	NE	Clear	
Trenton, Castellamare, Italy *	30.20	767.1	67	19.4	55	WNW			2		2			0	0	Sm'h		Fair	
Vandalia, Norfolk, Va.	30.40	772.1	59	15.0	88	N			1		1		Calm					Clear	
Wabash, Boston, Massachusetts	30.44	773.2	42	5.6	50	NW	8	3.6						0	0			Hazy	
Wachusetts, N. 27° 12′, W. 156° 43′	30.06	763.5	70	21.1	75	E			2		8		E	0	0	Long	N	Cloudy	
Wyoming, N. 20° 20′, W. 33° 52′	30.10	764.5	73	22.8	72	NE			4		5		NE			Mod.	NE	Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 39° 13′, W. 155° 47′	30.18	766.6	49.8	9.9	81	NE			3		10							Misty	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, Demerara, Brit. Guiana	29.93	760.2	76	24.4	100	W			2		10							Raining	W. N. Lailey.
City of Agra ‡																			Capt. T. Young.
Barque Commewyne, N. 34° 33′, W. 20° 59′	30.25	768.3	63.3	17.4	67	N			3		4							D. clouds	Capt. W. Scott.
Barque Coppename, N. 50° 25′, W. 0° 35′	29.76	755.9	56	13.3	69	SSW			3		1					1		Blue sky	Capt. Jas. Buchan.
Denbighshire																			Capt. H. Y. Murdock.
Barque Dochra ‡																			Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 8° 09′, W. 33° 12′	29.94	760.5	80.5	26.9	70	NE			5		2							Blue sky	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope ‡																			Capt. Jas. Campbell.
Ship Iron Cross, S. 29° 56′, E. 75° 40′ *	30.19	766.8	66	18.9		E			0-1		9							Gloomy	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee, ‡ S. 15° 46′, W. 5° 25′	30.06	763.5	70.9	21.6	71	ESE			4		7							Showery	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 45° 35′, W. 38° 24′	30.10	764.5	57.3	14.1	96	SW			6		10					4-5	W; WNW	Misty	Capt. H. W. Dyke.
Barque Mertola, N. 36° 57′, W. 10° 48′	30.08	764.0	61.5	16.4	83	NNW			3		9							D. clouds	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ S. 24° 28′, E. 8° 03′	30.10	764.5	67	19.4	84	SE			4		5							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 8° 17′, E. 84° 43′	29.72	754.9	80.5	26.9	87	NE			5		10							Drizzling	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, ‡ N. 11° 30′, E. 52° 23′	29.89	759.2	85	29.4	76	NE			1		4							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean																			
S. S. Circassian, N. 44° 45′, W. 58° 28′	30.38	771.6	37	2.8	90	N			3	8c	0	WSW		0	0	2	SW	D. clouds	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 48° 03′, W. 35° 12′ †	29.93	760.2	54	12.2		SW			4		10		WSW	6h'rs	light	Mod.	W	Overcast	Capt. Benj. Gleadell.
S. S. Germanic, N. 40° 37′, W. 66° 40′	30.48	774.2	38	3.3		WNW			3		5?		NW	0	0	Sm'h		Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Thol.
S. S. Hermann, N. 49° 42′, W. 10° 46′	29.56	750.8	59	15.0	94	WSW			4		10		W	0	0	H'vy	W	Cloudy	Capt. H. Baur.
S. S. Köln																			Capt. Th. Jüngst.
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, N. 48° 52′, W. 27° 18′	29.85	758.2	53	11.7	93	NNW			4		8?		N			Cross	N	Clear?	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio, N. 43° 58′, W. 54° 02′ *†	30.16	766.1	42	5.6	91	WNW			2		5		WNW	10 ho	urs	Sm'll	SW	Fair	W. Shackford, Chief Off'r
S. S. Pennsylvania, Philadelphia, Pa. *†	30.12	765.0	52	11.1	93	NE			2		2		NE					Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, Hong Kong, China †	29.97	761.2	80	26.7	82	SE			2		8		SE	0	0	Sm'h		Cloudy	Capt. H. Davison.
S. S. Gaelic, N. 38° 02′, W. 177° 03′ *†	30.12	765.0	60	15.6	94	ENE			3		10		NE			Sm'h	NE	Raining	Capt. W. H. Kidley.
S. S. Oceanic																			Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon †	30.03	762.7	47.0	8.3		NW			2		2		NW					Fair	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota, N. 40° 50′, W. 124° 40′ *†	29.92	760.0	52	11.1	100	NW			4		2		NW	0	0	Short	W	Fair	Capt. H. G. Morse.
S. S. Idaho, N. 47° 30′, W. 125° 30′ †	30.12	765.0	47	8.3	70	NE			3		0					Light	W	Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, N. 32° 40′, W. 117° 18′ †	30.00	762.0	58	14.4	88	NE			1		8		E			Sm'h		Fair	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal. †	29.94	760.5	52	11.1	86	Calm			0		10							Overcast	Capt. G. Debney.
S. S. Victoria, N. 43° 10′, W. 124° 40′ †	29.95	760.7	52	11.1	100	NW			3		2					Long	W	Fair	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, Sydney, N. S. W.	30.51	774.9	59	15.0	88	WNW			2		10							Raining	A. Bannerman, 2d Officer.
S. S. City of New York																			Wm.H.Hawes,2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, N. 23° 36′, E. 117° 50′ †	29.88	758.9	73	22.8	95	SSW			3		8		S	0	0	Sm'h		Cloudy	Capt. G. G. Berry.
S. S. City of Sidney, S. 16° 57′, W. 171° 44′ †	29.97	761.2	82	27.8	79	ESE			4		8		SE	0	0	4	ENE	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 38° 45′, W. 166° 07′ †	30.15	765.8	56	13.3	75	E			6		10		E			R'gh	E	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima																			Capt. R. R. Searle.
S. S. Granada, N. 15° 04′, W. 93° 58′ †	29.84	757.9	84	28.9	75	N			3		5		N	0	0	Light	SW	Clear	Capt. M. Connolly.
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland																			Capt. W. Geo. Randle.
S. S. Vaderland, N. 47° 37′, W. 38° 11′	29.99	761.7				SW			4		10			Sho	wers	R'gh	SW	Overcast	T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Savannah, Georgia	30.24	768.1	73	22.8	76	NE				2c	0			0	0			Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 33° 32′, W. 20° 45′ *†	30.32	770.1	65	18.3		NNE			3		2		NNE	0	0	Sm'h	NNE	Fine	Capt B. F. Woodbury.
Brigantine George																			Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Albemarle Sound †	30.44	773.2	57	13.9	82	NNE	3	1.3		0	28			0	0			Clear	
Bark Sunbeam, N. 41° 00′, W. 30° 41′ †	30.26	768.6	60	15.6	76	WNW			6		5		NW	0	0	Mod.	NW	Fair	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 2, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours		Weather	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco‡			30.06	763.4	68.7	20.4	78	NE			2		3			0	0	Pretty fair.	Dr. Ollive.
Nemours‡			29.93	760.3	72.3	22.4	79	SSW			3		4			0	0	Cloudy	Reynard.
Algiers‡			29.91	759.6	72.7	22.6	53	NW			4		0			0	0	Clear	Nicolas.
La Calle‡			29.91	759.8	73.4	23.0	74	SE			5		3			0	0	Pretty fair.	Fonfrède.
Tunis‡			29.98	761.4															Jacques.
Sfax‡			30.07	763.6															Gau.
Saida‡			29.99	761.8	79.2	26.2	31	NW			5		0			0	0	Clear	Dumas.
Tebessa‡			30.02	762.5	75.9	24.4	16	W			3		2			0	0	Fair	Watrin.
Geriville‡																			Lonchamp.
Laghouat‡			30.07	763.6	79.5	26.4	11	S			2		0			0	0	Clear	Herbin.
Biskra‡			30.04	762.9															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.22	767.6	30.31	769.9	55.0	12.8	80	SE	6	2.7		2				0	0	Fine	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.44	747.8	29.98	761.4	65.8	18.8	30	SW			6	2				0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.10	739.0	29.84	757.9	68.0	20.0	40	SE	3.8	1.7		4				0	0		Dr. Wierzbicki.
Eperies	29.09	738.8	29.95	760.7	62.6	17.0	38	S			5	3cs	0	N		0	0		Julius Mikolik.
Gratz‡	28.62	727.0	29.82	757.4	71.4	21.9	36	SW			4		0			0	0		Andreas Rosplal.
Hermannstadt	28.63	727.1	30.02	762.6	65.5	18.6	36	N			1		0			0	0		Prof. A Gottschling.
Kremsmunster, Obs'y	28.45	722.5	29.74	755.3	67.6	19.8	59	NE			1		0			0	0		The Staff.
Lemberg	28.97	735.9	29.94	760.5	61.5	16.4	54	SW			2		2			0	0		Dr. T. Stanecki.
Pola	29.99	701.8	30.10	764.6	62.6	17.0	64	SSE			3		5			0	0		K. K. Hydrographic Office.
Szathmar	29.57	751.1	30.02	762.6	65.5	18.6	38	E			1		2			0	0		Beicht Peter, S. J.
Szegedin	29.71	754.6	29.98	761.6	65.5	18.6	51	S			2		3			0	0		Karl Stancel.
Trieste	30.01	762.2	30.11	764.8	64.8	18.2	54	WSW			1		1			0	0	Clear	Secco.
Vienna	29.16	740.6	29.85	758.3	65.8	18.8	49	SE			2		0			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.72	754.9	29.82	757.4	43.6	6.4	52	N	14	6.3	.....	.....	7	.....	.....	0.015	0.4	D. clouds	W. Boswell.
Armagh, Observatory	29.55	750.6	29.79	756.7	47.0	8.3	89	NNE	6	2.7	.....	.....	10	.....	.....	.....	.....	Gloomy	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.67	753.6	53.3	11.8	65	NNE	11	4.9	.....	.....	9	.....	.....	.....	.....	Overcast	John Hartnup.
Bolton, Sharples	29.14	740.1	29.67	753.6	50.7	10.4	73	SE	18	8.0	.....	.....	10	.....	.....	.....	.....	Gloomy	Thomas Mackereth.
Bradford, Yorkshire	29.28	743.7	29.68	753.9	50.5	10.3	72	NW	.....	.....	1	.....	4	.....	.....	0	0	D. clouds	J.McLandsborough, F.R.S
Bridgetown, Barbadoes	29.94	760.5	29.97	761.2	83.0	28.3	65	NE	.....	.....	2	.....	3	.....	.....	.....	.....	D. clouds	Corpl. J. Surgener, A.H.C.
Cardington	.....	.....	29.63	752.6	56.0	13.3	75	NW	.....	.....	0.2	.....	9	.....	.....	.....	.....	Overcast	John McLaren.
Chatham, School M. E.	29.51	749.5	29.64	752.8	51.1	10.6	79	E	.....	.....	3	.....	10	.....	.....	Blank		Gloomy	Lance Cpl. R. Tear, R.E.
Falmouth, Observatory	29.44	747.8	29.66	753.4	53.2	11.8	74	NNW	.....	.....	3	.....	10	.....	.....	.....	.....	Overcast	The Staff.
Fort Napier, Natal	27.60	701.0	29.81	757.2	77.2	25.1	99	Calm	.....	.....	0	.....	0	.....	.....	.....	.....	Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.58	751.3	29.81	757.2	88	31.1	88	W	.....	.....	1	.....	3	.....	.....	.....	.....	D. clouds	Sgt. C. E. Keane.
Galway, Queen's College	.....	.....	29.74	755.4	57	13.9	75	NW	.....	.....	2	.....	4	.....	.....	0	0	Blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	30.00	762.0	30.06	763.5	69.6	20.9	73	W	.....	.....	4	.....	0	.....	.....	.....	.....	Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.59	751.6	29.79	756.7	44.7	7.1	70	NE	.....	.....	3	.....	10k	.....	.....	Blank		Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.46	748.3	29.63	752.6	58.7	14.8	57	ENE	.....	.....	1	.....	9	.....	.....	.....	.....	D. clouds	The Staff.
Guernsey	29.37	746.0	29.59	751.6	50	10.0	93	NNE	.....	.....	1	.....	10	.....	.....	.....	.....	Raining	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.61	752.1	29.64	752.8	54.2	12.3	61	ENE	13	5.8	.....	.....	10	.....	.....	.....	.....	Overcast	The Staff.
Leicester, Museum	29.36	745.7	29.61	752.1	51.9	11.1	76	NE	.....	.....	1	.....	10	.....	.....	.....	.....	Overcast	J. E. Carryer.
Malta, Mediterranean	30.04	763.0	30.11	764.8	65.0	18.3	73	SE	.....	.....	4	.....	4	.....	.....	0	0	D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas	30.05	763.3	30.10	764.5	76.0	24.4	87	NE	.....	.....	2	.....	8	.....	.....	Blank		D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.15	740.4	29.67	753.6	51.2	10.7	77	N	.....	.....	2	.....	8	.....	.....	.....	.....	D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	29.42	747.3	29.65	753.1	54.2	12.3	74	ENE	.....	.....	2	.....	10	.....	.....	.....	.....	Threatening	The Staff.
Plymouth	29.54	750.3	29.62	752.3	54.5	12.5	82	N	.....	.....	1	.....	10	.....	.....	.....	.....	Drizzling	John Merrifield.
Sandwick Manse, Orkneys	.....	.....	29.86	758.4	42.6	5.9	63	NE	16	7.2	.....	.....	1	.....	.....	.....	.....	D. clouds	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.15	765.8	30.21	767.3	49.4	15.2	72	SW	.....	.....	1	.....	1	.....	.....	.....	.....	Blue sky	Serg't W. H. Lyne.
Sheffield	29.42	747.3	29.70	754.4	51.7	10.9	75	ENE	.....	.....	1	.....	10	.....	.....	0	0	Overcast	W. F. Cooper.
Silloth Rectory	29.70	754.4	29.73	755.1	47.4	8.6	82	E	.....	.....	4	.....	8	.....	.....	0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.70	754.4	53.0	11.7	62	NE	7	3.1	.....	.....	10	.....	.....	.....	.....	Overcast	Rev. S. J. Perry.
Strathfield Turgiss	29.41	747.0	29.62	752.3	59.4	15.2	63	E	.....	.....	2	.....	8	.....	.....	.....	.....	D. clouds	Rev C.H.Griffiths, F.M.S.
Truro, Royal Institution	29.66	753.4	29.70	754.4	57	13.9	75	NW	.....	.....	6	.....	6	.....	.....	.....	.....	D. clouds	W. Newcombe.
Valencia, Observatory	29.76	755.9	29.79	756.7	52.9	11.6	82	NW	15	6.7	.....	.....	7	.....	.....	Blank		Misty	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.96	761.0	30.00	762.0	38	3.3	87	S	12	5.4	.....	.....	10n	.....	.....	0.030	0.8	Light rain	H. J. Cundall, C. E.
Chatham, N. B.*	29.86	758.4	29.93	760.2	38	3.3	90	S	5	2.2	.....	.....	10s	.....	S	0.09	2.3	Cloudy	G. A. Blair.
Chicoutimi, Quebec	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Rev. V. A. Huart.
Cornwall, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	James Smith, M. A.
Dalhousie, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. A. Johnson.
Father Point, Quebec*	29.79	756.7	29.81	757.2	41	5.0	80	SW	10	4.5	.....	.....	10n	.....	Calm	0	0	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.62	752.3	30.49	774.4	30	— 1.1	89	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	James Stewart.
Fredericton, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. Harrison.
Granton, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	James Grant.
Halifax, N. S.*	29.99	761.7	30.13	765.3	40	4.4	82	SW	9	4.0	.....	.....	10n	.....	.....	0	0	Cloudy	A. Allison.
Hamilton, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. Dickson, B. A.
Kingston, Ontario*	29.60	751.8	29.93	760.2	47	8.3	91	W	5	2.2	.....	5k	0	W	.....	0.09	2.3	Fair	S. Woods, M. A.
Little Glace Bay, N. S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. H. Rigby.
Montreal, Quebec*	29.63	752.6	29.83	757.7	50	10.0	89	W	21	9.4	.....	.....	10ks	.....	W	0.06	1.5	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. R. Nason.
Parry Sound, Ontario*	29.37	746.0	30.08	764.0	41	5.0	82	NW	10	4.5	.....	5k	0	NW	.....	Inap.	Inap.	Fair	Rev. R. Moseley.
Peterboro, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. F. Jeffers, M. A.
Port Dover, Ontario	29.40	746.7	30.10	764.5	48	8.9	70	NW	8	3.6	.....	10k	0	NW	.....	Inap.	Inap.	Fair	H. Morgan.
Port Stanley, Ontario	29.47	748.5	30.12	765.0	45	7.2	74	W	10	4.5	.....	.....	10ks	.....	W	0.01	0.3	Cloudy	M. Payne.
Quebec, Quebec*	29.48	748.8	29.81	757.2	40	4.4	91	W	.....	.....	1	.....	Fg	.....	.....	0.03	0.8	Light rain	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.51	749.5	29.98	761.5	42	5.6	74	NW	4	1.8	.....	5k	0	NW	.....	0	0	Fair	W. H. McIntyre.
Saugeen, Ontario*	29.40	746.7	30.13	765.3	38	3.3	82	NW	16	7.2	.....	2k	0	N	.....	0	0	Clear	K. Stewart.
St. Andrews, N. B.	29.90	759.4	29.95	760.7	42	5.6	78	SW	4	1.8	.....	.....	10n	.....	.....	0	0	Cloudy	
St. John, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Murdock, C. E.
Stratford, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. J. Macgregor, M. A.
Sydney, C. B*	30.03	762.7	30.07	763.8	43	6.1	56	SW	11	4.9	.....	8cs	0	W	.....	0	0	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.71	754.6	30.09	764.3	48	8.9	56	NW	19	8.5	.....	0	5s	.....	.....	0.03	0.8	Fair	Magnetic Observatory.
Windsor, N. S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Woodstock, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. Wolverton.
Yarmouth, N. S.*	29.96	761.0	30.03	762.7	42	5.6	80	S	6	2.7	.....	10k	0	W	.....	0	0	Cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.84	757.9	30.00	762.0	40	4.4	82	W	2	0.9	.....	5k	5s	.....	.....	0	0	Fair	John Delany.
St. Pierre, N. F.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	N. F. Land, Comd't.
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.73	755.1	.....	.....	67.6	19.8	85	SW	18.3	8.2	.....	.....	8s	.....	.....	0.100	2.5	Cloudy	John Duthie.
Cape Town, C. G. H. Obs'y	29.85	758.2	29.89	759.2	62.2	16.8	.....	NNW	16.2	7.2	.....	5	5n	.....	.....	0.430	10.9	.....	The Staff, for D. Gill.
Worcester*†	28.67	728.2	.....	.....	69.7	20.9	57	NW	.....	.....	6	4	5	.....	.....	0	0	Overcast	C. Stokes.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.88	759.0	29.91	759.6	58.8	14.9	91	ESE	4.9	2.2	.....	.....	10n	.....	.....	.....	.....	Raining	M. Marc Dechevrens, S.J.

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

STATIONS.	Barometer. Corrected for instrumental error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.19	665.2	29.91	759.7	66.6	19.2	90	SE			2	8cs	0			0.08	2.	Cloudy.	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.67	753.5	29.71	754.7	50.9	10.5	80	SW	11	5		8							Oversergent Fischer.
Fanöe	29.64	752.9	29.66	753.4	48.9	9.4	86	WSW			4	2							Overloerer Lauridsen.
Godthaab, Greenland	29.38	746.3	29.43	747.4	43.3	6.3	52	NNE			4	6							S. Kleinschmidt.
Stykkisholm, Iceland	29.89	759.3	29.94	760.4	43.7	6.5		Calm			0	8							A. O. Thorlacius.
Thorshavn	29.98	761.5	30.02	762.4	41.2	5.1	66	NE	11	5		7							Overloerer Bergh.
Vestervig	29.54	750.2	29.63	752.6	46.2	7.9	94	SW			2	10							Loerarer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.07	738.3	29.71	754.6	60.3	15.7	65	SSW			1	8kn	N	N		0.244	6.2	Very cloudy	M. Labroue, Director.
Alençon Normal School	29.06	738.0	29.61	752.0	59.4	15.2	82	SW			1	8kn		SW		0.39	10.	Very cloudy	M. Nicot, Director.
Arras, Engineer School	29.42	747.2	29.67	753.6	55.8	13.2	88	SSE			1	kn		SSE		0.165	4.2		M. Klein, Commandant.
Avignon, Normal School	29.73	755.1	29.81	757.1	68.0	20	43	SE			4	5		S		0	0	Cloudy.	M. Giraud, Director.
Bar-sur-Seine	29.15	740.3	29.69	754.2	58.5	14.7	74	S			2	10		SW		0.150	3.8	Covered	M. Saillard, Director.
Beauvais, Normal School	29.34	745.1	29.60	751.8	57.4	14.1	78	SSE			1	10		S		0.134	3.4	Covered	M. Frère Eugene Marie.
Besançon, Normal School	28.91	734.2	29.78	756.3	57.4	14.1	66	NW			1	n		SW		0	0		M. Gobin, Director.
Bordeaux, Observatory	29.41	747.1	29.67	753.6	59.9	15.5	71	SW			1	8		SW		0.555	14.1	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.13	739.9	29.68	753.8	54.0	12.2	92	ESE			1	10n		ESE		0.24	6.	Raining	M. Postel, Director.
Brest, Naval Observatory	29.37	746 0	29.61	752.2	56.8	13.8	79	NE			2	10		NE		0.165	4.2		M. de Kermaree, Dir.
Caen, Normal School	29.46	748.2	29.53	750.1	58.3	14.6	91	WNW			1	10				0.16	4.	Covered	M. Bidtrix, Director.
Châlons-sur-Marne, N.Sch'l	29.41	746.9	29.72	754.9	58.3	14.6	93	S			1	10				0.177	4.5	Covered	M. Jadot, Director.
Charleville, Normal School	29.16	740.0	29.66	753.3	54.3	12.4	70	S			1	10				0	0	Covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.35	720.0	29.68	753.8	57.2	14.0	60	SSE			3	10				0	0	Covered	M. Alluard, Director.
Cluny, Normal School	28.90	734.0	29.74	755.5	59.7	15.4	83	S			1	7		S		0.122	3.1		M. de Villemontée, Dir.
Commercy, Normal School	28.89	733.7	29.74	755.4	54.5	12.5	63	SW			2	10kn	SW	SW		0	0	Covered	Dr. Coulet, Director.
Gap, Normal School	27.33	694.2	29.80	756.9	63.9	17.7	33	E			2	3		S		0	0	¼ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	28.75	730.2	29.89	759.2	63.5	17.5	43	SE			8	10				0	0	Covered	M. Kina, Director.
Grenoble, Normal School	28 97	735.9	29.71	754.6	69.1	20.6	31	SW			3	kn		S		0	0		M. Ablard, Director.
Guéret, Normal School	28.13	714.5	29.71	754.6	47.8	8.8	81	SW			1	5n		NE		0.217	5.5	Cloudy	M. Rivoire, Director.
Lamballe, Normal School	29.43	747.4	29.70	754.3	55.4	13	86	N			1			N		0.098	2.5		M. Ollitrault, Director.
Lesear, Normal School	29.15	740.4	29.81	757.1	61.2	16.2	81	N			4	ck	0	NE		0	0		M Chauvin, Director.
Lorient, Naval Observatory	29.45	748 1	29.56	750.7	64.4	18.0	62	S			3	5	NW	S		0.146	3.7	½ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.09	728.6	29.72	755.0	60.4	15.8	42	SW			1	10		SW		0	0	Covered	M. André, Director.
Mans, Normal School	29.31	744.5	29.58	751.2	59.2	15.1	81	SSE			3	8		SE		0.598	15.2	Very cloudy	M Piboeu, Director.
Marseille, Observatory	29.54	750.4	29.81	757.1	68.2	20.1	37	ESE			3	5		WSW		0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.56	623.8	29.80	756.8	49.1	9.5	61	WSW	18.6	8.3		6		W		0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.09	754.1	29.80	757.0	57.9	14.4	86	SSE			4	10				0	0	Covered	M. P. Galzin, Director.
Nancy, Normal School	28.97	735.8	29.72	755.0	57.2	14	55	SSE			3	10kn		S		0.031	0.8	Sprinkling	M. Hasse.
Nantes, Observatory	29.43	747.4	29.59	751.5	63.3	17.4	57	S			1-2	9n		SW		0.217	5.5	Raining	M. Larocque, Director.
Nice	29.91	759.6	29.94	760.5	61.2	16.2	69	E			8	5	E	E		0	0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.58	751.2	29.68	753.9	62.4	16.9	78	S	20.6	9.2		9	NW	SE		0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.25	595.3			33.4	0.8						10	NE	SW		0.232	5.9	Snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.77	730.8	29.83	757.6	59.9	15.5	55	S			4	2		S				Light rain	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.85	631.1			39.2	4.0	100	S			8	10				0.031	0.8	Rain & fog	M. Alluard, Director
Rochefort, Naval Obs'y	29.63	752.5	29.66	753.3	56.8	13.8	82	S			1	8		SW		1.26	32.	¾ covered	Lt. E. Decanie, Director.
Roche-sur-Yon, N. School	29.35	745.6	29.57	751.0	56.5	13.6	80	SSE			2	8		S		0.55	14.	Very cloudy	M. Mouillot, Director.
Rodez, Normal School	27.58	700.6	29. 9	754.1	56.8	13.8	62	E			4	10		S		0.98	25.	Covered	M. Richard, Director.
Rouen, Normal School	29.48	748.7	29.56	750.9	55.8	13.2	90	SSE			2	10		ESE		0.20	5.	Covered	M. Platrier, Director.
Saint Lô, Normal School	29.42	747.2	29.58	751 2	54.0	12.2	90	SW			1	10				0.004	0.1	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.45	747.9	29.51	752.1	58.8	14.9	75	SSW			3	10		SSW		0.059	1.5		M. Renou, Director.
Toulouse, Observatory	29.02	737.2	29.74	755 3	65.5	18.6	100	SSE			1					0.189	4.8		M. Baillaud, Director.
Tours	29.47	747.1	29.01	752.1	63.0	17.2	57	SW			2	8		W		0.445	11.3	Stormy	M. de Tastes.
Versailles, Observatory	29.11	739.3	29.60	751.8	57.6	14.2	80	S			2					0.157	4.0		Dr. A. Bérigny, Director.
Sub-Series.																			
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.89	733.7	29.74	755.4	64.8	18.2	40	SW			2	6k	SSW			0.008	0.2		Prof. Dr. Hoh.
Berlin	29.50	750.8	29.72	755.0	67.1	19.5	31	W			1	5				0	0		Prof. Dr. Arndt.
Breslau	29.32	744.6	29.84	758.0	69.1	20.6	40	SSW			2	7				0.039	1.0		Royal University Obs'y.
Carlsruhe	29.29	743.9	29.70	754.3	67.6	19.8	46	SW			1	10	SW			0	0		Albert Senx.
Cassel	28.92	734.5	29. 3	752.7	66.9	19.4	39	S			4	7	S			0.008	0.2		Dr. H. Möhl.
Frankfort on the Main	29.38	746.3	29.73	755.2	71.2	21.8	31	SW			2	8				0.012	0.3		Physical Society.
Friedrichshafen	28.30	718.8	29.70	754.3	61.9	16.6	57	SSE			6	7	SW			0	0		Wilhelm, Chief Tel.
Hamburg	29.01	752.2	29. 9	754.0	63.7	17.6	58	Calm			0	10				0.016	0.4		Dr. R. Kleeman.
Kiel	29.05	753.2	29. 7	753.6	50.7	10.4	65	WSW			2	7				0.087	2.2		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.32	744.7	29.72	754.9	71.6	22.0	58	SSW			4	7	W-W			0	0		Prof. Dr. Bruhns.
Magdeburg	29.01	752.2	29.89	759.3	67.3	19.6	73	SSW			1	7ks	SW			0	0		Dr. Assmann.
Memel	29.85	758.2	29.90	759.4	48.7	9.3	84	W			3	10n							Reinbrecht & Issermann.
Munich	27.93	709.5	29.78	756.4	72.9	22.7	25	SE			1	2	S			0.008	0.2		Central Station.
Neufahrwasser	29.82	757.5	29.84	757 9	61.5	16.4	60	SSW			1	10				0.024	0.6		A. Lothes.
Neustadt, Palatinate	29.17	740.8	29.09	754.1	69.0	20.9	38	SW			2	7	SW			0	0		Dicknether.
Stuttgart	28.75	730.3	29.00	751.8	73.0	22.8	33	SW			5	8	W			0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.24	717.3	29.71	754.7	71.4	21.9	38	SE			4	8	SE			0	0		Prof. Kemlein.
Wustrow	29.70	754.3	29.72	754.9	52.3	11.3	85	N			3	10s				0.031	0.8		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	OBSERVERS.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.86	758.4	30.24	768.2	67.3	19.6	.....	SW	.....	.....	1.0	.....	0	.....	.....	.....	.....	Clear	A. Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.74	755.3	29.79	756.6	89.5	31.9	61	WSW	14.0	6.3	.....	.....	0	.....	.....	0	0	Misty	
Deesa	29.21	742.0	29.67	753.5	101.8	38.8	10	W	7.4	3.3	.....	.....	0	.....	.....	0	0	Blue sky	
Bombay	29.65	753.0	29.68	754.0	87.4	30.8	69	WNW	17.0	7.6	.....	.....	0	.....	.....	0	0	Blue sky	
Poona, Yarrowda	27.83	707.0	29.61	752.2	98.0	36.7	8	W	16.0	7.2	.....	.....	0	.....	.....	0	0	Blue sky	
Belgaum	27.16	689.9	29.63	752.6	87.4	30.8	53	W	15.0	6.7	.....	.....	3	.....	E	0	0	Misty	
Lahore	28.96	735.6	29.69	754.1	88.1	31.2	18	W	4.3	1.9	.....	.....	2	.....	.....	0	0	Blue sky	
Roorkee	28.76	730.6	29.64	752.9	88.8	31.6	60	NW	4.5	2.0	.....	.....	5	.....	.....	0	0	.....	
Agra	29.09	738.9	29.64	752.7	95.1	35.1	40	W	6.0	2.7	.....	.....	0	.....	.....	0	0	.....	
Nagpur	28.56	725.4	29.55	750.5	104.7	40.4	17	NNW	3.5	1.6	.....	.....	0	.....	.....	0	0	Blue sky	
Jubbulpore	28.34	719.7	29.64	752.9	97.2	36.2	5	NNE	2.4	1.1	.....	.....	0	.....	.....	0	0	Blue sky	
Lucknow	29.22	742.0	29.58	751.3	96.0	35.6	16	W	3.9	1.7	.....	.....	0	.....	.....	0	0	Blue sky	
Allahabad	29.31	744.4	29.61	752.0	98.7	37.1	21	NW	3.4	1.5	.....	.....	0	.....	.....	0	0	Blue sky	
Patna	29.38	746.4	29.56	750.8	97.5	36.4	32	N	0.8	0.4	.....	.....	4	N	N	0	0	D. clouds	
Hazaribagh	27.62	701.5	29.55	750.5	95.6	35.3	12	N	7.6	3.4	.....	.....	0	.....	.....	0	0	Misty	
Cuttack	29.60	751.9	29.68	753.9	87.9	31.1	60	S	5.7	2.6	.....	.....	3	.....	.....	0	0	D. clouds	
Calcutta, Alipore	29.60	751.8	29.62	752.3	84.8	29.3	76	SSW	13.0	5.8	.....	.....	10	.....	.....	0	0	Overcast	
Dhubri	29.44	747.8	29.56	750.8	84.5	29.2	75	ESE	7.1	3.2	.....	.....	9	W	.....	0.29	7.4	Gloomy	
Chittagong	29.64	752.9	29.73	755.2	83.5	28.6	80	S	6.9	3.1	.....	.....	2	.....	.....	0	0	Blue sky	
Sibsagar	29.38	746.1	29.71	754.6	80.1	26.7	82	NE	1.9	0.8	.....	.....	10	W	W	0.04	1.0	D. clouds	
Zanzibar, Africa	.....	.....	29.87	758.7	83.9	28.8	74	S	9	4.0	.....	.....	8	.....	S	0.22	5.6	Threatening	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.69	754.0	30.10	764.4	64.0	17.8	59	Calm	0	0	.....	.....	7	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.53	750.0	30.04	763.0	64.2	17.9	71	WSW	3.8	1.7	.....	.....	6	SW	.....	0	0	.....	Prof. Schiaparelli.
Padua	29.97	761.1	30.08	763.9	64.0	17.8	51	SSE	4.9	2.2	.....	.....	5	ESE	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.13	739.9	30.03	762.7	54.9	12.7	78	N	4.9	2.2	.....	.....	10	.....	.....	0.945	24.0	.....	Prof. P. F. Denza.
Genoa	29.89	759.1	30.08	764.0	60.4	15.8	59	SE	8.7	3.9	.....	.....	10	SE	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	28.11	713.9	30.01	762.3	55.0	12.8	64	SE	.....	.....	6	.....	9	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	30.02	762.5	30.07	763.7	60.8	16.0	75	E	12.5	5.6	.....	.....	4	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.81	757.1	30.06	763.5	66.7	19.3	41	S	.....	.....	2	.....	10	SW	.....	0	0	.....	Prof. Costantino Pitter.
Leghorn	29.98	761.4	30.06	763.6	65.1	18.4	52	S	3.1	1.4	.....	.....	10	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.93	760.2	30.10	764.6	66.2	19.0	46	SSW	16.1	7.2	.....	.....	8	.....	.....	0	0	.....	Prof. P. S. Ferrari.
Lecce	29.93	760.1	30.18	766.5	68.4	20.2	48	S	13.6	6.1	.....	.....	2	S	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.23	742.5	30.11	764.8	66.2	19.0	72	SSE	3.8	1.7	.....	.....	2	SE	.....	0	0	.....	Prof. D. Conti.
Cagliari	29.77	756.1	29.96	761.0	65.8	18.8	66	E	.....	.....	2	.....	4	SE	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	29.86	758.5	30.11	764.9	65.3	18.5	46	E	6.3	2.8	.....	.....	5	.....	.....	0	0	.....	Prof. G. Ciacciatore.
Syracuse	30.12	765.0	30.16	766.1	66.2	19.0	49	S	5.6	2.5	.....	.....	6	SW	.....	0	0	.....	Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.59	751.6	30.11	764.8	65.1	18.4	64	SSE	3.1	1.4	.....	.....	3	SSW	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	22.15	562.6	.....	.....	36.7	2.6	65	W	.....	.....	6	4cs	0	S	.....	0	0	Fair	Prof. P. F. Denza.
Valdobbia	22.16	562.8	.....	.....	32.9	0.5	81	SE	.....	.....	2	.....	10	S	.....	.....	.....	Snowing	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y †..	29.91	759.7	29.92	759.9	63.6	17.6	98	SSW	4.0	1.8	.....	.....	10s	.....	.....	0.978	24.8	Gloomy	K. Sasaki.
Kioto	29.76	755.9	29.93	760.2	67.6	19.8	94	Calm	.....	.....	.....	.....	10n	.....	.....	0.590	15.0	Raining	M. Tojima.
Nagasaki, I. M. Obs'y	29.77	756.1	29.97	761.2	63.8	17.7	97	SW	1.4	0.6	.....	.....	10n	.....	.....	0.620	15.8	Raining	S. Takehayashi.
Tokei Obs'y, Yeddo	29.87	758.7	29.94	760.5	65.2	18.4	96	NW	4.0	1.8	.....	.....	10n	.....	.....	0.050	1.3	Light rain	The Staff.
Wakayama	29.88	758.9	29.93	760.2	71.5	21.9	82	S	7.8	3.5	.....	ck	10n	.....	S	0.645	16.4	Raining	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.85	758.2	30.04	763.0	76.2	24.6	85	ESE	12.0	5.4	.....	0	4	.....	E	0.01	0.3	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanajuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez
Leon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Leal.
Mazatlan	29.67	753.7	29.93	760.3	71.0	21.7	95	E	1.6	0.8	.....	4cs	0	W	.....	0	0	Misty	F. Quijano, C. E.
Mexico, Central Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff.
Pabellon, Aguascalientes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. P. Spina.
San Luis Potosi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Barroeta, M. D.
Tlacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.64	752.9	29.64	752.9	56.1	13.4	.....	ESE	.....	.....	2	.....	.....	.....	.....	0.016	0.4	.....	
Groningen	29.60	751.8	29.65	753.2	58.1	14.5	.....	N	.....	.....	2	.....	.....	.....	.....	0.016	0.4	.....	
Helder	29.66	753.3	29.66	753.3	52.0	11.1	.....	NE	.....	.....	2	.....	.....	.....	.....	0.583	14.8	.....	
Hellevoetsluis	29.64	752.9	29.64	752.9	58.5	14.7	91	Calm	.....	.....	0	.....	.....	.....	.....	0.043	1.1	.....	
Utrecht	29.61	752.1	29.66	753.3	55.9	13.3	90	SE	.....	.....	1	.....	8	.....	.....	0.465	11.8	Very cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.	Wind. Force	Clouds. Amount and kind Up'er	Clouds. Amount and kind Lo'er	Clouds. Direction, Upper.	Clouds. Direction, Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r / Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																		
Bergen	29.60	751.8	29.66	753.4	47.8	8.8	44	NW	6.0	2.7		6			0	0		
Christiania	29.56	750.8	29.71	754.5	46.6	8.1	50	SE	7	3		10			0	0		
Gjæsvær	29.62	752.4	29.65	753.0	31.1	— 0.5		NE	9	4		10					Snowing	
Lodingen	29.71	754.5	29.75	755.7	33.1	0.6	84	WSW		2		10			0.012	0.3	Snowing	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																		
Angra, Azores	30.21	767.2	30.36	771.2	61.5	16.4	81	ESE	2.5	1.1		4			0	0		Dr. J. A. Sampaio.
Campo Major	28.95	735.4	29.95	760.6	61.5	16.4	58	W	8.7	3.9		8			0.063	1.6		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.08	763.9	30.17	766.2	64.8	18.2	60	SW	3.1	1.4		10			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.71	754.5	30.06	763.6	59.0	15.0	78	NW	19.2	8.6		8			0	0		The Staff.
Ponta Delgada, Azores	30.28	769.2	30.35	771.0	63.7	17.6	59	NNE	9.4	4.2		4			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																		
Akmolinski																		Capt. Lasarew.
Archangel	30.00	762.0	30.02	762.5	48.0	8.9	49	Calm	0	0		0						Capt. Sseliwerstow.
Astrakhan	29.85	758.2	29.77	756.1	60.8	16.0	67	NNE	4	2		10s;n			Blank			Capt. Wisganow.
Barnaul ‡	29.58	751.2	30.08	763.9	48.9	9.4	29	N	9	4		0						Meteorological Obs'y.
Dorpat	29.58	751.2	29.82	757.4	52.7	11.5	63	SW	11	5		9k						Observatory.
Ekaterinburg	28.98	736.1	29.90	759.5	73.8	23.2	27	SE	7	3		10					Light clouds	Meteorological Obs'y.
Kasan	29.51	749.5	29.77	756.2	61.3	16.3	59	E	9	4		10						Observatory.
Kertch	30.04	763.1	30.06	763.6	56.1	13.4	81	NW	7	3		4						Lagodio & Sastyrez.
Kieff	29.37	746.0	30.00	761.9	57.9	14.4	48	SSE	7	3	8c;ck;cs	0					Light clouds	Observatory.
Krotkowo																		Cand. Farjanow.
Lugan	29.70	754.4	29.90	759.5	62.8	17.1	52	NNW	13	6		5						Meteorological Obs'y.
Moscow	29.42	747.3	29.97	761.3	52.0	11.1	42	N	4	2		0						Meteorological Obs'y.
Nertchinsk	27.64	702.1	30.01	762.2	29.8	— 1.2	40	W	2	1		2						Meteorological Obs'y.
Nikolaiev	30.04	763.1	30.11	764.9	64.8	18.2	54	N	4	2		1k						Capt. Kurdakow.
Nikolaievsk, on the Amoor																		Lieut. Iwanow.
Pekin, China	29.76	756.0	29.92	759.9	66.7	19.3	69	Calm	0	0		0						Physical Observatory.
St. Petersburg	29.82	757.5	29.84	757.9	44.1	6.7	71	SSE	22	10		10n						Central Physical Obs'y.
Tashkend, Laboratory	28.36	720.3	29.87	758.8	71.6	22	51	Calm	0	0		6			Blank			Teich, A. M.
Tiflis	28.44	722.3	29.84	757.9	57.0	13.9	51	NW	45	20		6k						Physical Observatory.
Warsaw	29.48	748.9	29.90	759.5	58.1	14.5	73	SSE	11	5		10ks						Astronomical Obs'y.
Wilna	29.50	749.4	29.92	759.9	59.0	15.0	49	W	4	2		5						Berg, Assistant.
Yeniseisk	29.98	761.5	30.28	769.0	37.9	3.3	37	N	4	2		2						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																		
Leith, Restalrig Park			29.84	757.9	42.4	5.8	77	E			2		10s		0	0	Overcast	Andrew Gibb.
Monach Lt. House, Hebrides			29.88	758.9	47	8.3	92	ENE			4	5	3	ENE	0	0		J. Youngclause.
North Unst, Shetland Isl'ds			29.88	758.9				NE			6	2	4	ENE	Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																		
Barcelona, Met. Obs'y	29.67	753.6	29.77	756.2	66.7	19.3	63	SSW	5.4	2.4		0	2k		0	0	Vapory	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.74	755.3	29.79	756.7	60.8	16.0	80	NW	2.9	1.3		10			0.055	1.4	Rainy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	26.85	681.9			55.4	13.0	70	SW	13.6	6.1		0	6		0.079	2.0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.61	701.4	29.83	757.7	55.9	13.3	73	SW	15.7	7.0		0	7		0.094	2.4	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.65	753.2	29.80	756.9	75.9	24.4	45	NNW	5.1	2.3		2	4	SE	0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.97	735.7	29.87	758.6	49.8	9.9	93	NW	18.1	8.1			10		0.768	19.5	Raining	R. Gil Vallanueva, Dir.
Sub-Series.																		
Havana, Cuba, W. I	29.97	761.3	30.04	763.0	73.5	23.1	78	E	8.1	3.6		0	1s		0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.79	756.6	29.84	757.9	87.8	30.8	61	SE	4.4	2.0		0	6k	E	0	0	Very cloudy	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.90	761.0	30.06	763.5	63.7	17.6	73	WNW	8.2	3.7		10		W	0.011	0.3		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.94	760.4	30.03	762.7	75.9	24.4	94	SE	4.3	1.9		2kn	4kn	SE	SE	0.327	8.3	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.75	755.7	29.90	759.4	83.9	28.8	69	NW	2.9	1.5		4k		WNW	0	0	Partly clo'dy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																		
Haparanda	29.75	755.6	29.79	756.6	28.4	— 2.0	84	S			2		0		0	0		
Umea	29.73	755.2	29.78	756.5	41.0	5.0	63	SW			2		5		0	0		
Hernosand	29.74	755.5	29.80	755.8	39.0	3.9	65	NE			2		3		0	0		
Stockholm	29.55	750.5	29.72	755.0	38.1	3.4	83	NE			2		10		0.224	5.7	Raining	
Wisby	29.64	752.9	29.70	754.4	40.6	4.8	87	NNW			2		5		0.157	4.0		
Sub-Series.																		
Upsala	29.63	752.5	29.71	754.7	38.5	3.6	85	NNE	13.4	6.0			10	NE	0.047	1.2		Nils Ekholm
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																		
Geneva																		The Observatory.
Zurich	28.13	714.4	29.72	755.0	66.2	19.0	48	NW			4		4		0	0	Clear	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —— mm.; Ther. —— cent.; Hum. —— per cent.																		
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																		
Constantinople			29.87	758.8	60.6	15.9	48	ESE	6	2.5			2	NE	0	0		The Observatory.
Valona			30.21	767.3	67.8	19.9		NW			1		0		0	0	Clear	A. Bertrand
Sub-Series.																		
Beirut, Lee Obs'y, Syria			30.07	763.8	66.9	19.4	72	NW			1		0		0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
Albany, New York	29.92	760.0	30.00	762.0	54	12.2	80	S	6	2.7			10n		SW	0.06	1.5	Light rain..	
Alpena, Michigan	29.53	750.0	30.20	767.1	39	3.9	73	NW	18	8.0		2k	0	NW		0.03	0.8	Fair..	
Atlanta, Georgia	29.08	738.6	30.20	767.1	67.8	19.9	79	SE	5	2.2		2c	0	Calm		0	0	Clear.	
Atlantic City, New Jersey	30.11	764.8	30.12	765.0	53	11.7	93	W	11	4.9		10k	0	W		0	0	Cloudy..	
Attou Id., Alaska‡	30.72	780.3			39	3.9	82	SE	6	2.7			10s		SE	0	0	Cloudy	
Augusta, Georgia	30.11	764.8	30.31	769.9	69.0	20.6	80	SE	1	0.4			10s		SE	0	0	Cloudy.	
Baltimore, Maryland	30.06	763.5	30.11	764.8	63	17.2	72	S	11	4.9		0	8s		SW	0	0	Fair	
Barnegat, New Jersey	30.06	763.5	30.08	764.0	57	13.9	87	SW	20	8.9			10s		W	0	0	Cloudy	
Bismarck. Dakota	28.60	726.4	30.46	773.7	33	0.6	79	E	3	1.3		0	0			0	0	Clear	
Boise City, Idaho	27.10	688.3	30.06	763.5	47	8.3	77	Calm	0	0		10cs	0	Calm		0	0	Cloudy	
Boston, Massachusetts	29.82	757.4	29.97	761.2	53.0	11.7	80	SW	12	5.4			10n		W	0.04	1.0	Light rain	
Brackettville, Texas	28.79	731.3	29.82	757.4	71	21.7	85	E	12	5.4			10s		E	0	0	Cloudy	
Brownsville, Texas	29.97	761.2	30.01	762.2	76	24.4	77	SE	4	1.8		5cs	2ks		SE	0	0	Fair	
Buffalo, New York	29.36	745.7	30.08	764.0	38	3.3	96	W	8	3.6			Fg			0.15	3.8	Dense fog	
Burlington, Vermont	29.61	752.1	29.90	759.4	49.0	9.4	85	S	13	5.8			10n		SW	0.06	1.5	Light rain	
Cairo, Illinois	29.78	756.4	30.16	766.1	64	17.8	89	SE	4	1.8			10s		NW	0.19	4.8	Cloudy.	
Campo, California	27.39	695.7	29.96	761.0	51	10.6	79	SW	3	1.3			10s		SW	0	0	Cloudy	
Camp Thomas, Arizona	27.17	690.1			50	10.0	45	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	30.20	767.1	30.22	767.6	65	18.3	63	S	21	9.4		2ck	0			0	0	Clear	
Cape May, New Jersey	30.09	764.3	30.12	765.0	39	3.9	76	S	28	12.5			10s			0	0	Cloudy	
Castroville, Texas	29.21	741.9	29.89	759.2	73	22.8	76	S	6	2.7			10s		S	0	0	Cloudy	
Cedar Keys, Florida	30.18	766.6	30.20	767.1	69	20.6	90	NE	10	4.5		0	0			0	0	Clear	
Champaign, Illinois	29.34	745.2	30.14	765.5	54	12.2	67	N	19	8.5			10s		N	0.17	4.3	Cloudy	
Charleston, S. Carolina	30.23	767.8	30.28	769.1	70	21.1	80	E	7	3.1		0	0			0	0	Clear	
Charlotte, N. Carolina	29.42	747.3	30.23	767.8	63.2	17.3	94	SW	3	1.3			10s		S	0	0	Cloudy	
Chattanooga, Tennessee	29.41	747.0	30.20	767.1	66	18.9	79	Calm	0	0		6cs;k	8k	Calm;s	Calm	0	0	Fair	
Cheyenne, Wyoming	24.17	613.9	30.11	764.8	39	3.9	100	S	12	5.4			Fg			0.11	2.8	Dense fog	
Chicago, Illinois	29.50	749.3	30.21	767.3	40.3	4.6	73	N	15	6.7		10k	0	W		0.19	4.8	Cloudy	
Chincoteague, Virginia	30.20	767.1	30.21	767.3	55	12.8	93	SW	24	10.7		2k	5s	W	Calm	0	0	Cloudy	
Cincinnati, Ohio	29.49	749.0	30.13	765.3	62	16.7	83	SW	1	0.4			10ks		SW	0.21	5.3	Cloudy	
Cleveland, Ohio	29.42	747.3	30.16	766.1	42.8	6.0	77	N	7	3.1			10n		NE	0.14	3.6	Light rain	
Coleman City, Texas	28.21	716.5	29.83	757.7	66	18.9	79	S	8	3.6		0	8s		S	0	0	Cloudy	
Columbus, Ohio	29.27	743.4	30.10	764.5	60	15.6	82	SW	4	1.8			10n			0.09	2.3	Light rain	
Concho, Texas	28.07	713.0	29.70	754.4	67	19.4	95	E	10	4.5		0	8s		SE	0	0	Cloudy	
Corsicana, Texas	29.61	752.1	30.06	763.5	69	20.6	80	S	4	1.8		0	5s			0	0	Fair	
Davenport, Iowa	29.63	752.6	30.28	769.1	48	8.9	56	NE	8	3.6		2cs	8s	NE	NE	0.01	0.3	Cloudy	
Dayton, Washington T'y	28.29	718.6	29.97	761.2	45	7.2	60	N	5	2.2		0	0			0	0	Clear	
Deadwood, Dakota	25.60	650.2			32	0.0	69	E	1	0.4		5cs	0			0	0	Fair	
Decatur, Texas	28.89	733.8	30.02	762.5	70	21.1	80	SE	8	3.6			10s			0	0	Cloudy	
Delaware Breakwater, Del.	30.09	764.3	30.11	764.8	62	16.7	77	S	4	1.8			10ks		W	0	0	Cloudy	
Denison, Texas	29.24	742.7	30.02	762.5	73	22.8	72	S	8	3.6			10ks		S	Inap.	Inap.	Threatening	
Denver, Colorado	24.92	633.0	30.14	765.5	48.0	8.9	88	NW	4	1.8		2k	8s	Calm	Calm	0.10	2.5	Cloudy	
Des Moines, Iowa	29.44	747.8	30.35	770.9	40	4.4	73	NE	8	3.6		0	0			0.02	0.5	Clear	
Detroit, Michigan	29.47	748.5	30.17	766.3	47.6	8.7	56	N	12	5.4			10s		SW	0.12	3.0	Cloudy	
Dodge City, Kansas	27 58	700.5	29.90	759.4	48	8.9	100	NE	21	9.4			10n			0.32	8.1	Light rain	
Dubuque, Iowa	29.60	751.8	30.32	770.1	44.2	6.8	60	N	7	3.1		5c	0	NE		0.05	1.3	Fair	
Duluth, Minnesota	29.75	755.6	30.47	773.9	36	2.2	71	NE	3	1.3			10s		NE	0	0	Cloudy	
Eagle Pass, Texas	29.19	741.4	29.89	759.2	74	23.3	81	SE	7	3.1			10s		SE	0	0	Cloudy	
Eagle Rock, Idaho	25.27	641.8	29.92	760.0	36	2.2	61	N	4	1.8		0	0			0	0	Clear	
Eastport, Maine	29.90	759.4	29.97	761.2	43	6.1	75	S	12	5.4			10s		SW	0	0	Cloudy	
El Paso, Texas	26.16	664.5			65	18.3	10	NW	8	3.6		0	0			0	0	Clear	
Erie, Pennsylvania	29.39	746.5	30.11	764.8	46	7.8	100	W	7	3.1			10n			0.29	7.4	Light rain	
Escanaba, Michigan	29.07	753.6	30.36	771.1	33	0.6	70	N	17	7.6			10s		N	0	0	Cloudy	
Florence, Arizona	28.36	720.3	29.96	761.0	55	12.8	39	Calm	0	0		0	0			0	0	Clear	
Fort Apache, Arizona	25.01	635.2	30.44	773.2	38	3.3	45	NE	4	1.8		0	1s		Calm	0	0	Clear	
Fort Assinnaboine, Montana	27.36	694.9			34	1.1	43	SW	11	4.9		0	0			0	0	Clear	
Fort Bennett, Dakota	28.81	731.8			35	1.7	90	SE	2	0.9		2ck	0	NW		0	0	Fair	
Fort Benton, Montana																			
Fort Buford, Dakota	28.35	720.1	30.20	767.1	30	— 1.1	78	NE	5	2.2		2cs	0	W		0	0	Clear	
Fort Custer, Montana	27.00	685.8			38	3.3	71	SE	5	2.2		0	0			0	0	Clear	
Fort Davis, Texas	25.12	638.0	30.08	764.0	55	12.8	74	W	4	1.8		5ck	0			0	0	Fair	
Fort Elliott, Texas	27.33	694.2	29.59	751.6	55	12.8	80	N	16	7.2			10s		N	0	0	Threatening	
Fort Gibson, Indian T'y	29.51	749.5	30.03	762.7	67	19.4	89	E	2	0.9		10cs	0	W		Inap.	Inap.	Cloudy	
Fort Grant, Arizona	25.20	640.1	30.00	762.0	56	13.3	24	NE	4	1.8		0	0			0	0	Clear	
Fort Griffin, Texas	28.69	728.7	29.92	760.0	68.0	20.0	70	N	3	1.3			10s			0.37	9.4	Cloudy	
Fort Keogh, Montana	27.76	705.1			34	1.1	69	NE	6	2.7		0	0			0	0	Clear	
Fort Macon, North Carolina	30.30	769.6	30.31	769.6	65	18.3	84	S	10	4.5		5c	Hz	Calm	Calm	0	0	Fair	
Fort McKavett, Texas	27.77	705.3	29.63	752.6	69	20.6	85	E	6	2.7			10n			Inap.	Inap.	Light rain	
Fort Missoula, Montana	26.78	680.2			49	9.4	64	SW	2	0.9		0	0			0	0	Clear	
Fort St. Michaels																			
Fort Shaw, Montana																			
Fort Sill, Indian Territory	26.55	674.4			29	— 1.7	67	W	7	3.1		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.80	731.5	29.87	758.7	66	18.9	79	NE	6	2.7			10s			Inap.	Inap.	Cloudy	
Fort Verde, Arizona	28.52	724.4			32	0.0	79	S	2	0.9		0	0			0	0	Clear	
Fredericksburg, Texas					49	9.4	37	SW			1	0	0			0	0	Clear	
Galveston, Texas	28.29	718.6	29.81	757.2	68	20.0	90	SE	8	3.6			10ks		S	0	0	Cloudy	
Grand Haven, Michigan	30.07	763.8	30.11	764.8	71	21.7	80	S	4	1.8		8ck	2ks	W	S	0	0	Cloudy	
Hatteras, North Carolina	29.59	751.6	30.26	768.6	44	6.7	68	NW	12	5.4		0	0			0.07	1.8	Clear	
Helena, Montana	30.28	769.1	30.30	769.6	63	17.2	83	SW	12	5.4		1cs	0	Calm		0	0	Clear	
Henrietta, Texas	25.91	658.1			46	7.8	33	S	1	0.4		0	0			0	0	Clear	
Indianapolis, Indiana	29.00	736.6	29.90	759.4	69	20.6	80	Calm	0	0			10s			0	0	Cloudy	
Indianola, Texas	29.32	744.7	30.09	764.3	59	15.0	88	W	1	0.4			10s		NW	0.45	11.4	Cloudy	
Jacksboro, Texas	30.08	764.0	30.10	764.5	71.3	21.8	95	S	8	3.6		2cs	2s	N	S	Inap.	Inap.	Fair	
Jacksonville, Florida	28.85	732.8	29.95	760.7	68	20.0	79	NE	1	0.4		5ck	5s	SE	Calm	0	0	Cloudy	
Keokuk, Iowa	30.19	766.8	30.23	767.8	75	23.9	77	NE	6	2.7		0	0			0	0	Clear	
Key West, Florida	29.56	750.8	30.22	767.6	51.2	10.7	67	NE	9	4.0			10s			Inap.	Inap.	Cloudy	
Kittyhawk, North Carolina	30.04	763.0	30.08	764.0	75	23.9	81	E	10	4.5		2k	2ks	E	E	0	0	Fair	
Knoxville, Tennessee	30.29	769.4	30.31	769.9	64	17.8	78	SW	18	8.0		5c	Hz			0	0	Fair	
La Crosse, Wisconsin	29.22	742.2	30.21	767.3	64	17.8	78	E	4	1.8		2c	5s	Calm	NW	0.03	0.8	Fair	
La Mesilla, New Mexico	29.60	751.8	30.37	771.4	41.5	5.3	57	N	11	4.9		0	0			0	0	Clear	
Laredo, Texas	26.03	661.2	30.18	766.6	52	11.1	41	Calm	0	0		0	2s			0	0	Fair	
Leavenworth, Kansas	29.54	750.3	29.86	758.4	75	23.9	81	SE	8	3.6			10s		SE	0	0	Cloudy	
Lewiston, Idaho	29.36	745.7	30.22	767.6	50	10.0	72	NE	12	5.4			10s		NE	0.82	20.8	Cloudy	
Little Rock, Arkansas	29.21	741.9	29.87	758.7	42	5.6	35	E	1	0.4		0	5s		Calm	0	0	Fair	
Los Angeles, California	29.78	756.4	30.09	764.3	67	19.4	79	S	2	0.9		0	0			0	0	Clear	
Louisville, Kentucky	29.63	752.6	29.99	761.7	58.0	14.4	88	NE	2	0.9			10s		Calm	0	0	Cloudy	
Lynchburg, Virginia	29.57	751.1	30.12	765.0	61.2	16.2	88	S	8	3.6			10n		S	0.75	19.1	Light rain	
Madison, Wisconsin	29.52	749.8	30.19	766.8	68	20.0	61	SW	1	0.4		8k	0	W		0	0	Fair	
Marquette, Michigan	29.28	743.7	30.31	769.9	38	3.3	81	N	10	4.5		5c	0	W		0.02	0.5	Fair	
Mason, Texas	29.65	753.1	30.40	772.1	33	0.6	79	N	14	6.3			10s		NW	0	0	Cloudy	
Memphis, Tennessee	28.40	721.3	30.10	764.5	71	21.7	75	S	8	3.6			10s		S	0	0	Cloudy	
	29.81	757.2	30.14	765.5	72	22.2	67	S	4	1.8		0	0			0.03	0.8	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.55	750,6	30.31	769.9	39	3.9	82	N	12	5.4		5ck	0	N		0.01	0.3	Fair	
Mobile, Alabama	30.13	765.3	30.20	767.1	71.0	21.7	75	SE	2	0.9		1cs	0	W		0	0	Clear	
Montgomery, Alabama	29.99	761.7	30.22	767.6	67	19.4	84	E	5	2.2		5k	2ks	SE	SE	0.28	7.1	Fair	
Moorhead, Minnesota	29.44	747.8	30.44	773.2	32	0.0	79	NE	5	2.2		0	0			0	0	Clear	
Morgantown, W. Virginia	29.11	739.4	30.08	764.0	65	18.3	68	SW	4	1.8			10-		SW	0.05	1.3	Cloudy	
Mt. Washington, N. H.	23.58	598.9	29.94	760.5	27	— 2.8	100	NW	45	20.1			10n;fg		NW	0.05	1.3	Light snow.	
Nashville, Tennessee	29.66	753.4	30.19	766.8	65.6	18.7	79	W	3	1 3			10n		SW	0.07	1.8	Thund'r st'm	
New Haven, Connecticut	29.91	759.7	30.03	762.7	51	10.6	86	SW	6	2.7			10s		SW	0.02	0.5	Cloudy	
New London, Connecticut	30.00	762.0	30.05	763.3	51	10.6	93	W	10	4.5			10n		W	0.23	5.8	Light rain	
New Orleans, Louisiana	30.09	764.3	30.15	765.8	69	20.6	90	Calm	0	0		0	Sk			0.12	3.0	Clear	
Newport, Rhode Island	29.99	761.7	30.04	763.0	48.2	9.0	95	SW	9	4.0			10n		SW	Inap.	Inap.	Light rain	
New River, N. Carolina																			
New Shoreham, Rhode I'd	30.02	762.5	30.05	763.3	51.1	10.6	93	SW	20	8.9			10n		SW	0.03	0.8	Light rain	
New York, New York	29.87	758.7	30.05	763.3	52	11.1	86	SW	6	2.7			10s		W	0	0	Cloudy	
Norfolk, Virginia	30.19	766.8	30.25	768.3	65	18.3	73	SW	16	7.2		5ck	2s	W		0	0	Fair	
North Platte, Nebraska	27.38	695.4	30.02	762.5	43	6.1	79	NE	11	4.9			10n		NE	0.16	4.1	Light rain	
Olympia, Washington T'y	29.93	760.2	29.97	761.2	37.0	2.8	90	NE	1	0.4		0	0			0	0	Clear	
Omaha, Nebraska	29.20	741.7	30.33	770.4	42	5.6	66	N	14	6.3		5cs	1s			Inap.	Inap	Fair	
Oswego, New York	29.65	753.1	29.97	761.2	47.0	8.3	85	W	14	6.3			10n		W	0.10	2.5	Light rain	
Pensacola, Florida	30.16	766.1	30.19	766.8	71	21.7	85	NE	5	2.2		0	2ks		SE	0	0	Fair	
Philadelphia, Pa	30.02	762 5	30.07	763.8	62	16.7	77	W	10	7.2			10s		W	0	0	Cloudy	
Phœnix, Arizona	28.74	730.0	30.53	775.4	57	13.9	58	E	1	0.4		5ck	0	S		0	0	Fair	
Pike's Peak, Colorado	17.89	454.4	30.10	764.5	21	— 6.1	100	NW	10	4.5			10n			0.84	21.3	Light snow	
Ploche, Nevada	24.00	609.6	29.77	756.1	48	8.9	29	Calm	0	0		1k	0	Calm		0	0	Clear	
Pittsburg, Pennsylvania	29.26	743.2	30.05	763.3	61.5	16.4	80	SW	6	2.7			10n		SW	0.03	0.8	Light rain	
Port Eads, Louisiana	30.16	766.1	30.17	766.3	69.8	21.0	95	E	7	3.1		2k	0	E		0	0	Clear	
Port Huron, Michigan	29.49	749.0	30.17	766.3	42.6	5.9	70	N	12	5.4		5c	0	Calm		Inap.	Inap.	Fair	
Portland, Maine	29.90	759.4	29.95	760.7	49	9.4	85	SW	6	2.7			10n		Calm	Inap.	Inap.	Light rain	
Portland, Oregon	29.92	760.0	29.99	761.7	45	7.2	80	N	1	0.4		1cs	0	W		0	0	Clear	
Portsmouth, N. Carolina					65	18.3	78	W	21	9.4		0	Hz		Calm	0	0	Clear	
Prescott, Arizona	24.74	628.4	30.10	764.5	41	5.0	41	SW	2	0.9		5k	0	SW		0	0	Fair	
Punta Rassa, Florida	30.09	764.3	30.10	764.5	73	22.8	76	E	13	5.8		8c	0	E		0.01	0.3	Fair	
Red Bluff, California	29.60	751 8	29.95	760.7	56.5	13.6	81	S	5	2.2		0	5s		Calm	0	0	Fair	
Rio Grande City, Texas	29.82	757.4	30.04	763.0	73	22.8	85	SE	10	4.5			10s		SE	0	0	Cloudy	
Rochester, New York	29.40	746.7	30.01	762.2	51	10.6	79	NW	7	3.1			10s		NW	0.02	0.5	Cloudy	
Roseburg, Oregon	29.47	748.5	30.04	763.0	45.5	7.5	92	Calm	0	0		2ck	0			0	0	Clear	
Sacramento, California	29.88	758.9	29.96	761.0	51.8	11.0	86	S	5	2.2		0	5s			0	0	Fair	
St. Louis, Missouri	29.57	751.1	30.14	765.5	59.8	15.4	94	N	12	5.4			10s			1.47	35.8	Cloudy	
St. Paul, Minnesota	29.53	750.0	30.40	772.1	38	3.3	63	N	6	2.7		0	0			0	0	Clear	
Salt Lake City, Utah	25.58	649.7	29.91	759.7	55	12.8	39	Calm	0	0		4k	0	Calm		0	0	Fair	
San Antonio, Texas	29.33	745.0	30.01	762.2	71	21.7	90	SE	6	2.7			10s		SE	0	0	Cloudy	
San Diego, California	29.88	758.9	29.95	760.7	60	15.6	77	NW	5	2.2			10s			0	0	Cloudy	
Sandusky, Ohio	29.48	748.8	30.16	766.1	48	8.9	78	N	24	10.7			10s		N	0.24	6.1	Cloudy	
Sandy Hook, New Jersey	30.02	762.5	30.06	763.5	60 3	15.7	92	W	15	6.7			10n			Inap.	Inap.	Light rain	
San Francisco, California	29.97	761.2	30.03	762.7	53	11.7	73	W	12	5.4			9s		W	0	0	Cloudy	
Santa Fé, New Mexico	23.30	591.8	29.84	757.9	48	8.9	70	SE	4	1.8			10n		S	0.02	0.5	Light rain	
Savannah, Georgia	30.18	766.6	30.27	768.8	74.5	23.6	79	E	3	1.3		2c	0			0	0	Fair	
Shreveport, Louisiana	29.87	758.7	30.11	764.8	68	20.0	84	S	3	1.3		2c	2s			0	0	Fair	
Silver City, New Mexico	24.24	615.7	30.37	771.4	49	9.4	31	NW	1	0.4		0	2s		Calm	0	0	Clear	
Sitka Alaska																0	0		
Smithville, North Carolina	30.28	769.1	30.32	770.1	67	19.4	89	SE	5	2.2		5c;hz	Hz			0	0	Light haze	
Socorro, New Mexico	25.36	644.1	29.43	747.5	60	15.6	34	SE	4	1.8		0	0			0	0	Clear	
Spokane Falls, Wash. Ter.	28.03	711.9	29.92	760.0	35	1.7	52	Calm	0	0		0	0			0	0	Clear	
Springfield, Illinois	29.52	749.8	30.19	766.8	55	12.8	81	NE	5	2.2			10s		W	0.71	18.0	Cloudy	
Springfield, Massachusetts	29.87	758.7	30.00	762.0	50	10.0	100	S	7	3.1			10n		S	0.23	5.8	Light rain	
Stockton, Texas	26.90	683.2	29.90	759.4	59.1	15.1	82	Calm	0	0		0	5s		W	0.04	1.0	Fair	
St. Vincent, Minnesota	29.60	751.8	30.44	773.2	34	1.1	70	SW	1	0.4		0	0			0	0	Clear	
Thatcher's Island, Mass	29.91	759.7	29.97	761.2	48	8.9	100	SW	17	7.6			10n		SW	0.11	2.8	Heavy rain	
Toledo, Ohio	29.48	748.8	30.17	766.3	48	8.9	70	N	12	5.4			10s		NE	0.11	2.8	Cloudy	
Tucson, Arizona	27.46	697.5	30.01	762.2	59	15.0	43	S	4	1.8		0	0			0	0	Clear	
Umatilla, Oregon	29.70	754.4	30.20	767.1	41	5.0	82	SE	4	1.8		2cs	0			0	0	Fair	
Uvalde, Texas	29.04	737.6	29.83	757.7	72	22.2	90	SE	7	3.1			10s		SE	0	0	Cloudy	
Vicksburg, Mississippi	29.92	760.0	30.17	766.3	69	20.6	85	SE	6	2.7		1cs	Sk			0	0	Clear	
Visalia, California	29.56	750.8	29.92	760.0	57	13.9	69	NW	4	1 8		0	0			0	0	Clear	
Washington, D. C.	30.01	762.2	30.12	765.0	63.5	17.5	80	S	8	3.6			9s		W	0.03	0.8	Cloudy	
Wickenburg, Arizona					53	11.7	48	W			1	5c	0	W		0	0	Fair	
Wilmington, N. Carolina	30.25	768.3	30.31	769.9	66	18.9	79	S	1	0.4		Hz	Hz	Calm	Calm	0	0	Dense haze	
Winnemucca, Nevada	25.58	649.7	29.94	760.5	58	14.4	42	S	6	2.7			10ks		S	0	0	Cloudy	
Wood's Holl, Mass	30.00	762.0	30.04	763.0	50	10.0	86	SW	24	10.7			10n		SW	0.01	0.3	Light rain	
Yankton, Dakota	29.10	739.1	30.45	773.4	41	5.0	57	NE	6	2.7		8ck	0			0	0	Fair	
Yuma, Arizona	29.68	753.9	29.83	757.7	63	17.2	72	Calm	0	0		2c	0			0	0	Fair	
SUB-SERIES.																			
Bogota, U. S. Columbia	22.08	560.8			54.5	12.5	82	Calm	0	0			10k«			0	0	Cloudy	Thomas Herran.
Buff Bay Town, Jamaica	29.76	755.9	30.07	763 8	73	22.8	85	E				2k	5k			Blank			
Havana, Cuba, W. I.	30.02	762.5	30.07	763.8	77	25.0	72	SE	2.4	1.1		0	0			0	0	Clear	A. Van Caneghem, Ass't.
Jakobshavn, Greenland	29.65	753.2	29.71	754.5	43.2	6.2		SW			8		0			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	29.96	761.0	29.97	761.2	77.1	25.1	72	Calm	0	0		2ck	2s			0.08	2.0	Fair	Robert Johnstone.
Navassa, W. I.	29.88	758.9	29.90	761.0	79	26.1	82	E				8k	5s	SE	E	0.09	2.3	Cloudy	F. M. Everett.
Paramaribo, S. A.	30.00	762.0	30.01	762.2	79	26.1	87	E			2	4ck	5k	E		1.070	27.2	½ Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Colombia	29.48	748.8	30.04	763.0	76	24.4	94	Calm			0		10ks		Calm	0.35	8.9	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					77.0	25		NE			1		10ks		NE	3.35	85.		Earl Flint.
Santiago de Cuba, W. I.	29.98	761.5	30.00	762.0	78	25.6	82	N	4.8	2.1		4cs	0			0 65	16.5	Cloudy	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.27	768.8	30.32	770.1	12.0	11.1	100	E	11	4.9		4k	4s	SE	E	0	0	Threatening	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0– 10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross, N. 34° 36′, E. 134° 52′	29.95	760.7	62	16.7	...	Calm			0		10							Raining	Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Villafranca, France	29.95	761.0	63	17.2	72	ENE			4–6		9	ENE						Squally	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 25° 44′, E. 57° 47′	29.76	755.9	83	28.3	71	WSW			1–3		Mist							Misty	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			62	16.7		Calm			0		0							Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N. 14° 02′, W. 59° 35′	30.02	762.5	79	26.1	86	E			4		8	E				3	E	Squally	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.92	760.0	74	23.3	83	E			1		0					2	SE	Blue sky	Com. F. W. Richards.
H. M. S. Champion, Elmina, Gold Coast, Africa	29.88	758.9	79	26.1	91	SSW			2		9	SSW				6	SSE	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 24° 20′, E. 118° 54′	29.84	757.9	74	23.3	90	S			1		0					1	SE	Blue sky	Capt. J. W. East.
H. M. S. Condor, Tunis Bay, N. Africa	29.98	761.5	67	19.4	89	S			5–6		5	S				5	S	D. clouds	Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 39° 40′, E. 20° 00′	30.22	767.6	69	20.6		ESE			1		0							Blue sky	Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 22° 09′, E. 114° 46′	29.74	755.4	79	26.1	86	SE			2		0							Misty	Capt. S. Long.
H. M. S. Danae, S. 29° 10′, W. 14° 14′	30.18	766.6	71	21.7	95	NW			3		6	NW				2	NW	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Eliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard																			Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 20′, W. 55° 31′	30.06	763.5	36.5	2.5	90	SW			3–4		10	SW				1	SW	Overcast	Capt. W. R. Kennedy.
H. M. S. Dryad, N. 19° 00′, E. 57° 48′	29.82	757.4	83	28.3		S			1		0					2	S	Blue sky	Capt. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 19° 50′, E. 107° 30′	29.56	750.8	79	26.1		SE			6							5	S	Misty	Comm. C. Johnstone.
H. M. S. Emerald, S. 22° 00′, E. 178° 40′	29.95	760.7	76	24.4	86	ENE			1		2	E				3	E	Misty	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Trincomalee, Ceylon, India	29.65	753.1	86	30.0	76	NE			1–2		10	E						D. clouds	Capt. R. P. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo, Turks Island, W. I.	30.05	763.3	82	27.8	87	E			3		6	E						D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish, Hong-Kong, China	29.83	757.7	80	26.7	86	SE			2		8	SE						Misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 20° 10′, W. 120° 00′	30.04	763.0	66.5	19.2	71	N			2–4		10					2	NW; N	Gloomy	Comm. E. G. Bourke.
H. M. S. Garnet, Colonia, Uruguay	30.27	768.8	51	10.6	65	SW			5		0							Blue sky	Capt. L. F. Jones.
H. M. S. Griffon																			Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 14° 24′, W. 56° 51′	30.03	762.7	79	26.1		E			3		4	E				3	E	Showery	Capt. J. L. Way.
H. M. S. Inconstant, S. 39° 00′, E. 83° 30′	30.19	766.8	52	11.1	73	S			6		3					5	SSW	Squally	Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 24° 28′, E. 118° 03′	29.86	758.4	75	23.9	77	Calm			0		3							D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	30.01	762.2	65	18.3		Calm			0		10							Raining	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Hong-Kong, China	29.91	759.7	80.5	26.9	83	Calm			0		8							D. clouds	Capt. A. Carpenter.
H. M. S. Midge																			Capt. W. N. Lang.
H. M. S. Minotaur, Madeira Island, Africa	30.11	764.8	65.5	18.6	79	WSW			1		6	NNW						D. clouds	Capt. H. H. Rawson.
H. M. S. Modeste, N. 5° 16′ E. 115° 15′	29.82	757.4	83	28.3	91	NE			1–2		4	NE						Thund'r st'm	Capt. J. G. Mead.
H. M. S. Monarch, Goletta, Tunis, N. Africa	30.00	762.0	64	17.8	100	SE			6		1	SSE				Sm'h		Blue sky	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda, W. I.	30.29	769.4	66	18.9	64	NNW			4		1	NNW						Blue sky	Capt. E. B Drummond.
H. M. S. Orontes, S. 33° 45′, E. 27° 00′ †	30.00	762.0	71.5	21.9	83	NNW			1		2	W				3	SSW	Blue sky	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.83	757.7	79	26.1		NW			1		7							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, N. 18° 54′, W. 79° 26′	29.97	761.2	80	26.7	87	ENE			2–3		10					2	ENE	Overcast	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	30.01	762.2	35	1.7		Calm			0		4							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.87	758.7	82.4	28.0	85	SE			2										Capt. C. E. Foot.
H. M. S. Salamis.																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis, N. 18° 41′, E. 39° 31′	29.74	755.4	85	29.4	64	Calm			0		0					Sm'h		Blue sky	Capt. G. O. Twiss.
H. M. S. Shannon, S. 30° 41′, W. 42° 34′	30.01	762.2	68.5	20.3	84	W			4		6	W				4	SW	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb, N. 40° 50′, E. 14° 16′ *	30.24	768.1	61	16.1	88	SSW			2		1	WSW						Blue sky	Capt. T. L. H. Ward.
H. M. S. Tenedos, N. 22° 30′, W. 63° 22	30.14	765.5	76.5	24.7	75	ENE			4		1					3	ENE	D. clouds	Capt. C. G. Fane.
H. M. S. Thetis, S. 19° 00′, W. 147° 44′	29.91	759.7	80	26.7	87	SE			4		8					3	S	D. clouds	Capt. P. W. Stephens.
H. M. S Thunderer, Fort Augusta, Sicily	30.20	767.1	64.5	18.1	67	SE			5		6					2		D. clouds	Capt. P. H. Colomb.
H. M. S Triumph, Coquimbo, Chili, S. A.	30.03	762.7	52	11.1	96	ENE			2		10	Calm						Foggy	Capt. A. H. Markham.
H. M. S. Turquoise, Callao Bay, Peru	29.95	760.7	65	18.3	97	SE			1		10							Foggy	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 8° 50′, E. 68° 50′	29.77	756.1	86	30.0	80	NW			4		3	WNW				1	NW	D. clouds	Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.			77	25.0		N			1		6							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, S. 41° 03′, E 174° 15′	29.82	757.4	51	10.6		SSW			5–8		2	S						D. clouds	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, N. 19° 53′, E. 69° 16′	29.88	758.9	82.5	28.1	85	NW			4		0					3–4	NW	Misty	Capt. T. P. Nesham.
H M. S. Zephyr																			Lt. Comm. G W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Santiago, Cape Verd Id's	29.95	760.8	77.9	25.5	86	NE			4		4					1	ESE	D. clouds	S. C da Silva Costa, Comd't.
Sado																			G. A de Brito Capello, Comd't
Tamega																			P. I. R. de Carvealtio, Comd'
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡ N. 36° 16′, W. 7° 52′	30.05	763.3	66.9	19.4	80	WNW			3		1							Blue sky	Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.22	767.6	79	26.1	54	NE	7	3.1			8		SE	0	0			Fair	
N. Yard, Portsmouth, N. H.	29.97	761.2	48	8.9	92	S	3	1.3		10c	0	W						Sprinkling	
Naval Hospital, Yokahama, Japan	29.89	759.2	66.5	19.2	92	Calm			0		10		W	Sli	ght			Cloudy	
Adams, Callao, Peru	29.75	755.6	66	18.9	94	Calm			0		10					Long	SW	Cloudy	
Alaska, Callao, Peru	29.86	758.4	64	17.8	94	SE			1		10					Sm'h		Foggy	
Alert, Port Lloyd, Bonin Id. *	29.94	760.5	73	22.8	76	NE			1		0					Sm'h		Clear.	
Alliance, Hampton Roads, Va.	30.26	768.6	63	17.2	83	SSW			3		5		E	0	0	Sm'h		Fair	
Ashuelot, N. 32° 09′, E. 128° 14′	29.94	760.5	64	17.8	94	E			3		10		E			Sm'h		Cloudy	
Colorado, New York, N. Y.	30.05	763.3	56	13.3	100	S			2		10							Sprinkling	
Constitution, Piney Point, Md.	30.11	764.8	62	16.7	77	SW	15	6.7			8		NE					Fair	
Franklin, Norfolk, Va.	30.22	767.6	63	17.2	72	S	15	6.7			8		W	0	0			Fair	
Galena, Piraeus, Greece	30.24	768.1	66	18.9	54	S			1		0							Clear	
Independence, N. Yard, Mare I'd, Cal.	30.01	762.2	52	11.1	86	SW	2.4	1.1			10		SW	0	0			Overcast	
Jamestown, Sitka, Alaska *	30.04	763.0	36	2.2	90	N			1		0			0	0	Sm'h		Clear	
Kearsarge, Hampton Roads, Va	30.28	769.1	63	17.2	78	SW			4		5		SW			Sm'h		Fair	
Lackawanna, Valparaiso, Chili †	30.16	766.1	56	13.3	100	SSE			1		0							Clear	
Marion, Montevideo, Uruguay	30.26	768.6	54	12.2	67	SW			6		0			0	0	R'gh	SW	Clear	
Michigan, Erie, Pennsylvania	30.05	763.3	45	7.2		NNW	2	0.9			10							Raining	
Minnesota, Newport, R. I.	30.05	763.3	49	9.4	100	SW			4		10					Sm'h		Raining	
Monocacy, *N. 31° 04′, E. 122° 09′	29.90	759.4	58	14.4	100	E			3		10		Calm			Sm'h		Foggy	
New Hampshire, Port Royal, S. C.	30.22	767.6	76	24.4	77	NE	4	1.8			8		SSE	0	0			Fair	
Nipsic, N. 38° 13′, E. 7° 59′	29.92	760.0	65	18.3	78	SE			2		2					Sm'h	E	Hazy	
Onward, Callao, Peru †.	29.91	759.7	64	17.8	94	Calm			0		10					Long	W	Misty	
Palos, Yokohama, Japan	29.93	760.2	67	19.4	100	WNW			1		10							Showery	
Passaic, Washington, D. C.	30.12	765.0	64	17.8	89	S			3		8		SW					Cloudy	
Pensacola, Honolulu, Sandwich Ids.	30.05	763.3	74	23.3	86				0		0			0	0	Sm'h		Clear	
Portsmouth, Alexandria, Va.	30.12	765.0	65	18.3	89	SSW			2		10		SW					Cloudy	
Powhatan, New York, N. Y.	30.06	763.5	54	12.2	87	SSW			1		10		S					Cloudy	
Quinnebaug, Cadiz, Spain	30.02	762.5	65	18.3	73	WNW			2		2							Fair	
Ranger, Acapulco, Mexico *	29.82	757.4	81	27.2	78	Calm			0		0			0	0	Sm'h		Clear	
Richmond, N. 32° 38′, E. 127° 34′	29.97	761.2	63	17.2	89	S			4		10			0	0	Sm'h	E	Cloudy	
Saratoga, Washington, D. C.	30.11	764.8	65	18.3	84	SSW			4		8		SW	0	0			Cloudy	
Shenandoah, Montevideo, Uruguay *	30.23	767.8	53	11.7	67	SSW			6		2					R'gh	SSW	Fair	
St. Louis, League Island, Pa			62	16.7	77	SSW	26	11.6			10		SSW	0	0			Cloudy	
Swatara, Shanghai, China †*	29.83	757.7	63	17.2	83	SW			3		8		Calm					D. clouds	
Tennessee, Hampton Roads, Va.	30.26	768.6	64	17.8	83	SSW	18	8.0			5		WSW	0	0	Sm'h		Hazy	
Ticonderoga, S. 26° 26′, W. 129° 19′	30.00	762.0	75	23.9	90	SSE			1		5		SSE	0.5	13.	Mod.	SW	Fair	
Trenton, Castellamare, Italy *	30.11	764.8	69	20.6	52	WNW			2		2			0	0	Sm'h		Fair	
Vandalia, Norfolk, Va.	30.25	768.3	68	20.0	79	SSW			3		2		NW					Fair	
Wabash, Boston, Massachusetts.	30.03	762.7	49	9.4	93	SW	17	7.6			10		W	0.04	1.0			Raining	
Wachusetts, N. 29° 10′, W. 155° 03′	29.92	760.0	69	20.6	95	ESE			4		5		E	0	0	Long	E	Fair	
Wyoming, N. 20° 10′, W. 360° 27′	30.13	765.3	75	23.9	72	E			3		8		ESE			Long	ENE	Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
Britl-h Merchant, ‡ N. 38° 20′, W. 154° 36′	30.03	762.7	47.8	8.8	90	NE			1		10							Raining	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, Demorara, Brit. Guiana	29.99	761.7	77.2	25.1	95	SSW			2		5							D. clouds	Capt. W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne, N. 32° 51′, W. 22° 47′	30.29	769.4	64	17.8	68	NNE			4		8							D clouds	Capt. W. Scott.
Barque Coppename, off Royal Soverign Light	29.60	751.8	49	9.4	93	NE			3		10					1		Raining	Capt. A. Buchan.
Denbighshire [Ship, Eng.																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 10° 14′, W. 35° 27′	30.00	762.0	78.5	25.8	78	NNE			5		5							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross, S. 28 40′, E. 76° 10′ *	30.20	767.1	68	20.0		S			4		5							D. clouds	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ S. 13° 44′, W. 7° 36′	30.04	763.0	75.1	23.9	68	SE			4		6							D. clouds	Capt. J. Raeburn, R.N.F.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, N. 46° 38′, W. 34° 59′ ‡	30.01	762.2	57.0	13.9	94	SW			6		10					4	W; WSW	Misty	Capt. H. W. Dyke.
Barque Mertola, N. 38° 31′, W. 10° 11′	30.07	763.8	60.5	15.8	83	NW			5		4							D. clouds	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ S. 23° 22, E. 6° 52′	29.99	761.7	67	19.4	89	SE			5		10							Showery	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 10° 26′, E. 87° 30′	29.60	751.8	81.5	27.5	91	SE			6		10							Showery	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton, ‡ N. 12° 28′, E. 48° 15′	29.83	757.7	85.5	29.7	78	NE			4		3							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean																			Capt. W. H. Smith.
S. S. Circassian, N. 44° 56′, W. 52° 10′	30.47	773.9	35	1.7	80	SW			4		8kn		S	0	0	3	SW	D. clouds	Capt. F. Archer.
S. S. Hibernian																			Capt. Wm. Richardson.
S. S. Nova Scotian																			
CUNARD LINE. *Ch. G. Francklyn.*																			Capt. W. H. P. Hains.
S. S. Gallia																			Capt. W. Watson.
S. S. Algeria																			
S. S. Scythia, N. 51° 00′, W. 14° 30′	29.73	755.1	55	12.8	93	NW			6		10		NW	Light		Long	NW	Cloudy	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 46° 05′, W. 41° 48′ †	29.98	761.5	46	7.8		WSW			6		10		W	10h'rs	light	High	W	Cloudy	Capt. Benj. Gleadell.
S. S. Germanic, N. 41° 15′, W. 58° 37′ †	30.45	773.4	48	8.9		W			4		5?		W	0	0	Sm'h		Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann, N. 49° 22′, W. 17° 43′	30.04	763.0	63	17.2	83	N			5		5		N	0	0	H'vy	NW	Cloudy	Capt. H. Baur.
S. S. Köln																			Capt. Th. Jüngst
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 50° 26′, W. 19° 42′....*†	30.13	765.3	54	12.2	93	E	.....	.....	2	.....	2	.....	E	.....	.....	Sm'h	N	Clear.....	Capt. J. W. Shackford.
S. S. Indiana.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. R. W. Sargent.
S. S. Ohio, N. 42° 42′, W. 61° 05′.... *†	30.28	769.1	43	6.1	92	SW	.....	.....	4	.....	8	.....	SW	0	0	Sm'h	.....	Cloudy.....	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, Philadelphia, Pa.....*†	30.17	766.3	51	10.6	100	NE	.....	.....	2	.....	2	.....	NE	.....	.....	.....	.....	Fair...	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 22° 15′, E. 144° 55′.....†	29.96	761.0	80	26.7	87	E	.....	.....	3	.....	2	.....	NE	0	0	Sm'h	.....	Clear.....	Capt. H. Davison.
S. S. Gaelic, N. 38° 00′, E. 177° 49′....*†	30.02	762,5	58	14.4	94	ENE	.....	.....	4	.....	10	.....	NE	.....	.....	Light	NE	Raining.....	Capt. W. H. Kidley.
S. S. Oceanic.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 40° 59′, W. 124° 30′....†	30.05	763.3	52	11.1	79	W	.....	.....	1	.....	10	.....	NW	.....	.....	Sm'h	WNW	Cloudy.....	Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon.....†	29.97	761.2	46.5	8.1	.....	SE	.....	.....	1	.....	2	.....	SE	.....	.....	.....	.....	Clear.....	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. J. N. Ingalls.
S. S. Dakota, N. 46° 15′, W. 124° 48′..*†	30.00	762.0	55	12.8	93	Var.	.....	.....	0–3	.....	2	.....	NW	0	0	Short	W	Fine.....	Capt. H. G. Morse.
S. S. Idaho, N. 43° 20′, W. 125° 04′....†	30.02	762.5	53	11.7	86	SW	.....	.....	3	.....	0	.....	.....	.....	.....	Light	W	Clear.	C. E. Lyons, 1st Officer.
S. S. Orizaba...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. H. Harrison.
S. S. Senator, San Pedro, California..†	29.98	761.5	60	15.6	88	N	.....	.....	1	.....	8	.....	NW	.....	.....	Sm'h	.....	Fair.....	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal.... ....†	29.99	761.7	50	10.0	93	NW	.....	.....	3	.....	8	.....	W	.....	.....	.....	.....	Overcast....	Capt. G. Debney.
S. S. Victoria, N. 46° 51′, W. 124° 00′....†	29.96	761.0	53	11.7	100	SE	.....	.....	2	.....	2	.....	.....	.....	.....	Sm'h	.....	Fair.....	Capt. H. M. Hayward.
PACIFIC MAIL S. S.CO. *J. B. Houston, President.*																			
S. S. Australia, Sydney, N. S. Wales.....	30.48	774.2	58	14.4	88	N	.....	.....	1	.....	5	.....	N	.....	.....	.....	.....	Cloudy.....	A. Bannerman, 2d Officer.
S. S. City of New York, S. 34° 30′ E. 177° 30′.....†	30.11	764.8	70	21.1	98	ENE	.....	.....	2	.....	5	.....	NW	.....	.....	Mod.	NW	Fair.....	Wm. H. Hawes, 2d Officer.
S. S. City of Panama.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China.....†	29.84	757.9	80	26.7	96	SE	.....	.....	2	.....	8	.....	NE	0	0	Sm'h	.....	Cloudy.....	Capt. G. G. Berry.
S. S. City of Sidney, S. 12° 46′, W. 169° 52′.....†	29.88	758.9	84	28.9	79	E	.....	.....	3	.....	5	.....	E	0	0	Mod.	E	Drizzling.....	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 38° 23′, W. 161° 34′....†	29.98	761.5	55	12.8	87	E	.....	.....	6	.....	10	.....	E	....a...	.....	R'gh	E	Cloudy.....	A. L. Ritchie, 2d Officer.
S. S. Colima,.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. R. R. Searle.
S. S. Granada, San José, Guatemala...†	29.88	758.9	80	26.7	87	Calm	.....	.....	0	.....	5?	.....	NE	0	0	Light	S	Clear?.....	Capt. M. Connolly.
S. S. Zealandia,.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
RED STAR LINE. *Jas. A. Wright President.*																			
S. S. Belgenland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Sam'l Jackson.
S. S. Nederland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Feddersen, 2d Officer.
S. S. Rhyn'land.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Wm. Geo. Randle.
S. S. Vaderland, N. 46° 10′, W. 42° 20′.....	30.11	764.8	.....	.....	.....	W	.....	.....	5	.....	8	.....	WNW	Light		Long	NW	Cloudy.....	T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, Savannah, Georgia.....	30.25	768.3	75	23.9	77	Calm	0	0	.....	2c	0	.....	.....	0	0	.....	.....	Clear.....	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. L. L. Lewis.
Bark Carrie Heckle, N. 31° 58′, W. 22° 53′...*†	30.36	771.1	67	19.4	.....	NE	.....	.....	3	.....	10	.....	NE	0	0	Sm'h	NE	Fair...	Capt. B. F. Woodbury.
Brigantine George.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, off Cape Hatteras, N. C.†	30.39	771.9	62	16.7	79	S	2	0.9	.....	2s	2k	.....	.....	0	0	.....	.....	Clear.....	.....
Bark Sunbeam, N. 40° 53′, W. 28° 10′.....†	30.37	771.4	61	16.1	88	WSW	.....	.....	4	.....	5	.....	W	0	0	Mod.	NW	Fair	Capt. Jos. Hand.
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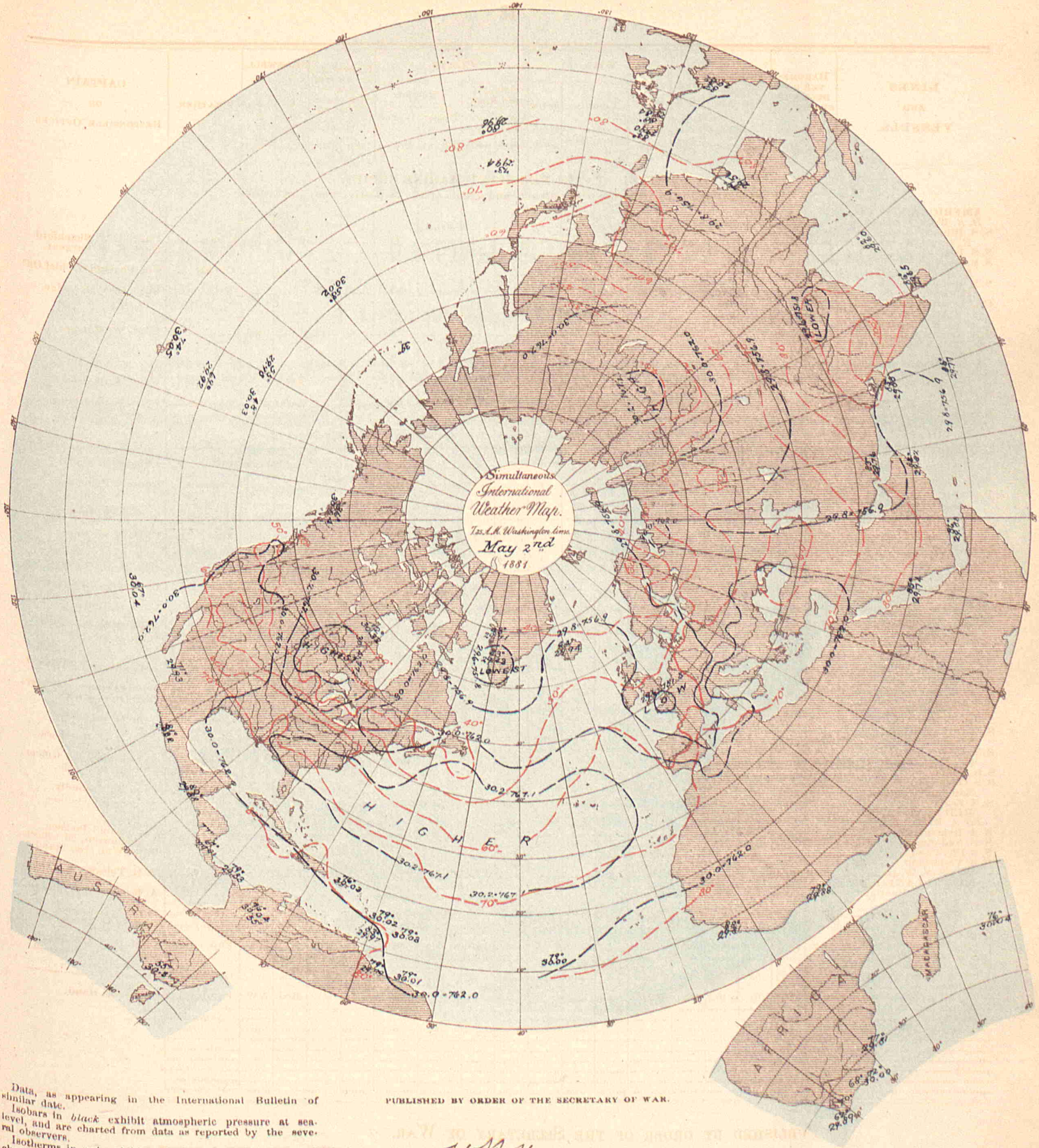
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

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W. B. Hazen

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

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 3, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco‡			30.07	763.6	68.4	20.2	74	NE			3		2			0	0	Fair	Dr. Ollive.
Nemours‡			30.02	762.6	72.1	22.3	88	SW			4		1			0	0	Very fair	Raynard.
Algiers‡			30.01	762.2	66.2	19.0	58	WSW			7		1			0	0	Very fair	Nicolas.
La Calle‡			29.97	761.2	71.2	21.8	71	SE			2		3			0	0	Pretty fair	Fonfréde.
Tunis‡			29.95	760.6															Jacques.
Sfax‡			30.02	762.4															Gau.
Saida‡			30.07	763.7	64.8	18.2	21	NW			4		5			0	0	Cloudy	Dumas.
Tebessa‡			30.04	763.0	78.1	25.6	19	WSW			4		2			Inap.	Inap.	Fair	Watrin.
Geriville‡																			Lonchamp.
Laghouat‡			30.05	763.2	73.0	22.8	33	W			2		0			0	0	Clear	Herbin.
Biskra‡			30.04	763.1															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.12	765.0	30.21	767.3	57.0	13.9	87	NE	6	2.7			10			0.06	1.5	Dull	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.34	745.3	29.87	758.8	68.2	20.1	41	SW			4		3			0.102	2.6		Prof. Ivan Stozir.
Oracow, I. R. Obs'y	28.99	736.3	29.72	754.9	72.7	22.6	32	SW	2.5	1.1			3			0	0		Dr. Wierzbicki.
Eperies	28.98	736.2	29.84	757.8	68 7	20.4	41	S			5	ICS	0	N		0	0		Julius Mikolik.
Gratz‡	28.56	725.4	29.76	755.9	70.2	21.2	38	SW			3		0			0	0		Andreas Rospini.
Hermannstadt	28.56	725.3	29.93	760.1	71.8	22.1	23	SSE			3		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.33	719.6	29.61	752.0	71.2	21.8	51	NE			1		5			0	0		The Staff.
Lemberg	28.87	733.3	29.82	757.4	70.0	21.1	44	SW			3		1			0	0		Dr. T. Stanecki.
Pola	29.84	757.9	29.95	760.7	59.4	15.2	80	SE			5		7			0.394	10.0		I. R. HydrographicOffice.
Szathmar	29.47	748.6	29.94	760.4	70.9	21.6	30	W			1		0			0	0		Beicht Peter, S. J.
Szegedin	29.65	753.0	29.92	759.9	69.1	20.6	33	SW			2		4			0	0		Karl Stancel.
Trieste	29.88	759.0	29.98	761.6	66.6	19.2	56	SSE			1		6			0.252	6.4	Cloudy	Secco.
Vienna	29.02	737.0	29.71	754.5	70.2	21.2	45	SE			1		10			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed May 1, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.94	760.5	30.04	763.0	43.7	6.5	53	NE	14	6.3		7				0	0	D. clouds	W. Boswell.
Armagh, Observatory	29.82	757.4	30.05	763.3	49.8	9.9	57	S	9	4.0		8						D. clouds	S. Call.
Bidston, Liverpool Obs'y			30.04	763.0	47.9	8.8	49	NW	12	5.4		6						D. clouds	John Hartnup.
Bolton, Sharples	29.49	749.0	30.03	762.7	47.8	8.8	50	NNE	6	2.7		6						D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.64	752.8	30.04	763.0	44.7	7.1	50	NE			1	6				0.10	2.5	D. clouds	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.96	761.0	29.99	761.7	82.0	27.8	67	NE			2	3						D. clouds	Corpl. J. Surgener, A.H.C.
Cardington			29.95	760.7	48.0	8.9	56	NE			0.6	8						D. clouds	John McLaren.
Chatham, School M. E.	29.85	758.2	29.98	761.5	48.1	8.9	64	N			2	9						D. clouds	Lance Cpl. R. Tear, R.E.
Falmouth, Observatory	29.81	757.2	30.05	763.3	52.8	11.6	73	NW			2	8				Blank		Gloomy	The Staff.
Fort Napier, Natal	27.64	702.0	29.85	758.2	81.0	27.2	100	NE			1	0						Foggy	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.58	751.3	29.82	757.4	89	31.7	88	NW			1	4						Blue sky	Sgt. C. E. Keane.
Galway, Queen's College			29.96	761.0	54	12.2	67	N			2	6				0.12	3.0	D. clouds	J. O'Donaghue.
Gibraltar, Mediterranean	30.06	763.5	30.11	764.8	70.6	21.4	81	W			4	0						Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.83	757.7	30.03	762.7	46.0	7.8	47	E			1	9k						Gloomy	D. G. MacLean.
Greenwich, Royal Obs'y	29.82	757.4	29.99	761.7	48.0	8.9	63	N			1	10						Overcast	The Staff.
Guernsey	29.76	755.9	29.98	761.5	47.5	8.6	81	NE			2	7						D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.97	761.2	30.01	762.2	56.5	13.6	52	NNE	13	5.8		10						Overcast	The Staff.
Leicester, Museum	29.78	756.4	30.04	763.0	44.1	6.7	60	NE			1	10						Overcast	J. E. Carryer.
Malta, Mediterranean	29.92	760.0	30.00	762.0	67.0	19.4	80	SE			3	6				0	0	D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas	29.99	761.7	30.04	763.0	76.0	24.4	93	SE			1	10						Overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.51	749.5	30.04	763.0	45.5	7.5	51	NNE			3	8						D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	29.78	756.4	30.01	762.2	47.8	8.8	53	NNW			5	10						Squally	The Staff.
Plymouth	29.94	760.5	30.02	762.5	49.8	9.9	84	S			2	10						Overcast	John Merrifield.
Sandwick Manse, Orkneys			30.04	763.0	43.2	6.2	73	NW	13	5.8		10				Blank		Light clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.06	763.5	30.12	765.0	63.0	17.2	56	SW			1	1						Blue sky	Serg't W. H. Lyne.
Sheffield	29.77	756.1	30.06	763.5	45.7	7.6	63	NE			2	8				0	0	Overcast	W. F. Cooper.
Silloth Rectory	30.00	762.0	30.03	762.7	50.6	10.3	66	W			1	7				0.250	6.3	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.04	763.0	49.0	9.4	39	NE	6	2.7		8						D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	29.78	756.4	30.00	762.0	50.1	10.1	55	NE			1	7						D. clouds	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.01	762.2	30.04	763.0	57	13.9	69	N			5	3						D. clouds	W. Newcombe.
Valencia, Observatory	30.02	762.5	30.04	763.0	53.5	11.9	75	SW	14	6.3		9						Misty	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.95	760.7	30.00	762.0	34	1.1	94	NNW	8	3.6			10n			0.074	1.9	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	30.01	762.2	30.07	763.8	36	2.2	94	NW	5	2.2			10n		NW	0.16	4.1	Light rain	G. A. Blair.
Chicontimi, Quebec																			Rev. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.21	767.3	30.24	768.1	29	— 1.7	87	N	5	2.2		0	0			0.45	11.4	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.48	748.8	30.32	770.1	36	2.2	90	S	10	4.5		5k	5ks	S	S	0	0	Cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.92	760.0	30.06	763.5	42	5.6	83	NW	4	1.8			10n		W	0.230	5.8	Cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	30.08	764.0	30.43	772.9	36	2.2	58	N	7	3.1		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.17	766.3	30.38	771.6	38	3.3	51	N	8	3.6		0	0			0	0	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.76	755.9	30.49	774.4	37	2.8	59	E	1	0.4		0	0			0	0	Clear	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.70	754.4	30.42	772.7	40	4.4	57	NE	9	4.0		0	0			0	0	Clear	H. Morgan.
Port Stanley, Ontario	29.73	755.1	30.40	772.1	41	5.0	56	E	12	5.4		0	0			0	0	Clear	M. Payne.
Quebec, Quebec*	29.97	761.2	30.31	769.9	34	1.1	62	NW			1	0	2s		W	0.02	0.5	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	30.00	762.0	30.49	774.4	32	0.0	77	Calm	0	0		0	0			0	0	Clear	W. H. McIntyre.
Saugeen, Ontario*	29.70	754.4	30.44	773.2	38	3.3	72	SE	5	2.2		0	0			0	0	Clear	K. Stewart.
St. Andrews, N. B.	30.07	763.8	30.12	765.0	40	4.4	64	NW	7	3.1		0	0			0.16	4.1	Clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	29.86	758.4	29.90	759.4	36	2.2	91	N	8	3.6			10n			0.15	3.8	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	30.07	763.8	30.47	773.9	39	3.9	54	NE	7	3.1		2cs	0			0	0	Clear	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.04	763.0	30.10	764.5	41	5.0	76	NW	9	4.0		0	0			0.16	4.1	Clear	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.54	750.3	29.80	756.9	41	5.0	82	W	2	0.9		5k	5s			0	0	Fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.92	760.0			66.5	19.2	89	SSW	8.2	3.7			2s			0	0		John Duthie.
Cape Town, C. G. H. Obs'y.	29.93	760.2	29.97	761.2	59.9	15.5		NW	14.0	6.3		5	5n			0.230	5.8	Raining	The Staff, for D. Gill.
Worcester *†.	28.76	730.5			68.2	20.1	63	NW			2	5	5			0	0	Cloudy	C. Stokes.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.86	758.5	29.89	759.1	57.2	14.0	98	NW	4.9	2.2			10			0.862	21.9	Covered	M. Marc Dechevrens, S.J.

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

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

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

San José	26.20	665.5	29.92	760.0	67.1	19.5	92	NE			1		10s		NE	0	0	Cloudy	Amand Maison.

DANISH SERIES.

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

Copenhagen	29.63	752.7	29.68	753.9	46.4	8.0	98	Calm	0	0			10					Foggy	Oversergent Fischer.
Fanöe	29.77	756.1	29.78	759.5	43.2	6.2	77	NNW			4		10						Overloerer Lauridsen.
Godthaab, Greenland	29.32	744.8	29.37	745.9	39.0	3.9	72	NW			2		1						S. Kleinschmidt.
Stykkisholm, Iceland	29.73	755.2	29.78	756.3	40.3	4.6		SE			7		8						A. O. Thoriacius.
Thorshavn	30.02	762.6	30.06	763.5	45.0	7.2	65	SE	9	4			10						Overloerer Bergh.
Vestervig	29.69	754.2	29.79	756.6	39.6	4.2	89	N			4		10						Loerarer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.23	742.5	29.88	758.9	56.1	13.4	77	NW			2		10cn	E	E	0.098	2.5	Raining	M. Labroue, Director.
Alençon Normal School	29.41	747.0	29.96	761.0	49.6	9.8	81	N			3		8n		N	1.54	39.	Very cloudy	M. Nicot, Director.
Arras, Engineer School	29.65	753.0	29.91	759.7	43.9	6.6	90	NE			1		kn		NE	0	0		M. Klein, Commandant
Avignon, Normal School	29.71	754.6	29.79	756.6	66.2	19	54	N			1		5		NNW	0.79	20.	Cloudy	M. Giraud, Director.
Bar-sur-Seine	29.24	742.7	29.79	756.6	58.6	14.8	69	SE			1		10		ENE	0.138	3.5	Covered	M. Saillard, Director.
Beauvais, Normal School	29.65	753.0	29.91	759.8	47.7	8.7	73	N			3		10		N	0.189	4.8	Covered	M. Frère Eugene Marie.
Besançon, Normal School	28.99	736.3	29.88	758.9	51.8	11	78	S			1		n		SW	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.63	752.7	29.89	759.3	55.6	13.1	78	NW			2		8		NW	0.043	1.1	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.22	742.3	29.84	758.0	59.9	15.5	69	NNW			1		k		NNW	0.32	8.		M. Postel, Director.
Brest, Naval Observatory	29.79	756.6	30.03	762.8	53.6	12.0	76	N			1		10		N	0	0	Misty	M. de Rermaree, Dir.
Caen, Normal School	29.87	758.7	29.95	760.6	48.9	9.4	89	NNW			2		10		N	0.209	5.3	Covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.43	747.4	29.74	755.5	52.9	11.6	80	W			3		10			0.079	2.0	Covered	M. Jadot, Director.
Charleville, Normal School	29.31	744.4	29.85	758.2	48.9	9.4	76	E			1		10			0.157	4.0	Covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.43	722.0	29.77	756.1	55.0	12.8	64	S			1		8		NW	0.856	21.8	¾ covered	M. Alluard, Director.
Cluny, Normal School	28.96	735.5	29.81	757.1	58.8	14.9	72	S			1		7		SE	0.272	6.9		M. de Villemontée, Dir.
Commercy, Normal School	28 89	733.8	29.75	755.6	55.2	12.9	84	S			1		10kn	S	S	0.067	1.7	Raining	Dr. Coulet, Director.
Gap, Normal School	27.27	692.7	29.80	756.8	51.3	10.7	84	E			1		8s		NE	0.807	20.5	½ covered	M. Jeangirard, Director.
Grénasque, du. Rhone	28.70	728.9	29.84	757.9	59.5	15.3	66	N			1		8		W	0.35	9.	¾ covered	M. Kina, Director.
Grenoble, Normal School	29.04	737.6	29.80	757.0	54.9	12.7	79	W			1		kn			0.83	21.		M. Ablard, Director.
Guéret, Normal School	28.28	718.4	29.87	758.7	54.3	12.4	65	SW			1		n		NE	0.08	2.		M. Rivoire, Director.
Lamballe, Normal School	29.73	755.1	30.00	762.1	49.6	9.8	84	N			1		Fg		N	0.24	6.	Foggy	M. Ollitrault, Director.
Lescar, Normal School	29.39	746.6	30.07	763.6	55.4	13	81	SW			3					0.724	18.4		M. Chauvin, Director.
Lorient, Naval Observatory	29.95	760.6	30.05	763.2	58.3	14.6	68	N			2		10	NW	N	0	0	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.76	730.6	29.81	757.1	58.3	14.6	58	SSE			1		10		W	0.547	13.9	Covered	M. André, Director.
Mans, Normal School	29.61	752.1	29.92	759.9	52.3	11.3	70	NNE			4		8		NNE	0.102	2.6	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.50	749.2	29.80	757.0	64.6	18.1	55	NW			2		6		NNW	0.142	3.6		M. Stephan, Director.
Montlouis l'Instituteur	24.68	626.8	29.91	759.8	46.4	8.0	57	W	13.0	5.8			5		W	0.067	1.7		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.67	753.5	29.78	756.3	63.9	17.7	86	NNW			1		5	NW	NW	0.685	17.4	Cloudy	M. P. Galzin, Director.
Nancy, Normal School	29.03	737.4	29.80	756.8	52.9	11.6	85	W			1		10kn		SE	0	0	Misty	M. Hasse.
Nantes, Observatory	29.82	757.4	29.98	761.5	55.4	13	68	NNW			2-3	2k	8n		NW	0.532	13.5		M. Larocque, Director.
Nice	29.75	755.6	29.78	756.5	57.9	14.4	80	E			2		10	NE	E	1.315	33.4	Lightrain	Capt. Boissière, Director.
Perpignan, Observatory	29.73	755.2	29.84	757.9	62.4	16.9	45	N	22.4	10.0			6	NW	NW	0.106	2.7		Dr. Fines.
Pic-du-Midi, Plantade	22.35	567.8			27.1	—2.7							10		NW	1.067	27.1	Snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.77	730.8	29.83	757.7	57.2	14	67	N			1		10s			0.240	6.1	Covered	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.95	633.7			37.2	2.9	100	WNW			4		10			0.598	15.2	Foggy	M. Alluard, Director
Rochefort, Naval Obs'y	29.87	758.7	29.90	759.5	56.8	13.8	78	NW			2		10		N	0	0	Covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.72	755.0	29.94	760.4	56.5	13.6	73	NW			3		5		N	0.264	6.7	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.71	703.8	29.84	757.8	54.7	12.6	77	W			1		10		W	d.16	4.	Covered	M. Richard, Director.
Rouen, Normal School	29.84	758.0	29.93	760.2	47.8	8.8	72	N			2		10		N	0.217	5.5	Covered	M. Platrier, Director.
Saint Lô, Normal School	29.89	759.2	30.05	763.2	47.5	8.6	81	N			1		8		N	0.47	12.	Very cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.72	754.8	29.88	759.0	45.1	7.3	98	N			3		10			0.055	1.4		M. Renou, Director.
Toulouse, Observatory	29.19	741.5	29.91	759.8	55.4	13.0	78	W			2					0.390	9.9		M. Bailland, Director.
Tours	29.69	754.0	29.88	759.0	50.9	10.5	85	NE			3		10		N	0.866	22.0	Covered	M. de Tastes.
Versailles, Observatory	29.41	746.9	29.90	759.4	46.0	7.8	80	N			3					0.024	0.6		Dr. A. Bérigny, Director.
Sub-Series.																			

GERMAN SERIES.

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

Bamberg	28.86	733.1	29.72	754.8	68.0	20.0	36	Calm			0		5k			0.028	0.7		Prof. Dr. Hoh.
Berlin	29.53	750.0	29.69	754.2	72.7	22.6	33	W			1		5			0.004	0.1		Prof. Dr. Arndt.
Breslau	29.22	742.2	29.74	755.5	72.3	22.4	34	SE			2		2			0	0		Royal University Obs'y.
Carlsruhe	29.30	744.2	29.72	754.9	64.9	18.3	64	NE			1		10	S		1.240	31.5		Albert Senz.
Cassel	29.02	737.2	29.74	755.3	60.8	16.0	61	NW			4		6			0.071	1.8		Dr. H. Möhl.
Frankfort on the Main	29.41	746.9	29.80	756.8	71.4	21.9	52	SSW			1		9			0	0		Physical Society.
Friedrichshafen	28.28	718.4	29.68	753.9	62.2	16.8	57	SW			4		6	SW		0.406	35.7		Wilhelm, Chief Tel.
Hamburg	29.69	754.1	29.76	755.9	48.2	9.0	92	N			2		10			0.091	2.3		Dr. R. Kleeman.
Kiel	29.69	754.0	29.70	754.4	45.1	7.3	88	NNE			1		1c			0.142	3.6		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.29	744.0	29.69	754.2	71.8	22.1	38	SW			1		8	SW		0	0		Prof. Dr. Bruhns.
Magdeburg	29.41	746.9	29.69	754.0	70.0	21.1	80	WSW			1		7cs	0	SSW	0.008	0.2	Threatening	Dr. Assmann.
Memel	29.71	754.7	29.76	755.9	65.1	18.4	66	S			1		10s						Reinbrecht & Issernann.
Munich	27.88	708.2	29.72	755.0	68.5	20.3	32	E			1		8			0	0		Central Station.
Neufahrwasser	29.69	754.2	29.71	754.6	72.5	22.5	43	SSW			3		4	WSW		0	0		A. Lothes.
Neustadt, Palatinate	29.20	741.7	29.72	755.0	59.9	15.5	69	W			2		10			0	0		Dicknether.
Stuttgart	28.78	730.9	29.64	752.9	65.8	18.8	49	E			1		10			0.705	17.9		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.22	716.8	29.69	754.0	69.3	20.7	43	NE			2		9	W		0	0		Prof. Kemlein.
Wustrow	29.69	754.0	29.71	754.6	47.3	8.5	100	N			2		10			0.020	0.5		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.78	756.4	30.17	766.2	67.5	19.7		SW			1.5		0					Clear.	A. Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.74	755.4	29.79	756.7	88.2	31.2	79	WSW	20.0	8.9			0			0	0	Misty	
Deesa	29.22	742.0	29.66	753.4	105.3	40.7	10	NW	8.7	3.9			0			0	0	Blue sky	
Bombay	29.64	752.8	29.68	753.8	87.9	31.1	67	NW	17.0	7.6			0			0	0	Blue sky	
Poona, Yarrowda	27.82	706.5	29.58	751.4	101.8	38.8	8	WNW	5.0	2.2			0			0	0	Blue sky	
Belgaum	27.17	690.1	29.65	753.1	85.1	29.5	60	SW	14.0	6.3			0			0	0	Misty	
Lahore	28.99	736.2	29.71	754.7	89.9	33.2	16	NW	3.5	1.6			6			0	0	D. clouds	
Roorkee	28.79	731.2	29.66	753.4	89.0	31.7	16	W	2.9	1.3			4			0	0	Misty	
Agra	29.14	740.0	29.68	753.9	94.6	34.8	39	W	5.8	2.6			0			0	0		
Nagpur	28.59	726.1	29.58	751.4	101.7	38.7	16	N	3.9	1.7			0			0	0	Blue sky	
Jubbulpore	28.34	719.8	29.65	753.1	94.7	34.8	5	Calm	3.1	1.4			0			0	0	Blue sky	
Lucknow	29.25	742.8	29.61	752.1	95.0	35.0	20	NW	1.9	0.8			0			0	0	Blue sky	
Allahabad	29.28	743.6	29.58	751.3	97.5	36.4	18	W	3.0	1.3			0			0	0	Blue sky	
Patna	29.47	748.4	29.64	752.8	102.9	39.4	25	N	2.8	1.2			0			0	0	Blue sky	
Hazaribagh	27.66	702.5	29.60	751.9	91.8	33.2	11	N	8.9	4.0			0			0	0	Misty	
Cuttack	29.60	751.9	29.68	753.9	89.3	31.8	55	S	3.0	1.3			7			0	0	D. clouds	
Calcutta, Alipore	29.65	753.2	29.67	753.7	86.7	30.4	60	SW	6.0	2.7			10	SW	SW	0	0	Overcast	
Dhubri	29.56	750.8	29.68	753.9	81.2	27.3	74	Calm	5.1	2.3			0			0.29	7.4	Blue sky	
Chittagong	29.64	752.9	29.73	755.2	83.7	28.7	76	SSW	5.9	2.6			9			0	0	D. clouds	
Sibsagar	29.39	746.5	29.72	755.0	80.3	26.8	73	NE	4.6	2.1			10	SW	SW	0.80	20.3	D. clouds	
Zanzibar, Africa			29.88	758.9	77.2	25.1	93	S	7	3.1			10		S	1.51	38.4	Threatening	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.57	751.0	29.98	761.4	61.5	16.4	73	SW	0.7	0.3			10			0.114	2.9		Prof. Giovanni Clodig.
Milan	29.31	744.5	29.82	757.5	55.2	12.9	86	E	11.2	5.0			10			0	0		Prof. Schiaparelli.
Padua	29.82	757.3	29.93	760.1	62.6	17.0	65	ESE	17.4	7.8			6	ESE		0	0		Prof. Dott. Lorenzoni.
Moncalieri	28.93	734.9	29.83	757.7	49.5	9.7	95	NW	2.5	1.1			10			1.909	48.5		Prof. P. F. Denza.
Genoa	29.64	752.8	29.83	757.7	55.4	13.0	88	E	10.5	4.7			10	SE		1.929	49.0		Prof. G. M. Garibaldi.
Mondovi	27.93	709.3	29.83	757.7	43.3	6.3	86	W			4		10			2.012	51.1		Prof. D. C. Bruno.
Pesaro	29.85	758.2	29.90	759.4	60.1	15.6	77	E	13.6	6.1			8	SW		0	0		Prof. Luigi Guidi.
Florence	29.65	753.0	29.90	759.4	59.0	15.0	86	WNW			2		10			0.110	2.8		Prof. Costantino Pitter.
Leghorn	29.76	755.9	29.85	758.1	57.9	14.4	96	ESE	6.3	2.8			10			0	0		Prof. P. Monte.
Rome	29.77	756.1	29.94	760.5	66.9	19.4	50	SSE	19.9	8.9			10			0	0		Prof. P. S. Ferrari.
Lecce	29.84	757.9	30.09	764.3	65.1	18.4	52	SSW	34.2	15.3			3	S		0	0		Prof. C. de Giorgi.
Cosenza	29.13	740.0	30.01	762.3	67.6	19.8	74	ESE	1.8	0.8			0			0	0		Prof. D. Conti.
Cagliari	29.63	752.5	29.82	757.4	71.6	22.0	44	S			2		6	SW		0	0		Prof. A. Pacinotti.
Palermo	29.69	754.2	29.95	760.6	73.8	23.2	64	NNE	1.3	0.6			0			0	0		Prof. G. Ciacciatore.
Syracuse	30.03	762.8	30.08	763.9	65.8	18.8	63	ESE	8.7	3.9			8	SW		0	0		Prof. Vincenzo Gulliano.
Sub-Series.																			
Naples, S. R	29.45	747.9	29.96	761.0	63.7	17.6	65	SW	3.8	1.7			4	SE		0	0		Prof. F. Brioschi.
Stelvio	22.04	559.7			37.2	2.9	67	SW			2		9k	S		0	0	Covered	Prof. P. F. Denza.
Valdobbia	21.98	558.4			32.0	0.0	91	SE			6		10	S		3.740	95.0	Snow & fog.	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.91	759.7	29.93	760.2	67.8	19.9	92	NNE	3.2	1.4			10n			0.346	8.8	Light rain	K. Sasaki.
Kioto	29.81	757.2	29.98	761.5	60.6	15.9	83	N				2ck;cs	0			0.022	0.6	Clear.	M. Tojima.
Nagasaki, I. M. Obs'y	29.73	755.1	29.93	760.2	68.8	20.4	90	S	1.7	0.8		c	8s			0.160	4.1	Cloudy	S. Takehayashi.
Tokei Obs'y, Yeddo	29.97	761.2	30.04	763.0	55.5	13.1	95	Calm	0	0			10s			0.015	0.4	Covered	The Staff.
Wakayama	29.90	759.4	29.95	760.7	66.6	19.2	89	N	1.0	0.4		ck	6s			0	0	Fair	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.88	758.9	30.07	763.8	78.1	25.6	71	E	18.0	8.0		0	4		ESE	0.26	6.6	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.67	753.6	29.93	760.1	71.0	21.7	95	ESE	1.6	0.8		7cs	0	WSW		0	0	Dense mist	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. F.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.93	760.1	29.93	760.1	46.6	8.1		N			4					0.843	21.4		
Groningen	29.79	756.7	29.85	758.1	44.1	6.7		N			4					0.283	7.2		
Helder	29.88	758.9	29.88	758.9	43.7	6.5		N			4					0	0		
Hellevoetsluis	29.89	759.1	29.89	759.1	45.5	7.5	83	N			2					0.535	13.6		
Utrecht	29.85	758.1	29.89	759.3	45.1	7.3	79	NNW			2		8			0.201	5.1	Very cloudy	H. van der Brink

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES.																			
Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.74	755.3	29.80	756.9	47.8	8.8	41	NNE	8.5	3.8			2			0	0		
Christiania	29.69	754.1	29.84	757.9	40.1	4.5	66	ENE	18	8			10			0.004	0.1	Rain & snow	
Gjæsvær	29.54	750.3	29.56	750.9	28.0	— 2.2		WSW			7		10					Snowing	
Lodingen	29.84	757.9	29.89	759.1	36.0	2.2	57	NW			1		9			0.004	0.1		
PORTUGUESE SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.30	769.6	30.46	773.6	61.9	16.6	94	W	3.1	1.4			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.12	739.6	30.11	764.9	63.3	17.4	36	NNW	9.4	4.2			0			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.13	765.2	30.21	767.4	65.7	18.7	50	SW	4.9	2.2			2			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.87	758.6	30.22	767.7	61.0	16.1	53	NNW	21.0	9.4			7			0	0		The Staff.
Ponta Delgada, Azores	30.39	772.0	30.47	773.8	62.6	17.0	72	NNE	4.3	1.9			10			0	0		
RUSSIAN SERIES.																			
Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski																			Capt. Lasarew.
Archangel	29.84	757.9	29.86	758.4	51.6	10.9	46	SSE	2	1		10s	0						Capt. Sseliwerstow.
Astrakhan	29.91	759.6	29.82	757.5	58.3	14.6	92	NW	13	6			10n			Blank		Heavy cl'ds	Capt. Wisganow.
Barnaul ‡	29.76	755.8	30.27	768.9	41.4	5.2	33	N	4	2			0						Meteorological Obs'y.
Dorpat	29.69	754.0	29.93	760.3	43.0	6.1	95	ENE	7	3			10n						Observatory.
Ekaterinburg	28.99	736.4	29.93	760.1	66.9	19.4	42	E	4	2			10n						Meteorological Obs'y.
Kasan	29.58	751.2	29.84	757.8	63.0	17.2	67	Calm	0	0			2k						Observatory.
Kertch	30.19	766.7	30.21	767.2	62.6	17.0	72	NW	7	3			0						Lagorio & Sastyrez.
Kieff	29.34	745.2	29.95	760.8	68.4	20.2	31	S	9	4			0						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.86	758.5	30.06	763.6	65.5	18.6	35	NW	18	8			3					Light clouds	Meteorological Obs'y.
Moscow	29.47	748.6	30.01	762.3	60.3	15.7	41	S	7.8	3.5			6ks						Meteorological Obs'y.
Nertchinsk	27.90	708.7	30.30	769.6	28.0	— 2.2	41	Calm	0	0			0						Meteorological Obs'y.
Nikolaiev	30.10	764.4	30.17	766.2	63.9	17.7	59	SSW	18	8			0						Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	29.92	760.0	30.06	763.6	65.1	18.4	54	SW	4	2			4k						Physical Observatory.
St. Petersburg	29.97	761.3	29.99	761.7	39.4	4.1	79	W	7	3		cs	7ks;n						Central Physical Obs'y.
Tashkend, Laboratory	28.35	720.1	29.86	758.4	75.6	24.2	53	Calm	0	0			4						Teich, A. M.
Tiflis	28.67	728.1	30.08	764.1	57.4	14.1	53	NW	45	20			10s						Physical Observatory.
Warsaw	29.37	745.9	29.78	756.3	70.3	21.3	38	S	9	4			0						Astronomical Obs'y.
Wilna	29.42	747.2	29.82	757.5	68.4	20.2	44	S	9	4			7						Berg, Assistant.
Yeniseisk	30.17	766.4	30.47	774.0	42.6	5.9	35	NE	4	2			2						M. O. Marks.
SCOTTISH SERIES.																			
Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.06	763.5	44.2	6.8	58	E			1		Sk			0.12	3.0	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			30.01	762.2	49	9.4	93	ESE			3	5	5	SE		0	0	D. clouds	J. Youngclause.
North Unst, Shetland Isl'ds			29.99	761.7				NE			3	3	6	E					Robert Burnet.
SPANISH SERIES.																			
Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.76	755.9	29.87	758.6	64.8	18.2	58	WSW	7.4	3.3			4			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.06	763.6	30.12	765.0	59.4	15.2	84	NW	5.4	2.4			10			0.650	16.5	Raining	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.15	689.6			48.7	9.3	72	N	2.9	1.3		0	5			0.079	2.0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.81	705.4	30.04	763.0	59.0	15.0	67	NW	11.6	5.2		0	5			0.039	1.0	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.82	757.5	29.97	761.2	73.2	22.9	35	NNW	7.6	3.4		2	4	SE		0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.25	743.0	30.16	766.0	57.4	14.1	66	NW	11.2	5.0			5			0.114	2.9	Cloudy	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	29.94	760.5	30.01	762.2	71.4	21.9	86	E	2.2	1.0		1c	0	SW		0.591	15.0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.82	757.5	29.87	758.8	85.8	29.9	68	N	5.5	2.5		0	1s			0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.06	763.6	30.16	766.1	63.9	17.7	62	WNW	11.5	5.1		0	6		W	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.98	761.4	30.07	763.7	79.2	26.2	84	SE	9.4	4.2		1s	5k	SE	SE	0.071	1.8	Clear	Enrique Gadea, Chief Engin'er.
Tuguegarao, Philippine Ids	29.79	755.7	29.94	760.4	81.5	27.5	70	NW	4.5	2.0			7k		NW	0	0	Cloudy	José L. Fastovra.
SWEDISH SERIES.																			
Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.87	758.6	29.91	759.6	25.9	— 3.4	78	S			2		0			0	0		
Umea	29.88	758.9	29.93	760.2	41.7	5.4	49	SW			2		1			0	0		
Hernosand	29.89	759.1	29.94	760.4	42.3	5.7	45	SSE			2		5			0	0		
Stockholm	29.65	753.1	29.83	757.6	34.7	1.5	96	NE			4		10			0.181	4.6	Raining	
Wisby	29.65	753.0	29.71	754.5	43.2	6.2	94	ESE			4		10			0.146	3.7	Rain & fog	
SUB-SERIES.																			
Upsala	29.75	755.6	29.84	757.8	34.3	1.3	96	ENE	11.0	4.9			10			0.118	3.0	Snowing	Nils Ekholm
SWISS SERIES.																			
Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour. Director of the Observatory at Geneva.																			
Geneva																			The Observatory.
Zurich	28.13	714.6	29.76	755.8	59.0	15.0	68	NW			4		6			0.098	2.5	Cloudy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. — mm.; Ther. —° cent.; Hum. — per cent.																			
TURKISH SERIES.																			
Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.17	766.2	66.2	19.0	35	ENE	6	2.5			0			0	0		The Observatory.
Valona			30.12	765.1	68.4	20.2		SW			2		2			0	0	Slightly cl'dy	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			30.03	762.7	68.5	20.3	76	N			3		0			0	0		Prof. C. V. A. van Dyck.

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

UNITED STATES SERIES.

By authority of the Secretary of War.

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

Albany, New York	30.32	770.1	30.40	772.1	45.5	7.5	46	NE	10	4.5		0	0			Inap.	Inap.	Clear	
Alpena, Michigan	29.79	756.7	30.47	773.9	32	0.0	69	N	7	3.1		0	0			0	0	Clear	
Atlanta, Georgia	29.02	737.1	30.14	765.5	67.0	19.4	79	E	4	1.8		2c	Hz	Calm		0	0	Clear	
Atlantic City, New Jersey	30.30	769.6	30.32	770.1	51	10.6	72	NE	16	7.2		10k	0			0.19	4.8	Cloudy	
Attou Id., Alaska	30.71	780.0			39	3.9	82	NE	3	1.3			10s		E	0	0	Cloudy	
Augusta, Georgia	30.04	763.0	30.25	768.3	68.0	20.0	79	Calm	0	0		0	0			0	0	Clear	
Baltimore, Maryland	30.30	769.6	30.34	770.6	53	11.7	61	N	8	3.6			10n			0.31	7.9	Light rain	
Barnegat, New Jersey	30.29	769.4	30.31	769.9	50	10.0	72	NE	16	7.2		8ck	2s	NW	NW	0.10	2.5	Cloudy	
Bismarck, Dakota	28.38	720.8	30.24	768.1	44	6.7	59	SE	16	7.2			10s		Calm	0	0	Cloudy	
Boise City, Idaho	27.17	690.1	30.13	765.3	50	10.0	79	S	1	0.4		5cs	0	W		Inap.	Inap.	Fair	
Boston, Massachusetts	30.16	766.1	30.32	770.1	42.0	5.6	42	NW	15	6.7		2c	0	W		0.06	1.5	Fair	
Brackettville, Texas	28.85	732.8	29.89	759.2	67	19.4	89	E	12	5.4		0	5ks		E	0	0	Fair	
Brownsville, Texas	29.95	760.7	30.00	762.0	75	23.9	77	SE	4	1.8		2c	0			0	0	Clear	
Buffalo, New York	29.67	753.6	30.40	772.1	39	3.9	59	NE	10	4.5		0	Sk			0	0	Clear	
Burlington, Vermont	30.09	764.3	30.40	772.1	37.0	2.8	53	N	8	3.6		5ck	0	W		Inap.	Inap	Fair	
Cairo, Illinois	29.84	757.9	30.23	767.8	59	15.0	94	NE	12	5.4			10n		Calm	0.80	20.3	Light rain	
Campo, California	27.37	695.2	29.94	760.5	50	10.0	86	W	4	1.8			10s			0	0	Cloudy	
Camp Thomas, Arizona	27.12	688.8			51	10.6	53	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	30.20	767.1	30.22	767.6	61	16.1	77	NE	21	9.4			10s		NE	0.10	2.5	Cloudy	
Cape May, New Jersey	30.27	768.8	30.30	769.6	51	10.6	79	NE	9	4.0			10n			0.07	1.8	Light rain	
Castroville, Texas	29.28	743.7	29.98	761.5	69	20.6	85	NE	4	1.8			10ks		SE	0	0	Cloudy	
Cedar Keys, Florida	30.12	765.0	30.14	765.5	70	21.1	85	NE	8	3.6		8cs	0			0	0	Fair	
Champaign, Illinois	29.46	748.3	30.30	769.6	36.8	2.7	81	NE	12	5.4		8k	0	NE		0	0	Fair	
Charleston, S. Carolina	30.17	766.3	30.22	767.6	69	20.6	80	NW	3	1.3		0	0			0	0	Clear	
Charlotte, N. Carolina	29.33	745.0	30.13	765.3	66.0	18.9	89	SW	1	0.4		5ck	Sk	SE		0	0	Fair	
Chattanooga, Tennessee	29.38	746.2	30.17	766.3	63	17.2	83	E	2	0.9		8cs	2ks;sk	SW	W;C	Inap.	Inap.	Cloudy	
Cheyenne, Wyoming	24.07	611.4	30.01	762.2	39	3.9	91	SW	8	3.6			Fg			0	0	Dense fog	
Chicago, Illinois	29.66	753.4	30.38	771.6	40.8	4.9	65	NE	12	5.4		0	0			0	0	Clear	
Chincoteague, Virginia	30.24	768.1	30.26	768.6	51	10.6	86	NE	25	11.2			10n		Calm	0.87	22.1	Light rain	
Cincinnati, Ohio	29.65	753.1	30.32	770.1	50	10.0	72	NE	6	2.7			10n		S	0.22	5.6	Light rain	
Cleveland, Ohio	29.64	752.8	30.40	772.1	40.5	4.7	65	NE	9	4.0		8c	0	W		0.01	0.3	Fair	
Coleman City, Texas	28.20	716.3	29.84	757.9	60	15.6	94	SE	2	0.9		0	5s			0.90	22.9	Fair	
Columbus, Ohio	29.47	748.5	30.33	770.4	47	8.3	62	NE	4	1.8			10s			0.32	8.1	Cloudy	
Concho, Texas	28.10	713.7	29.75	755.6	60	15.6	88	S	8	3.6		5ck	2s	S		1.10	27.9	Cloudy	
Corsicana, Texas	29.60	751.8	30.07	763.8	64	17.8	89	SE	4	1.8		0	8ks			0.11	2.8	Cloudy	
Davenport, Iowa	29.72	754.9	30.39	771.9	43	6.1	51	NE	8	3.6		1cs	0	NE		0	0	Clear	
Dayton, Washington T'y	28.29	718.6	29.95	760.7	49	9.4	71	S	8	3.6		0	5s		SW	0	0	Fair	
Deadwood, Dakota	25.40	645.1			34	1.1	79	SW	2	0.9		5cs	0			0	0	Fair	
Decatur, Texas	28.86	733.0	30.00	762.0	66	18.9	89	SE	8	3.6			10s			0	0	Cloudy	
Delaware Breakwater, Del.	30.28	769.1	30.30	769.6	52	11.1	79	NE	19	8.5			10n		NE	0.22	5.6	Light rain	
Denison, Texas	29.28	743.7	30.06	763.5	65	18.3	89	E	3	1.3			10s	Calm		1.81	46.0	Cloudy	
Denver, Colorado	24.85	631.2	30.07	763.8	44.2	6.8	92	N	5	2.2			Fg			0	0	Dense fog	
Des Moines, Iowa	29.46	748.3	30.37	771.4	43	6.1	83	E	4	1.8		5cs	0			0	0	Fair	
Detroit, Michigan	29.69	754.1	30.42	772.7	39.8	4.3	73	N	6	2.7		0	0			0	0	Clear	
Dodge City, Kansas	27.56	700.0	29.89	759.2	46	7.8	100	NE	10	4.5			10n			0.48	12.2	Light rain	
Dubuque, Iowa	29.70	754.4	30.43	772.9	39	3.9	55	NE	6	2.7		1k	0	NE		0	0	Clear	
Duluth, Minnesota	29.77	756.1	30.50	774.7	32	0.0	79	N	2	0.9		0	0			0	0	Clear	
Eagle Pass, Texas	29.26	743.2	29.98	761.5	68	20.0	84	SE	11	4.9		0	5s		SE	0	0	Fair	
Eagle Rock, Idaho	25.30	642.6	29.95	760.7	43	6.1	51	SW	3	1.3		0	0			0	0	Clear	
Eastport, Maine	30.04	763.0	30.11	764.8	42	5.6	58	NW	23	10.3		2k	0	NW		0.12	3.0	Fair	
El Paso, Texas	26.17	664.7			57	13.9	63	NE	1	0.4		0	1s			0	0	Clear	
Erie, Pennsylvania	29.65	753.1	30.39	771.9	40	4.4	73	NE	6	2.7		2c	0			0.02	0.5	Fair	
Escanaba, Michigan	29.82	757.4	30.52	775.2	30	— 1.1	78	N	5	2.2		0	0			0	0	Clear	
Florence, Arizona	28.33	719.6	29.93	760.2	55	12.8	22	NE	2	0.9		0	0			0	0	Clear	
Fort Apache, Arizona	24.98	634.5	30.43	772.9	39	3.9	38	E	4	1.8		0	0			0	0	Clear	
Fort Assinnaboine, Montana	27.03	686.5			40	4.4	56	Calm	0	0		0	0			0	0	Clear	
Fort Bennett, Dakota	28.60	726.4			46	7.8	77	SE	21	9.4			10s			Inap.	Inap.	Cloudy	
Fort Benton, Montana																			
Fort Buford, Dakota	28.00	711.2	29.84	757.9	45	7.2	68	SE	8	3.6		8cs	0	W		0	0	Cloudy	
Fort Custer, Montana	26.76	679.7			50	10.0	71	SE	4	1.8		0	0			0	0	Clear	
Fort Davis, Texas	25.15	638.8	30.11	764.8	57	13.9	87	S	3	1.3			10s		S	0.28	7.1	Cloudy	
Fort Elliott, Texas	27.32	693.9	29.61	752.1	48	8.9	85	NE	4	1.8			10n		NE	1.80	45.7	Heavy rain	
Fort Gibson, Indian T'y	29.54	750.3	30.07	763.8	64	17.8	94	Calm	0	0		10cs	0	S		0.10	2.5	Cloudy	
Fort Grant, Arizona	25.16	639.1	29.96	761.0	57	13.9	15	Calm	0	0		0	0			0	0	Clear	
Fort Griffin, Texas	28.70	729.0	29.94	760.5	62.8	17.1	89	N	6	2.7			10s			0.50	12.7	Cloudy	
Fort Keogh, Montana	27.44	697.0			45	7.2	75	E	17	7.6		1c	0			0	0	Clear	
Fort Macon, North Carolina	30.21	767.3	30.22	767.6	66	18.9	95	SW	5	2.2		5c	Hz	Calm	Calm	0	0	Fair	
Fort McKavett, Texas	27.76	705.1	29.64	752.8	61.2	16.2	88	S	15	6.7		1k	0			0.82	20.8	Clear	
Fort Missoula, Montana	26.73	678.9			51	10.6	65	N	1	0.4		8ck	0			0	0	Cloudy	
Fort St. Michaels																			
Fort Shaw, Montana	26.29	667.8			42	5.6	58	SW	18	8.0		10cs	0			0	0	Cloudy	
Fort Sill, Indian Territory	28.85	732.8	29.94	760.5	62	16.7	94	NE	12	5.4			10s		NE	1.20	30.5	Cloudy	
Fort Stevenson, Dakota	28.33	719.6			43	6.1	67	SE	16	7.2			10s		SE	0	0	Cloudy	
Fort Verde, Arizona					58	14.4	37	SW								0	0	Clear	
Fredericksburg, Texas	28.29	718.6	29.82	757.4	62	16.7	94	SE	6	2.7	1	0	0			0.05	1.3	Cloudy	
Galveston, Texas	30.06	763.5	30.10	764.5	72	22.2	85	S	5	2.2		0	8s			0	0	Fair	
Grand Haven, Michigan	29.76	755.9	30.44	773.2	40	4.4	65	NE	8	3.6		2ck	5ks	W	S	0	0	Clear	
Hatteras, North Carolina	30.20	767.1	30.22	767.6	64	17.8	94	SW	9	4.0		0	0			0	0	Clear	
Helena, Montana	25.75	654.0			58	14.4	42	N	2	0.9		0	0			0	0	Clear	
Henrietta, Texas	29.03	737.3	29.93	760.2	68	20.0	64	SE	9	4.0		2k	0	Calm		0	0	Fair	
Indianapolis, Indiana	29.47	748.5	30.26	768.6	50	10.0	65	E	5	2.2			10s		E	0	0	Cloudy	
Indianola, Texas	30.06	763.5	30.09	764.3	71.8	22.1	90	SE	7	3.1		4c	0	S		0.18	4.6	Fair	
Jacksboro, Texas	28.87	733.3	29.97	761.2	67	19.4	89	E	1	0.4		5cs	1ks	N	S	0	0	Fair	
Jacksonville, Florida	30.13	765.3	30.17	766.3	73	22.8	85	E	3	1.3			10ks		Calm	Inap.	Inap.	Cloudy	
Keokuk, Iowa	29.68	753.9	30.35	770.9	42.2	5.7	73	NE	9	4.0		5cs	0	W		0	0	Fair	
Key West, Florida	30.01	762.2	30.04	763.0	75	23.9	81	E	6	2.7			10s			0	0	Cloudy	
Kittyhawk, North Carolina	30.19	766.8	30.22	767.6	66	18.9	89	W	11	4.9		0	2ks			0.49	12.4	Fair	
Knoxville, Tennessee	29.20	741.7	30.20	767.1	60	15.6	94	N	1	0.4		0	8ks;n		W	0.05	1.3	Light rain	
La Crosse, Wisconsin	29.64	752.8	30.41	772.4	42.2	5.7	74	SE	4	1.8		8cs	Fg	SW	Calm	Inap.	Inap.	Fair	
La Mesilla, New Mexico	26.01	660.6	30.16	766.1	49	9.4	44	Calm	0	0		0	0			0	0	Clear	
Laredo, Texas	29.59	751.6	29.92	760.0	70	21.1	90	E	3	1.3		0	0			0	0	Clear	
Leavenworth, Kansas	29.37	746.0	30.22	767.6	53	11.7	67	E	12	5.4		5ck	0	E		0	0	Fair	
Lewiston, Idaho	29.19	741.4	29.84	757.9	47	8.3	54	E	2	0.9		4k	5s	SW		0	0	Cloudy	
Little Rock, Arkansas	29.79	756.7	30.10	764.5	66	18.9	95	N	2	0.9			10s		Calm	0	0	Cloudy	
Los Angeles, California	29.60	751.8	29.96	761.0	58.0	14.4	82	NE	3	1.3			10s			0.02	0.5	Cloudy	
Louisville, Kentucky	29.63	752.6	30.19	766.8	55.5	13.1	93	NE	8	3.6			9s		Calm	0	0	Cloudy	
Lynchburg, Virginia	29.55	750.6	30.22	767.6	64	17.8	68	NE	3	1.3			10n			0.33	8.4	Light rain	
Madison, Wisconsin	29.40	746.7	30.44	773.2	35	1.7	80	NE	5	2.2			10s			0.01	0.3	Cloudy	
Marquette, Michigan	29.76	755.9	30.52	775.2	33	0.6	79	Calm	0	0		0	0			0	0	Clear	
Mason, Texas	28.36	720.3	30.08	764.0	65	18.3	78	S	7	3.1		1cs	4s	W	Calm	1.85	47.0	Cloudy	
Memphis, Tennessee	29.81	757.2	30.15	765.8	65	18.3	89	N	2	0.9			10s		NW	Inap.	Inap.	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Velocity.		Force	Clouds. Amount and kind.		Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.67	753.6	30.44	773.2	38	3.3	72	N	9	4.0		0	0			0	0	Clear	
Mobile, Alabama	30.08	764.0	30.15	765.8	69.0	20.6	85	NE	4	1.8		1cs	0			0	0	Clear	
Montgomery, Alabama	29.94	760.5	30.17	766.3	67	19.4	90	E	1	0.4		Hz	Hz			0	0	Hazy	
Moorhead, Minnesota	29.36	745.7	30.37	771.4	33	0.6	80	SE	8	3.6		5k	2s	S		0	0	Cloudy	
Morgantown, W. Virginia	29.28	743.7	30.30	769.6	48	8.9	70	NE	4	1.8			1cs			0.47	11.9	Cloudy	
Mt. Washington, N. H.	23.71	602.2	30.07	763.8	9	—12.8	89	NW	45	20.1		0	Fg		NW	0.07	1.8	Light fog	
Nashville, Tennessee	29.64	752.8	30.17	766.3	64.0	17.8	89	SE	2	0.9			10ks		SW	0.45	11.4	Threatening	
New Haven, Connecticut	30.22	767.6	30.34	770.6	67	19.4	62	N	11	4.9		8c	0	W		0.10	2.5	Fair	
New London, Connecticut	30.29	769.4	30.34	770.6	49	9.4	51	N	10	4.5		0	0			0.07	1.8	Clear	
New Orleans, Louisiana	30.07	763.8	30.13	765.3	70.5	21.4	85	Calm	0	0		0	1ks		SE	0	0	Clear	
Newport, Rhode Island	30.25	768.3	30.30	769.6	45.3	7.4	52	N	12	5.4		1c	0	Calm		0.09	2.3	Clear	
New River, N. Carolina																			
New Shoreham, Rhode I'd	30.28	769.1	30.31	769.9	44.1	6.7	68	N	12	5.4		0	0			0.12	3.0	Clear	
New York, New York	30.16	766.1	30.34	770.6	49	9.4	51	N	10	4.5		8cs	0			0.08	2.0	Fair	
Norfolk, Virginia	30.17	766.3	30.23	767.8	59	15.0	94	E	11	4.9			10ks		E	0.23	5.8	Cloudy	
North Platte, Nebraska	27.28	692.9	29.90	759.4	45	7.2	80	SE	12	5.4			10s			0.20	5.1	Cloudy	
Olympia, Washington T'y	29.98	761.5	30.02	762.5	48.0	8.9	93	S	6	2.7			10s		Calm	0.01	0.3	Cloudy	
Omaha, Nebraska	29.16	740.7	30.29	769.4	47.5	8.6	67	NE	4	1.8		1cs	5s			0	0	Fair	
Oswego, New York	30.10	764.5	30.43	772.9	37.0	2.8	53	NE	12	5.4		0	0			Inap.	Inap.	Clear	
Pensacola, Florida	30.12	765.0	30.15	765.8	71	21.7	80	NE	4	1.8		0	0			0	0	Clear	
Philadelphia, Pa.	30.28	769.1	30.33	770.4	49	9.4	64	E	16	7.2		10k	0	W		0.18	4.6	Cloudy	
Phœnix, Arizona	28.75	730.2	30.55	776.0	54	12.2	61	N	1	0.4		0	0			0	0	Clear	
Pike's Peak, Colorado	17.83	452.9	30.04	763.0	22	— 5.6	72	NE	10	4.5		0	8ks		N	0.23	5.8	Cloudy	
Pioche, Nevada	24.01	609.8	29.78	756.4	49	9.4	37	W	4	1.8		0	5s		Calm	0	0	Fair	
Pittsburg, Pennsylvania	29.49	749.0	30.32	770.1	46	7.8	69	NE	4	1.8			10s		NE	0.37	9.4	Cloudy	
Port Eads, Louisiana	30.12	765.0	30.12	765.0	70.1	21.2	95	E	11	4.9		0	0			0	0	Clear	
Port Huron, Michigan	29.73	755.1	30.43	772.9	35.9	2.2	80	NE	7	3.1		0	0			0	0	Clear	
Portland, Maine	30.23	767.8	30.28	769.1	43	6.1	51	NW	12	5.4		0	0			0.04	1.0	Clear	
Portland, Oregon	30.03	762.7	30.10	764.5	55	12.8	50	S	13	5.8		5k	5s	W	W	0	0	Cloudy	
Portsmouth, N. Carolina					63	17.2	83	SW	12	5.4		2k	0	Calm		0	0	Clear	
Prescott, Arizona	24.70	627.4	30.06	763.5	49	9.4	37	S	2	0.9			10s		S	0	0	Cloudy	
Punta Rassa, Florida	30.04	763.0	30.06	763.5	69	20.6	90	NE	16	7.2		5ck	5ks	Calm	NE	0.93	23.6	Cloudy	
Red Bluff, California	29.67	753.6	30.01	762.2	56.0	13.3	87	NW	3	1.3		0	0			0	0	Clear	
Rio Grande City, Texas	29.83	757.7	30.05	763.3	68	20.0	90	SE	2	0.9		0	0			0	0	Clear	
Rochester, New York	29.80	756.9	30.45	773.4	40	4.4	65	E	8	3.6		0	0			0	0	Clear	
Roseburg, Oregon	29.60	751.8	30.19	766.8	44	6.7	63	E	2	0.9		9k	0	SW		0	0	Fair	
Sacramento, California	29.94	760.5	30.02	762.5	50.9	10.5	79	SE	4	1.8		0	0			0	0	Clear	
St. Louis, Missouri	29.68	753.9	30.28	769.1	43.0	6.1	67	NE	13	5.8			10s			0.36	9.1	Cloudy	
St. Paul, Minnesota	29.53	750.0	30.40	772.1	40	4.4	56	E	6	2.7		5c	0	NW		0	0	Fair	
Salt Lake City, Utah	25.59	650.0	29.92	760.0	56	13.3	40	NE	2	0.9		4k	0	SW		0	0	Fair	
San Antonio, Texas	29.39	746.5	30.08	764.0	69	20.6	90	NE	1	0.4			10s		Calm	0	0	Cloudy	
San Diego, California	29.88	758.9	29.95	760.7	60	15.6	77	SW	5	2.2			10s			0	0	Cloudy	
Sandusky, Ohio	29.69	754.1	30.38	771.6	45	7.2	68	NE	14	6.3		1c	0			0	0	Clear	
Sandy Hook, New Jersey	30.31	769.9	30.34	770.6	49.5	9.7	61	NE	16	7.2		5c	0			0.09	2.3	Fair	
San Francisco, California	29.99	761.7	30.05	763.3	51	10.6	82	W	7	3.1		0	0			0	0	Clear	
Santa Fé, New Mexico	23.31	592.1	29.85	758.2	50	10.0	65	SE	4	1.8		0	2s			0.41	10.4	Fair	
Savannah, Georgia	30.12	765.0	30.22	767.6	70.5	21.4	85	S	2	0.9		0	Fg			0	0	Clear	
Shreveport, Louisiana	29.86	758.4	30.10	764.5	69.2	20.7	90	SE	4	1.8			10s			0	0	Cloudy	
Silver City, New Mexico	24.20	614.7	30.38	771.6	45	7.2	24	Calm	0	0		0	0			0	0	Clear	
Sitka Alaska																0	0		
Smithville, North Carolina	30.21	767.3	30.24	768.1	69	20.6	95	S	4	1.8		5c;hz	Hz			0	0	Light haze	
Socorro, New Mexico	25.36	644.1	29.43	747.5	55	12.8	33	S	12	5.4		0	0			0	0	Clear	
Spokane Falls, Wash. Ter.	27.93	709.4	29.75	755.6	49	9.4	57	S	3	1.3			10s		SW	0	0	Cloudy	
Springfield, Illinois	29.63	752.6	30.33	770.4	39.5	4.2	73	NE	6	2.7		1ck	2s	W	W	0	0	Fair	
Springfield, Massachusetts	30.22	767.6	30.35	770.9	45	7.2	46	N	8	3.6		2c	0			0.02	0.5	Clear	
Stockton, Texas	26.94	684.3	29.94	760.5	64.2	17.9	94	SE	28	12.5			10n		SE	Inap.	Inap.	Light rain	
St. Vincent, Minnesota	29.46	748.3	30.29	769.4	37	2.8	71	SE	4	1.8		8cs	0			0	0	Fair	
Thatcher's Island, Mass	30.20	767.1	30.25	768.3	41	5.0	65	N	17	7.6		2c	0	Calm		0.13	3.3	Clear	
Toledo, Ohio	29.67	753.6	30.38	771.6	42	5.6	83	N	5	2.2		5c;hz	0	W;E		0	0	Fair	
Tucson, Arizona	27.43	696.7	29.98	761.5	57	13.9	41	SE	2	0.9		0	0			0	0	Clear	
Umatilla, Oregon	29.69	754.1	30.17	766.3	57	13.9	41	W	4	1.8			10s		W	0	0	Cloudy	
Uvalde, Texas	29.09	738.9	29.90	759.4	70	21.1	80	SE	2	0.9		2c	5s	SW	SE	0	0	Fair	
Vicksburg, Mississippi	29.89	759.2	30.15	765.8	68	20.0	84	SE	6	2.7		0	0			0	0	Clear	
Visalia, California	29.62	752.3	29.98	761.5	55	12.8	68	NW	1	0.4		0	0			0	0	Clear	
Washington, D. C.	30.20	767.1	30.32	770.1	52	11.1	79	N	7	3.1			10n			0.12	3.0	Light rain	
Wickenburg, Arizona					52	11.1	47	Calm			0	1c	0			0	0	Clear	
Wilmington, N. Carolina	30.16	766.1	30.22	767.6	68	20.0	84	SW	4	1.8		0	0			0	0	Clear	
Winnemucca, Nevada	25.63	651.0	29.99	761.7	48	8.9	56	S	8	3.6		2ck	0	SW		0	0	Clear	
Wood's Holl, Mass	30.26	768.6	30.30	769.6	46	7.8	47	N	19	8.5		5cs	0	W		0.14	3.6	Fair	
Yankton, Dakota	29.06	738.1	30.39	771.9	46	7.8	84	E	12	5.4			10n			0.04	1.0	Light rain	
Yuma, Arizona	29.64	752.8	29.78	756.4	63.2	17.3	62	N	3	1.3		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.09	561.1			55.2	12.9	80	Calm	0	0		5c;cs	0			0.28	7.1	Fair	Thomas Herran
Buff Bay Town, Jamaica.‡	29.79	756.7	30.11	764.8	72	22.2	90	E				k	k						
Havana, Cuba, W. I.	30.01	762.2	30.06	763.5	74	23.3	81	Calm	0	0		0	0			0.36	9.1	Clear	A. Van Caneghem, Ass't
Jakobshavn, Greenland	29.43	747.6	29.48	748.9	44.6	7		SW			7		5			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	29.98	761.5	29.99	761.7	74.3	23.5	91	Calm	0	0			10s		E	0	0	Cloudy	Robert Johnstone
Navassa, W. I.	29.93	760.2	30.01	762.2	75	23.9	73	NE					10s		NE	5.02	127.5	Raining	F. M. Everett.
Paramaribo, S. A.	30.01	762.2	30.01	762.2	77	25.0	91	E			2		10n	E		0.420	10.7	Rainy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.46	748.3	30.02	762.5	79	26.1	80	Calm			0	2c	8s	S	Calm	0	0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					77.0	25		NE			2	10k	1ks	SE	NE	0.20	5.		Earl Flint.
Santiago de Cuba, W. I.	29.99	761.7	30.02	762.5	78	25.6	86	SW	4.8	2.1		4k	8n			0.22	5.6	Cloudy	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.14	765.5	30.18	766.6	15.0	—9.4	91	W	7	3.1		1c	2s	W	W	0.12	3.0	Fair	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross, N. 34° 36′, E. 134° 53′	29.99	761.7	61	16.1		NE			1		7	NW						D. clouds	Comm A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Villafranca, France	29.76	755.9	60	15.6	82	Var.			1–2		10	ENE						Raining	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 25° 44′, E. 57° 47′	29.70	754.4	87	30.6	62	W			2–3		0					1	W	Misty	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			68	20.0		Calm			0		0							Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N. 15° 49′, W. 59° 49′	30.06	763.5	80	26.7	86	ENE			3		3	E				2	E	D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.95	760.7	74	23.3	83	SE			1		0					1	SE	Blue sky	Com. F. W. Richards.
H. M. S. Champion, Elmina, Gold Coast, Africa.	29.88	758.9	80	26.7	87	WNW			1		8	Calm				3	SSE	Threatening	Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 25° 09′, E. 120° 56′	29.86	758.4	79	26.1	86	WSW			2		2					1	SW	D. clouds	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer, N. 39° 40′, E. 19° 59′	30.12	765.0	68	20.0		SSE			1		1	S						D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 23° 19′, E. 118° 05′	29.76	755.9	78	25.6	73	Calm			0		c							Blue sky	Capt. S. Long.
H. M. S. Danae, S. 26° 58′, W. 12° 45′	30.21	767.3	73	22.8		NNE			1		1	Calm				1		Blue sky	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt C. Domville.
H. M. Dock-Yard																			Capt. J. Barnardisten.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 46° 55′, W. 55° 23′	29.72	754.9	38	3.3	90	NW			1		10							Drizzling	Capt. W. R. Kennedy.
H. M. S. Dryad, N. 19° 00′, E. 57° 48′	29.75	755.6	83	28.3		SW			1		4	SW				2	SW	D. clouds	Capt. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 19° 00′, E. 107° 20′	29.61	752.1	80	26.7		SE			6							5	S	Misty	Comm. C. Johnstone.
H. M. S. Emerald, S. 20° 05′, E. 178° 52′	29.96	761.0	79	26.1	78	SE			4–6		10	SE				3	SE	Showery	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Trincomalee, Ceylon, India.	29.67	753.6	88	31.1	73	NNW			1		7	NW						D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo, Turks Island, W. I.	30.05	763.3	81	27.2	83	E			4		10					3	E	Raining	Comm. R. N. Custance.
H. M. S. Flying Fish, Hong-Kong, China	29.82	757.4	80	26.7	84	SE			1		6	NE						Misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 21° 00′, W. 122° 40′	30.08	764.0	66	18.9	74	NNE			3–5		10					2	NNW; N	Squally	Comm. E. G. Bourke.
H. M. S. Garnet, Colonia, Uruguay	30.21	767.3	50	10.0	72	NW			3		0							Blue sky	Capt. L. F. Jones.
H. M. S. Griffon																			Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant, S. 38° 30′, E. 86° 10′	30.44	773.2	51	10.6	72	S			4–6		7	SSE				4	SSE	D. clouds	Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 24° 28′, E. 118° 03′	29.85	758.2	76	24.4	82	N			1		3	S				1–2	WSW	D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	30.01	762.2	70	21.1		Calm			0		10							Overcast	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Hong-Keng, China	29.83	757.7	80.7	27.1	82	Calm			0		3							D. clouds	Capt. A. Carpenter.
H. M. S. Midge																			Capt. W. N. Lang.
H. M. S. Minotaur, Madeira Island, Africa.	30.17	766.3	64.5	18.1	75	SSW			1		3	ENE						D. clouds	Capt. H. H. Rawson.
H. M. S. Modeste, N. 5° 16′, E. 115° 15′	29.76	755.9	84	28.9	91	Calm			0		0							Blue sky	Capt. J. G. Mead.
H. M. S. Monarch Goletta, Tunis, N. Africa.	29.91	759.7	65	18.3	100	Var.			2		9	NNW						D. clouds	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda Islands, W. I.	30.28	769.1	68	20.0	67	NNW			1		0							Blue sky	Capt. E. B. Drummond.
H. M. S. Orontes, S. 29° 55′, E. 30° 00′†	30.03	762.7	78.5	25.8	84	Var.			1		3	SW				2	SSE	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.88	758.9	79	26.1		NW			1		7							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, N. 18° 24′, W. 79° 00′	29.95	760.7	80	26.7	82	E			2		6	SE				2	E	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A.C.Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	29.97	761.2	46	7.8		W			3		10							Overcast	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.86	758.4	82.4	28.0	85	SE			3		10							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis, N. 22° 09′, E. 37° 12′	29.80	756.9	82	27.8	70	NNW			3		0					Sm'h		Blue sky	Capt. G. O. Twiss.
H. M. S. Shannon, S. 29° 19′, W. 39° 27′	30.12	765.0	68.5	20.3	67	SW			6		2	SW				7	SW	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb, N. 40° 50′, E. 14° 16′ *	30.01	762.2	65	18.3	68	S			4-5		4	SSE				3-6	SSW	Squally	Capt. T. L. H. Ward.
H. M. S. Tenedos, N 25° 05′, W. 64° 22′	30.22	767.6	74	23.3	80	ENE			5		1					3	ENE	D. clouds	Capt. C. G. Fane.
H. M. S. Thetis, S. 17° 30′, W. 149° 00′	29.87	758.7	80	26.7	78	SE			6		2					3	SE	D. clouds	Capt. P. W. Stephens.
H. M. S. Thunderer, Fort Augusta, Sicily	30.10	764.5	64.5	18.1	65	SE			4		1					2		Blue sky	Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A	29.98	761.5	56.5	13.6	87	N			1-2		10	Calm						Misty	Capt. A. H. Markham.
H. M. S. Turquoise, Callao Bay, Peru			65	18.3	97	Calm			0		10							Foggy	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 9° 30′, E. 65° 54′	29.79	756.7	85	29.4	79	NW			3		3	NW				Sm'h		D. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I			76	24.4		Calm			0		8							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Wellington, New Zealand	30.28	769.1	54	12.2		S			5-6		3	SSE						Squally	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, N. 20° 26′, E. 67° 33′	29.72	754.9	87.5	30.8	75	WNW			3-4		0					3-4	NW	Misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES. Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
RioLima, Santiago, Cape Verd I'ds.	29.99	761.8	78.6	25.9	82	N			3		1					1	ESE	Blue sky	S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't.
Tamega																			P. I R. de Carvealtio, Comd't.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡ N. 36° 52′, W. 8° 49′	30.17	766.4	62.2	16.8	64	WNW			3		1							Blue sky	Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.						
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.	
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.			
N. Yard, Pensacola, Fla.	30.20	767.1	73	22.8	81	NE	5	2.2			0			0	0			Clear.
N. Yard, Portsmouth, N. H.	30.29	769.4	43	6.1	51	NNW	8	3.6			0			0	0			Clear.
Naval Hospital, Yokahama, Japan.	29.84	757.9	56	13.3	97	Calm			0		10		N	0.04	1.0			Gloomy
Adams, Callao, Peru	29.78	756.4	66	18.9	94	E			1		10		SSE			Long	SW	Cloudy
Alaska, Callao, Peru	29.88	758.9	65	18.3	89	Calm			0		10					Sm'h		Foggy
Alert, N. 26° 32′, E. 142° 36′ *	29.96	761.0	74	23.3	68	E			5		5		E			Mod.	E	Fair
Alliance, Hampton Roads, Va.	30.17	766.3	60	15.6	94	ENE			3		10		NE	Light		Sm'h		Cloudy
Ashuelot, Nagasaki, Japan.	29.94	760.5	72	22.2	90	Calm			0		10		Calm					Cloudy
Colorado, New York, N. Y.	30.33	770.4	50	10.0	58	N			5		5		Calm	0.03	0.8			Fair
Constitution, Piney Point, Md.	30.23	767.8	52	11.1	86	NE	12	5.4			10		SW					Rainy
Franklin, Norfolk, Va.	30.15	765.8	60	15.6	88	NE	20	8.9			10		NE	0.01	0.3			Drizzling
Galena, Piraeus, Greece.	30.15	765.8	65	18.3	68	S			2		0					Sm'h		Clear.
Independence, N. Yard, Mare I'd, Cal.	30.05	763.3	52	11.1	73	WSW	1.2	0.5			2		WSW	0	0			Clear
Jamestown, Sitka, Alaska *	29.61	752.1	38	3.3	81	Calm			0		0			0	0			Clear.
Kearsarge, Norfolk, Va.	30.26	768.6	61	16.1	88	NE			3		10					Sm'h		Cloudy
Lackawanna, S. 33° 11′, W. 72° 36′ †	30.13	765.3	59	15.0	100	SW			2		2		S			Long	S	Fair
Marion, Montevideo, Uruguay.	30.30	769.6	52	11.1	66	WNW			5		0			0	0	Mod.	W	Clear.
Michigan, Erie, Pennsylvania.	30.33	770.4	46	7.8		NE	2	0.9			0							Clear
Minnesota, Newport, R. I.	30.34	770.6	47	8.3	77	NNE			4-5		2					Sm'h		Clear.
Monocacy, N. 31° 21′, E. 123° 41′	29.83	757.7	58	14.4	100	S			1		10		Calm			Sm'h		Foggy
New Hampshire, Port Royal, S. C.	30.16	766.1	73	22.8	100	Calm	0	0			5		Calm	0	0			Fair
Nipsic, N. 37° 43′, E. 4° 37′	29.93	760.2	66	18.9	64	WSW			5		0					Mod.	W	Blue sky
Onward, Callao, Peru †.	29.94	760.5	65	18.3	94	Calm			0		10					Long	W	Cloudy
Palos, Yokohama, Japan.	30.06	763.5	56	13.3	100	ENE			1		10							Overcast
Passaic, Washington, D. C.	30.29	769.4	55	12.8	93	NE			1		2		SW					Raining
Pensacola, Honolulu, Sandwich Ids.	30.07	763.8	73	22.8	90	N			1		2		NE	Slight		Sm'h		Fair
Portsmouth, Indian Head, Maryland.	30.28	769.1	53	11.7	100	NE			4		10		NE					Rainy
Powhatan, New York, N. Y.	30.35	770.9	51	10.6	59	NNE			3		8							Cloudy
Quinnebaug, Cadiz, Spain.	30.15	765.8	70	21.1	57	SW			2		2							Clear.
Ranger, Acapulco, Mexico. *	29.82	757.4	80	26.7	74	Calm			0		2		Calm	0	0	Sm'h		Clear.
Richmond, Nagasaki, Japan.	29.93	760.2	72	22.2	85	SSW			1		8			0	0			Cloudy.
Saratoga, Potomac river.	30.25	768.3	55	12.8	74	NE			3		10		Calm	Moderate				Raining
Shenandoah, Montevideo, Uruguay. *	30.23	767.8	51	10.6	59	NW			3		2					Sm'h		Fair.
St. Louis, League Island, Pa.	29.91	759.7	51	10.6	65	NE	4	1.8			8			0.06	1.5			Cloudy
Swatara, Shanghai, China †*	29.83	757.7	65	18.3	78	NW			1		8		Calm					Raining
Tennessee, Hampton Roads, Va.	30.25	768.3	59	15.0	100	ENE	16	7.2			10		ENE	0.005	0.1	Sm'h		Overcast
Ticonderoga, S. 26° 55′, W. 129° 05′	29.93	760.2	71	21.7	90	ENE			3		10		ENE; SW	1.9	48.	Sm'h		Cloudy
Trenton, Castellamare, Italy *	29.95	760.7	80	26.7	39	W			1		2			0	0	Sm'h		Fair
Vandalia, Norfolk, Va.	30.31	769.9	62	16.7	88	E			2		10		Calm					Cloudy
Wabash, Boston, Massachusetts.	30.36	771.1	42	5.6	50	NNW	11	4.9			2		N	0.07	1.8			Clear
Wachusetts, N. 31° 02′, W. 152° 52′	30.00	762.9	71	21.7	90	SSW			4		8		S	Light		Mod.	S	Cloudy
Wyoming, N. 20° 10′, W. 380 46′	30.12	765.0	74	23.3	68	ENE			6		2		ENE			Sm'h	ENE	Clear.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 37° 40′, W. 151° 51′	29.83	757.7	54	12.2	87	N			5		10							Misty	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, Demerara, Brit. Guiana	29.98	761.5	81	27.2	91	NE			3		5							D. clouds	W. N. Lailey.
City of Agra ‡																			Capt. T. Young.
Barque Commewyne, N. 31° 11′, W. 24° 58′	30.33	770.4	64.2	17.9	73	NE			4		10							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra ‡																			Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 12° 28′, W. 37° 28′	30.06	763.5	77.5	25.3	73	NE			5		4							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow, ‡ N. 0° 10′, E. 80° 00′	29.77	756.1	84.2	29.0	82	WSW			4		5							D. clouds	Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope ‡																			Capt. Jas. Campbell.
Ship Iron Cross, S. 24° 35′, E. 77° 20′ *	30.14	765.5	70	21.1		ESE			5-6		6							Misty	Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee, ‡ S. 11° 51′, W. 9° 46′	30.03	762.7	77.5	25.3	82	SE			4		4							D. clouds	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 47° 55′, W. 30° 45′	30.18	766.6	51.5	10.8	73	W			6		5				5	WNW		D. clouds	Capt. H. W. Dyke.
Barque Mertola, N. 38° 34′, W. 11° 55′	30.31	769.9	59.0	15.0	81	N			4		9							D. clouds	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ S. 22° 23′, E. 4° 37′	30.10	764.5	69	20.6	75	SE			4		4							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 12° 58′, E. 90° 56′	29.63	752.6	83.5	28.6	83	SSE			5		10							Overcast	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, ‡ N. 12° 49′, E. 45° 03′	29.87	758.7	86	30.0	76	NNE			2		3							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean																			
S. S. Circassian, N. 45° 52′, W. 45° 40′	30.30	769.6	45	7.2	92	SW			5		10kn		SW	8 mi	nutes	2	SW;NW	Raining	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Scythia, N. 50° 16′, W. 22° 10′	29.86	758.4	56	13.3	94	W			5		8		W	0	0	Long	W	Cloudy	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 43° 53′, W. 47° 59′ †	29.93	760.2	46	7.8		S			6		10		WSW	0	0	Mod.	SW	Overcast	Capt. Benj. Gleadell.
S. S. Germanic, N. 42° 14′, W. 50° 10′ †	30.21	767.3	46	7.8		S			4		8?		S	0	0	Sm'h		Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Thol.
S. S. Hermann, N. 48° 44′, W. 24° 17′	30.13	765.3	60	15.6	94	WNW			5		8			0	0	Mod.	NW	Foggy	Capt. H. Baur.
S. S. Köln																			Capt. Th. Jüngst.
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Skoldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, N. 51° 20′, W. 11° 46′	30.01	762.2	57	13.9	94	SSW			3		8		SSE			Sm'h	W	Fair	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio, N. 40° 51′, W. 67° 19′ *†	30.30	769.6	42	5.6	91	NW			2		2		NW	4hrs	fog	Sm'll	W	Fair	W. Shackford, Chief Off'r
S. S. Pennsylvania, Philadelphia, Pa *†	30.22	767.6	49	9.4	85	NW			3		2		NW					Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 24° 19′, E. 118° 47′ †	29.99	761.7	78	25.6	91	ESE			2		0			0	0	Sm'h			Capt. H. Davison.
S. S. Gaelic, N. 38° 00′, E. 172° 07′ *†	30.14	765.5	58	14.4	88	ENE			5		10		NE			R'gh	ENE	Overcast	Capt. W. H. Kidley.
S. S. Oceanic																			Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 46° 12′, W. 124° 05′ †	30.07	763.8	52	11.1	79	WNW			4		10		NNW			Sm'h		Cloudy	Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon †	30.07	763.8	55	12.8		SSW			1		10		S					Cloudy	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota, N. 48° 21′, W. 124° 52′ *†	30.00	762.0	53	11.7	93	NW			5		10			0	0	Long	W	Overcast	Capt. H. G. Morse.
S. S. Ida[illegible] N. 39° 10′, W. 124° 10′ †	30.12	765.0	50	10.0	86	NW			3		0					Light	W	Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, N. 34° 50′, W. 120° 40′ †	29.94	760.5	56	13.3	87	NW			2		0					Mod.	NW	Clear	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal †	30.02	762.5	49	9.4	78	Calm			0		5							Fair	Capt. G. Debney.
S. S. Victoria, Strait of Fuca †	29.94	760.5	46	7.8	100	Var.			2		8					Sm'h		Rainy	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, Sydney, N. S. W	30.39	771.9	64	17.8	83	N			1		10		N					Raining	A. Bannerman, 2d Officer
S. S. City of New York, S. 36° 51′, E. 174° 49′ †	29.95	760.7	69	20.6	95	NW			2		5		NW			Mod.	NW	Fair	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China †	29.87	758.7	79	26.1	82	E			1		2		NE			Sm'h		Clear	Capt. G. G. Berry.
S. S. City of Sidney, S. 8° 14′, W. 168° 13′ †	29.82	757.4	85	29.4	76	E			3		5		E	0	0	Mod.	ESE	Fair	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 38° 11′, W. 155° 54′ †	29.99	761.7	49	9.4	85	NE			7		10		NE			R'gh	E	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima																			Capt. R. R. Searle.
S. S. Granada, N. 12° 00′, W. 87° 50′ †	29.85	758.2	83	28.3	75	ENE			6		5?		NE	Ra	in	Sm'll	NE	Clear?	Capt. M. Connolly.
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland																			Capt. W. Geo. Randle.
S. S. Vaderland, N. 44° 43′, W. 46° 02′	30.08	764.0				SSW			4		10			Driz	zles	Short	SW	Overcast	T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Savannah, Georgia	30.20	767.1	73	22.8	81	Calm	0	0		2c	0			0	0			Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 30° 16′, W. 25° 40′ *†	30.40	772.1	68	20.0		NE			6		10		NE	0	0	Mod.	NNE	Squally	Capt B. F. Woodbury.
Brigantine George																			Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Chesapeake Bay †	30.29	769.4	58	14.4	94	NE	4	1.8			10n			0.30	7.6			Raining	
Bark Sunbeam, N. 40° 43′, W. 26° 30′	30.37	771.4	63	17.2	78	W			3		2		NW	0	0	Mod.	NW	Fair	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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W. B. Hazen

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

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 4, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco‡			30.02	762.6	67.6	19.8	76	NE			4		1			0	0	Very fair	Dr. Ollive.
Nemours‡			30.11	764.7	69.1	20.6	89	W			3		0			0	0	Clear	Raynard.
Algiers‡			30.15	765.8	67.3	19.6	53	NNW			3		3			Inap.	Inap.	Pretty fair	Nicolas.
La Calle‡			30.07	763.8	59.4	15.2	89	NE			5		5			0.374	9.5	Cloudy	Fonfréde.
Tunis‡			30.02	762.5															Jacques.
Sfax‡			30.06	763.5															Gau.
Saida‡			30.17	766.3	67.1	19.5	66	N			5		0			0	0	Clear	Dumas.
Tebessa‡			30.12	765.1	59.0	15.0	39	NNW			5		6			0.039	1.0	Cloudy	Watrin.
Geriville‡																			Lonchamp.
Laghouat‡			30.11	764.7	70.2	21.2	42	NW			3		0			0	0	Clear	Herbin.
Biskra‡			30.12	765.1															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.96	761.0	30.05	763.3	61.8	16.6	85	NNE	2	0.9			9			0.10	2.5	Dull	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.40	746.7	29.94	760.4	62.1	16.7	69	W			2		10			0.012	0.3		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.09	738.9	29.83	757.7	71.6	22.0	37	W	3.8	1.7			10			0.020	0.5		Dr. Wierzbicki.
Eperies	29.02	737.1	29.87	758.7	68.4	20.2	43	SE			3	cs	8s		N	0	0		Julius Mikolik.
Gratz‡	28.65	727.8	29.87	758.6	67.6	19.8	49	SW			4		5			0	0		Andreas Rospini.
Hermannstadt	28.52	724.5	29.87	758.8	78.8	26.0	32	SSE			3		1			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.54	724.8	29.85	758.2	59.9	15.5	68	WSW			1		10			0.209	5.3		The Staff.
Lemberg	28.91	734.4	29.86	758.4	73.4	23.0	39	SW			2		6			0	0		Dr. T. Stanecki.
Pola	29.84	758.0	29.95	760.8	58.8	14.9	87	SSE			5		10			0.571	14.5		I. R. HydrographicOffice.
Szathmar	29.46	748.3	29.91	759.6	75.9	24.4	62	NW			3		4			0	0		Belcht Peter, S. J.
Szegedin	29.65	753.1	29.92	760.0	69.4	20.8	46	S			2		4			0	0		Karl Stancel.
Trieste	29.89	759.3	30.00	761.9	60.8	16.0	81	Calm			0		10			0.583	14.8	Raining	Secco.
Vienna	29.15	740.5	29.85	758.3	67.3	19.6	49	E			1		9			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed May 1, 1882.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.74	755.4	29.84	757.9	43.7	6.5	79	S	16	7.2	.....	.....	9	.....	.....	0.235	6.0	Overcast	W. Boswell.
Armagh, Observatory	29.71	754.6	29.95	760.7	49.3	9.6	81	WSW	8	3.6	.....	.....	9	.....	.....	.....	.....	Showery	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.93	760.2	48.7	9.3	75	W	32	14.3	.....	.....	8	.....	.....	.....	.....	Overcast	John Hartnup.
Bolton, Sharples	29.36	745.7	29.89	759.2	44.0	6.7	98	SSW	.....	.....	.....	.....	10	.....	.....	.....	.....	Raining	Thomas Mackereth.
Bradford, Yorkshire	29.48	748.8	29.87	758.7	49.1	9.5	79	SW	.....	.....	1	.....	6	.....	.....	0.16	4.1	D. clouds	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.94	760.5	29.97	761.2	84.0	28.9	71	NE	.....	.....	2	.....	6	.....	.....	.....	.....	Gloomy	Corpl. J. Surgener, A.H.C.
Cardington	.....	.....	29.99	761.7	51.4	10.8	91	SW	.....	.....	1.0	.....	10	.....	.....	.....	.....	Drizzling	John McLaren.
Chatham, School M. E.	29.95	760.7	30.08	764.0	52.4	11.3	68	SW	.....	.....	3	.....	10	.....	.....	.....	.....	Raining	Lance Cpl. R. Tear, R.E.
Falmouth, Observatory	29.88	758.9	30.12	765.0	55.2	12.9	61	WNW	.....	.....	4	.....	5	.....	.....	.....	.....	D. clouds	The Staff.
Fort Napier, Natal	27.56	700.0	29.77	756.1	80.0	26.7	96	NE	.....	.....	1	.....	0	.....	.....	.....	.....	Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.59	751.6	29.82	757.4	89	31.7	92	SW	.....	.....	1	.....	5	.....	.....	.....	.....	D. clouds	Sgt. C. E. Keane.
Galway, Queen's College	.....	.....	29.92	760.0	57	13.9	69	N	.....	.....	4	.....	6	.....	.....	0.63	16.0	D. clouds	J. O'Donaghue.
Gibraltar, Mediterranean	30.10	764.5	30.16	766.1	71.0	21.7	73	ENE	.....	.....	3	.....	0	.....	.....	.....	.....	Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.64	752.8	29.85	758.2	48.1	8.9	79	WSW	.....	.....	1	.....	9	.....	.....	.....	.....	Gloomy	D. G. MacLean.
Greenwich, Royal Obs'y	29.88	758.9	30.05	763.3	50.7	10.4	80	SSW	.....	.....	1	.....	10	.....	.....	.....	.....	Raining	The Staff.
Guernsey	29.86	758.4	30.08	764.0	52	11.1	90	SSW	.....	.....	1	.....	8	.....	.....	.....	.....	Showery	Dr. S. E. Hoskins, F.R.S.
Kew, Observatory	30.02	762.5	30.06	763.5	52.3	11.3	77	S	15	6.7	.....	.....	10	.....	.....	.....	.....	Showery	The Staff.
Leicester, Museum	29.71	754.6	29.96	761.0	49.3	9.6	91	S	.....	.....	1	.....	10	.....	.....	.....	.....	Overcast	J. E. Carryer.
Malta, Mediterranean	29.87	758.7	29.95	760.7	63.8	17.7	92	NE	.....	.....	2	.....	10	.....	.....	0.24	6.1	Overcast	F. S. Vine, A. H. C.
Nassau, Bahamas	29.92	760.0	29.97	761.2	80.5	26.9	87	SE	.....	.....	1	.....	7	.....	.....	.....	.....	D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.42	747.3	29.94	760.5	53.7	12.1	83	SSW	.....	.....	3	.....	7	.....	.....	.....	.....	D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	29.78	756.4	30.01	762.2	48.4	9.1	93	S	.....	.....	4	.....	10	.....	.....	.....	.....	Raining	The Staff.
Plymouth	29.98	761.5	30.06	763.5	58.0	14.4	74	NW	.....	.....	2	.....	4	.....	.....	.....	.....	D. clouds	John Merrifield.
Sandwick Manse, Orkneys	.....	.....	29.80	756.9	46.2	7.9	82	SSE	20	8.9	.....	.....	10	.....	.....	.....	.....	Light clouds	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.96	761.0	30.02	762.5	67.2	19.6	59	WSW	.....	.....	1	.....	1	.....	.....	.....	.....	Blue sky	Serg't W. H. Lyne.
Sheffield	29.65	753.1	29.93	760.2	48.5	9.2	92	SW	.....	.....	1	.....	10	.....	.....	0.12	3.0	Overcast	W. F. Cooper.
Silloth Rectory	29.86	758.4	29.89	759.2	49.9	9.9	92	W	.....	.....	2	.....	10	.....	.....	0.213	5.4	Raining	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.92	760.0	45.1	7.3	91	SW	11	4.9	.....	.....	10	.....	.....	.....	.....	Overcast	Rev. S. J. Perry.
Stratfield Turgiss	29.79	756.7	30.00	762.0	57.6	14.2	83	SW	.....	.....	1	.....	5	.....	.....	.....	.....	D. clouds	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.04	763.0	30.07	763.8	59	15.0	65	W	.....	.....	7	.....	5	.....	.....	.....	.....	D. clouds	W. Newcombe.
Valencia, Observatory	30.06	763.5	30.08	764.0	53.8	12.1	68	W	24	10.7	.....	.....	3	.....	.....	Blank		D. clouds	The Met'g'l Office.
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.....																			
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.31	769.9	30.35	770.9	36	2.2	62	NW	9	4.0	.....	0	0	.....	.....	0	0	Clear	H. J. Cundall, C. E.
Chatham, N. B.*	30.34	770.6	30.41	772.4	34	1.1	52	NW	7	3.1	.....	0	0	.....	.....	0.02	0.5	Clear	G. A. Blair.
Chicontimi, Quebec	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Rev. V. A. Huart.
Cornwall, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	James Smith, M. A.
Dalhousie, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. A. Johnson.
Father Point, Quebec*	30.42	772.7	30.45	773.4	34	1.1	85	N	3	1.3	.....	0	0	.....	.....	0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.11	739.4	29.94	760.5	43	6.1	87	S	14	6.3	.....	5k	5n	W	W	0	0	Cloudy	James Stewart.
Fredericton, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. Harrison.
Granton, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	James Grant.
Halifax, N. S.*	30.27	768.8	30.40	772.1	37	2.8	66	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	A. Allison.
Hamilton, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. Dickson, B. A.
Kingston, Ontario*	30.13	765.3	30.43	772.9	39	3.9	84	S	3	1.3	.....	8c	0	Calm	.....	0	0	Fair	S. Woods, M. A.
Little Glace Bay, N. S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. H. Rigby.
Montreal, Quebec*	30.26	768.6	30.47	773.9	41	5.0	51	SE	5	2.2	.....	0	Sk	.....	.....	0	0	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. R. Nason.
Parry Sound, Ontario*	29.78	756.4	30.50	774.7	37	2.8	62	E	.....	.....	.....	0	0	.....	.....	0	0	Clear	Rev. R. Moseley.
Peterboro, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. F. Jeffers, M. A.
Port Dover, Ontario	29.71	754.6	30.43	772.9	40	4.4	48	NE	10	4.5	.....	2c	0	NW	.....	0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.76	755.9	30.43	772.9	40	4.4	51	NE	8	3.6	.....	2k	0	NW	.....	0	0	Clear	M. Payne.
Quebec, Quebec*	30.14	765.5	30.48	774.2	33	0.6	60	W	.....	.....	1	0	Hz	.....	.....	0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	30.00	762.0	30.48	774.2	31	— 0.6	75	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	W. H. McIntyre.
Saugeen, Ontario*	29.73	755.1	30.47	773.9	39	3.9	64	E	4	1.8	.....	8ck	0	.....	.....	0	0	Cloudy	K. Stewart.
St. Andrews, N. B.	30.39	771.9	30.44	773.2	37	2.8	49	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
St. John, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Murdock, C. E.
Stratford, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. J. Macgregor, M. A.
Sydney, C. B*	30.26	768.6	30.30	769.6	40	4.4	50	W	9	4.0	.....	5k	0	NW	.....	0	0	Fair	T. C. Hill, C. E.
Toronto, Ontario*	30.09	764.3	30.49	774.4	41	5.0	51	W	8	3.6	.....	8cs	0	W	.....	0	0	Fair	Magnetic Observatory.
Windsor, N. S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Woodstock, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. Wolverton.
Yarmouth, N. S.*	30.34	770.6	30.41	772.4	42	5.6	44	N	2	0.9	.....	0	0	.....	.....	0	0	Clear	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.90	759.4	30.16	766.1	36	2.2	100	NE	2	0.9	.....	5k	5s	.....	.....	0	0	Fair	John Delany.
St. Pierre, N. F.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	N. F. Land, Comd't.
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Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.91	759.7	.....	.....	61.8	16.6	92	SW	10.6	4.7	.....	.....	1	98	.....	.....	0.200	5.1	Drizzling	John Duthie.
Cape Town, C. G. H. Obs'y	29.98	761.5	30.02	762.5	66.0	18.9	.....	WNW	3.7	1.7	.....	.....	1	2n;8	.....	.....	0.072	1.8	.....	The Staff, for D. Gill.
Worcester *†	28.82	732.0	.....	.....	65.1	18.4	46	NW	.....	.....	2	0	3	.....	.....	.....	0.02	0.5	.....	C. Stokes.
.....																			

CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.91	759.8	29.94	760.4	61.3	16.3	89	Calm	0	0	.....	.....	10	.....	.....	0.02	0.6	Covered	M. Marc Dechevrens, S.J.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction,		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
COSTA RICA SERIES.																			
By authority of the MINISTER OF FOREIGN AFFAIRS.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.22	666.0	29.94	760.5	68.0	20.0	95						10			Inap.	Inap.	Cloudy	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.89	759.3	29.94	760.5	42.4	5.8	69	NW	20	9			7						Oversergent Fischer.
Fanöe	30.02	762.4	30.04	762.9	44.6	7.0	63	W			4		5						Overloerer Lauridsen.
Godthaab, Greenland	29.40	746.8	29.45	747.9	34.3	1.3	80	Calm			0		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.61	752.2	29.66	753.3	40.3	4.6		SE			6		8						A. O. Thorlacius.
Thorshavn	29.77	756.1	29.80	757.0	45.1	7.3	70	SE	18	8			7						Overloerer Bergh.
Vestervig	29.89	759.3	29.99	761.7	43.9	6.6	80	W			2		2						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.59	751.5	30.24	768.0	56.5	13.6	57	NW			1	ck	0	SW		0.264	6.7		M. Labroue, Director.
Alençon Normal School	29.65	753.2	30.21	767.2	56.1	13.4	73	SW			1		5kn		N	0	0	Cloudy	M. Nicot, Director.
Arras, Engineer School	29.98	761.4	30.20	767.0	52.7	11.5	60	SW			1		kn		SW	0	0		M. Klein, Commandant.
Avignon, Normal School	29.94	760.4	30.02	762.4	58.1	14.5	52	N			6		2			0	0	Lightly cl'dy	M. Giraud, Director.
Bar-sur-Seine	29.63	752.7	30.21	767.2	46.9	8.3	77	NE			1		10		NE	0.146	3.7	Covered	M. Saillard, Director.
Beauvais, Normal School	29.91	759.8	30.18	766.6	54.0	12.2	49	NW			1		2		NW	0	0	Slightly cl'dy	M. Frère Eugene Marie.
Besançon, Normal School	29.34	745.3	30.21	767.4	57.9	14.4	75	NE			1		n		S	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.98	761.4	30.24	768.0	58.8	14.9	49	ENE			2		8		NNW	0.252	6.4	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.66	753.4	30.22	767.6	52.7	11.5	47	NNW			1		k		NNW	0.051	1.3		M. Postel, Director.
Brest, Naval Observatory	29.93	760.3	30.18	766.5	55.8	13.2	86	NW			1		10		NW	0	0		M. de Rermaree, Dir.
Caen, Normal School	30.04	763.1	30.12	765.0	58.6	14.8	76	WNW			1		5		W	0	0	Cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.80	757.0	30.13	765.2	56.1	13.4	84	W			1		5	W	W	0.008	0.2	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.63	752.6	30.14	765.5	50.0	10	62	NW			1		2			0.04	1.	¼ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.82	731.9	30.21	767.2	45.7	7.6	67	NW			2		8		NW	0.331	8.4	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.33	745.0	30.19	766.7	46.0	7.8	72	NW			1		8		NW	0.102	2.6		M. de Villemontée, Dir.
Commercy, Normal School	29.29	743.9	30.17	766.2	44.6	7	62	WNW			1		10kn		WNW	0.240	6.1	Covered	Dr. Coulet, Director.
Gap, Normal School	27.41	696.1	29.91	759.8	56.8	13.8	64	NE			1	5cs	0	S		0	0	½ covered	M. Jeangirard, Director.
Grésque, du. Rhone	28.87	733.3	30.01	762.3	57.7	14.3	57	NW			3		2		NW	0.213	5.4	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.31	744.4	30.09	764.3	46.2	7.9	79	NW			6		kn	N	N	0.098	2.5		M. Ablard, Director.
Guéret, Normal School	28.61	726.7	30.19	766.7	45.5	7.5	83	NW			1		k		SE	0.098	2.5		M. Rivoire, Director.
Lamballe, Normal School	29.99	761.8	30.27	768.9	54.9	12.7	85	N			2				N	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.70	754.3	30.37	771.5	56.3	13.5	86	W			1	cs	0	W		0.693	17.6		M. Chauvin, Director.
Lorient, Naval Observatory	30.17	766.3	30.27	768.9	53.6	12.0	100	SW			4		5		SW	0	0	½ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.12	739.6	30.21	767.2	44.2	6.8	67	NNW			1		10		NW	0.157	4.0	Covered	M. André, Director.
Mans, Normal School	29.92	759.9	30.23	767.8	53.8	12.1	56	SW			1		2		W	0.008	0.2	Slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	29.68	753.8	29.95	760.6	61.3	16.3	47	WNW			4		2		NW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.88	631.9	30.11	764.9	42.8	6.0	56	NW	18.6	8.3			6		N	0.016	0.4		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.92	760.0	30.03	762.8	60.8	16	58	NW			3		2	SE	NE	0	0	Slightly cl'dy	M. P. Galzin, Director.
Nancy, Normal School	29.37	746.0	30.15	765.9	44.6	7	60	W			1		10n			0.071	1.8	Covered	M. Hasse.
Nantes, Observatory	30.08	764.0	30.24	768.1	58.1	14.5	70	SSW			1-2		10k;n	SW	SW	0	0		M. Larocque, Director.
Nice	29.91	759.6	29.94	760.4	59.7	15.4	81	SE			2		10	E	SE	0.488	12.4	Light rain	Capt. Boissière, Director.
Perpignan, Observatory	29.97	761.2	30.08	763.9	60.6	15.9	44	N	29.8	13.3			3		NW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.58	573.6			29.8	—1.2							10		NW	2.028	51.5	Snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.95	735.2	30.00	762.0	61.7	16.5	43	N			1		0			0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.19	639.8			27.5	—2.5	100	NW			4		8		NW	0.591	15.0	¾ covered	M. Alluard, Director
Rochefort, Naval Obs'y	30.22	767.6	30.25	768.4	62.6	17.0	64	W			1		8		W	0	0	¼ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.97	761.2	30.19	766.7	55.8	13.2	75	NNW			1		8		WNW	0	0	Very cloudy	M. Mouillot, Director.
Rodez, Normal School	27.99	710.8	30.15	765.9	48.9	9.4	56	NW			2		2		N	0	0	Slightly cl'dy	M. Richard, Director.
Rouen, Normal School	30.07	763.6	30.15	765.8	55.8	13.2	55	SSW			1		5		SSW	0	0	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.98	761.6	30.14	765.6			66	SW			1		8		SW	0	0	Very cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.02	762.5	30.19	766.7	53.1	11.7	43	NW			1		5	N	NNW	0.012	0.3		M. Renou, Director.
Toulouse, Observatory	29.52	749.8	30.25	768.3	55.8	13.2	53	NW			2					0.091	2.3		M. Bailland, Director.
Tours	30.10	764.4	30.21	767.4	57.2	14.0	53	W			2		5		WNW	0.024	0.6	½ covered	M. de Tastes.
Versailles, Observatory	29.69	754.0	30.18	766.5	52.9	11.6	46	W			2					0	0		Dr. A. Bérigny, Director.
SUB-SERIES.																			
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.20	741.7	30.06	763.6	45.1	7.3	77	W			2		9n	W		0.760	19.3	Raining	Prof. Dr. Hoh.
Berlin	29.85	758.3	30.03	762.8	48.0	8.9	55	NW			2		10			0.720	18.3		Prof. Dr. Arndt.
Breslau	29.43	747.6	29.97	761.1	52.0	11.1	77	NNW			2		10			0.008	0.2		Royal University Obs'y.
Carlsruhe	29.69	754.1	30.13	765.2	47.1	8.4	77	N			1		10	N		0.020	0.5		Albert Senz.
Cassel	29.34	745.2	30.06	763.4	48.6	9.2	48	NNW			3		5	N		0	0		Dr. H. Möhl.
Frankfort on the Main	29.76	756.0	30.13	765.4	51.1	10.6	46	N			1		10			0	0		Physical Society.
Friedrichshafen	28.63	727.2	30.08	764.0	50.0	10.0	80	SSW			2		10	WSW		0.043	1.1	Light rain	Wilhelm, Chief Tel.
Hamburg	30.00	761.9	30.07	763.7	48.2	9.0	63	NW			3		9			0.020	0.5		Dr. R. Kleeman.
Kiel	30.00	762.0	30.02	762.4	40.6	4.8	56	WNW			2		7			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.62	752.3	30.04	763.1	46.6	8.1	58	NW			3		9	NNW		0.764	19.4		Prof. Dr. Bruhns.
Magdeburg	29.74	755.5	30.04	763.0	48.6	9.2	80	NW			4		7k	NW		0.063	1.6		Dr. Assmann.
Memel	29.75	755.6	29.80	756.8	44.6	7.0	89	NW			4-5		10k					Foggy	Reinbrecht & Issermann.
Munich	28.18	715.7	30.04	763.0	49.3	9.6	76	W			2		10	W		0.071	1.8		Central Station.
Neufahrwasser	29.91	759.8	29.93	760.2	47.5	8.6	74	NW			3		10			0	0		A. Lothes.
Neustadt, Palatinate	29.57	751.0	30.10	764.4	48.4	9.1	60	NNW			2		10			0	0		Dicknether.
Stuttgart	29.12	739.7	30.04	762.9	45.1	7.3	79	NW			1		10			0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Ounerth.
Weissenburg, Bavaria	28.55	725.2	30.04	762.9	42.6	5.9	86	W			4		10	NW		0.768	19.5		Prof. Kemlein.
Wustrow	30.02	762.6	30.05	763.2	46.2	7.9	99	WNW			5		3s			0	0		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Barometer. Reduced to sea-level.		Tempera-ture of the Air.		Rel. Hum.	Wind. Direc-tion.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.69	754.2	30.08	764.0	67.6	19.8		S			1.0		0					Clear	A. Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.68	754.0	29.73	755.2	88.5	31.4	61	WSW	27.0	12.1			0			0	0	Misty	
Deesa	29.20	741.7	29.65	753.1	107.3	41.8	11	NW	8.7	3.9			0			0	0	Blue sky	
Bombay	29.64	752.8	29.68	753.8	87.3	30.7	79	WNW	11.0	4.9			0			0	0	Blue sky	
Poona, Yarrowda	27.82	706.7	29.59	751.6	102.7	39.3	1	NW	20.0	8.9			0			0	0	Blue sky	
Belgaum	27.18	690.2	29.65	753.2	85.8	29.9	53	SSE	12	5.4			0			0	0	Misty	
Lahore	28.90	734.2	29.62	752.3	98.2	36.8	16	NW	2.4	1.1			0			0	0	Blue sky	
Roorkee	28.76	730.6	29.63	752.6	95.9	35.5	21	Calm	1.7	0.8			0			0	0		
Agra	29.11	739.3	29.65	753.1	98.1	36.7	39	W	4.6	2.1			0			0	0		
Nagpur	28.58	726.0	29.58	751.3	100.7	38	14	N	5.2	2.3			0			0	0	Blue sky	
Jubbulpore	28.34	719.7	29.66	753.4	92.8	33.8	11	NW	3.6	1.6			0			0	0	Blue sky	
Lucknow	29.26	743.2	29.62	752.5	93.0	33.9	30	Calm	2.6	1.2			0			0	0	Blue sky	
Allahabad	29.32	744.7	29.62	752.3	96.7	35.9	22	NW	2.5	1.1			0			0	0	Blue sky	
Patna	29.44	747.9	29.62	752.4	89.8	32.1	51	E	3.1	1.4			0			0	0	Blue sky	
Hazaribagh	27.63	701.9	29.59	751.6	88.3	31.3	25	NNW	8.3	3.7			0			0	0	Blue sky	
Cuttack	29.55	750.6	29.64	752.7	89.2	31.8	58	ENE	1.0	0.4			1			0	0	Blue sky	
Calcutta, Alipore	29.65	753.2	29.68	753.7	84.9	29.4	56	SSE	10.0	4.5			5	S		0	0	D. clouds	
Dhubri	29.62	752.3	29.74	755.4	75.6	24.2	76	E	8.7	3.9			4	W		2.12	53.8	D. clouds	
Chittagong	29.73	755.2	29.82	757.5	73.6	23.1	92	ESE	3.6	1.6			10			0.03	0.8	Drizzling	
Sibsagar	29.50	749.2	29.84	757.9	71.0	21.7	90	NE	4.0	1.8			10	W	W	1.58	40.1	D. clouds	
Zanzibar, Africa			29.88	758.9	81.7	27.6	82	S	4	1.8			6		SE	0.59	15.0	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.59	751.6	30.00	762.0	54.9	12.7	89	SW	2.5	1.1			10			0.406	10.3		Prof. Giovanni Clodig.
Milan	29.42	747.2	29.93	760.2	60.6	15.9	61	NW	2.5	1.1			8			0	0		Prof. Schiaparelli.
Padua	29.83	757.6	29.94	760.4	63.0	17.2	72	ENE	9.8	4.4			10	SE		0.366	9.3		Prof. Dott. Lorenzoni.
Moncalieri	29.04	737.5	29.93	760.3	57.6	14.2	74	SE	6.3	2.8			9	NE		0.102	2.6		Prof. P. F. Denza.
Genoa	29.73	755.1	29.92	760.0	60.8	16.0	61	SW	3.1	1.4			2	N		0.441	11.2		Prof. G. M. Garibaldi.
Mondovi	28.04	712.1	29.94	760.5	55.4	13.0	74	NNE			4		9			0	0		Prof. D. C. Bruno.
Pesaro	29.89	759.2	29.94	760.4	60.4	15.8	85	NE	6.3	2.8			10	SW		0.354	9.0		Prof. Luigi Guidi.
Florence	29.63	752.6	29.88	759.0	63.3	17.4	62	E			2		10	S		0.634	16.1		Prof. Costantino Pitter.
Leghorn	29.83	757.7	29.92	759.9	59.4	15.2	81	SW	3.1	1.4			10	N		0	0		Prof. P. Monte.
Rome	29.77	756.2	29.95	760.6	59.5	[illegible]	82	SSE	12.5	5.6			10			0.547	13.9		Prof. P. S. Ferrari.
Lecce	29.76	756.0	30.02	762.4	66.4	19.1	58	SSE	17.4	7.8			6			0	0		Prof. C. de Giorgi.
Cosenza	29.07	738.4	29.95	760.7	69.8	21.0	75	NNW	2.5	1.1			8	NW		0.106	2.7		Prof. D. Conti.
Cagliari	29.77	756.2	29.97	761.1	64.8	18.2	54	NW			4		8	W		0.008	0.2		Prof. A. Pacinotti.
Palermo	29.71	754.6	29.96	761.0	59.7	15.4	73	NNE	3.8	1.7			10			0.146	3.7		Prof. G. Cincciatore.
Syracuse	29.95	760.7	29.99	761.8	62.6	17.0	87	E	4.9	2.2			10	WSW		0.039	1.0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.45	747.9	29.97	761.2	57.2	14.0	86	E	0	0			10	SW		0.161	4.1		Prof. F. Brioschi.
Stelvio	22.10	561.2			37.4	3.0	74	NE			2		9k	S		0.280	7.1	Covered	Prof. P. F. Denza.
Valdobbia	22.11	561.6			43.7	6.5	70	E			2		10	SE		0	0	Covered	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.99	761.7	30.01	762.2	61.0	16.1	98	WSW	2.3	1.0			10n			1.220	31.0	Raining	K. Sasaki.
Kioto	29.87	758.7	30.05	763.3	62.8	17.1	96	NNW					10n			0.740	18.8	Raining	M. Tojima.
Nagasaki, I. M. Obs'y	29.81	757.2	30.01	762.2	58.1	14.5	98	N	5.6	2.5			10s			1.580	40.1	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	30.17	766.3	30.24	768.1	52.1	11.2	98	NE	2.5	1.1			10ks;s		WSW	0.230	5.8	Cloudy	The Staff.
Wakayama	29.96	761.0	30.01	762.2	66.5	19.2	94	NE	1.4	0.6			10s			0.596	15.1	Cloudy	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.89	759.2	30.08	763.9	76.3	24.6	75	E	15.0	6.7		0	6		ESE	0.03	0.8	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez
Leon																			Prof. M. Leal.
Mazatlan	29.65	753.1	29.91	759.7	71.0	21.7	95	ESE	1.6	0.8		10s	0			0	0	Dense mist.	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. F.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.15	765.8	30.15	765.8	48.2	9.0		WNW			3					0	0		
Groningen	30.04	763.0	30.10	764.4	46.0	7.8		NW			2					0.004	0.1		
Helder	30.10	764.4	30.10	764.4	46.0	7.8		SW			2					0.047	1.2		
Hellevoetsluis	30.12	765.1	30.12	765.1	50.2	10.1	71	WNW			2					0.012	0.3		
Utrecht	30.08	764.0	30.13	765.2	50.2	10.1	62	W			2		8			0	0	Very cloudy	H. van der Brink

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

NORWEGIAN SERIES.

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

Bergen	29.83	757.7	29.89	759.3	49.6	9.8	47	SSW	12.3	5.5	.....	.....	3	.....	.....	0	0	.....	
Christiania	29.73	755.1	29.88	758.9	45.3	7.4	52	SW	9	4	.....	.....	9	.....	.....	0.012	0.3	.....	
Gjæsvær	29.87	758.7	29.89	759.3	33.3	0.7	.....	SW	.....	.....	2	.....	10	.....	.....	.....	.....	.....	
Lodingen	29.88	758.9	29.93	760.1	37.6	3.1	67	Calm	.....	.....	0	.....	2	.....	.....	0	0	.....	

PORTUGUESE SERIES.

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

Angra, Azores	30.29	769.4	30.45	773.4	63.0	17.2	86	W	9.4	4.2	.....	.....	3	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.19	741.4	30.17	766.4	69.8	21.0	40	NNE	0.7	0.3	.....	.....	1	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.15	765.9	30.24	768.2	66.0	18.9	56	SE	0.9	0.4	.....	.....	2	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.91	759.7	30.27	768.9	64.6	18.1	43	NE	18.1	8.1	.....	.....	1	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.39	772.0	30.47	773.8	66.9	19.4	65	SSW	2.5	1.1	.....	.....	3	.....	.....	0	0	.....	

RUSSIAN SERIES.

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

Akmolinski	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	30.01	762.2	30.03	762.7	45.5	7.5	60	W	4	2	.....	.....	7ks	.....	.....	.....	.....	.....	Capt. Sseliwerstow.
Astrakhan	30.01	762.3	29.93	760.2	60.4	15.8	82	NW	18	8	.....	.....	10s;n	.....	.....	Blank		.....	Capt. Wisgnow.
Barnaul	29.80	757.0	30.31	769.8	48.9	9.4	21	NNE	11	5	.....	.....	5	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	29.46	748.3	29.69	754.2	73.2	22.9	48	S	7	3	.....	cs	9k	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	29.06	738.0	30.00	762.0	59.4	15.2	71	NE	4	2	.....	.....	9ks;n	.....	.....	.....	.....	.....	Meteorological Obs'y.
Kasan	29.81	757.1	30.07	763.8	62.2	16.8	66	NNE	7	3	.....	.....	8	.....	.....	.....	.....	.....	Observatory.
Kertch	30.21	767.2	30.22	767.7	62.6	17.0	75	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Lagorio & Sastyrez.
Kieff	29.37	745.9	29.98	761.4	72.0	22.2	41	S	16	7	.....	.....	0	.....	.....	.....	.....	.....	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.93	760.1	30.16	766.0	69.6	20.9	34	N	9	4	.....	.....	4	.....	.....	.....	.....	.....	Meteorological Obs'y.
Moscow	29.49	749.1	30.02	762.5	71.4	21.9	39	Calm	0	0	.....	.....	4ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.93	709.5	30.30	769.7	33.6	0.9	40	NW	2	1	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolajev	30.14	765.5	30.21	767.3	65.8	18.8	60	S	22	10	.....	.....	0	.....	.....	.....	.....	.....	Capt. Kurdakow.
Nikolajevsk, on the Amoor	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lieut. Iwanow.
Pekin, China	29.90	759.5	30.04	763.1	63.3	17.4	56	Calm	0	0	.....	.....	7n	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	29.73	755.1	29.74	755.4	67.8	19.9	54	S	13	6	.....	7c;cs	0	.....	.....	.....	.....	Light clouds	Central Physical Obs'y.
Tashkend, Laboratory	28.41	721.6	29.95	760.8	63.0	17.2	82	Calm	0	0	.....	.....	8	.....	.....	Blank		.....	Teich, A. M.
Tiflis	28.68	728.4	30.07	763.7	67.6	19.8	35	NW	13	6	.....	.....	1k	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	29.43	747.6	29.84	758.0	66.6	19.2	59	WSW	16	7	.....	0	9ks	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.37	745.9	29.77	756.1	73.4	23.0	47	S	11	5	.....	.....	7	.....	.....	.....	.....	Light clouds	Berg, Assistant.
Yeniseisk	30.21	767.4	30.51	775.0	38.7	3.7	40	N	4	2	.....	.....	1	.....	.....	.....	.....	.....	M. O. Marks.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
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SCOTTISH SERIES.

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

Leith, Restalrig Park	.....	.....	29.87	758.7	47.8	8.8	84	W	.....	.....	1	.....	10n	.....	.....	0.07	1.8	Raining	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.82	757.4	50	10.0	93	WSW	.....	.....	3	5	5	SW	.....	0.1	3.	Cloudy	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	29.89	759.2	.....	.....	.....	SE	.....	.....	4	.....	10	.....	.....	Blank		.....	Robert Burnet.

SPANISH SERIES.

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

Barcelona, Met. Obs'y	29.99	761.7	30.10	764.4	63.0	17.2	65	SE	5.6	2.5	.....	0	1k	.....	.....	0.240	6.1	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.27	768.9	30.33	770.3	65.8	18.8	67	NW	4.5	2.0	.....	2	3	SE	.....	0.425	10.8	Cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.30	693.4	.....	.....	52.2	11.2	66	NE	8.5	3.8	.....	0	4	.....	.....	0	0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.97	710.5	30.19	766.8	63.0	17.2	69	NW	6.0	2.7	.....	0	1	.....	.....	0	0	Almost clear	The Staff.
Murcia, Met. Obs'y	29.97	761.2	30.11	764.9	73.4	23.0	34	NNE	5.8	2.6	.....	0	0	.....	.....	0	0	Clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.38	746.2	30.29	769.3	59.0	15.0	67	N	0	0	.....	.....	10	.....	.....	0	0	Covered	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	29.93	760.2	30.00	761.9	72.9	22.7	89	E	2.9	1.3	.....	0	0	.....	.....	0	0	Clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.84	757.8	29.89	759.1	86.4	30.2	59	ESE	6.6	3.0	.....	0	0	.....	.....	0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.06	763.4	30.15	765.9	73.2	22.9	35	NE	4.7	2.1	.....	0	1	.....	NE	0	0	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.94	760.4	30.03	762.7	78.4	25.8	86	E	13.6	6.1	.....	3s	2k	E	E	0.315	8.0	Clear	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.78	756.4	29.92	760.1	83.0	28.3	72	WNW	2.6	1.3	.....	.....	2k	.....	W	0	0	Clear	José L. Fastovra.

SWEDISH SERIES.

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

Haparanda	29.85	758.1	29.89	759.1	40.6	4.8	44	E	.....	.....	2	.....	10	.....	.....	0	0	.....	
Umea	29.85	758.3	29.91	759.6	35.2	1.8	78	NE	.....	.....	2	.....	10	.....	.....	0.047	1.2	.....	
Hernosand	29.81	757.2	29.86	758.5	35.8	2.1	84	NNE	.....	.....	4	.....	10	.....	.....	0	0	.....	
Stockholm	29.61	752.0	29.78	756.5	37.4	3.0	96	NW	.....	.....	2	.....	10	.....	.....	0.283	7.2	.....	
Wisby	29.71	754.7	29.77	756.2	35.2	1.8	93	NNW	.....	.....	2	.....	10	.....	.....	0.142	3.6	.....	
SUB-SERIES.																			
Upsala	29.69	754.1	29.78	756.3	35.2	1.8	89	NNW	15.2	6.8	.....	.....	10	.....	N	0.008	0.2	Snowing	Nils Ekholm

SWISS SERIES.

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

Geneva	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Observatory.
Zurich	28.45	722.5	30.10	764.6	48.2	9.0	82	W	.....	.....	2–4	.....	10	.....	.....	0.240	6.1	Raining	The Observatory.

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

TURKISH SERIES.

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

Constantinople	.....	.....	30.08	764.0	71.1	21.7	39	ENE	3	1.5	.....	.....	0	.....	.....	0	0	.....	The Observatory.
Valona	.....	.....	30.07	763.7	71.2	21.8	.....	SW	.....	.....	1	.....	2	.....	.....	0	0	Slightly cld'y	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.93	760.2	72.1	22.3	54	N	.....	.....	1	10	0	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	

STATIONS.	Barometer. Corrected for instru'm'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Albany, New York	30.42	772.7	30.50	774.7	48	8.9	49	NE	4	1.8		2cs	0			0	0	Fair	
Alpena, Michigan	29.81	757.2	30.49	774.4	37	2.8	81	NW	1	0.4		8cs	0	NW		0	0	Fair	
Atlanta, Georgia	29.03	737.3	30.17	766.3	62.5	16.9	94	NE	7	3.1			10s		Calm	0.15	3.8	Cloudy	
Atlantic City, New Jersey	30.44	773.2	30.45	773.4	50	10.0	65	NE	9	4.0		0	0			0.01	0.3	Clear	
Attou Id., Alaska	30.60	777.2			39	3.9	91	S	11	4.9			10s		S	0	0	Cloudy	
Augusta, Georgia	30.04	763.0	30.24	768.1	70.0	21.1	80	NE	8	3.6		5ck	5s	NE	NE	0.26	6.6	Cloudy	
Baltimore, Maryland	30.40	772.1	30.45	773.4	53	11.7	67	E	3	1.3		8ck;cs	0	NE;E		0.11	2.8	Fair	
Barnegat, New Jersey	30.42	772.7	30.44	773.2	51	10.6	72	NE	3	1.3		0	0			0	0	Clear	
Bismarck, Dakota	28.07	713.0	29.93	760.2	47	8.3	85	SE	2	0.9		2c	0	NW		0	0	Fair	
Boise City, Idaho	27.24	691.9	30.20	767.1	49.3	9.6	64	NE	2	0.9		2cs	0	Calm		0	0	Fair	
Boston, Massachusetts	30.33	770.4	30.49	774.4	48.2	9.0	48	E	6	2.7		1cs	0			0	0	Clear	
Brackettville, Texas	28.82	732.0	29.87	758.7	61	16.1	94	S	2	0.9			10s		W	1.86	47.2	Cloudy	
Brownsville, Texas	29.95	760.7	30.00	762.0	70	21.1	95	Calm	0	0		5cs	2ks		SE	0	0	Fair	
Buffalo, New York	29.70	754.4	30.44	773.2	40	4.4	60	NE	6	2.7		1cs	Sk	W		0	0	Clear	
Burlington, Vermont	30.19	766.8	30.50	774.7	40.0	4.4	56	E	1	0.4		8cs	0	E		0	0	Fair	
Cairo, Illinois	29.78	756.4	30.18	766.6	59	15.0	94	E	4	1.8			10s		Calm	0.17	4.3	Threatening	
Campo, California	27.33	694.2	29.90	759.4	45	7.2	68	S	3	1.3		0	0			0	0	Clear	
Camp Thomas, Arizona	27.15	689.6			47	8.3	62	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	30.37	771.4	30.39	771.9	52	11.1	79	NE	17	7.6			10s			0.18	4.6	Cloudy	
Cape May, New Jersey	30.39	771.9	30.42	772.7	51	10.6	89	NE	14	6.3		0	2s			0.03	0.8	Fair	
Castroville, Texas	29.19	741.4	29.87	758.7	68	20.0	84	S	4	1.8			10s		SW	0.25	6.3	Cloudy	
Cedar Keys, Florida	30.02	762.5	30.04	763.0	69	20.6	95	NE	13	5.8		0	5ks		W	0.60	15.2	Fair	
Champaign, Illinois	29.42	747.3	30.24	768.1	47	8.3	62	E	12	5.4		5k	2s	E	E	0	0	Fair	
Charleston, S. Carolina	30.14	765.5	30.19	766.8	68	20.0	84	NE	10	4.5		8c	0	S		0	0	Cloudy	
Charlotte, N. Carolina	29.43	747.5	30.26	768.6	53.0	11.7	93	NE	7	3.1			10n		NE	0.18	4.6	Light rain	
Chattanooga, Tennessee	29.40	746.7	30.19	766.8	66	18.9	84	S	8	3.6		5ck	2ks	N	SE	0.08	2.0	Fair	
Cheyenne, Wyoming	24.02	610.1	29.96	761.0	47	8.3	48	NW	12	5.4		2c	0	NW		0	0	Clear	
Chicago, Illinois	29.60	751.8	30.31	769.9	45.2	7.3	61	SE	6	2.7		2ck	0			0	0	Clear	
Chincoteague, Virginia	30.39	771.9	30.41	772.4	49	9.4	78	NE	16	7.2		8k	2s	SW	Calm	Inap.	Inap.	Cloudy	
Cincinnati, Ohio	29.63	752.6	30.29	769.4	47	8.3	70	NE	6	2.7		1c	0	SW		0.03	0.8	Clear	
Cleveland, Ohio	29.64	752.8	30.39	771.9	40	4.4	60	NE	4	1.8		1c	0	W		0	0	Clear	
Coleman City, Texas	28.18	715.8	29.80	756.9	63	17.2	89	SE	1	0.4		2k	0	S		0.60	15.2	Fair	
Columbus, Ohio	29.45	748.0	30.31	769.9	45	7.2	53	NE	6	2.7		5cs	Hz			0	0	Fair	
Concho, Texas	28.08	713.2	29.72	754.9	61	16.1	94	Calm	0	0			10s		W	0.99	25.1	Cloudy	
Corsicana, Texas	29.58	751.3	30.04	763.0	65	18.3	94	S	4	1.8		0	8s			0.14	3.6	Cloudy	
Davenport, Iowa	29.59	751.6	30.24	768.1	47	8.3	62	E	11	4.9		8cs	0	E		0	0	Fair	
Dayton, Washington T'y	28.28	718.3	29.95	760.7	44	6.7	84	Calm	0	0		0	8s		SW	0	0	Fair	
Deadwood, Dakota	25.29	642.4			44	6.7	60	SW	1	0.4		0	0			0	0	Clear	
Decatur, Texas	28.81	731.8	29.94	760.5	67	19.4	79	SE	6	2.7		0	0			Inap.	Inap.	Clear	
Delaware Breakwater, Del.	30.39	771.9	30.41	772.4	50	10.0	72	NE	24	10.7		8k	1ks	W	W	0.04	1.0	Cloudy	
Denison, Texas	29.21	741.9	29.98	761.5	69	20.6	90	S	3	1.3		0	5ks		S	0.23	5.8	Fair	
Denver, Colorado	24.77	629.1	29.99	761.7	46.8	8.2	77	S	3	1.3		0	0			Inap.	Inap.	Clear	
Des Moines, Iowa	29.25	742.9	30.13	765.3	50	10.0	72	SE	7	3.1			10s			0	0	Cloudy	
Detroit, Michigan	29.70	754.4	30.43	772.9	42.5	5.8	66	N	9	4.0		1cs	0	W		0	0	Clear	
Dodge City, Kansas	27.44	697.0	29.72	754.9	52	11.1	100	SE	3	1.3			10s;fg			0.20	5.1	Cloudy	
Dubuque, Iowa	29.56	750.8	30.27	768.8	45.1	7.3	61	E	4	1.8			10ks		SE	0	0	Cloudy	
Duluth, Minnesota	29.59	751.6	30.30	769.6	38	3.3	81	NE	3	1.3			10s			0	0	Cloudy	
Eagle Pass, Texas	29.22	742.2	29.94	760.5	64	17.8	94	E	2	0.9		0	0			1.25	31.7	Clear	
Eagle Rock, Idaho	25.26	641.6	29.91	759.7	51	10.6	40	NW	16	7.2		0	0			0	0	Clear	
Eastport, Maine	30.37	771.4	30.44	773.2	39	3.9	46	NW	9	4.0		0	0			0	0	Clear	
El Paso, Texas	26.19	665.2			52	11.1	79	NE	1	0.4		5ck	0			0	0	Fair	
Erie, Pennsylvania	29.68	753.9	30.42	772.7	41	5.0	74	NE	5	2.2		0	0			0	0	Clear	
Escanaba, Michigan	29.74	755.4	30.43	772.9	35	1.7	70	N	4	1.8			10s		Calm	0	0	Cloudy	
Florence, Arizona	28.34	719.8	29.94	760.5	55	12.8	28	NE	3	1.3		0	0			0	0	Clear	
Fort Apache, Arizona	24.97	634.2	30.42	772.7	42	5.6	50	E	4	1.8		0	0			0	0	Clear	
Fort Assinnaboine, Montana	27.05	687.1			48	8.9	43	SW	5	2.2		0	0			0	0	Clear	
Fort Bennett, Dakota	28.28	718.3			54	12.2	80	SE	5	2.2		2c	0	W		0	0	Fair	
Fort Benton, Montana																			
Fort Buford, Dakota	27.80	706.1	29.59	751.6	51	10.6	79	SW	3	1.3		1cs	0	W		0	0	Clear	
Fort Custer, Montana	26.81	681.0			50	10.0	71	Calm	0	0		5k	0	W		0	0	Fair	
Fort Davis, Texas	25.14	638.5	30.10	764.5	50	10.0	52	E	1	0.4		0	0			0.31	7.9	Clear	
Fort Elliott, Texas	27.27	692.6	29.54	750.3	52	11.1	86	S	4	1.8			Fg			0.13	3.3	Dense fog	
Fort Gibson, Indian T'y	29.46	748.3	29.98	761.5	67	19.4	89	SE	4	1.8			10s		S	Inap.	Inap.	Cloudy	
Fort Grant, Arizona	25.15	638.8	29.95	760.7	60	15.6	20	SE	4	1.8		2k	0			0	0	Clear	
Fort Griffin, Texas	28.64	727.4	29.88	758.9	62.0	16.7	94	N	4	1.8			10s			0	0	Cloudy	
Fort Keogh, Montana	27.36	694.9			47	8.3	85	SW	2	0.9		5cs	0			Inap.	Inap.	Fair	
Fort Macon, North Carolina	30.26	768.6	30.27	768.8	62	16.7	94	NE	16	7.2			10s		Calm	0	0	Cloudy	
Fort McKavett, Texas	27.71	703.8	29.55	751.3	63.1	17.3	78	SW	7	3.1			10s			0.37	9.4	Cloudy	
Fort Missoula, Montana	26.75	679.4			51	10.6	59	NE	1	0.4		5k	0			0	0	Fair	
Fort St. Michaels																			
Fort Shaw, Montana	26.31	668.3			47	8.3	55	SW	11	4.9		10cs	0			0	0	Cloudy	
Fort Sill, Indian Territory	28.77	730.7	29.85	758.2	62	16.7	100	N	5	2.2			Fg			0.21	5.3	Dense fog	
Fort Stevenson, Dakota	27.99	710.9			47	8.3	85	SE	1	0.4		0	2ks		SE	0	0	Clear	
Fort Verde, Arizona					50.6	10.3	40	SW			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.24	717.3	29.76	755.9	66	18.9	95	N	2	0.9			10n			0.38	9.7	Light rain	
Galveston, Texas	30.00	762.0	30.04	763.0	73	22.8	85	S	8	3.6		5ck;k	0	S		0	0	Fair	
Grand Haven, Michigan	29.72	754.9	30.39	771.9	46	7.8	62	NE	11	4.9		0	5s		W	0	0	Fair	
Hatteras, North Carolina	30.24	768.1	30.26	768.6	60	15.6	94	NE	29	13.0			10ks		NE	0.01	0.3	Cloudy	
Helena, Montana	25.77	654.5			49	9.4	57	S	4	1.8		5k	0	Calm		0	0	Fair	
Henrietta, Texas	28.97	735.8	29.87	758.7	67	19.4	79	NW	7	3.1		0	0			0	0	Clear	
Indianapolis, Indiana	29.46	748.3	30.25	768.3	48	8.9	53	E	4	1.8		3c;ck	Hz	C;W	Calm	0	0	Fair	
Indianola, Texas	30.02	762.5	30.05	763.3	71.1	21.7	95	S	4	1.8		5cs	2ks	SW	SE	0	0	Fair	
Jacksboro, Texas	28.84	732.5	29.95	760.7	63	17.2	89	SE	1	0.4			10s		SE	0.34	8.6	Cloudy	
Jacksonville, Florida	30.06	763.5	30.11	764.8	73	22.8	76	NE	5	2.2		5cs	0	SW		0.03	0.8	Fair	
Keokuk, Iowa	29.51	749.5	30.17	766.3	49.3	9.6	30	E	9	4.0			10s			0	0	Cloudy	
Key West, Florida	29.98	761.5	30.01	762.2	77	25.0	77	NE	3	1.8		0	0			0.12	3.0	Clear	
Kittyhawk, North Carolina	30.34	770.6	30.36	771.1	53	11.7	80	NE	23	10.3			10s		SE	0.19	4.8	Cloudy	
Knoxville, Tennessee	29.20	741.7	30.20	767.1	61	16.1	88	Calm	0	0		0	1s		Calm	0.04	1.0	Clear	
La Crosse, Wisconsin	29.51	749.5	30.25	768.3	49	9.4	44	SE	4	1.8			10s			0	0	Cloudy	
La Mesilla, New Mexico	26.06	661.9	30.21	767.3	51	10.6	59	Calm	0	0		0	8s			0	0	Cloudy	
Laredo, Texas	29.53	750.0	29.86	758.4	69	20.6	85	N	1	0.4		0	0			0.03	0.8	Clear	
Leavenworth, Kansas	29.18	741.2	30.01	762.2	58	14.4	88	E	4	1.8			10n		SE	0.14	3.6	Light rain	
Lewiston, Idaho	29.19	741.4	29.83	757.7	54	12.2	62	W	2	0.9		0	5s		Calm	0	0	Fair	
Little Rock, Arkansas	29.77	758.1	30.08	764.0	65	18.3	94	NE	2	0.9			10s			0.87	22.1	Cloudy	
Los Angeles, California	29.55	750.6	29.91	759.7	52.0	11.1	73	NE	3	1.3		0	0			0	0	Clear	
Louisville, Kentucky	29.64	752.8	30.21	767.3	52.0	11.1	73	NE	8	3.6			10s			0.11	2.8	Cloudy	
Lynchburg, Virginia	29.68	753.9	30.38	771.6	52	11.1	93	NE	1	0.4			10n			0.23	5.8	Light rain	
Madison, Wisconsin	29.30	744.2	30.31	769.9	43	6.1	75	E	5	2.2		10cs	0	NW		0	0	Cloudy	
Marquette, Michigan	29.66	753.4	30.40	772.1	40	4.4	39	SE	5	2.2		4ck	5s	SE	SE	0	0	Cloudy	
Mason, Texas	28.33	719.6	30.05	763.3	66	18.9	89	S	4	1.8			10s		S	0.37	9.4	Cloudy	
Memphis, Tennessee	29.79	756.7	30.12	765.0	64	17.8	94	Calm	0	0			10s		N	0.21	5.3	Cloudy	

UNITED STATES SERIES.

By authority of the Secretary of War.

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

MAY 4, 1881.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.61	752.1	30.37	771.4	41	5.0	82	NE	7	3.1		5ck	Sk			0	0	Fair	
Mobile, Alabama	30.05	763.3	30.13	765.3	68.0	20.0	84	NW	2	0.9		0	Hz			0	0	Clear	
Montgomery, Alabama	29.91	759.7	30.14	765.5	70	21.1	79	NE	2	0.9		5c	0			0	0	Fair	
Moorhead, Minnesota	29.01	736.8	29.96	761.0	47	8.3	77	SE	30	13.4			10s		SE	0.08	2.0	Cloudy	
Morgantown, W. Virginia	29.31	744.5	30.31	769.9	51	10.6	79	N	2	0.9		0	8s			0	0	Fair	
Mt. Washington, N. H.	23.99	609.3	30.35	770.9	15	— 9.4	65	NW	6	2.7		0	Hz		Calm	0	0	Clear	
Nashville, Tennessee	29.64	752.8	30.17	766.3	62.7	17.1	86	E	3	1.3		10cs	Sk			0	0	Cloudy	
New Haven, Connecticut	30.35	770.9	30.47	773.9	44	6.7	52	NE	10	4.5		0	0			0	0	Clear	
New London, Connecticut	30.45	773.4	30.50	774.7	47	8.3	70	N	3	1.3		0	0			0	0	Clear	
New Orleans, Louisiana	30.05	763.3	30.11	764.8	68.7	20.4	82	Calm	0	0		8c	Sk	W		0	0	Fair	
Newport, Rhode Island	30.41	772.4	30.47	773.9	43.0	6.1	87	SW	2	0.9			Fg			0	0	Dense fog	
New River, N. Carolina																			
New Shoreham, Rhode I'd	30.44	773.2	30.48	774.2	47.3	8.5	85	Calm	0	0		0	0			0	0	Clear	
New York, New York	30.28	769.1	30.46	773.7	50	10.0	65	E	5	2.2		0	Fg			0	0	Clear	
Norfolk, Virginia	30.33	770.4	30.39	771.9	51	10.6	72	NE	8	3.6			10n			0.18	4.6	Light rain	
North Platte, Nebraska	27.08	687.8	29.61	752.1	52	11.1	89	S	10	4.5		10k	0	S		0	0	Cloudy	
Olympia, Washington T'y	29.92	760.0	29.96	761.0	45.0	7.2	84	NW	1	0.4			10s		Calm	Inap.	Inap.	Cloudy	
Omaha, Nebraska	28.94	735.1	30.04	763.0	52.2	11.2	92	SE	4	1.8			10n			0.20	5.1	Light rain	
Oswego, New York	30.15	765.8	30.49	774.4	39.3	4.1	67	S	1	0.4		10	Hz			0	0	Clear	
Pensacola, Florida	30.08	764.0	30.11	764.8	70	21.1	90	SW	4	1.8		0	1ks		Calm	0	0	Clear	
Philadelphia, Pa.	30.38	771.6	30.44	773.2	49	9.4	78	NE	4	1.8		0	Fg			0	0	Clear	
Phœnix, Arizona	28.74	730.0	30.54	775.7	54	12.2	55	Calm	0	0		0	0			0	0	Clear	
Pike's Peak, Colorado	17.86	453.6	30.07	763.8	20	— 6.7	70	NE	9	4.0		0	0			0.16	4.1	Clear	
Pioche, Nevada	24.02	610.1	29.79	756.7	53	11.7	36	NW	5	2.2		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.50	749.3	30.33	770.4	48	8.9	70	NE	7	3.1		0	0			0	0	Clear	
Port Eads, Louisiana	30.11	764.8	30.11	764.8	71.1	21.7	90	E	7	3.1		0	0			0	0	Clear	
Port Huron, Michigan	29.74	755.4	30.44	773.2	35.4	1.9	80	NE	6	2.7		10cs	0	N		0	0	Cloudy	
Portland, Maine	30.42	772.7	30.47	773.9	47	8.3	55	Calm	0	0		0	2s		Calm	0	0	Clear	
Portland, Oregon	29.92	760.0	30.00	762.0	48.5	9.2	89	NW	2	0.9			10s		SW	0	0	Cloudy	
Portsmouth, N. Carolina					60	15.6	94	NE	28	12.5			10s		Calm	0.41	10.4	Cloudy	
Prescott, Arizona	24.72	627.9	30.08	764.0	44	6.7	52	SW	3	1.3		0	0			0	0	Clear	
Punta Rassa, Florida	29.99	761.7	30.00	762.0	68	20.0	95	NE	10	4.5			Fg		NE	0	0	Dense fog	
Red Bluff, California	29.69	751.8	29.94	760.5	57.0	13.9	72	Calm	0	0		0	1s		Calm	0	0	Clear	
Rio Grande City, Texas	29.76	755.9	29.97	761.2	73	22.8	81	SE	12	5.4		5cs	5s	Calm	Calm	0	0	Cloudy	
Rochester, New York	29.83	757.7	30.47	773.9	42	5.6	58	SW	1	0.4		2c	Fg	SW		0	0	Clear	
Roseburg, Oregon	29.44	747.8	30.01	762.2	50.5	10.3	86	Calm	0	0			10s			0	0	Cloudy	
Sacramento, California	29.90	759.4	29.97	761.2	54.8	12.7	81	SE	6	2.7		0	0			0	0	Clear	
St. Louis, Missouri	29.58	751.3	30.16	766.1	57.0	13.9	87	E	11	4.9			10s			Inap.	Inap.	Cloudy	
St. Paul, Minnesota	29.32	744.7	30.16	766.1	49	9.4	57	SE	24	10.7		5ck	0	NW		0.01	0.3	Fair	
Salt Lake City, Utah	25.62	650.7	29.95	760.7	53	11.7	48	Calm	0	0		1k	0	Calm		0	0	Clear	
San Antonio, Texas	29.32	744.7	30.00	762.0	68	20.0	95	Calm	0	0			9s		Calm	0.20	5.1	Cloudy	
San Diego, California	29.81	757.2	29.88	758.9	56	13.3	87	N	4	1.8		0	5s			0	0	Fair	
Sandusky, Ohio	29.68	753.9	30.38	771.6	45	7.2	68	NE	15	6.7		0	0			0	0	Clear	
Sandy Hook, New Jersey	30.42	772.7	30.45	773.4	48.0	8.9	78	NE	4	1.8		0	0			0	0	Clear	
San Francisco, California	29.96	761.0	30.03	762.7	51	10.6	93	SW	11	4.9			Fg		SW	0	0	Dense fog	
Santa Fé, New Mexico	23.28	591.3	29.82	757.4	42	5.6	91	N	3	1.3		0	0			0.12	3.0	Clear	
Savannah, Georgia	30.08	764.0	30.17	766.3	70	21.1	85	NE	6	2.7		8ck	2ks		NE	0	0	Cloudy	
Shreveport, Louisiana	29.83	757.7	30.07	763.8	70	21.1	90	SE	3	1.3		0	5s			0.35	8.9	Fair	
Silver City, New Mexico	24.23	615.4	30.34	770.6	49	9.4	64	Calm	0	0		8cs	0	Calm		0	0	Fair	
Sitka Alaska																0	0		
Smithville, North Carolina	30.22	767.6	30.26	768.6	64	17.8	94	N	10	4.5			10s			0	0	Cloudy	
Socorro, New Mexico	25.41	645.4	29.48	748.8	52	11.1	47	NW	4	1.8		0	0			0.03	0.8	Clear	
Spokane Falls, Wash. Ter.	27.99	710.9	29.84	757.9	46	7.8	60	S	12	5.4			10s			0	0	Cloudy	
Springfield, Illinois	29.53	750.0	30.21	767.3	52	11.1	76	E	9	4.0			10s		W	0	0	Cloudy	
Springfield, Massachusetts	30.35	770.9	30.49	774.4	47	8.3	48	N	4	1.8		0	0			0	0	Clear	
Stockton, Texas	26.98	685.3	29.98	761.5	50.0	10.0	100	SW	4	1.8		0	2s		SW	0.24	6.1	Fair	
St. Vincent, Minnesota	29.04	737.6	29.82	757.4	47	8.3	77	S	24	10.7		0	5s		Calm	0	0	Fair	
Thatcher's Island, Mass.	30.44	773.2	30.50	774.7	47	8.3	77	SE	13	5.8		2c	0	SE		0	0	Clear	
Toledo, Ohio	29.66	753.4	30.36	771.1	49.2	9.6	56	NE	14	6.3		5cs	0	W		0	0	Fair	
Tucson, Arizona	27.41	696.2	29.96	761.0	56	13.3	40	E	2	0.9		0	0			0	0	Clear	
Umatilla, Oregon	29.69	754.1	30.18	766.6	50	10.0	68	S	5	2.2		5cs	0	N		0	0	Fair	
Uvalde, Texas	29.02	737.1	29.83	757.7	64	17.8	94	SW	1	0.4		8c;k	0	NW		0.98	24.9	Fair	
Vicksburg, Mississippi	29.86	758.4	30.10	764.5	68	20.0	84	SW	7	3.1		5c	0			0	0	Fair	
Visalia, California	29.57	751.1	29.93	760.2	57	13.9	75	N	2	0.9		0	0			0	0	Clear	
Washington, D. C.	30.32	770.1	30.44	773.2	51	10.6	79	NE	3	1.3			10s			0.06	1.5	Cloudy	
Wickenburg, Arizona					55	12.8	50	Calm			0	0	0			0	0	Clear	
Wilmington, N. Carolina	30.20	767.1	30.26	768.6	62	16.7	88	NE	4	1.8			10s		Calm	0	0	Cloudy	
Winnemucca, Nevada	25.62	650.7	29.98	761.5	51	10.6	34	NE	8	3.6		5ck	0	SW		0	0	Fair	
Wood's Holl, Mass.	30.43	772.9	30.46	773.7	47	8.3	77	SW	3	1.3		2k	0	Calm		0	0	Fair	
Yankton, Dakota	28.79	731.3	30.06	763.5	57	13.9	69	S	10	4.5			10s		S	0.01	0.3	Cloudy	
Yuma, Arizona	29.63	752.6	29.77	756.1	63.1	17.3	57	W	1	0.4		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.11	561.6			54.5	12.5	85	Calm	0	0		10cs	0			0.16	4.1	Cloudy	Thomas Heran
Buff Bay Town, Jamaica	29.80	756.9	30.11	764.8	71	21.7	95	E				k	k						
Havana, Cuba, W. I.	30.08	764.0	30.13	765.3	76	24.4	86	Calm	0	0		0	0			0	0	Clear	A. Van Caneghem, Ass't
Jakobshavn, Greenland	29.48	748.7	29.53	750.0	31.6	— 0.2		Calm				0	6			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	29.96	761.0	29.97	761.2	74.4	23.6	93	Calm	0	0			10s		E	0.94	23.9	Rainy	Robert Johnstone
Navassa, W. I.	29.89	759.2	29.97	761.2	79	26.1	82	E				5k	5s	SE	NE	0.17	4.3	Squally	F. M. Everett.
Paramaribo, S. A.	30.00	762.0	30.00	762.0	78	25.6	86	E					10n	E		0.570	14.5	Rainy	Dr. C. J. Hering.
Puerto Berric, U. S. Col'mbia	29.46	748.3	30.02	762.5	79	26.1	80	Calm			3	0	8k		N	0	0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					77.0	25		S			0	2ck	9ks	SE	S	Inap.	Inap.		Earl Flint.
Santiago de Cuba, W. I.	29.95	760.7	29.98	761.5	76	24.4	90	Calm	0	0		2k	8k			0.10	2.5	Cloudy	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.21	767.3	30.26	768.6	16.0	— 8.9	92	SW	10	4.5		0	0			0	0	Clear	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

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

STATIONS — AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross, N. 34° 10′, E. 133° 13′	30.04	763.0	60	15.6	...	ENE			1		10							Raining	Comm. A. J. Errington.
H M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Villafranca, France	29.94	760.5	63	17.2	78	Calm			0		8							Raining	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 25° 44′, E. 57° 47′	29.69	754.1	84	28.9	71	WSW			2–3		0					3	W	Misty	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey.			69	20.6		Calm			0		0							Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N. 16° 53′, W. 61° 38′	30.04	763.0	79	26.1	86	ESE			3		4	E				2	E	Showery	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 51′, E. 31° 04′	29.85	758.2	74.5	23.6	76	NNE			2–3		1	NE				4	Con.	Squally	Com. F. W. Richards.
H. M. S. Champion, Elmina, Gold Coast, Africa.	29.89	759.2	81	27.2	87	Calm			0		9	Calm				2	S	Threatening	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 25° 09′, E. 121° 45′	29.96	761.0	77	25.0	77	Calm			0		0							Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 39° 35′, E. 20° 02′	30.02	762.5	68	20.0		S			1		1	SSW						Blue sky	Capt. F. A. Wetherall.
H. M. S. Curacoa, N. 24° 23′, E. 119° 50′	29.81	757.2	79	26.1	86	S			1		0							Blue sky	Capt. S. Long.
H. M. S. Danae, S. 25° 06′, W. 11° 28′	39.20	767.1	72	22.2	76	NE			1–2		3					2		D. clouds	Capt. J. C. Parvis.
H. M S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard																			Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 00′, W. 55° 09′	30.12	765.0	35	1.7	80	NW			1–2		7	NW						D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad, N. 19° 00′, E. 57° 48′	29.72	754.9	84	28.9		SSW			2		4	SW				4	SW	D. clouds	Capt. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 17° 30′, E. 107° 00′	29.67	753.6	76	24.4		SSE			2							2	SE	Misty	Comm. C. Johnstone.
H. M. S. Emerald, S. 18° 10′, E. 178° 20′	29.96	761.0	79	26.1	78	ESE			4–6		10	SE						Raining	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Trincomalee, Ceylon, India.	29.68	753.9	78	25.6	86	SW			2		10							D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo, N. 20° 40′. W. 73° 14′	30.01	762.2	81	27.2	87	ESE			2–3		10					3	SE	Showery	Comm. R. N. Custance.
H M. S. Flying Fish, Hong-Kong, China	29.91	759.7	81	27.2	82	SE			1		4	SSE						Squally	Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 22° 15′, W. 125° 30′	30.10	764.5	65.5	18.6	71	NE			5		4					3	N	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Colonia, Uruguay	30.00	762.0	55	12.8	81	N			4		5	W						D. clouds	Capt. L. F. Jones.
H. M. S. Griffon																			Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant, S. 38° 30′, E. 88° 30′	30.35	770.9	54	12.2	80	SW			3		10	WSW				2	SSE	Drizzling	Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 24° 28′, E. 118° 03′	29.85	758.2	76	24.4	82	SE			2		3	N						D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	30.03	762.7	60	15.6		N			1		10							Overcast	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Hong-Kong, China	29.86	758.4	81.4	27.4	80	SE			1		5							D. clouds	Capt. A. Carpenter.
H. M. S. Midge																			Capt. W. N. Lang.
H. M. S. Minotaur, Madeira Island, Africa.	30.20	767.1	65	18.3	78	Var.			1		4	ENE						D. clouds	Capt. H. H. Rawson.
H. M. S. Modeste, N. 5° 16′ E. 115° 15′	29.83	757.7	84	28.9	87	Calm			0		2							D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Goletta, Tunis, N. Africa.	30.01	762.2	66	18.9	89	NW			3		5	NNW						D. clouds	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda, W. I.	30.29	769.4	68	20.0	79	SE			2		9	SSE						D. clouds	Capt. E. B Drummond.
H. M. S. Orontes, D'Urban, Natal, S. Africa†	29.92	760.0	73.5	23.1	83	NE			1		4	SW						D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.90	759.4	78.5	25.8		WNW			1		7							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, N. 18° 32′, W. 78° 32′	29.95	760.7	79	26.1	86	NNE			3		10					2	NE	Raining	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	29.94	760.5	44	6.7		Calm			0		9	WNW						D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.86	758.4	82.4	28.0	85	SE			3		10							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis.																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, S. 27° 37′, W. 37° 30′	30.21	767.3	70.5	21.4	73	SW			1		1					3	SW	Blue sky	Capt. J. D'Arcy.
H. M. S. Superb, N. 40° 50′, E. 14° 16′ .... *	30.01	762.2	59	15.0	88	NNE			1-2							2-3	SW	Raining	Capt. T. L. H. Ward.
H. M. S. Tenedos, N. 27° 33′, W. 65° 36	30.26	768.6	72	22.2	62	ENE			4		1					2	E	Blue sky	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer, Fort Augusta, Sicily	30.02	762.5	69	20.6	72	E			1		7					1		D. clouds	Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A.	30.03	762.7	57	13.9	84	N			2		10	Calm						Misty	Capt. A. H. Markham.
H. M. S. Turquoise, Callao Bay, Peru	29.99	761.7	66	18.9	97	S			1		8							D. clouds	Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne, N. 10° 25′, E. 62° 10′	29.81	757.2	84	28.9	68	NW			2		0							Blue sky	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.			77	25.0		N			1		9							Raining	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Wellington, New Zealand	30.39	771.9				Calm			0		0							Blue sky	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, N. 21° 17′, E. 65° 21′	29.77	756.1	88.5	31.4	71	WNW			1-2		0					2	NW	Misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Santiago, Cape Verd Id's	29.98	761.5	78.4	25.8	84	NE			3		0					1	ESE	Blue sky	S. C da Silva Costa, Comd't.
Sado																			G. A de Brito Capello, Comd't
Tamega																			P. I. R. de Carvcattio, Comd't
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, N. 37° 14′, W. 10° 42′ ‡	30.24	768.1	61.5	16.4	72	NNE			7		2							D. clouds	Com. Th. Uiner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.	Force	Amount and kind.		Direction.							
									Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.			
N. Yard, Pensacola, Fla	30.19	766.8	75	23.9	95	NNW	1	0.4			0			0	0			Clear.
N. Yard. Portsmouth, N. H.	30.47	773.9	48	8.9	63	Calm	0	0		3c	0			0	0			Hazy.
Naval Hospital, Yokahama, Japan	30.03	762.7	54	12.2	90	Calm			0		10		E	0.31	7.9			Cloudy.
Adams, Callao, Peru	29.81	757.2	67	19.4	89	SSE			2		10		S			Long	SW	Cloudy.
Alaska, Callao, Peru	29.92	760.0	65	18.3	94	SSE			1		10		SE			Sm'h		Overcast.
Alert, N. 25° 28′, E. 142° 55′	30.01	762.2	74	23.3	68	NE			4		5		NE			Long	NE	Fair.
Alliance, Hampton Roads, Va.	30.37	771.4	53	11.7	73	E			4		10			Light		Sm'h		Cloudy.
Ashuelot, Nagasaki, Japan	30.00	762.0	60	15.6	94	N			2		10		Calm			Sm'h		Rainy
Colorado, New York, N. Y.	30.48	774.2	52	11.1	73	NE			1		0			0	0			Clear.
Constitution, Piney Point, Md	30.36	771.1	52	11.1	66	ENE	4	1.8			10							Cloudy.
Franklin, Norfolk, Va	30.32	770.1	52	11.1	66	ENE	5	2.2			10			0.25	6.3			Cloudy.
Galena, Piraeus, Greece	30.06	763.5	66	18.9	68	S			2		0					Sm'h		Clear
Independence, N. Yard, Mare I'd, Cal.	30.01	762.2	54	12.2	74	SW	1.2	0.5			2		SW	0	0			Clear.
Jamestown, Sitka, Alaska	29.56	750.8	42	5.6	83	E			1		10			0.03	0.8			Drizzling
Kearsarge, Norfolk, Va	30.41	772.4	54	12.2	74	NE			2		10					Sm'h		Sprinkling
Lackawanna, S. 33° 45′, W. 75° 42′	30.18	766.6	59	15.0	94	S			3		10		W			Sm'h	SE	Cloudy.
Marion, Montevideo, Uruguay	30.02	762.5	53	11.7	67	NW			4		2			0	0	Sm'h		Clear
Michigan, Erie, Pennsylvania	30.38	771.6	38	3.3		NE	3	1.3			0							Clear.
Minnesota, Newport, R. I.	30.49	774.4	46	7.8	92	NNW			1		8		WNW			Sm'h		Foggy
Monocacy, N. 34° 57′, E. 126° 25′	29.93	760.2	62	16.7	100	E			3		10					Mod.		Foggy.
New Hampshire, Port Royal, S. C.	30.14	765.5	74	23.3	81	NE	16	7.2			5		N	0	0			Fair
Nipsic, N. 37° 01′, E. 1° 02′	30.15	765.8	64	17.8	58	N			3		2					Sm'h	NE	Hazy.
Onward, Callao, Peru	29.95	760.7	65	18.3	94	S			1		10		NNW			Long	W	Cloudy.
Palos, Yokohama, Japan	30.27	768.8	54	12.2	100	NNW			1		10							Overcast.
Passaic, Washington, D. C.	30.39	771.9	51	10.6	93	NE			2		8		SW					Cloudy
Pensacola, Honolulu, Sandwich Ids.	30.10	764.5	73	22.8	90	NNE			1		5?			0	0	Sm'h		Clear?
Portsmouth, Maryland Point, Md	30.41	772.4	53	11.7	93	E			3		10							Cloudy.
Powhatan, New York, N. Y.	30.44	773.2	53	11.7	73	NE			1		0							Clear.
Quinnebaug, N. 36° 00′, W. 5° 30′	30.14	765.5	68	20.0	51	NW			2		2					Sm'h		Clear.
Ranger, Acapulco, Mexico	29.87	758.7	78	25.6	86	Calm			0		0			0	0			Clear.
Richmond, Nagasaki, Japan	29.88	758.9	60	15.6	88	NNE			3		10		NE	0.54	13.7			Misty.
Saratoga, Potomac River	30.39	771.9	51	10.6	79	E			1-2		10		Calm	Moderate				Cloudy.
Shenandoah, Montevideo, Uruguay	30.06	763.5	52	11.1	66	WNW			3		2					Sm'h		Fair.
St. Louis, League Island, Pa.	30.00	762.0	49	9.4	?	E	0	0			8			0	0			Cloudy.
Swatara, Shanghai, China	29.88	758.9	65	18.3	84	ENE			1		10		Calm					Overcast.
Tennessee, Hampton Roads, Va.	30.40	772.1	54	12.2	93	ENE	27	12.1			10		ENE	0.10	2.5	Sm'h		Misty.
Ticonderoga, S. 28° 30′, W. 128° 27′	29.96	761.0	68	20.0	84	SSE			4		10		Calm	0.75	19.0	Mod.	SSW	Cloudy.
Trenton, Castellamare, Italy	29.96	761.0	61	16.1	88	NE			1-2		10			23 h'r	slight	Sm'h		Rainy.
Vandalia, Hampton Roads, Va.	30.55	776.0	54	12.2	80	NE			5		10		Calm					Cloudy.
Wabash, Boston, Massachusetts	30.52	775.2	47	8.3	70	NE	5	2.2			2		Calm	0	0			Fair
Wachusetts, N. 32° 26′, W. 151° 03′	30.17	766.3	63	17.2	89	NE			3		10		N	0	0	Long	N	Cloudy.
Wyoming, N. 20° 10′, W. 41° 05′	30.13	765.3	74	23.3	68	ENE			2		8		E			Sm'h	E	Cloudy.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	Upper.	Lower.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 38° 04′, W. 147° 49′	30.12	765.0	53.5	11.9	73	N			3-4		6							Misty	Capt. E. J. Molony.
Chin Yang																			Capt. N. Youlden.
S. S. Cipero, Demerara, Brit. Guiana	29.99	761.7	76	24.4	100	SE			2		10							Showery	Capt. W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne, N. 29° 18′, W. 27° 28′	30.31	769.9	67	19.4	79	NE			5		8							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 14° 56′, W. 38° 47′	30.05	763.3	76.5	24.7	77	ENE			4		5							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow, ‡ N. 1° 57′, E. 85° 00′	29.67	753.6	83.5	28.6	89	WSW			4		5							D. clouds	Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope ‡																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ S. 10° 02′, W. 11° 56′	30.01	762.2	78.5	25.8	82	SE			4		6							Misty	Capt. J. Raeburn, R.N R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 49° 04′, W. 26° 26′	29.93	760.2	54.5	12.5	100	SSW			7		10					4-5	SW; WNW	Raining	Capt. H. W. Dyke.
Barque Mertola, N. 39° 10′, W. 14° 05′	30.41	772.4	59.5	15.3	87	NE			4		7							D. clouds	Capt E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria, ‡ S. 21° 47′, E. 2° 35′	30.12	765.0	71	21.7	71	ESE			4		8							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 15° 09′, E. 94° 44′	29.69	754.1	84.5	29.2	89	SSE			3		5							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton, N. 14° 46′, E. 42° 19′ ‡	29.72	754.9	85.5	29.7	86	SSE			3		2							Blue sky	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean																			Capt. W. H. Smith.
S. S. Circassian, N. 48° 30′, W. 39° 40′	30.03	762.7	46	7.8	92	NW			6	c	10k	NW	WNW	½ hour		4	NW	Raining	Capt. F. Archer.
S. S. Hibernian																			Capt. Wm. Richardson.
S. S. Nova Scotian																			
CUNARD LINE. *Ch. G. Francklyn.*																			Capt. W. Watson.
S. S. Algeria																			
S. S. Bothnia																			
S. S. Gallia, Off Sandy Hook, N. J.*	30.32	770.1	48	8.9	.....	SE			2		5		Calm	0	0			Fine	Capt. W. H. P. Hains.
S. S. Scythia, N. 49° 23′, W. 27° 51′	29.72	754.9	57	13.9	94	SW			7		10		SW	Heavy		H'vy	SW	Cloudy	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			Capt. J. W. Jennings.
S. S. Adriatic																			Capt. H. Parsell.
S. S. Baltic																			Capt. H. Perry.
S. S. Britannic																			
S. S. Celtic, N. 42° 57′, W. 54° 36′ †	30.15	765.8	45	7.2	.....	NNW			4		0			0	0	Sm'h	.....	Clear	Capt. Benj. Gleadell.
S. S. Germanic, N. 44° 36′, W. 42° 09′ †	30.09	764.3	47	8.3	.....	WNW			4		8?		NW	4 hours		Sm'h	.....	Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann, N. 47° 53′, W. 29° 34′	29.91	759.7	60	15.6	?	WSW			6		10		W	4 hours		Very h'vy	wsw	Raining	Capt. H. Baur.
S. S. Köln																			Capt. Th. Jüngst.
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Helmbourh.
SWEDISH MERCHANT--MARINE SERIES.																			
Barque Adolf Fredholm ‡																			Capt. Albert Fredholm.
Barque Fredrik ‡																			Capt. Sjöström.
Ship Peru ‡																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. Off Skerries, Ireland	29.87	758.7	50	10.0	93	WNW			2		2		WNW			Sm'h		Clear	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio, N. 39° 05′, W. 74° 10′ *†	30.46	773.7	47	8.3	92	NE			2		2		NE	0	0	Sm'h		Fair	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, Philadelphia, Pa *†	30.35	770.9	55	12.8	80	NE			3		2		E					Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 26° 16′, E. 122° 33′ †	30.08	764.0	78	25.6	86	E			2		2		SE	0	0	Sm'h		Clear	Capt. H. Davison.
S. S. Gaelic, N. 38° 00′, E. 167° 35′ *†	30.23	767.8	56	13.3	93	E			3		10		NE			Sl't	NE	Misty	Capt. W. H. Kidley.
S. S. Oceanic																			Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, N. 43° 25′, W. 124° 30′ †	29.99	761.7	53.0	11.7		SSW			1		10		SSW			Sm'h	SW	Cloudy	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, San Francisco, Cal †	30.02	762.5	52	11.1	86	SW			3		10		W					Foggy	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 35° 09′, W. 120° 43′ †	30.07	763.8	59	15.0	70	NW			8		2		NW	0	0	Long	NW	Cloudy	Geo. H. Harrison.
S. S. Senator, N. 36° 05′, W. 121° 48′ †	30.02	762.5	52	11.1	86	NW			2		5		NW			Mod.	NW	Fair	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal †	29.99	761.7	50	10.0	86	NW			3		5		W					Fair	Capt. G. Debney.
S. S. Victoria, New Westminster, Brit. Col †	29.95	760.8	52	11.1	86	Var.			2		2					Sm'h		Fair	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, Sydney, N. S. Wales	30.28	769.1	67	19.4	84	NE			1		1		NE					Clear	A. Bannerman, 2d Officer.
S. S. City of New York, S. 35° —, E. 173° — †	30.33	770.4	65	18.3	63	SW			2		5		NW			Mod.	NW	Fair	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China †	29.92	760.0	79	26.1	91	SSE			1		2		S	0	0	Sm'h		Clear	Capt. G. G. Berry.
S. S. City of Sidney, S. 3° 46′, W. 167° 04′ †	29.83	757.7	82	27.8	83	NE			3		8		NE	0	0	Mod.	NE	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 38° 05′, W. 150° 25′ †	30.22	767.6	51	10.6	72	N			2		10		N			R'gh	N	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima																			Capt. R. R. Searle.
S. S. Granada, N. 9° 10′, W. 84° 40′ †	29.90	759.4	82	27.8	83	Calm			0		2		E	0	0			Clear	Capt. M. Connolly.
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland																			Capt. Wm. Geo. Randle.
S. S. Vaderland, N. 43° 27′, W. 50° 05′	30.19	766.8				WNW			3		2		NW	Light		Mod.	NW	Fair	T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, Savannah, Georgia	30.16	766.1	73	22.8	76	Calm	0	0		5ck	2d		NE	0	0			Fair	Capt J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 28° 23′, W. 28° 06′ *†	30.36	771.1	69	20.6		ENE			6		10		ENE	0	0	Mod.	ENE	Squally	Capt. B. F. Woodbury.
Brigantine George																			Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Annapolis Roads, Md. †	30.44	773.2	51	10.6	74	NE	3	1.3		5c	2k			0	0			Cloudy	
Bark Sunbeam, N. 40° 28′, W. 25° 39′	30.47	778.9	63	17.2	89	S			2		2		SE	0	0	Mod.	NW	Fair	Capt. Jos. Hand.

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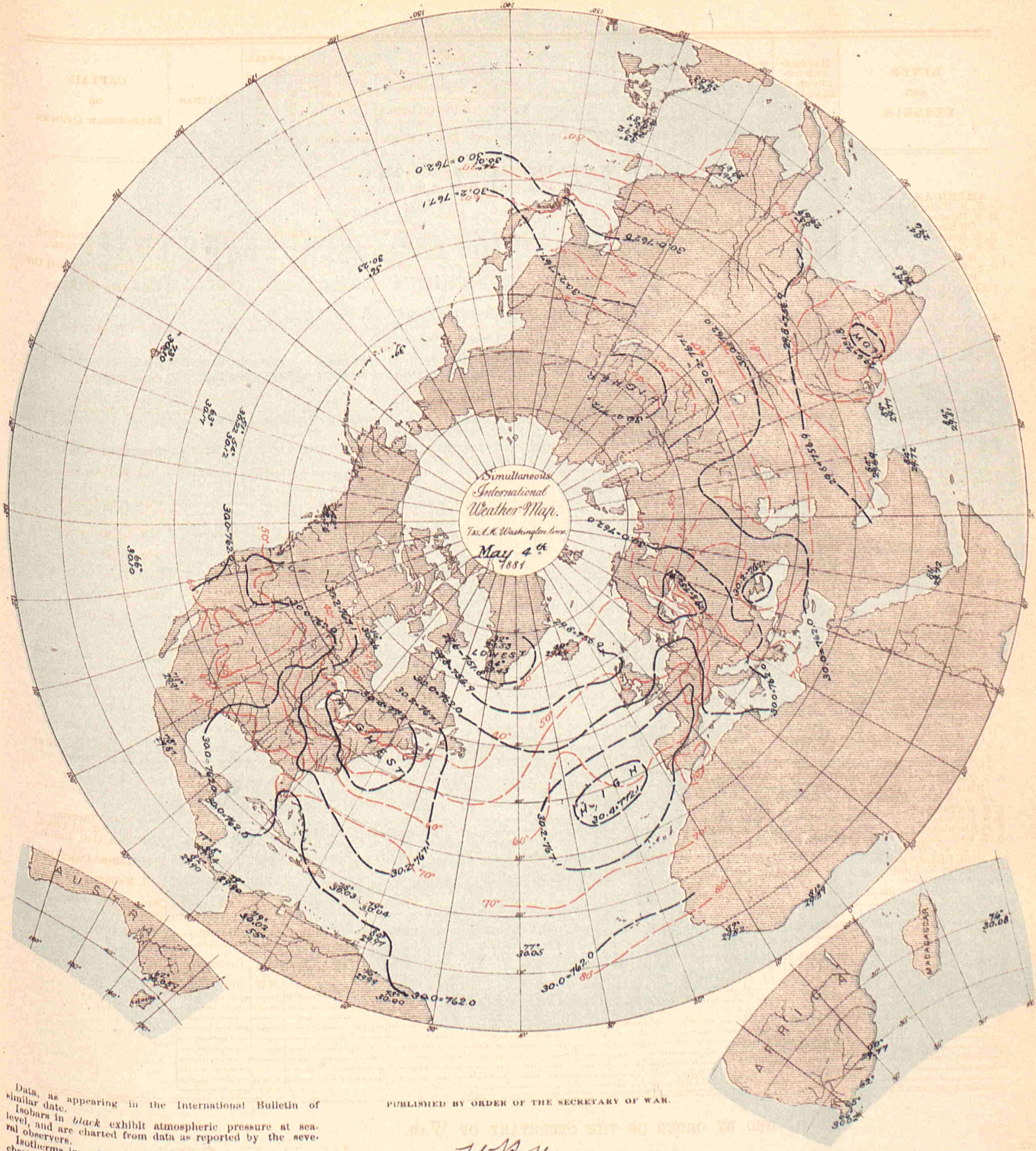
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

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W. B. Hazen

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

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 5, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER.				TEMPERATURE OF THE AIR.		REL. HUM.	WIND.				CLOUDS.				RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER	OBSERVERS.
	Corrected for instrum'tal error and temperature.		Reduced to sea-level.					Direction.	Velocity.		Force	Amount and kind.		Direction.					
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco	‡			30.02	762.5	68.7	20.4	80	NE			3		1			0	0	Very fair	Dr. Ollive.
Nemours	‡			30.16	766.1	70.3	21.3	87	W			5		0			0	0	Clear	Raynard.
Algiers	‡			30.24	768.1	65.8	18.8	59	N			2		0			0	0	Clear	Nicolas.
La Calle	‡			30.08	764.1	64.0	17.8	67	NNW			6		6			0	0	Cloudy	Fonfrède.
Tunis	‡			30.05	763.3															Jacques.
Sfax	‡			30.05	763.2															Gau.
Saida	‡			30.22	767.6	66.9	19.4	72	N			6		0			0	0	Clear	Dumas.
Tebessa	‡			30.15	765.9	56.8	13.8	39	N			3		9			0.012	0.3	Covered	Watrin.
Geriville	‡																			Lonchamp.
Laghouat	‡			30.15	765.8	69.1	20.6	25	NNE			3		0			0	0	Clear	Herbin.
Biskra	‡			30.14	765.6															Bandassé.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria		29.82	757.4	29.91	759.7	63.3	17.4	86	N	10	4.5			9			0.07	1.8	Showery	R. L. J. Ellery.
SUB-SERIES.																				
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram		29.53	750.0	30.08	763.9	59.4	15.2	62	NE			2		10			0.004	0.1		Prof. Ivan Stozir.
Cracow, I. R. Obs'y		29.43	747.5	30.21	767.3	50.0	10.0	79	N	1.8	0.8			10			0.126	3.2		Dr. Wierzbicki.
Eperies		29.18	741.2	30.04	763.1	64.0	17.8	62	N			4		10s		S	0			Julius Mikolik.
Gratz	‡	28.89	733.9	30.15	765.8	54.9	12.7	56	NW			4		10			0	0		Andreas Rospini.
Hermannstadt		28.59	726.2	29.95	760.8	77.0	25.0	32	SE			3		4			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y		28.90	734.0	30.27	768.8	47.7	8.7	77	WSW			1		10			0.063	1.6	Rainy	The Staff.
Lemberg		29.06	738.2	30.02	762.5	70.0	21.1	56	E			1		5			0	0		Dr. T. Stanecki.
Pola		29.93	760.2	30.04	763.0	63.1	17.3	69	SE			3		4			0.035	0.9		I. R. HydrographicOffice.
Szathmar		29.52	749.8	29.96	761.0	78.1	25.6	70	N			1		7			0	0		Beicht Peter, S. J.
Szegedin		29.70	754.4	30.01	762.2	77.4	25.2	39	SE			1		6			0	0		Karl Stancel.
Trieste		29.97	761.3	30.08	763.9	62.1	16.7	58	E			2		5			0	0	Sli'tly cl'dy.	Secco.
Vienna		29.52	749.7	30.24	768.2	50.4	10.2	72	W			2		10			0.079	2.0		I. R. Central Met. Obs'y
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																				Royal Observatory.
Furnes																				M. E. de Cae.
Maeseyck																				M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed May 2, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.76	755.9	29.86	758.4	47.8	8.8	73	S	20	8.9			9			0.010	0.3	Overcast	W. Boswell.
Armagh, Observatory	29.62	752.3	29.85	758.2	52.8	11.6	94	SSW	22	9.8			10					Squally	S. Call.
Bidston, Liverpool Obs'y			30.07	763.8	49.3	9.6	83	SSW	19	8.5			10					Raining	John Hartnup.
Bolton, Sharples	29.54	750.3	30.08	764.0	48.9	9.4	79	SSW	6	2.7			10					Raining	Thomas Mackereth.
Bradford, Yorkshire	29.66	753.4	30.06	763.5	51.7	10.9	71	SW			2		10			0.07	1.8	Raining	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.93	760.2	29.96	761.0	82.0	27.8	69	NE			3		4					D. clouds	Corpl. J. Surgener,AH.C.
Cardington			30.15	765.8	62.0	16.7	64	W			1.0		8					Overcast	John McLaren.
Chatham, School M. E.	30.09	764.3	30.22	767.6	61.5	16.4	47	SW			1		5					D. clouds	Lance Cpl. R. Tear, R.E.
Falmouth, Observatory	30.03	762.7	30.26	768.6	56.6	13.7	73	SW			4		9					Overcast	The Staff.
Fort Napier, Natal	27.40	695.9	29.62	752.3	76.0	24.4	41	NE			1		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.59	751.6	29.83	757.7	88	31.1	88	NW			2		4					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			29.87	758.7	54	12.2	93	WSW			4		10			0 19	4.8	Showery	J. O'Donaghue.
Gibraltar, Mediterranean	30.14	765.5	30.19	766.8	70.0	21.1	79	NE			4		0					Blue sky	2nd Cpl. C. Baldwin.
Glasgow, Observatory	29.65	753.1	29.85	758.2	47.7	8.7	83	S			4		10					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	30.04	763.0	30.21	767.3	62.7	17.1	51	WSW			1		9					D. clouds	The Staff.
Guernsey	30.07	763.8	30.28	769.1	53.5	11.9	80	WSW			3		4					Blue sky	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.18	766.6	30.22	767.6	59.5	15.3	43	WSW	12	5.4			6					D. clouds	The Staff.
Leicester, Museum	29.89	759.2	30.14	765.5	57.2	14.0	61	SW			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.98	761.5	30.06	763.5	67.0	19.4	64	NW			2		3			0	0	Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.93	760.2	29.97	761.2	78.0	25.6	83	S			1		5					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.62	752.3	30.14	765.5	54.8	12.7	66	SSW			3		10					Overcast	Robert Pate.
Oxford, Radcliffe Obs'y	29.96	761.0	30.19	766.8	59.7	15.4	57	SW			3		10					Overcast	The Staff.
Plymouth	30.19	766.8	30.26	768.6	56.8	13.8	77	SW			3		8					D. clouds	John Merrifield.
Sandwick Manse, Orkneys			29.70	754.4	51.1	10.6	85	SSE	35	15.6			10					Overcast	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.94	760.5	30.01	762.2	59.8	15.4	71	NNE			3		1					Blue sky	Serg't W. H. Lyne.
Sheffield	29.84	757.9	30.12	765.0	56.2	13.4	68	WSW			4		10			0	0	Overcast	W. F. Cooper.
Silloth Rectory	29.92	760.0	29.95	760.7	52.6	11.4	95	SW			5		10			0.617	15.7	Raining	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.08	764.0	48.5	9.2	83	SSW	13	5.8			10					Heavy rain	Rev. S. J. Perry.
Stratfield Turgiss	29.99	761.7	30.21	767.3	62.6	17.0	47	W			3		8					D. clouds	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	30.22	767.6	30.25	768.3	59	15.0	76	SW			0		6					D. clouds	W. Newcombe.
Valencia, Observatory	29.98	761.5	30.01	762.2	54.7	12.6	91	SW	34	15.2			10					Misty	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.20	767.1	30.24	768.1	38	3.3	79	NW	9	4.0			10s			0	0	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	30.24	768.1	30.30	769.6	40	4.4	62	NW	7	3.1		0	0			0	0	Clear	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.34	770.6	30.36	771.1	36	2.2	87	WNW	5	2.2		0	0			0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.11	739.4	29.95	760.7	38	3.3	90	W	4	1.8		0	0			0	0	Clear	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.17	766.3	30.30	769.6	41	5.0	74	W	8	3.6		0	2s		W	0	0	Fair	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.97	761.2	30.31	769.9	43	6.1	60	E	5	2.2		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.16	766	30.36	771.1	47	8.3	43	SE	6	2.7		0	0			0	0	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.54	750.3	30.25	768.3	44	6.7	45	SE	17	7.6		0	0			0	0	Clear	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.51	749.5	30.22	767.6	43	6.1	68	NE	7	3.1		10cs	0	SW		0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.53	750.0	30.19	766.8	45	7.2	64	E	6	2.7			10ks		W	0	0	Cloudy	M. Payne.
Quebec, Quebec*	30.07	763.8	30.41	772.4	36	2.2	80	Calm			0	0	Hz			0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.81	757.2	30.29	769.4	33	0.6	83	E	2	0.9		0	0			0	0	Clear	W. H. McIntyre.
Saugeen, Ontario*	29.45	748.0	30.18	766.6	45	7.2	90	SE	12	5.4		5cs	0			0	0	Fair	K. Stewart.
St. Andrews, N. B.	30.27	768.8	30.32	770.1	43	6.1	57	NW	3	1.3		0	0					Clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.24	768.1	30.28	769.1	41	5.0	66	S	7	3.1		8c	0	W		0	0	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.88	758.9	30.27	768.8	45	7.2	43	E	19	8.5		5cs	0			0	0	Fair	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.26	768.6	30.23	767.8	42	5.6	90	W	2	0.9		2k	0	W		0	0	Clear	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.98	761.5	30.24	768.1	33	0.6	89	SE	2	0.9		5k	5s			0	0	Fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd'r.
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.92	760.0			60.0	15.6	84	W	29.0	13.0			5n			0.270	6.9	Showery	John Duthie.
Cape Town, C. G. H. Obs'y	30.06	763.5	30.10	764.5	64.1	17.8		NW	2.8	1.3		5	5			0.528	13.4	Vapory	The Staff, for D. Gill.
Worcester *†	28.88	733.5			61.7	16.5	48	NW			1	5	5			0.04	1.0	Cloudy	C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.84	757.8	29.86	758.4	60.8	16.0	96	NW		0.3			10n			0.378	9.6	Raining	M. Marc Dechevrens, S.J.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	25.19	665.2	29.91	759.7	67.1	19.5	90	SE			3	8ck	1d			0	0	Cloudy.	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.15	765.9	30.20	767.1	46.9	8.3	63	S	18	8			10						Oversergent Fischer.
Fanöe	30.07	763.8	30.09	764.3	44.4	6.9	96	WSW			4		10						Overloerer Lauridsen.
Godthaab, Greenland	29.64	752.9	29.69	754.0	33.8	1.0	81	W			2		9						S. Kleinschmidt.
Stykkisholm, Iceland	29.34	745.2	29.38	745.3	37.4	3.0		E			4		2						A. O. Thorlacius.
Thorshavn	29.50	749.4	29.54	750.3	46.6	8.1	88	S	38	17			10					Raining	Overloerer Bergh.
Vestervig	29.98	761.5	30.08	763.9	43.5	6.4	96	SE			4		10						Loearer Oesterboi.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.68	753.8	30.33	770.4	60.1	15.6	75				2	c	ckn	SE	SE	0.020	0.5		M. Labroue, Director.
Alençon Normal School	29.74	755.3	30.29	769.3	57.6	14.2	76	W			1		5kn		NW	0	0	Cloudy.	M. Nicot, Director.
Arras, Engineer School	30.03	762.8	30.29	769.3	59.4	15.2	42	NW			2		k		NW	0	0		M. Klein, Commandant.
Avignon, Normal School	30.00	762.1	30.08	764.1	65.1	18.4	35	NNW			8		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.74	755.3	30.30	769.5	57.9	14.4	59	E			1		5kn		NNE	0	0	Cloudy	M. Saillard, Director.
Beauvais, Normal School	30.04	762.9	30.30	769.6	59.2	15.1	39	NNW			1		2		W	0.016	0.4	Slightly cl'dy	M. Frère Eugene Marie.
Besançon, Normal School	29.41	747.1	30.30	769.7	55.4	13	66	S			1	c	0	S		0	0		M. Gobin, Director.
Bordeaux, Observatory	30.06	763.4	30.32	770.0	62.2	16.8	48	NW			1		8		WNW	0.031	0.8	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.76	755.8	30.30	769.7	62.6	17	34	N			1	ck	0	N		0	0		M. Postel, Director.
Brest, Naval Observatory	30.10	764.6	30.35	770.8	62.2	16.8	69	SW			1		6		SW	0.047	1.2		M. de Rermaree, Dir.
Caen, Normal School	30.21	767.4	30.29	769.3	62.8	17.1	70	W			1		2		W	0.016	0.4	Slightly cl'dy	M. Bitrix, Director.
Châlons-sur-Marne, N.Sch'l	29.88	758.9	30.20	767.0	65.5	18.6	44	S			1		5			0.004	0.1	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.74	755.4	30.25	768.4	58.6	14.8	67	WNW			1		2			0.055	1.4	¼ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.90	734.1	30.26	768.5	59.0	15.0	68	NNE			1		8			0	0	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.47	748.5	30.32	770.1	61.2	16.2	56	NW			2		5		NW	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.42	747.3	30.30	769.5	57.2	14	72	W			1		5k	W	W	0	0	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.52	699.1	30.02	762.6	60.4	15.8	47	E			1					0	0		M. Jeangirard, Director.
Grénasque, du. Rhone	28.98	736.2	30.13	765.2	65.7	18.7	41	NW			2		2		SW	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.43	747.4	30.19	766.9	56.5	13.6	53	N			2		ckn			0	0		M. Ablard, Director.
Guéret, Normal School	28.71	729.3	30.29	769.4	58.1	14.5	57	NW			1		k		NW	0.020	0.5		M. Rivoire, Director.
Lamballe, Normal School	30.15	765.7	30.42	772.7	58.1	14.5	62	NNW			1				NNW	0.12	3.		M. Ollitrault, Director.
Lescar, Normal School	29.79	756.7	30.46	773.7	59.9	15.5	87	NW			1	ck	0	NW		0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.32	770.1	30.42	772.7	59.0	15.0	60	WSW			4		10		W	0.012	0.3	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.21	741.8	30.27	768.8	57.6	14.2	69	N			1		5		N	0	0	Cloudy	M. André, Director.
Mans, Normal School	30.04	763.0	30.35	770.9	57.4	14.1	59	W			1		5		NW	0.020	0.5	Cloudy	M. Piboen, Director.
Marseille, Observatory	29.74	755.4	30.01	762.2	67.3	19.6	25	NW			2		1		NW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.99	634.8	30.23	767.8	45.9	7.7	53	N	22.4	10.0			5		N	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	30.00	762.0	30.11	764.8	70.5	21.4	46	N			3		2	N	N	0	0	Slightly cl'dy	M. P. Galzin, Director.
Nancy, Normal School	29.52	749.8	30.29	769.4	55.4	13	59	WNW			1		8k			0	0	Very cloudy	M. Hasse.
Nantes, Observatory	30.25	768.4	30.42	772.6	61.3	16.3	60	WSW			0-1		8k;n		WSW	0	0		M. Larocque, Director.
Nice	29.90	760.9	29.99	761.7	65.8	18.8	64	E			1		5	SW	E	0.079	2.0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	30.10	764.6	30.21	767.3	63.3	17.4	41	N	31.8	14.2			1		NW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.70	576.6			34.2	1.2							10		NE	0.331	8.4	Snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.06	738.0	30.13	765.4	50.0	10	52	N			4		5s		N	0	0	Cloudy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.36	644.0			38.5	3.6	98	NNW			3		10			0.051	1.3	Covered	M. Alluard, Director
Rochefort, Naval Obs'y	30.33	770.4	30.36	771.2	67.1	19.5	54	NW			1		5	NNW	W	0	0	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.13	765.3	30.35	770.8	62.2	16.8	63	WNW			1		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	28.10	713.6	30.25	768.6	54.3	12.4	81	W			1		5		N	0	0	Cloudy	M. Richard, Director.
Rouen, Normal School	30.22	767.5	30.30	769.7	59.7	15.4	64	W			2		2		W	0.059	1.5	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	30.17	766.2	30.32	770.2	56.8	13.8	57	NW			1		2		NW	0.04	1.	Slightly cl'dy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.13	765.2	30.29	769.4	62.2	16.8	39	N			1		5		NNW	0.020	0.5		M. Renou, Director.
Toulouse, Observatory	29.63	752.5	30.36	771.1	63.0	17.2	72	NW			2					0	0		M. Bailland, Director.
Tours	30.13	765.3	30.33	770.3	61.7	16.5	55	NW			1		5		WNW	0	0	½ covered	M. de Tastes.
Versailles, Observatory	29.81	757.1	30.30	769.6	59.4	15.2	47	NW			2					0.016	0.4		Dr. A. Bérigny, Director.
Sub-Series.																			
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.39	746.6	30.26	768.7	53.8	12.1	55	WNW			2		6k	W		0	0		Prof. Dr. Hoh.
Berlin	30.08	764.0	30.25	768.4	55.8	13.2	43	SW			1		10			0	0		Prof. Dr. Arndt.
Breslau	29.77	756.2	30.31	769.8	47.1	8.4	52	NE			1		10			0.035	0.9	Raining	Royal University Obs'y.
Carlsruhe	29.85	758.2	30.29	769.3	54.7	12.6	66	SW			2		9	SW		0	0		Albert Senz.
Cassel	29.49	749.1	30.21	767.3	52.5	11.4	68	S			4		7	W		0.091	2.3	Thnd'rstorm	Dr. H. Möhl.
Frankfort on the Main	29.95	760.6	30.32	770.1	54.7	12.6	53	SW			1		10			0.012	0.3		Physical Society.
Friedrichshafen	28.83	732.2	30.28	769.0	54.3	12.4	66	SW			3		2	SW		0	0		Wilhelm, Chief Tel.
Hamburg	30.15	765.7	30.22	767.5	46.9	8.3	75	SW			2		10			0	0		Dr. R. Kleeman.
Kiel	30.15	765.8	30.17	766.2	44.8	7.1	78	SW			3		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.82	757.5	30.25	768.3	54.3	12.4	55	SW			1		8	WSW		0	0		Prof. Dr. Bruhns.
Magdeburg	29.92	760.0	30.22	767.5	53.4	11.9	48	SW			2		10ks			0.020	0.5		Dr. Assmann.
Memel	30.26	768.6	30.31	769.8	47.5	8.6	66	NW			2	8ck	0						Reinbrecht & Issermann.
Munich	28.44	722.3	30.32	770.1	51.8	11.0	56	Calm			0		7	SW		0.051	1.3		Central Station.
Neufahrwasser	30.29	769.4	30.31	769.8	46.8	8.2	60	ENE			2		9			0	0		A. Lothes.
Neustadt, Palatinate	29.75	755.6	30.28	769.1	57.0	13.9	65	W			2		10			0	0		Dicknether.
Stuttgart	29.30	744.2	30.20	767.1	53.6	12.0	59	N			1		8	NW		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.76	730.6	30.26	768.5	54.0	12.2	51	W			2		9	W		0	0		Prof. Kemlein.
Wustrow	30.21	767.3	30.23	767.9	51.6	10.9	98	S			3		10s			0	0		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.65	753.2	30.04	763.0	70.9	21.6	.....	S	.....	.....	1.0	.....	0	.....	.....	.....	.....	Clear.....	A. Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.69	754.2	29.74	755.4	89.8	32.1	56	WSW	32.0	14.3	.....	.....	0	.....	.....	0	0	Misty.....	
Deesa	29.20	741.6	29.64	752.9	110.6	43.7	13	N	9.3	4.2	.....	.....	0	.....	.....	0	0	Blue sky.....	
Bombay	29.67	753.7	29.71	754.6	87.2	30.7	78	WNW	10.0	4.5	.....	.....	0	.....	.....	0	0	Blue sky.....	
Poona, Yarrowda	27.85	707.3	29.62	752.3	101.1	38.4	16	NW	25.0	11.2	.....	.....	0	.....	.....	0	0	Blue sky.....	
Belgaum	27.22	691.3	29.70	754.4	85.1	29.5	55	WSW	14.0	6.3	.....	.....	0	.....	.....	0	0	Blue sky.....	
Lahore	28.90	734.1	29.60	752.0	104.3	40.2	13	NW	1.5	0.7	.....	.....	0	.....	.....	0	0	Blue sky.....	
Roorkee	28.76	730.5	29.62	752.4	97.9	36.6	14	NW	1.5	0.7	.....	.....	0	.....	.....	0	0	.....	
Agra	29.12	739.5	29.65	753.2	102.6	39.2	42	N	2.2	1.0	.....	.....	0	.....	.....	0	0	.....	
Nagpur	28.62	726.9	29.61	752.1	103.5	39.7	14	NE	4.1	1.8	.....	.....	0	.....	.....	0	0	Blue sky.....	
Jubbulpore	28.36	720.2	29.66	753.4	96.8	36.0	12	E	2.5	1.1	.....	.....	0	.....	.....	0	0	Blue sky.....	
Lucknow	29.29	744.0	29.66	753.4	93.0	33.9	38	Calm	1.9	0.8	.....	.....	0	.....	.....	0	0	Blue sky.....	
Allahabad	29.35	745.5	29.65	753.2	97.7	36.5	31	Calm	1.3	0.6	.....	.....	0	.....	.....	0	0	Blue sky.....	
Patna	29.52	749.8	29.70	754.3	90.6	32.6	48	ENE	3.8	1.7	.....	.....	0	.....	.....	0	0	Blue sky.....	
Hazaribagh	27.71	703.8	29.67	753.6	89.0	31.7	36	ESE	9.7	4.3	.....	.....	5	.....	W	0	0	.....	
Cuttack	29.64	752.8	29.72	754.8	90.3	32.4	55	SSE	0.5	0.2	.....	.....	2	.....	.....	0	0	D. clouds.....	
Calcutta, Alipore	29.66	753.5	29.69	754.1	88.2	31.2	51	NNE	10.0	4.5	.....	.....	1	.....	N	0	0	D. clouds.....	
Dhubri	29.65	753.2	29.78	756.3	79.6	26.4	84	E	10.6	4.7	.....	.....	0	.....	.....	0	0	Blue sky.....	
Chittagong	29.55	750.5	29.62	752.8	70.6	21.4	96	NE	5.2	2.3	.....	.....	10	.....	.....	0.57	14.5	Drizzling...	
Sibsagar	29.50	749.3	29.84	758.0	74.9	23.8	86	ENE	3.0	1.3	.....	.....	10	W	W	0	0	D. clouds....	
Zanzibar, Africa	.....	.....	29.87	758.7	82.8	28.2	71	SW	7	3.1	.....	.....	3	.....	S	0.42	10.7	D. clouds....	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.70	754.3	30.11	764.7	57.0	13.9	70	NE	0.7	0.3	.....	.....	10	.....	.....	0.791	20.1	.....	Prof. Giovanni Clodig.
Milan	29.52	749.8	30.03	762.8	66.7	19.3	58	SSE	4.3	1.9	.....	.....	7	.....	.....	0	0	.....	Prof. Schiaparelli.
Padua	29.97	761.3	30.08	764.1	57.2	14.0	80	NNE	20.6	9.2	.....	.....	10	NE	.....	0.547	13.9	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.12	739.6	30.02	762.4	64.9	18.3	46	ENE	1.8	0.8	.....	.....	3	NNE	.....	0	0	.....	Prof. P. F. Denza.
Genoa	29.80	757.0	30.00	761.9	64.0	17.8	46	NE	6.3	2.8	.....	.....	10	NE	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	28.13	714.6	30.04	763.0	59.2	15.1	56	NNW	.....	.....	4	.....	3	NNE	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.94	760.4	29.98	761.6	59.7	15.4	91	E	11.2	5.0	.....	.....	6	SE	.....	0.394	10.0	.....	Prof. Luigi Guidi.
Florence	29.72	754.8	29.97	761.2	56.8	13.8	86	E	.....	.....	2	.....	10	.....	.....	1.130	28.7	.....	Prof. Costantino Pitter.
Leghorn	29.90	759.4	29.98	761.6	59.9	15.5	82	ENE	1.3	0.6	.....	.....	10	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.80	756.9	29.97	761.3	64.2	17.9	62	SE	9.4	4.2	.....	.....	10	.....	.....	0.366	9.3	.....	Prof. P. S. Ferrari.
Lecce	29.76	755.8	30.01	762.2	71.6	22.0	49	SSE	11.9	5.3	.....	.....	7	.....	.....	0.008	0.2	.....	Prof. C. de Giorgi.
Cosenza	29.09	738.9	29.97	761.2	65.7	18.7	74	SSE	1.8	0.8	.....	.....	9	SE	.....	0.102	2.6	.....	Prof. D. Conti.
Cagliari	29.78	756.4	29.97	761.3	59.7	15.4	60	NW	.....	.....	2	.....	10	.....	.....	0.031	0.8	.....	Prof. A. Pacinotti.
Palermo	29.77	756.1	30.02	762.5	61.3	16.3	71	NW	4.9	2.2	.....	.....	10	W	.....	0.024	0.6	.....	Prof. G. Ciacciatore.
Syracuse	29.92	759.9	29.96	761.0	65.1	18.4	79	E	8.7	3.9	.....	.....	3	SW	.....	0	0	.....	Prof. Vincenzo Gulliano.
Sub-Series.																			
Naples, S. R	29.47	748.5	29.98	761.6	63.3	17.4	80	SE	1.3	0.6	.....	.....	4	SW	.....	0.713	18.1	.....	Prof. F. Brioschi.
Stelvio	22.23	564.6	.....	.....	29.5	— 1.4	96	NNE	.....	.....	2	.....	10k	S	.....	0	0	Overcast	Prof. P. F. Denza.
Valdobbia	22.18	563.3	.....	.....	40.3	4.6	65	E	.....	.....	2	2cs	0	N	.....	0	0	Clear.....	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.84	757.9	29.85	758.2	64.4	18.0	99	SW	1.7	0.8	.....	.....	10n	.....	.....	4.130	104.9	Raining.....	K. Sasaki.
Kioto	29.82	757.4	29.99	761.7	58.6	14.8	90	NNE	.....	.....	.....	.....	10n	.....	.....	1.370	34.8	Raining.....	M. Tojima.
Nagasaki, I. M. Obs'y	29.70	754.4	29.90	759.2	67.0	19.4	97	SW	8.0	3.6	.....	.....	10n	.....	.....	3.150	80.0	Raining.....	S. Takehayashi.
Tokei Obs'y, Yeddo	30.07	763.8	30.14	765.5	51.8	11.0	98	E	3.3	1.5	.....	.....	10n	.....	.....	0.185	4.7	Light rain...	The Staff.
Wakayama	29.89	759.2	29.94	760.5	67.0	19.4	89	SSE	5.9	2.6	.....	.....	10n	.....	S	1.551	39.4	Raining.....	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.87	758.7	30.06	763.4	77.4	25.2	65	E	22.0	9.8	.....	2	2	W	ESE	0.20	5.1	Squally.....	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Barcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.70	754.3	29.95	760.8	70.5	21.4	92	ESE	1.6	0.8	.....	0	6xn	.....	ESE	0	0	Misty.....	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.25	768.4	30.25	768.4	54.0	12.2	.....	WNW	.....	.....	3	.....	.....	.....	.....	0.138	3.5	.....	
Groningen	30.11	764.7	30.16	766.1	55.0	12.8	.....	WNW	.....	.....	4	.....	.....	.....	.....	0.947	1.2	.....	
Helder	30.18	766.5	30.18	766.5	50.7	10.4	.....	WSW	.....	.....	2	.....	.....	.....	.....	0.039	1.0	.....	
Hellevoetsluis	30.23	767.8	30.23	767.8	56.1	13.4	80	W	.....	.....	2	.....	.....	.....	.....	0.118	3.0	.....	
Utrecht	30.19	766.7	30.23	767.9	60.1	15.6	56	WSW	.....	.....	2	.....	5	.....	.....	0.116	0.4	Cloudy.	H. van der Brin.

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

NORWEGIAN SERIES.

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

Bergen	29.96	761.0	30.02	762.6	46.0	7.8	52	S	14.8	6.6			8			0	0		
Christiania	29.98	761.6	30.13	765.4	46.9	8.3	55	SSW	18	8			10			0	0		
Gjesvær	29.82	757.4	29.84	758.0	34.9	1.6		SW			2		10						
Lodingen	29.91	759.8	29.96	761.0	39.4	4.1	59	SSW			2		5			0	0		

PORTUGUESE SERIES.

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

Angra, Azores	30.24	768.0	30.39	772.0	61.2	16.2	91	W	2.5	1.1			4			0	0		Dr. J. A. Sampaio.
Campo Major	29.22	742.3	30.21	767.2	71.2	21.8	34	NNE	5.6	2.5			2			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.09	764.2	30.17	766.4	66.4	19.1	54	SW	6.3	2.8			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.89	759.3	30.25	768.3	70.3	21.3	45	NNE	16.1	7.2			0			0	0		The Staff.
Ponta Delgada, Azores	30.35	770.8	30.42	772.6	70.2	21.2	62	Calm	0	0			4			0	0		

RUSSIAN SERIES.

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

Akmolinski																			Capt. Lasarew.
Archangel	29.64	752.8	29.66	753.3	40.8	4.9	86	WSW	18	8			10						Capt. Sselliwerstow.
Astrakhan	30.10	764.4	30.01	762.3	72.9	22.7	54	NNW	7	3			1k						Capt. Wisganow.
Barnaul	29.78	756.3	30.28	769.0	53.4	11.9	18	N	2	1			1						Meteorological Obs'y.
Dorpat	30.04	762.9	30.29	769.3	43.7	6.5	57	W	4	2			7k						Observatory.
Ekaterinburg	29.21	741.9	30.15	765.7	69.6	20.9	44	Calm	0	0			9						Meteorological Obs'y.
Kasan	29.92	759.9	30.18	766.6	71.1	21.7	34	Calm	0	0			0						Observatory.
Kertch	30.20	767.0	30.22	767.5	66.9	19.4	69	S	4	2			0						Lagorio & Sastyrez.
Kieff	29.52	749.9	30.14	765.5	72.7	22.6	32	SSW	7	3			10cks						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.98	761.5	30.18	766.5	73.2	22.9	31	NNE	9	4			3						Meteorological Obs'y.
Moscow	29.50	749.4	30.02	762.6	76.5	24.7	47	S	7.8	3.5			6ks						Meteorological Obs'y.
Nertchinsk	27.84	707.2	30.21	767.3	33.1	0.6	31	Calm	0	0			0						Meteorological Obs'y.
Nikolaiev	30.18	766.5	30.25	768.3	78.1	24.5	43	SE	9	4			1k						Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	29.83	757.7	29.97	761.3	65.1	18.4	65	Calm	0	0			8n					Raining	Physical Observatory.
St. Petersburg	30.18	766.5	30.19	766.9	37.2	2.9	80	NW	16	7			9ks;n						Central Physical Obs'y.
Tashkend, Laboratory	28.61	726.7	30.15	765.8	67.6	19.8	66	Calm	0	0			7			Blank			Teich, A. M.
Tiflis	28.73	729.7	30.10	764.6	73.6	23.1	28	Calm	0	0			5k						Physical Observatory.
Warsaw	29.81	757.2	30.24	768.1	48.2	9.0	81	N	7	3			10n					Llight rain.	Astronomical Obs'y.
Wilna	29.82	757.5	30.24	768.2	54.9	12.7	59	NNE	4	2			7					Light clouds	Berg, Assistant.
Yeniseisk	30.09	764.2	30.38	771.7	40.6	4.8	34	Calm	0	0			0						M. O. Marks.

SCOTTISH SERIES.

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

Leith, Restalrig Park			29.90	759.4	50.0	10.0	73	SW			4	10k				0.06	1.5	Overcast	Andrew Gibb.
Monach Lt. House, Hebrides			29.57	751.1	50	10.0	93	S			6	10	5	SW		0.3	8.	Cloudy	J. Youngolause.
North Unst, Shetland Isl'ds			29.68	753.9				SSW			6		10			Blank			Robert Burnet.

SPANISH SERIES.

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

Barcelona, Met. Obs'y	30.09	764.2	30.19	766.9	64.0	17.8	66	SE	4.3	1.9			0			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.35	770.8	30.40	772.2	65.5	18.6	63	NW	2.2	1.0		2	3	SW		0.043	1.1	Cloudy	Prof. Manuel de Navera
Burgos, Met. Obs'y	27.37	695.3			55.4	13.0	73	NE	6.9	3.1		0	8			0	0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	28.02	711.6	30.21	767.4	66.6	19.2	49	NE	6.7	3.0		0	0			0	0	Clear	The Staff.
Murcia, Met. Obs'y	30.05	763.2	30.19	766.9	77.0	25.0	36	ENE	4.0	1.8		0	0			0	0	Clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.40	746.7	30.29	769.3	63.7	17.6	56	NE	4.9	2.2			0			0	0	Clear	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	29.90	759.4	29.96	761.1	75.0	23.9	83	E	2.7	1.2		0	0			0	0	Clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.85	758.3	29.91	759.6	85.7	29.8	61	SE	4.4	2.0		0	0			0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.08	764.1	30.18	766.5	75.2	24.0	26	E	13.6	6.1		0	0			0	0		Capt. C. Pujason, R. N., Dir.
San Juan de Porto Rico, W. I	29.92	760.0	30.01	762.3	78.1	25.6	86	S	0	0		2cs	4k			0.118	3.0	Clear	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.80	756.9	29.95	760.6	85.5	29.7	66	W	1.5	0.8		4ck	0	W		0	0	Lightly cl'dy	José L. Fastovra.

SWEDISH SERIES.

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

Haparanda																			
Umea	29.97	761.1	30.00	762.1	39.6	4.2	52	NW			2		10			0	0		
Hernosand	[illegible]05	763.2	30.10	764.5	43.9	6.6	51	SW			2		0			0	0		
Stockholm	30.10	764.4	30.15	765.7	41.9	5.5	48	S			4		0			0.024	0.6		
Wisby	30.05	763.2	30.22	767.7	45.9	7.7	50	SSW			2		10			0	0		
SUB-SERIES.	30.15	765.9	30.21	767.4	41.7	5.4	82	W			2		10			0.102	2.6		
Upsala	30.09	764.2	30.17	766.4	50.2	10.1	44	SSW	11.4	5.1			7		WSW	Inap.	Inap.		Nils Ekholm.

SWISS SERIES.

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

Geneva																			
Zurich	28.64	727.4	30.27	768.8	56.5	13.6	55	NW			2		4			0	0	Cloudy	The Observatory.
																			The Observatory.

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

TURKISH SERIES.

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

Constantinople			30.08	764.0	59.5	15.3	61	N	22	10.0			0			0	0		The Observatory.
Valona			30.03	762.8	68.5	20.3		W			1		10			0	0	Covered	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			29.85	758.1	82.2	27.9	37	ENE			1		0			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
Albany, New York	30.33	770.4	30.42	772.7	49.1	9.5	64	E	1	0.4		1cs	Hz			0	0	Dense haze.	
Alpena, Michigan	29.53	750.0	30.19	766.8	40	4.4	73	S	8	3.6		1ocs	0	SW		0	0	Cloudy	
Atlanta, Georgia	29.04	737.6	30.19	766.8	56.8	13.8	96	E	9	4.0			1os		Calm	0	0	Cloudy	
Atlantic City, New Jersey	30.39	771.9	30.40	772.1	50	10.0	79	E	15	6.7		5c	0	W		0	0	Fair	
Attou Id., Alaska‡	30.33	770.4			38	3.3	90	SE	31	13.9			1os		SE	0	0	Cloudy	
Augusta, Georgia	30.07	763.8	30.27	768.8	62.3	16.8	83	NE	8	3.6			1os		NE	0	0	Cloudy	
Baltimore, Maryland	30.35	770.9	30.40	772.1	53	11.7	67	E	4	1.8		8cs;ck	0		E;C	0	0	Fair	
Barnegat, New Jersey	30.38	771.6	30.40	772.1	51	10.6	72	E	10	4.5		8c	0	W		0	0	Fair	
Bismarck, Dakota	28.18	715.8	30.03	762.7	49	9.4	57	N	3	1.3		0	0			Inap.	Inap.	Clear	
Boise City, Idaho	27.14	689.3	30.10	764.5	47	8.3	65	W	4	1.8			1os		Calm	0	0	Cloudy	
Boston, Massachusetts	30.26	768.6	30.42	772.7	45.0	7.2	61	W	5	2.2		0	Hz			0	0	Clear	
Brackettville, Texas	28.68	728.5	29.72	754.9	62	16.7	94	SE	28	12.5			1oks		SE	0.91	23.1	Cloudy	
Brownsville, Texas	29.87	758.7	29.91	759.7	73	22.8	85	E	2	0.9		5c	0	SW		0	0	Fair	
Buffalo, New York	29.51	749.5	30.22	767.6	49.5	9.7	54	E	9	4.0		1ocs	Sk	SW		0	0	Cloudy	
Burlington, Vermont	30.10	764.5	30.40	772.1	43.5	6.4	56	S	3	1.3		0	0			0	0	Clear	
Cairo, Illinois	29.67	753.6	30.05	763.3	65	18.3	94	Calm	0	0		2ck	8s	W	Calm	0.16	4.1	Cloudy	
Campo, California	27.36	694.9	29.93	760.2	46	7.8	77	S	3	1.3		0	0			0	0	Clear	
Camp Thomas, Arizona	27.17	690.1			53	11.7	54	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	30.29	769.4	30.31	769.9	53	11.7	80	NE	16	7.2			1oks		N	0	0	Cloudy	
Cape May, New Jersey	30.33	770.4	30.36	771.1	50	10.0	79	E	11	4.9		5ck	0			0	0	Fair	
Castroville, Texas	29.21	741.9	29.90	759.4	65	18.3	89	S	8	3.6			1on			0.70	17.8	Light rain	
Cedar Keys, Florida	30.04	763.0	30.06	763.5	70	21.1	85	NE	9	4.0		5ck	0	NE		0.03	0.8	Fair	
Champaign, Illinois	29.19	741.4	29.97	761.2	58	14.4	94	SE	5	2.2			1on		SE	0.91	23.1	Light rain	
Charleston, S. Carolina	30.16	766.1	30.22	767.6	61	16.1	82	NE	15	6.7			1os		NE	0	0	Threatening	
Charlotte, N. Carolina	29.41	747.0	30.24	768.1	52.8	11.6	90	NE	6	2.7			1os		NE	0.04	1.0	Cloudy	
Chattanooga, Tennessee	29.38	746.2	30.17	766.3	63	17.2	78	SE	5	2.2			1os		SE	0.03	0.8	Cloudy	
Cheyenne, Wyoming	24.08	611.6	30.02	762.5	41	5.0	65	NW	4	1.8		0	0			0	0	Clear	
Chicago, Illinois	29.34	745.2	30.03	762.7	46.7	8.2	77	E	4	1.8			1on			0.12	3.0	Light rain	
Chincoteague, Virginia	30.32	770.1	30.34	770.6	50	10.0	86	NE	17	7.6		1k	0	Calm		0	0	Clear	
Cincinnati, Ohio	29.43	747.5	30.08	764.0	60	15.6	82	NE	2	0.9			1os		SE	0.09	2.3	Cloudy	
Cleveland, Ohio	29.41	747.0	30.13	765.3	51.5	10.8	86	SE	9	4.0			1on		S	0.03	0.8	Light rain	
Coleman City, Texas	28.14	714.7	29.70	755.9	65	18.3	89	SE	3	1.3		0	8s		S	0	0	Cloudy	
Columbus, Ohio	29.26	743.2	30.09	764.3	57	13.9	87	E	9	4.0			1on		E	0.33	8.4	Light rain	
Concho, Texas	28.02	711.7	29.65	753.1	65	18.3	94	Calm	0	0		2k	5s	NE		0	0	Cloudy	
Corsicana, Texas	29.56	750.8	30.01	762.2	69	20.6	90	S	4	1.8		2cs	2ks			0.09	2.3	Fair	
Davenport, Iowa	29.36	745.7	29.99	761.7	55	12.8	87	E	3	1.3			Fg		Calm	0.02	0.5	Dense fog	
Dayton, Washington T'y	28.18	715.8	29.83	757.7	50	10.0	86	S	1	0.4			1on		Calm	0.19	4.8	Light rain	
Deadwood, Dakota	25.37	644.4			41	5.0	74	Calm	0	0		5cs	0			0.66	16.8	Fair	
Decatur, Texas	28.80	731.5	29.94	760.5	65	18.3	78	SE	8	3.6			1os			1.16	29.5	Cloudy	
Delaware Breakwater, Del.	30.35	770.9	30.38	771.6	50	10.0	86	NE	18	8.0		8ck	0	W		0	0	Cloudy	
Denison, Texas	29.21	741.9	29.98	761.5	68	20.0	79	S	5	2.2		1cs	5ks	Calm	S	0.40	10.2	Fair	
Denver, Colorado	24.82	630.4	30.04	763.0	50.2	10.1	65	S	1	0.4		0	0			0	0	Clear	
Des Moines, Iowa	29.13	739.9	30.00	762.0	55	12.8	93	S	2	0.9			1os			0.10	2.5	Cloudy	
Detroit, Michigan	29.42	747.3	30.12	765.0	50.0	10.0	72	NE	9	4.0			1os		SW	0	0	Cloudy	
Dodge City, Kansas	27.36	694.9	29.61	752.1	55	12.8	81	S	2	0.9		5cs	0	SW	Calm	0	0	Fair	
Dubuque, Iowa	29.31	744.5	30.00	762.0	51	10.6	72	E	5	2.2			1os		Calm	0	0	Cloudy	
Duluth, Minnesota	29.26	743.2	29.94	760.5	43	6.1	92	NE	1	0.4			1os			0.07	1.8	Cloudy	
Eagle Pass, Texas	29.09	738.9	29.80	756.9	65	18.3	84	SE	17	7.6			1os		Calm	2.97	75.4	Cloudy	
Eagle Rock, Idaho	25.14	638.5	29.79	756.7	47	8.3	48	NW	5	2.2		0	5s		W	0	0	Fair	
Eastport, Maine	30.27	768.8	30.33	770.4	43	6.1	51	NW	5	2.2		0	Hz			0	0	Clear	
El Paso, Texas	26.18	665.0			55	12.8	68	Calm	0	0			1os		NE	0	0	Cloudy	
Erie, Pennsylvania	29.45	748.0	30.16	766.1	54	12.2	74	SE	10	4.5			1os			0	0	Cloudy	
Escanaba, Michigan	29.43	747.5	30.09	764.3	45	7.2	76	SE	1	0.4		5ck	2s	W	Calm	0	0	Fair	
Florence, Arizona	28.35	720.1	29.95	760.7	57	13.9	31	NE	1	0.4		0	0			0	0	Clear	
Fort Apache, Arizona	24.99	634.7	30.44	773.2	41	5.0	57	E	3	1.3		0	0			Inap.	Inap.	Clear	
Fort Assinnaboine, Montana	26.88	682.7			58	14.4	42	NW	5	2.2		5c	0	Calm		0	0	Fair	
Fort Bennett, Dakota	28.34	719.8			53	11.7	73	NW	3	1.3		1c	0			0.66	16.8	Clear	
Fort Benton, Montana																			
Fort Buford, Dakota	27.95	709.9	29.81	757.2	40	4.4	82	NE	4	1.8		2cs	0	N		0	0	Clear	
Fort Custer, Montana	26.68	677.7			48	8.9	77	SE	6	2.7		5k	0	W		0	0	Fair	
Fort Davis, Texas	25.18	639.6	30.14	765.5	47	8.3	85	SW	7	3.1		5ck	0	SW		1.79	45.5	Fair	
Fort Elliott, Texas	27.20	690.9	29.42	747.3	57	13.9	87	NW	4	1.8		10k	0	NW		0.02	0.5	Cloudy	
Fort Gibson, Indian T'y	29.44	747.8	29.96	761.0	66	18.9	89	Calm	0	0		5cs	0	S		0.40	10.2	Fair	
Fort Grant, Arizona	25.18	639.6	29.98	761.5	56	13.3	35	NE	5	2.2		0	0			0	0	Clear	
Fort Griffin, Texas	28.59	726.2	29.82	757.4	68.0	20.0	84	S	4	1.8			1os			0	0	Cloudy	
Fort Keogh, Montana	27.37	695.2			47	8.3	62	NE	3	1.3		1c	0			0	0	Clear	
Fort Macon, North Carolina	30.22	767.6	30.23	767.8	59	15.0	82	NE	17	7.6			1os		Calm	0	0	Cloudy	
Fort McKavett, Texas	27.67	702.8	29.53	750.0	64.8	18.2	78	SE	2	0.9			1os			0	0	Cloudy	
Fort Missoula, Montana	26.61	675.9			51	10.6	79	NW	1	0.4			1os			0	0	Threatening	
Fort St. Michaels																			
Fort Shaw, Montana	26.12	663.4			45	7.2	61	W	4	1.8		8cs	0	SW		0	0	Cloudy	
Fort Sill, Indian Territory	28.74	730.0	29.82	757.4	62	16.7	94	S	4	1.8			1os		S	0	0	Cloudy	
Fort Stevenson, Dakota	28.08	713.2			43	6.1	83	Calm	0	0		0	0			0	0	Clear	
Fort Verde, Arizona					54	12.2	55	S			1	2cs	0	SW		0	0	Fair	
Fredericksburg, Texas	28.20	716.3	29.72	754.9	65	18.3	78	SW	4	1.8			1os			0.62	15.7	Cloudy	
Galveston, Texas	29.97	761.2	30.01	762.2	73	22.8	85	SE	10	4.5		2ck	8ks	NW	NE	0	0	Cloudy	
Grand Haven, Michigan	29.42	747.3	30.07	763.8	49	9.4	64	NE	7	3.1			1os		Calm	0	0	Cloudy	
Hatteras, North Carolina	30.19	766.8	30.21	767.3	58	14.4	88	NE	28	12.5		5cs	0	Calm		0	0	Fair	
Helena, Montana	25.68	652.3			52	11.1	54	N	3	1.3		0	8s		Calm	0	0	Cloudy	
Henrietta, Texas	28.96	735.6	29.85	758.2	65	18.3	80	SE	7	3.1			1os			0	0	Cloudy	
Indianapolis, Indiana	29.24	742.7	30.01	762.2	58	14.4	82	SE	3	1.3			1on;fg		Calm	0.02	0.5	Light rain	
Indianola, Texas	29.99	761.7	30.02	762.5	72.1	22.3	90	S	5	2.2		2cs	2ks	S	S	0	0	Fair	
Jacksboro, Texas	28.81	731.8	29.90	759.4	66	18.9	89	SE	6	2.7			1os		Calm	0	0	Cloudy	
Jacksonville, Florida	30.06	763.5	30.11	764.8	67	19.4	89	NE	16	7.2			1os		NE	0.68	17.3	Cloudy	
Keokuk, Iowa	29.33	745.0	29.97	761.2	55.7	13.2	100	E	4	1.8			Fg			0.07	1.8	Dense fog	
Key West, Florida	29.96	761.0	30.00	762.0	77.8	25.4	73	NE	3	1.3		2k	0			0	0	Fair	
Kittyhawk, North Carolina	30.27	768.8	30.29	769.4	53	11.7	93	NE	20	8.9		2k	5s	E	NE	0.04	1.0	Cloudy	
Knoxville, Tennessee	29.19	741.4	30.19	766.8	61	16.1	88	SW	2	0.9		2ck	5s	Calm	SW	0.33	8.4	Fair	
La Crosse, Wisconsin	29.26	743.2	29.98	761.5	55.2	12.9	56	S	3	1.3			1os			0	0	Cloudy	
La Mesilla, New Mexico	26.05	661.7	30.20	767.1	58	14.4	86	Calm	0	0		0	8s			Inap.	Inap.	Cloudy	
Laredo, Texas	29.49	749.0	29.83	757.7	65	18.3	94	NE	9	4.0			1on		NE	2.00	50.8	Light rain	
Leavenworth, Kansas	29.10	739.1	29.92	760.0	62	16.7	94	E	1	0.4			Fg			0.21	5.3	Dense fog	
Lewiston, Idaho	29.01	736.8	29.64	752.8	56	13.3	53	NE	1	0.4			1os		Calm	0.05	1.3	Cloudy	
Little Rock, Arkansas	29.70	754.4	30.01	762.2	67	19.4	95	Calm	0	0		5ck	2ks			0	0	Fair	
Los Angeles, California	29.59	751.6	29.92	760.0	59.0	15.0	94	SE	4	1.8			Fg		Calm	0	0	Dense fog	
Louisville, Kentucky	29.49	749.0	30.03	762.7	65.0	18.3	89	E	4	1.8		2ck	5s			0.03	0.8	Cloudy	
Lynchburg, Virginia	29.65	753.1	30.34	770.6	55	12.8	68	Calm	0	0			1os			0.01	0.3	Cloudy	
Madison, Wisconsin	29.04	737.6	30.03	762.7	48	8.9	85	E	3	1.3			1os		Calm	0.02	0.5	Cloudy	
Marquette, Michigan	29.31	744.5	30.02	762.5	49	9.4	44	S	13	5.8		8cs	0	SW		0.02	0.5	Cloudy	
Mason, Texas	28.31	719.1	30.01	762.2	68	20.0	84	S	2	0.9			1os		S	0	0	Cloudy	
Memphis, Tennessee	29.72	754.9	30.05	763.3	68	20.0	84	Calm	0	0		4cs	Hz	SW	Calm	0.01	0.3	Light haze	

MAY 5, 1881.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.32	744.7	30.06	763.5	43	6.1	83	E	4	1.8			10n			0.01	0.3	Light rain	
Mobile, Alabama	30.02	762.5	30.09	764.3	72.0	22.2	76	SE	10	4.5		5cs	0			0	0	Fair	
Montgomery, Alabama	29.93	760.2	30.16	766.1	68	20.0	84	E	9	4.0		5k	0	E		0.01	0.3	Fair	
Moorhead, Minnesota	28.94	735.1	29.89	759.2	48	8.9	92	N	3	1.3		0	0			0.24	6.1	Clear	
Morgantown, W. Virginia	29.16	740.7	30.15	765.8	57	13.9	69	SE	4	1.8			10s		E	0	0	Cloudy	
Mt. Washington, N. H.	23.96	608.6	30.32	770.1	20	— 6.7	70	NW	32	14.3		0	Sk		Calm	0	0	Clear	
Nashville, Tennessee	29.58	751.3	30.10	764.5	67.0	19.4	84	SE	4	1.8			10n		S	0.17	4.3	Light rain	
New Haven, Connecticut	30.30	769.6	30.42	772.7	46	7.8	77	S	2	0.9		10c	Hz	W		0	0	Cloudy	
New London, Connecticut	30.41	772.4	30.46	773.7	48	8.9	78	SW	2	0.9		0	Fg			0	0	Clear	
New Orleans, Louisiana	30.00	762.0	30.06	763.5	72.5	22.5	77	E	2	0.9		0	2ks		E	0	0	Fair	
Newport, Rhode Island	30.37	771.4	30.43	772.9	48.0	8.9	74	SW	3	1.3		1c	0	Calm		0	0	Clear	
New River, N. Carolina																			
New Shoreham, Rhode I'd	30.42	772.7	30.45	773.4	48.4	9.1	78	S	2	0.9		0	0			0	0	Clear	
New York, New York	30.25	768.3	30.43	772.9	48	8.9	85	SE	2	0.9		5cs	Fg			0	0	Fair	
Norfolk, Virginia	30.25	768.3	30.31	769.9	54	12.2	87	NE	12	5.4		0	8ks		E	0.02	0.5	Fair	
North Platte, Nebraska	27.05	687.1	29.57	751.1	55	12.8	87	E	2	0.9		5c	0	E		0	0	Fair	
Olympia, Washington T'y	29.91	759.7	29.94	760.5	50.0	10.0	93	S	3	1.3		[illegible]	[illegible]		Calm	0.72	18.3	Light rain	
Omaha, Nebraska	28.85	732.8	29.92	760.0	58.1	14.5	96	S	6	2.7		10	[illegible]		S	0.07	1.8	Dense fog	
Oswego, New York	29.98	761.5	30.31	769.9	48.8	9.3	60	SE	12	5.4			[illegible]	NW		0	0	Clear	
Pensacola, Florida	30.07	763.8	30.10	764.5	71	21.7	85	NE	8	3.6			10s		E	0	0	Cloudy	
Philadelphia, Pa	30.35	770.9	30.40	772.1	47	8.3	85	NE	8	3.6		5c	0	W		0	0	Fair	
Phœnix, Arizona	28 71	729.2	30.50	774.7	58	14.4	53	Calm	0	0		0	0			0	0	Clear	
Pike's Peak, Colorado	17.90	454.7	30.11	764.8	23	— 5.0	60	Calm	0	0		2cs	0			0.07	1.8	Clear	
Pioche, Nevada	23.98	609.1	29.75	755.6	56	13.3	26	S	4	1.8		1k	0	Calm		0	0	Clear	
Pittsburg, Pennsylvania	29.37	746.0	30.18	766.6	55	12.8	68	E	6	2.7			10s		NE	0	0	Cloudy	
Port Eads, Louisiana	30.05	763.3	30.05	763.3	71.1	21.7	90	NE	12	5.4		1k	5ks	E	E	0	0	Fair	
Port Huron, Michigan	29.46	748.3	30.13	765.3	44.1	6.7	68	E	3	1.3		10cs	Sk	NW		0	0	Cloudy	
Portland, Maine	30.33	770.4	30.38	771.6	45	7.2	53	W	7	3.1		0	0			0	0	Clear	
Portland, Oregon	29.91	759.7	29.98	761.5	50	10.0	86	S	7	3.1		Hz	9n		SW	0.48	12.2	Light rain	
Portsmouth, N. Carolina					61	16.1	82	NE	32	14.3			10s		Calm	0	0	Cloudy	
Prescott, Arizona	24.75	628.6	30.11	764.8	47	8.3	41	SW	2	0.9		0	0			0	0	Clear	
Punta Rassa, Florida	29.96	761.0	29.98	761.5	74	23.3	81	NE	10	4.5		0	1ks		NE	0	0	Clear	
Red Bluff, California	29.58	751.3	29.93	760.2	59.5	15.3	68	SE	4	1.8		5k	0	SW		0	0	Fair	
Rio Grande City, Texas	29.74	755.4	29.95	760.7	73	22.8	81	SE	10	4.5		5cs	5ks	Calm	SE	0	0	Cloudy	
Rochester, New York	29.63	752.6	30.26	768.6	49	9.4	51	SE	6	2.7		5c	Sk	SW		0	0	Fair	
Roseburg, Oregon	29.48	748.8	30.05	763.3	47	8.3	96	SW	2	0.9		0	2ks		SW	0.23	5.8	Fair	
Sacramento, California	29.90	759.4	29.98	761.5	55.9	13.3	81	S	6	2.7			8s			0	0	Cloudy	
St. Louis, Missouri	29.43	747.5	29.99	761.7	62.0	16.7	97	SE	7	3.1		10c	Fg	W		0.24	6.1	Cloudy	
St. Paul, Minnesota	29.12	739.6	29.94	760.5	53	11.7	73	SE	6	2.7			10s		SE	0	0	Cloudy	
Salt Lake City, Utah	25.51	647.9	29.84	757.9	55	12.8	50	Calm	0	0		7k	0	W		0	0	Fair	
San Antonio, Texas	29.31	744.5	30.00	762.0	67	19.4	100	SW	5	2.2			10n		Calm	0.86	21.8	Thund'r st'm	
San Diego, California	29.86	758.4	29.93	760.2	59	15.0	94	SW	4	1.8			10s			0	0	Cloudy	
Sandusky, Ohio	29.44	747.8	30.11	764.8	50	10.0	79	NE	8	3.6			10s			Inap.	Inap.	Cloudy	
Sandy Hook, New Jersey	30.40	772.1	30.43	772.9	51.2	10.7	72	SW	1	0.4		0	Hz			0	0	Clear	
San Francisco, California	29.94	760.5	30.00	762.0	58	14.4	91	SW	3	1.3			Fg		SW	0	0	Dense fog	
Santa Fé, New Mexico	23.31	592.1	29.85	758.2	47	8.3	48	N	1	0.4		0	0			0	0	Clear	
Savannah, Georgia	30.11	764.8	30.20	767.1	65	18.3	76	NE	11	4.9			10ks		NE	0	0	Cloudy	
Shreveport, Louisiana	29.81	757.2	30.05	763.3	70.6	21.4	80	Calm	0	0		0	5s			0	0	Fair	
Silver City, New Mexico	24.22	615.2	30.37	771.4	47	8.3	48	S	1	0.4		0	0			0	0	Clear	
Sitka, Alaska																0.13	3.3		
Smithville, North Carolina	30.22	767.6	30.26	768.6	57	13.9	94	N	9	4.0			10s			0	0	Cloudy	
Socorro, New Mexico	25.40	645.1	29.46	748.3	53	11.7	31	NW	4	1.8		0	0			0	0	Clear	
Spokane Falls, Wash. Ter.	27.79	705.9	29.59	751.6	50	10.0	86	S	9	4.0			10s		S	0.16	4.1	Cloudy	
Springfield, Illinois	29.32	744.7	29.98	761.5	60	15.6	100	S	1	0.4			Fg			0.94	23.9	Dense fog	
Springfield, Massachusetts	30.29	769.4	30.43	772.9	45	7.2	68	S	2	0.9		Hz	Hz			0	0	Light haze	
Stockton, Texas	26.91	683.5	29.91	759.7	52.6	11.4	73	Calm	0	0		5cs	2s	Calm	Calm	0	0	Fair	
St. Vincent, Minnesota	29.10	739.1	29.90	759.4	45	7.2	84	NW	4	1.8		0	0			0.88	22.4	Clear	
Thatcher's Island, Mass	30.36	771.1	30.42	772.7	46	7.8	69	W	5	2.2		0	0			0	0	Clear	
Toledo, Ohio	29.43	747.5	30.12	765.0	48	8.9	85	N	12	5.4			10s		NE	Inap.	Inap	Cloudy	
Tucson, Arizona	27.4[illegible]	697.7	30.02	762.5	63	17.2	42	NE	2	0.9		0	0			0	0	Clear	
Umatilla, Oregon	29[illegible]	750.6	30.03	762.7	54.5	12.5	80	SW	14	6.3			10s		SW	0.02	0.5	Cloudy	
Uvalde, Texas	28[illegible]	732.8	29.66	753.4	62	16.7	94	S	8	3.6			10s		SW	2.20	55.9	Cloudy	
Vicksburg, Mississippi	29.81	757.2	30.07	763.8	68	20.0	84	SE	6	2.7		1ck	0			0	0	Clear	
Visalia, California	29.56	750.8	29.92	760.0	59	15.0	54	NW	3	1.3		0	0			0	0	Clear	
Washington, D. C.	30.26	768.6	30.38	771.6	51	10.6	65	E	6	2.7		5cs	0	W		0	0	Fair	
Wickenburg, Arizona					57	13.9	47	Calm			0	0	0			0	0	Clear	
Wilmington, N. Carolina	30.20	767.1	30.25	768.3	56	13.3	87	N	7	3.1			10s		Calm	0	0	Cloudy	
Winnemucca, Nevada	25.54	648.7	29.90	759.4	54	12.2	26	S	8	3.6			10ks		SW	0	0	Cloudy	
Wood's Holl, Mass	30.38	771.6	30.42	772.7	49	9.4	71	SW	6	2.7		1cs	0	Calm		0	0	Clear	
Yankton, Dakota	28.69	728.7	29.94	760.5	61	16.1	77	S	4	1.8		0	0			0	0	Clear	
Yuma, Arizona	29.65	753.1	29.79	756.7	68.2	20.1	47	SE	1	0.4		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.11	561.6			55.2	12.9	85	Calm	0	0		5cs;k	2ks			0.02	0.5	Cloudy	Thomas Herran.
Buff Bay Town, Jamaica.‡	29.75	755.6	30.06	763.5	75	23.9	81	E											
Havana, Cuba, W. I.	29.97	761.2	30.02	762.5	78	25.6	78	Calm	0	0		0	0			0	0	Clear	A. Van Caneghem, Ass't.
Jakobshavn, Greenland	29.65	753.[illegible]	29.70	754.3	29.5	— 1.4		SE			2		9			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	29.95	760.7	29.96	761.0	74.2	23.4	84	Calm	0	0		0	2ks			0	0	Fair	Robert Johnstone.
Navassa, W. I.	29.89	759.2	29.97	761.2	80	26.7	82	E				8k	2s	SE	NE	0.22	5.6	Fair	F. M. Everett.
Paramaribo, S. A.	29.99	761.7	29.99	761.7	80	26.7	78	E			2	3c	5k	E		0	0	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.42	747.3	29.98	761.5	75	23.9	100	Calm			0		10n		S			Raining	Francesco J. Cisneros.
Rivas, Nicaragua					77.0	25		E			2	2ck	1ks	E	E	0.20	5.		Earl Flint.
Santiago de Cuba, W. I.	29.96	761.0	29.98	761.5	74	23.3	85	Calm	0	0		0	2ks			0.39	9.9	Fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.08	764.0	30.13	765.3	18.0	— 7.8	92	S	14	6.3		0	0			0	0	Clear	J. Fortescue & W Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross, N. 34° 10′, E. 133° 13′	29.96	761.0	60	15.6		Calm			0		10							Raining	Comm A. J.Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Villafranca, France	29.98	761.5	66	18.9	68	SSE			1		5							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 25° 44′, E. 57° 47′	29.75	755.6	85	29.4	79	W			1		1	NW						Misty	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			61	16.1		NNE			1		2	NNE				1	NNW	Misty	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	30.06	763.5	79	26.1	82	E			3		9	E				2	E	Squally	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 32° 14′, E. 29° 29′	29.79	756.7	72	22.2	83	SSW			6		9	SW				8	SW	Squally	Com. F. W. Richards.
H. M. S. Champion, N. 3° 50′, W. 1° 13′	29.91	759.7	78	25.6	73	SSW			1		9	Calm				1	SSW	Raining	Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 25° 09′, E. 121° 45′	29.94	76015	79	26.1	82	Calm			0		1							Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S.Cruizer, N. 39° 35′, E. 20° 03′	29.99	761.7	71	21.7		Calm			0		2	SSW						D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, S. 23° 03′, W. 10° 04′	30.20	767.1	72	22.2	76	E			3		7	E				3		D. clouds	Capt. J. C. Parvis.
H. M. S. Daring, N. 10° 42′, E. 62° 42′	29.79	756.7	86	30.0		NNW			2		0					1	N	Blue sky	Capt. F. J. Elliott.
H. M. S. Dido, S. 31° 27′, E. 30° 48′	29.98	761.5	71	21.7		SW			6		9	SW				5	SSW	Showery	Capt C. Domville.
H. M. Dock-Yard																			Capt. J. Barnardisten.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 16′, W. 53° 59′	30.28	769.1	34	1.1	90	SSW			2-3		10					1	W	Snow & fog.	Capt. W. R. Kennedy.
H. M. S. Dryad, N. 19° 00′, E. 57° 48′	29.73	755.1	84	28.9		SSW			1		2	SW				2	SW	D. clouds	Capt. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 17° 10′, E. 107° 15′	29.72	754.9	78	25.6		E			3							2	SE	Misty	Comm. C. Johnstone.
H. M. S. Emerald, S. 18° 10′, E. 178° 20′	29.98	761.5	78	25.6	86	ESE			3-4		8	SE						Showery	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Trincomalee, Ceylon, India	29.68	753.9	88	31.1	76	SE			1		9							D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S Flamingo, Great Inagua I'd, W. I.	29.98	761.5	81	27.2	87	SE			1		2	SE						D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish, Hong-Kong, China	29.89	759.2	80	26.7	78	S			2		5	SSE						Misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 23° 17′, W. 128° 20′	30.16	766.1	66	18.9	68	NNE			4-6		10					3	N	Overcast	Comm. E. G. Bourke.
H. M. S. Garnet, Colonia, Uruguay	30.00	762.0	56	13.3	81	NNW			3		3							D. clouds	Capt. L. F. Jones.
H. M. S. Griffon																			Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant, S. 38° 45′, E. 91° 00′	30.10	764.5	56.5	13.6	90	W			4-5		10	WNW				3	WNW	Overcast	Capt. C. C.P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. IronDuke, N. 24° 28′, E. 118° 03′	29.94	760.5	78	25.6	86	SW			2-5		4	NE				3-4	E	D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	30.02	762.5	68	20.0		SW			1		10							Raining	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Hong-Kong, China	29.97	759.7	81.0	27.2	77	Calm			0		2							D. clouds	Capt. A. Carpenter.
H. M. S. Midge, N. 22° 41′, E. 115° 55′						Calm			0		2	NE				1	NE	D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 33° 02′, W. 15° 36	30.13	765.3	64.5	18	83	NNE			6		4	NNE				3	NNE	D. clouds	Capt. H. H. Rawson.
H. M. S. Modeste, N. 5° 04′, E. 114° 36′	29.90	759.4	84	28.9	83	W			2		0							Blue sky	Capt. J. G. Mead.
H. M. S. Monarch Goletta, Tunis, N. Africa	30.08	764.0	65	18.3	94	WNW			5		5	WNW						D. clouds	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda Islands, W. I.	30.22	767.6	67	19.4	76	ENE			2		10	ENE						Overcast	Capt. E. B. Drummond.
H. M. S. Orontes, D'Urban, Natal, S. Africa†	29.78	756.4	72.5	22.5	83	S			5		8	S						Misty	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.90	759.4	80	26.7		NW			1		9							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin, S. 31° 00′, W. 71° 50′	30.08	764.0	58	14.4		SW			1		9	SSW				1	SSW	D. clouds	Capt. A. C. Paget.
H. M. S. Phœnix, St. Lucea, Jamaica, W. I.	29.91	759.7	74	23.3	90	SSE			1		0						ENE	Blue sky	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A.C.Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	29.77	756.1	49	9.4		WSW			3-5		9							Squally	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.79	756.7	82.4	28.0	85	ESE			2		4							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis, Port Said, Suez Canal	29.71	754.6	80	26.7	51	Calm			0		4					Sm'h		D. clouds	Capt. G. O. Twiss.
H. M. S. Shannon, S. 26° 00′, W. 35° 54′	30.22	767.6	72.5	22.5	76	ESE			2		3	ESE				3	SSW	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb, N. 40° 50′, E. 14° 16′	30.01	762.2	64	17.8	78	S			2-3							2	SSW	Blue sky	Capt. T. [redacted] H. Ward.
H. M. S. Tenedos, N 30° 00′, W. 65° 21′	30.21	767.3	70	21.1	85	ENE			2		9					2	E	D. clouds	Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer, Fort Augusta, Sicily	30.01	762.2	69	20.6	70	ESE			3		3					2		Blue sky	Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A	30.06	763.5	55	12.8	79	E			2		10	Calm						D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise, Callao Bay, Peru			66	18.9	97	SSE			1		10							Misty	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 11° 05′, E. 59° 00′	29.80	756.9	85	29.4	64	W			1		0							Blue sky	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I			76	24.4		Calm			0		2							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Wellington, New Zealand	30.34	770.6	57	13.9		NNE			2-3		1	N						Blue sky	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, N. 22° 29′, E. 63° 16′	29.83	757.7	83.5	28.6	81	WSW			3		3	SW				2	NW	D. clouds	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Santiago, Cape Verd I'ds	30.03	762.8	77.9	25.5	88	NE			4		1					1	ESE	Blue sky	S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't.
Tamega																			P. I. R. de Carvoattio, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡ N. 38° 31′, W. 14° 23′	30.34	770.5	61.0	16.1	72	NNE			6		8							Overcast	Com. Th. Ulner.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.13	765.3	72	22.2	85	NE	10	4.5			8		NE	0	0			Fair	
N. Yard, Portsmouth, N. H	30.39	771.9	47	8.3	77	Calm	0	0			0			0	0			Clear	
Naval Hospital, Yokahama, Japan	30.02	762.5	54	12.2	97	Calm			0		10		NE	0.11	2.8			Raining	
Adams, Callao, Peru	29.75	755.6	68	20.0	84	SSE			1		5					Long	SW	Fair	
Alaska, Callao, Peru	29.94	760.5	65	18.3	94	SSE			1		5		SE			Sm'h		Fair	
Alert, N. 25° 05′, E. 141° 57′ *	29.96	761.0	74	23.3	63	ESE			3		2		SE			Sm'h		Fair	
Alliance, Hampton Roads, Va	30.33	770.4	54	12.2	87	NE			2		8		NE	0	0	Sm'h		Cloudy	
Ashuelot, Nagasaki, Japan	29.89	759.2	68	20.0	100	S			1		10		Calm					Raining	
Colorado, New York, N. Y	30.41	772.4	50	10.0	79	S			5		2			0	0			Misty	
Constitution, Piney Point, Md	30.29	769.4	51	10.6	79	ENE	4	1.8			8		NNW					Cloudy	
Franklin, Norfolk, Va	30.30	769.6	54	12.2	80	ENE	7	3.1			8		E	0	0			Fair	
Galena, Piraeus, Greece	30.03	762.7	68	20.0	65	S			2		0					Sm'h		Clear	
Independence, N. Yard, Mare I'd, Cal	29.99	761.7	59	15.0	88	Calm	0	0			8		Calm	0	0			Cloudy	
Jamestown, Sitka, Alaska *	29.13	739.9	48	8.9	100	Calm			0		10			0.14	3.6	Sm'h		Misty	
Kearsarge, Norfolk, Va	30.34	770.6	55	12.8	87	NE			1		8		NE			Sm'h		Cloudy	
Lackawanna, S. 33° 45′, W [illegible]° 24′ †	30.00	752.0	62	16.7	100	NW			2-3		8		ENE			Sm'h	SE	Fair	
Marion, Montevideo, Uruguay	29.59	751.6	54	12.2	74	NNW			3		2		Calm	0	0	Sm'h		Fair	
Michigan, Erie, Pennsylvania	30.11	764.8	52	11.1		SE	4	1.8			8							Hazy	
Minnesota, Newport, R. I	30.43	772.9	49	9.4	96	S			3		0					Sm'h		Clear	
Monocacy, Nagasaki, Japan	29.91	759.7	78	25.6	95	SW			2		10		Calm			Sm'h		Rainy	
New Hampshire, Port Royal, S. C	30.12	765.0	64	17.8	89	NNE	20	8.9			10		Calm	0	0			Overcast	
Nipsic, N. 36° 31′, W. 2° 11′	30.23	767.8	71	21.7	66	ESE			3		2					Sm'h		Hazy	
Onward, Callao, Peru †	29.98	761.5	67	19.4	89	Calm			0		5		NNW			Long	W	Fair	
Palos, Yokohama, Japan	30.19	756.8	58	14.4	94	NE			1		10							Rainy	
Passaic, Washington, D. C	30.42	772.7	50	10.0	100	NE			1		8		SW					Cloudy	
Pensacola, Honolulu, Sandwich Ids	30.09	764.3	74	23.3	85	Calm			0		0			0	0	Sm'h		Clear	
Portsmouth, Potomac River	30.37	771.4	50	10.0	93	NE			2		5							Fair	
Powhatan, New York, N. Y	30.41	772.4	49	9.4	100	NNE			1		2		E					Hazy	
Quinnebaug, Gibraltar, Mediterranean	30.17	766.3	65	18.3	68	N			6		2		ESE					Clear	
Ranger, Acapulco, Mexico *	29.84	757.9	78	25.6	73	Calm			0		5?			0	0	Sm'h		Clear?	
Richmond, Nagasaki, Japan	29.90	759.4	68	20.0	100	W			1		10		NW	1.72	43.7			Raining	
Saratoga, Potomac River	30.35	770.9	51	10.6	65	ENE			2-3		8		NE	0	0			Cloudy	
Shenandoah, Montevideo, Uruguay *	30.06	763.5	52	11.1	73	WNW			2		2					Sm'h		Fair	
St. Louis, League Island, Pa	29.98	761.5	50	10.0	86	NE	6	2.7			5		NE	0	0			Fair	
Swatara, Shangbai, China † *	29.81	757.2	65	18.3	89	Calm			0		10		Calm					Raining	
Tennessee, Hampton Roads, Va	30.32	770.1	54	12.2	93	NE	14	6.3			8		E	0.01	0.3	Sm'h		Cloudy	
Ticonderoga, S. 39° 29′, W. 127° 27′	30.09	764.3	67	19.4	74	SSE			3		5		Calm	0	0	Long	SSW	Fair	
Trenton, Castellamare, Italy *	29.96	761.0	67	19.4	74	W			1		5			15 h'r	s mod	Sm'h		Fair	
Vandalia, Hampton Roads, Va. * †	30.48	774.2	58	14.4	88	NE			4		5		NE					Fair	
Wabash, Boston, Massachusetts	30.45	773.4	48	8.9	70	W	5	2.2			6?			0	0			Clear?	
Wachusetts, N. 34° 13′, W. 149° 35′	30.14	765.5	62	16.7	100	SE			3		10		E	4 h	ours	Mod.	E	Cloudy	
Wyoming, N. 20° 12′, W. 42° 47′	30.11	764.8	73	22.8	76	E			3		5		E			Sm h	ENE	Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 38° 22′, W. 144° 57′	30.25	768.3	54.5	12.5	62	W			1–2		10							Misty	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, Demerara, Brit. Guiana	29.96	761.0	81.5	27.5	87	NE			4		3							D. clouds	Capt. W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne, N. 27° 24′, W. 29° 27′	30.25	768.3	65.9	18.8	84	NE			4		10							Drizzling	Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbighshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 17° 15′, W. 39° 47′	30.07	763.8	76.5	24.7	73	ENE			4		3							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ S. 8° 33′, W. 14° 27′	29.98	751.5	81.0	27.2	77	SE			5		4							Misty	Capt. J. Raeburn, R.N.F.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, N. 49° 30′, W. 22° 09′ †	29.95	760.7	52.5	11.4	86	WSW			5		10					4	WNW	Misty	Capt. H. W. Dyke.
Barque Mertola, N. 40° 20′, W. 16° 02′	30.45	773.4	61.2	16.2	90	NE			3		2							D. clouds	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ S. 20° 22′, E. 0° 52′	30.14	765.5	72	22.2	76	ESE			4		8							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Soine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 16° 45′, E. 96° 14′	29.81	757.2	83.5	28.6	83	Calm			0		3							D. clouds	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton, ‡ N. 18° 04′, E. 39° 55′	29.78	756.4	90	32.2	73	ESE			3		0							Blue sky	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean																			
S. S. Circassian, N. 50° 48′, W. 32° 10′	30.07	763.8	47	8.3	77	WNW			6		10kn		WNW	8min	utes	3	NW	Raining	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Gallia, N. 40° 42′, W. 67° 33′ *	30.40	772.1	50	10.0		Calm			0		5		Calm	0	0	Sm'h		Fine	Capt. W. H. P. Hains.
S. S. Algeria																			Capt. W. Watson.
S. S. Scythia, N. 48° 16′, W. 33° 43′	29.78	756.4	53	11.7	80	W			7		5		W	Hea	vy	H'vy	W	Cloudy	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic N. 41° 46′, W. 61° 30′ †	30.29	769.4	45	7.8		W			3		0			0	0	Sm'h		Clear	Capt. Benj. Gleadell.
S. S. Germanic, N. 47° 23′, W. 34° 08′ †	30.13	765.3	47	8.3		W			4		5?		WNW	0	0	Sm'h		Clear?	Capt. Ch. W. Kennedy
S. S. Republic, New York, N. Y. †	30.45	773.4	51	10.6	86	SSW			2		5		S	0	0			Fair	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann, N. 47° 13′, W. 34° 11′	30.04	763.0	51	10.6		WNW			5		2		WNW	0	0	H'vy	WNW	Clear	Capt. H. Baur.
S. S. Köln, N. 52° 38′, E. 3° 40′	30.26	768.6	55.0	12.8	80	SW			4		0			Ha	ze	Mod.	SW	Fair	Capt. Th. Jüngst
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	o—10	o—10	o—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England	30.03	762.7	52	11.1	93	SSE			4		10		SSE					Rainy	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio																			W. Shackford, Chief Off'r
S. S. Pennsylvania, Philadelphia, Pa. *†	30.24	768.1	52	11.1	93	SE			1		2		SE					Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 28° 16′, E. 127° 09′ †	30.07	763.8	78	25.6	86	S			4		8		S	0	0	Mod.	S	Cloudy	Capt. H. Davison.
S. S. Gaelic, N. 37° 54′, E. 162° 23′ *†	30.36	771.1	60	15.6	?	Calm			0		8		NE			Sm'h	NE	Cloudy	Capt. W. H. Kidley.
S. S. Oceanic, N. 38° 35′, W. 125° 08′	30.12	765.0	56	13.3	81	NW			4		2		NW	0.03	0.8	3	W	D. clouds	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, N. 39° 05′, W. 123° 55′ †	30.05	763.3	54.0	12.2		NW			2		5		NW			Mod.	NW	Fair	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, San Francisco, Cal. †	30.02	762.5	55	12.8	87	SW			1		10		W					Foggy	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 33° 43′, W. 118° 32′ †	29.94	760.5	63	17.2	78	SE			6		8		SE	Drizzles		Long	SW	Cloudy	Geo. H. Harrison.
S. S. Senator, San Francisco, Cal. †	30.04	763.0	56	13.3	87	SW			1		2							Clear	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal. †	29.99	761.7	57	13.9	94	W			3		5		W					Fair	Capt. G. Debney.
S. S. Victoria, NewWestminster, Brit. Col †	29.99	761.7	52	11.1	86	Calm			0		2					Sm'h		Fair	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, Sydney, N. S. W	30.16	756.1	67	19.4	79	Calm			0		10		NE					Hazy	A. Bannerman, 2d Officer
S. S. City of New York, S. 34° —′, E. 167° 49′ †	30.48	774.2	70	21.1	100	N			3		10		N			Mod.	N	Cloudy	Wm. H. Hawes, 2d Officer.
S. S. City of Panama.																			Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China †	29.94	760.5	80	26.7	91	SSW			2		5		SW	0	0	Sm'h		Fair	Capt. G. G. Berry.
S. S. City of Sidney, N. 0° 50′, W. 165° 57′ †	29.84	757.9	81	27.2	74	E			2		10			0	0	Mod.	NE	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 37° 56′, W. 144° 00′ †	30.38	771.6	55	12.8	74	N			3		10		N			R'gh	N	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 35° 29′, W. 121° 40′ †	30.03	762.7	57	13.9	87	NW			3		5		NW	0	0	Mod.	NW	Fair	Capt. R. R. Searle.
S. S. Granada, N. 7° 05′, W. 80° 55′ †	29.90	759.4	79	25.1	91	SSE			3		10		SE	4 hours				Raining	Capt. M. Connolly.
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland																			Capt. W. Geo. Randle.
S. S. Vaderland, N. 43° 11′, W. 54° 55′	30.35	770.9				WNW			3		5		NW	0	0	Sm'h	NW	Fair	T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Savannah, Georgia	30.18	766.6	67	19.4	79	NNE					10k		NE	0	0			Cloudy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 27° 03′, W. 30° 43′ *†	30.30	769.6	70	21.1		E			8		5		E	0	0	Mod.	E	Fair	Capt R. F. Woodbury.
Brigantine George.																			Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Havre de Grace, Md. †	30.42	772.7	50	10.0	74	E	2	0.9		2c	5s			0	0			Cloudy	
Bark Sunbeam, N. 40° 26′, W. 23° 34′ †	30.42	772.7	64	17.8	83	SSE			4		2		SE	0	0	Sm'h	NW	Fair	Capt. Jos. Hand.

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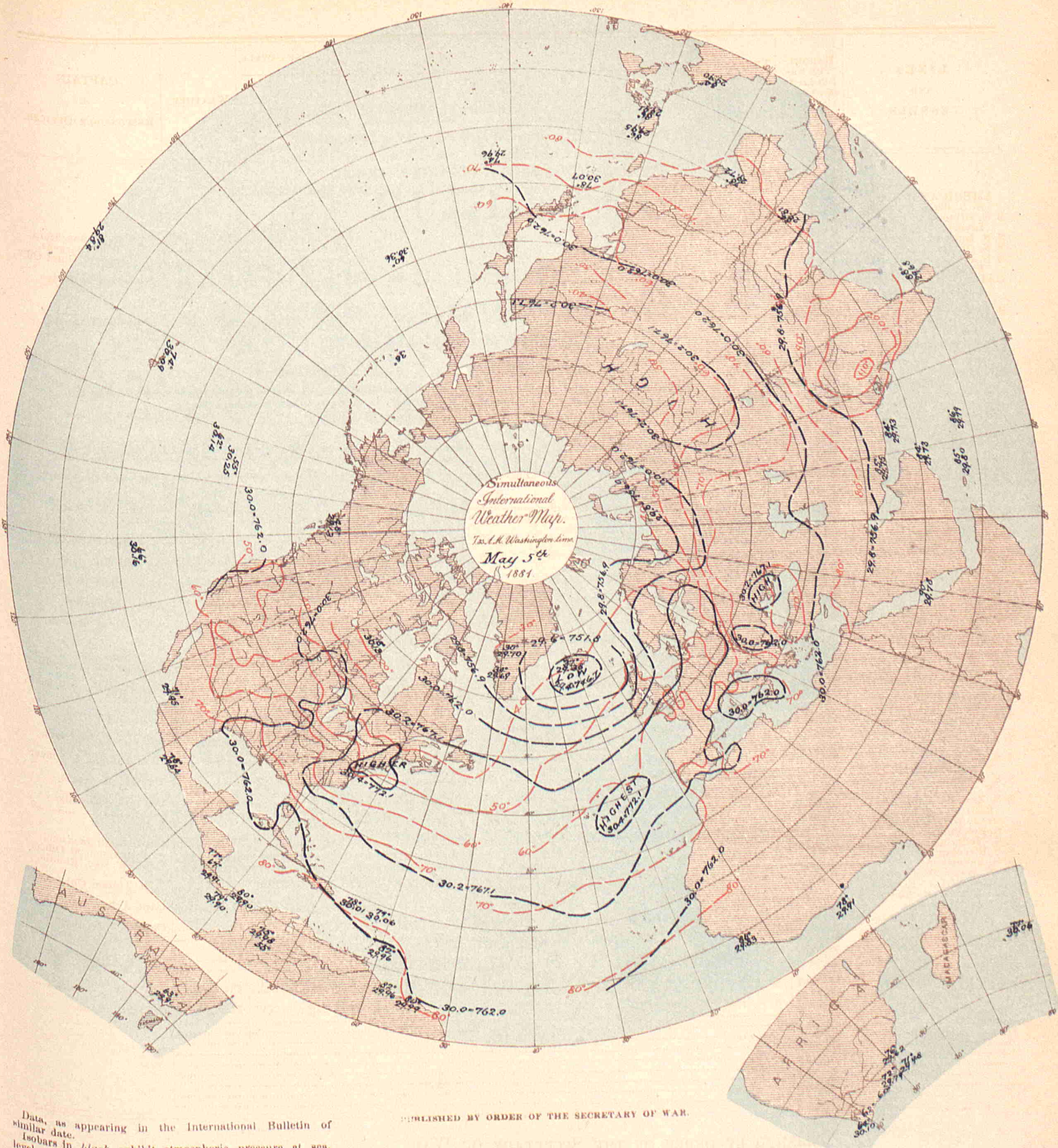
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 6, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instru-m'tal error and tem-perature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	TEMPERA-TURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direc-tion. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER	OBSERVERS.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco‡			29.97	761.2	69.4	20.8	80	NE			2		0			0	0	Clear	Dr. Ollive.
Nemours‡			30.22	767.5	70.2	21.2	91	W			4		0			0	0	Clear	Raynard.
Algiers‡			30.13	765.2	69.8	21.0	55	N			2		0			0	0	Clear	Nicolas.
La Calle‡			30.12	765.1	60.4	15.8	81	N			4		6			0.512	13.0	Cloudy	Fonfrède.
Tunis‡			30.13	765.2															Jacques.
Sfax‡			30.11	764.8															Gau.
Saida‡			30.24	768.0	70.3	21.3	88	NE			7		5			0	0	Cloudy	Dumas.
Tebessa‡			30.23	767.9	48.9	9.4	37	Calm			0		9			0.346	8.8	Very cloudy	Watrin.
Geriville‡																			Lonchamp.
Laghouat‡			30.19	766.9	66.9	19.4	22	NW			2		2			0	0	Fair	Herbin.
Biskra‡			30.15	765.8															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.82	757.4	29.91	759.7	64.0	17.8	82	NE	6	2.7			10			0.03	0.8	Dull	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.82	757.4	30.37	771.3	65.5	18.6	43	E			2		2			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.71	754.5	30.50	774.6	47.7	8.7	74	NNW	3.8	1.7			10			0.193	4.9		Dr. Wierzbicki.
Eperies	29.51	749.5	30.40	772.2	51.8	11.0	63	N			3		10S		S	0	0		Julius Mikolik.
Gratz‡	29.13	740.0	30.37	771.5	64.8	18.2	44	SE			2		0			0	0		Andreas Rospini.
Hermannstadt	28.81	731.7	30.19	766.7	75.6	24.2	23	SE			1		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	29.08	738.5	30.42	772.6	59.4	15.2	52	NNE			1		0			0	0		The Staff.
Lemberg	29.36	745.7	30.36	771.1	52.3	11.3	84	NW			2		10			Inap.	Inap.		Dr. T. Stanecki.
Pola	30.15	765.9	30.27	768.8	63.1	17.3	51	E			7		0			0	0		I. R. Hydrographic Office.
Szathmar	29.80	756.8	30.25	768.3	70.9	21.6	75	W			3		4			0	0		Beicht Peter, S. J.
Szegedin	30.02	762.5	30.30	769.6	63.3	17.4	73	NW			3		5			0	0		Karl Stancel.
Trieste	30.20	767.0	30.30	769.6	66.9	19.4	34	ENE			3		0			0	0	Clear	Secco.
Vienna	29.72	755.0	30.44	773.2	60.8	16.0	44	NNW			2		1			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maaseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed May 3, 1882.

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

BRITISH SERIES.

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

Aberdeen	29.73	755.1	29.83	757.7	56.5	13.6	41	WSW	32	14.3			3			0	0	Squally	W. Boswell.
Armagh, Observatory	29.85	758.2	30.08	764.0	56.2	13.4	67	WSW	17	7.6			7					Squally	S. Call.
Bidston, Liverpool Obs'y			30.16	766.1	52.8	11.6	91	W	21	9.4			10					Overcast	John Hartnup.
Bolton, Sharples	29.61	752.1	30.15	765.8	51.5	10.8	81	W	6	2.7			10					Raining	Thomas Mackereth.
Bradford, Yorkshire	29.74	755.4	30.13	765.3	57.2	14.0	75	W			1		5			0.03	0.8	D. clouds	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.94	760.5	29.97	761.2	84.0	28.9	60	NE			2		6					D. clouds	Corpl. J. Surgener,AH.C.
Cardington			30.21	767.3	68.4	20.2	58	W			2.0		8					Overcast	John McLaren.
Chatham, School M. E.	30.18	766.6	30.31	769.9	64.0	17.8	59	SW			3		3					D. clouds	Lance Cpl. R. Tear, R.E.
Falmouth, Observatory	30.14	765.5	30.37	771.4	56.4	13.6	86	WSW			3		10					Overcast	The Staff.
Fort Napier, Natal	27.65	702.3	29.86	758.4	60.1	15.6	55	E			1		5?					Overcast ?	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.59	751.6	29.82	757.4	89	31.7	88	NE			1		5					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			30.10	764.5	55	12.8	74	W			2		6			0	0	D. clouds	J. O'Donaghue.
Gibraltar, Mediterranean	30.18	765.6	30.23	767.8	68.4	20.2	73	ENE			7		2					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.76	755.9	29.97	761.2	54.0	12.2	60	SE			6		9			Blank		Gloomy	D. G. MacLean.
Greenwich, Royal Obs'y	30.12	765.0	30.28	769.1	63.8	17.7	68	SW			2		4					D. clouds	The Staff.
Guernsey	30.17	766.3	30.38	771.6	58	14.4	78	SW			2		5					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.26	768.6	30.29	769.4	63.6	17.6	70	SW	24	10.7			6					D. clouds	The Staff.
Leicester, Museum	29.94	760.5	30.20	767.1	60.2	15.7	76	SW			2		10					Overcast	J. E. Carryer.
Malta, Mediterranean	30.01	762.2	30.09	764.3	64.4	18.0	83	NE			1		4			0	0	D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas	29.88	758.9	29.93	760.2	83.0	28.3	76	S			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.66	753.4	30.17	766.3	62.4	16.9	73	SSW			5		8					D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	30.03	762.7	30.26	768.6	63.9	17.7	67	SW			6		7					Squally	The Staff.
Plymouth	30.28	769.1	30.35	770.9	58.0	14.4	83	SW			3		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.70	754.4	45.3	7.4	88	SW	22	9.8			3					Showery	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.05	763.3	30.12	765.0	59.4	15.2	78	NE			2		5					D. clouds	Serg't W. H. Lyne.
Sheffield	29.89	759.2	30.17	766.3	56.9	13.8	89	SW			2		10			0	0	Overcast	W. F. Cooper.
Silloth Rectory	30.06	763.5	30.09	764.3	55.9	13.3	67	W			5		4			0.030	0.8	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.14	765.5	53.9	12.2	88	WSW	23	10.3			10					Overcast	Rev. S. J. Perry.
Stratfield Turgiss	30.09	764.3	30.31	769.9	66.4	19.1	66	SW			3-4		9					Squally	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	30.36	771.1	30.39	771.9	60	15.6	82	W			4		10					Gloomy	W. Newcombe.
Valencia, Observatory	30.23	767.8	30.26	768.6	56.2	13.4	70	SW	27	12.1			4					D. clouds	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.24	768.1	30.29	769.4	41	5.0	66	SE	11	4.9		0	0			0	0	Clear	H. J. Cundall, C. E.
Chatham, N. B.*	30.18	766.6	30.24	768.1	40	4.4	76	E	2	0.9		5ck	0	Calm		0	0	Fair	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.07	763.8	30.10	764.5	42	5.6	89	NW	3	1.3			10n		Calm	0	0	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	28.90	734.0	29.71	754.6	57	13.9	60	S	19	8.5		5k	5n	W	W	0	0	Threatening	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.19	766.8	30.32	770.1	42	5.6	87	SE	6	2.7		0	0			0	0	Clear	A. Allison.
Hamilton. Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.61	752.1	29.95	760.7	44	6.7	89	SE	7	3.1			10s		Calm	0.03	0.8	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.79	756.7	29.99	761.7	49	9.4	63	S	13	5.8			10s			Inap.	Inap.	Light rain	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.28	743.7	29.97	761.2	47	8.3	96	NW	2	0.9			Fg		NW	0.31	7.9	Foggy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.27	743.4	29.97	761.2	48	8.9	100	N	3	1.3			Fg			0.41	10.4	Foggy	H. Morgan.
Port Stanley, Ontario	29.32	744.7	29.96	761.0	51	10.6	99	NW	1	0.4			Fg		NW	0.41	10.4	Foggy	M. Payne.
Quebec, Quebec*	29.73	755.1	30.06	763.5	44	6.7	76	NE			1		8n		NE	0	0	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.46	748.3	29.91	759.7	48	8.9	93	Calm	0	0			10s		SW	0.21	5.3	Cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.26	743.2	29.99	761.7	44	6.7	93	N	11	4.9			10k		N	0.20	5.1	Foggy	K. Stewart.
St. Andrews, N. B.	30.13	765.3	30.18	766.6	44	6.7	74	SW	2	0.9		0	Hz			0	0	Clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.33	770.4	30.37	771.4	35	1.7	95	Calm	0	0		5c	Fg	NW	NW	0.01	0.3	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.58	751.3	29.96	761.0	46	7.8	96	Calm	0	0			10n			0.10	2.5	Foggy	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.18	766.6	30.25	768.3	46	7.8	54	SE	4	1.8		8k	0	W		0	0	Cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	30.12	765.0	30.38	771.6	34	1.1	79	SE	1	0.4		5k	5s			0	0	Fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Cape St. Francis Lt. House	30.00	762.0			62.0	16.7	74	WSW	24.7	11.0		0	1k			0.185	4.7		John Duthie.
Cape Town, C. G. H. Obs'y	30.04	763.0	30.08	764.0	64.0	17.8		NNW	6.7	3.0		0	2ks			0.328	8.3		The Staff, for D. Gill.
Worcester *†	28.90	734.0			66.3	19.1	39	NW			1	0	0			0	0	Fine	C. Stokes.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.79	756.6	29.82	757.3	57.4	14.1	95	WNW	3.6	1.6			10n			0.622	15.8	Raining	M. Marc Dechevrens, S.J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.22	666.0	29.94	760.5	66.6	19.2	86	SE			2	7cs	1d			0.20	5.	Cloudy	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.17	766.2	30.21	767.4	55.4	13.0	63	SSW	18	8			8						Oversergent Fischer.
Faröe	30.13	765.4	30.15	765.9	47.5	8.6	95	WSW			6		10						Overloerer Lauridsen.
Godthaab, Greenland	29.90	759.5	29.95	760.6	32.2	0.1	79	NNE			2		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.34	745.3	29.39	746.4	41.4	5.2		NE			4		2						A. O. Thorlacius.
Thorshavn	29.35	745.5	29.39	746.4	49.3	9.6	73	SSW	36	16			5						Overloerer Bergh.
Vestervig	29.91	759.7	30.00	762.1	46.0	7.8	100	SSW			6		10						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.76	755.8	30.40	772.1	64.8	18.2	42	NNE			1	2ck	0	W	SW	0	0	Slightly cl'dy	M. Labroue, Director.
Alençon Normal School	29.86	758.4	30.41	772.4	58.6	14.8	68	SW			1		2ks		NW	0	0	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	30.13	765.2	30.38	771.7	64.2	17.9	57	W			2		ks		W	0	0		M. Klein, Commandaut
Avignon, Normal School	30.19	766.9	30.27	768.9	72.3	22.4	35	N			2		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.87	758.6	30.42	772.7	62.6	17.0	46	ESE			1	5c	0			0	0	Cloudy	M. Saillard, Director.
Beauvais, Normal School	30.18	766.5	30.44	773.2	67.1	19.5	51	W			1		8			0	0	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.52	749.7	30.40	772.2	62.6	17	52	SE			1				S	0	0		M. Gobin, Director.
Bordeaux, Observatory	30.15	765.9	30.42	772.6	63.7	17.6	53	N			1		8		E	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.88	759.0	30.43	772.9	66.2	19	38	N			1	c	0	N		0	0		M. Postel, Director.
Brest, Naval Observatory	30.21	767.3	30.45	773.5	60.8	16.0	81	SW			2		10		SW	0	0		M. de Rermaree, Dir.
Caen, Normal School	30.33	770.3	30.40	772.1	66.4	19.1	75	SW			1		2		SW	0	0	Slightly cl'dy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.04	762.9	30.35	771.0	70.9	21.6	69	Calm			0		0			0	0	Clear	M. Jadot, Director.
Charleville, Normal School	29.91	759.8	30.43	772.9	66.9	19.4	57	W			1		0			0	0	Clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.02	737.1	30.37	771.4	61.9	16.6	47	N			1		2k			0	0	¼ covered	M. Alluard, Director.
Cluny, Normal School	29.54	750.2	30.39	772.0	65.5	18.6	49	N			1		0			0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.56	750.8	30.44	773.1	65.5	18.6	42	WNW			1		2cs	WNW	WNW	0	0	Slightly cl'dy	Dr. Coulet, Director.
Gap, Normal School	27.72	704.0	30.22	767.5	65.1	18.4	46	NE			1					0	0	¼ covered	M. Jeangirard, Director.
Grénasque, du. Rhone	29.19	741.5	30.34	770.5	70.7	21.5	21	SW			2		2		SE	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.55	750.5	30.30	769.7	65.8	18.8	49	E			1	2ck	c			0	0	Slightly cl'dy	M. Ablard, Director.
Guéret, Normal School	28.83	732.3	30.41	772.4	62.6	17	52	E			2		s		E	0	0		M. Rivoire, Director.
Lamballe, Normal School	30.28	769.2	30.55	776.0	61.3	16.3	67	W			2				W	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.82	757.4	30.48	774.3	66.2	19	49	NW			1		8		E	0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.41	772.4	30.51	775.0	60.8	16.0	69	WSW			1		10		NW	0	0	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.30	744.3	30.36	771.2	63.5	17.5	49	N			1		0			0	0	Clear	M. André, Director.
Mans, Normal School	30.14	765.5	30.45	773.4	61.5	16.4	60	NNW			1		2		NW	0	0	Slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	29.97	761.3	30.24	768.1	71.1	21.7	39	W			1		1		NE	0	0		M. Stephan, Director.
Montlouis l'instituteur	25.09	637.2	30.32	770.2	51.8	11.0	41	NW	14.1	6.3			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	30.15	765.9	30.27	768.8	72.7	22.6	42	Calm			0		0			0	0	Clear	M. P. Galzin, Director.
Nancy, Normal School	29.65	753.2	30.41	772.5	64.8	18.2	33	WNW			1	2c	0			0	0	Slightly cl'dy	M. Hasse.
Nantes, Observatory	30.32	770.1	30.48	774.2	63.7	17.6	50	WSW			0-1		7k		NW	0	0		M. Larocque, Director.
Nice	30.20	767.0	30.23	767.9	64.8	18.2	77	SE			2		1	NW	SE	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	30.16	766.1	30.27	768.8	71.1	21.7	25	N	18.6	8.3			1		NW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.80	579.0			45.9	7.7							1		NE	0	0	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.29	743.9	30.34	770.6	68.0	20	34	N			4		0			0	0	Clear	M. Taillieu.
Puy de Dôme Obs'y, Summit	25.47	646.9			40.6	4.8	85	NE			4		5k		NE	0.035	0.9	½ covered	M. Alluard, Director
Rochefort, Naval Obs'y	30.43	772.9	30.46	773.7	69.8	21.0	58	W			1		5		N	0	0	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.25	768.4	30.47	773.8	65.5	18.6	63	WNW			1		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	28.16	715.3	30.28	769.2	64.0	17.8	55						1		N	0	0	Slightly cld'y	M. Richard, Director.
Rouen, Normal School	30.34	770.6	30.43	772.8	66.2	19	59	W			1		1		W	0	0	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	30.29	769.4	30.45	773.4	61.2	16.2	59	NW			1		8		NW	0	0	Very cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.28	769.0	30.44	773.2	66.4	19.1	44	SW			1		5	NNW	WNW	0	0		M. Renou, Director.
Toulouse, Observatory	29.69	754.2	30.43	772.8	66.7	19.3	45	NW			3					0	0		M. Baillaud, Director.
Tours	30.24	768.0	30.43	773.0	65.1	18.4	49	NW			1		8		N	0	0	¾ covered	M. de Tastes.
Versailles, Observatory	29.95	760.6	30.44	773.1	66.2	19.0	43	W			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.58	751.3	30.45	773.5	61.7	16.5	40	Calm			0	2cs	0			0	0		Prof. Dr. Hoh.
Berlin	30.21	767.4	30.38	771.7	66.2	19.0	41	W			1		8			0	0		Prof. Dr. Arndt.
Breslau	29.94	760.5	30.48	774.2	58.6	14.8	41	W			1		3			0.012	0.3		Royal University Obs'y.
Carlsruhe	29.98	761.6	30.41	772.5	64.0	17.8	49	SE			1		1			0	0		Albert Senz.
Cassel	29.65	753.1	30.37	771.3	67.3	19.6	40	SW			3		5	SW		0	0		Dr. H. Möhl.
Frankfort on the Main	30.08	764.0	30.44	773.1	67.1	19.5	38	SSW			1		1			0	0		Physical Society.
Friedrichshafen	28.94	735.1	30.37	771.5	60.8	16.0	43	NE			7		0			0	0		Wilhelm, Chief Tel.
Hamburg	30.22	767.5	30.29	769.3	61.9	16.6	68	SW			2		9			0.035	0.9		Dr. R. Kleeman.
Kiel	30.22	767.6	30.24	768.0	52.5	11.4	69	SW			2		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.99	761.7	30.41	772.3	64.8	18.2	43	SSW			3		6	SW		0	0		Prof. Dr. Bruhns.
Magdeburg	30.07	763.7	30.35	770.9	64.8	18.2	43	WSW			3		10ks			0	0		Dr. Assmann.
Memel	30.37	771.5	30.42	772.7	47.5	8.6	79	WNW			3-4		0						Reinbrecht & Issermann.
Munich	28.59	726.2	30.48	774.2	59.9	15.5	29	E			2		1	Calm		0.028	0.7		Central Station.
Neufahrwasser	30.38	771.7	30.40	772.1	53.6	12.0	57	E			2		2	WSW		0	0		A. Lothes.
Neustadt, Palatinate	29.91	759.6	30.44	773.2	65.7	18.7	46	S			1		2			0	0		Dickuether.
Stuttgart	29.47	748.4	30.35	771.0	63.1	17.3	37	NE			1		0			0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.92	734.5	30.42	772.7	60.4	15.8	50	W			2		2	SW		0	0		Prof. Kemlein.
Wustrow	30.28	769.1	30.30	769.7	53.1	11.7	99	SW			3		5s			0	0		Prof. J. Reimer.

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

GREEK SERIES.

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

Athens	29.67	753.7	30.05	763.3	80.1	26.7		S			1.0		Mist					Misty.	A. Wourlisch

INDIAN SERIES.

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

Kurrachee	29.72	754.9	29.77	756.1	96.5	35.8	49	W	25.0	11.2			0			0	0	Misty.	
Deesa	29.21	741.8	29.65	753.1	112.6	44.8	11	NNE	6.5	2.9			0			0	0	Blue sky.	
Bombay	29.70	754.3	29.73	755.2	88.9	31.6	71	WSW	6.0	2.7			0			0	0	Blue sky.	
Poona, Yarrowda.	27.88	708.2	29.65	753.1	102.7	39.3	17	NNE	19.0	8.5			2	Calm		0	0	D. clouds.	
Belgaum	27.26	692.4	29.76	755.8	84.0	28.9	61	SW	18.0	8.0			8	E		0	0	Misty.	
Lahore	28.93	734.8	29.63	752.6	106.3	41.3	12	NW.	2.0	0.9			0			0	0	Blue sky.	
Roorkee	28.80	731.4	29.66	753.2	100.3	37.9	26	Calm	4.5	2.0			0			0	0		
Agra	29.12	739.6	29.66	753.2	105.1	40.6	39	SW	4.0	1.8			0			0	0		
Nagpur	28.66	728.0	29.66	753.3	105.2	40.7	5	SE	3.8	1.7			0			0	0		
Jubbulpore	28.38	720.9	29.68	753.8	101.8	38.8	8	Calm	1.1	0.5			0			0	0	Blue sky.	
Lucknow	29.34	745.3	29.71	754.5	99.0	37.2	31	Calm	1.7	0.8			0			0	0	Blue sky.	
Allahabad	29.39	746.5	29.69	754.1	101.4	38.6	16	Calm	1.9	0.8			0			0	0	Blue sky.	
Patna	29.58	751.4	29.76	755.9	92.9	33.8	42	E	5.0	2.2			0			0	0	Blue sky.	
Hazaribagh	27.76	705.0	29.70	754.5	93.0	33.9	27	N	8.1	3.6			2		SW	0	0		
Cuttack	29.69	754.1	29.77	756.3	91.3	32.9	45	SSE	1.3	0.6			0			0	0	Blue sky.	
Calcutta, Alipore	29.76	756.0	29.78	756.5	88.8	31.6	44	E	2.0	0.9			0			0	0	Blue sky.	
Dhubri	29.68	753.7	29.80	756.8	83.0	28.5	64	Calm	2.8	1.2			0			0	0	Blue sky.	
Chittagong	29.75	755.7	29.84	758.0	77.4	25.2	80	NW	4.0	1.8			2			0	0	Blue sky.	
Sibsagar	29.45	747.9	29.78	756.4	82.6	28.1	73	ENE	2.7	1.2			0			0	0	Blue sky.	
Zanzibar, Africa			29.92	760.0	81.5	27.5	77	SW	7	3.1			6		SE	1.14	29.0	D. clouds.	

ITALIAN SERIES.

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

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

Udine	29.91	759.6	30.32	770.0	69.1	20.6	36	SE	0.7	0.3			0			0	0		Prof. Giovanni Cloding.
Milan	29.79	756.7	30.30	769.7	67.8	19.9	47	SSE	10.5	4.7			5			0	0		Prof. Schiaparelli.
Padua	30.23	767.8	30.34	770.6	64.9	18.3	53	ENE	8.1	3.6			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.40	746.7	30.30	769.5	65.7	18.7	51	SSW	2.5	1.1			5		N	0	0		Prof. P. F. Denza.
Genoa	30.07	763.7	30.26	768.6	68.9	20.5	40	NE.	4.3	1.9			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.40	721.4	30.31	769.8	61.9	16.6	51	NW			4		1		N	0	0		Prof. D. C. Bruno.
Pesaro	30.25	768.4	30.30	769.6	59.7	15.4	66	NE	8.7	3.9			8		ENE	0	0		Prof. Luigi Guidi.
Florence	30.00	762.0	30.25	768.4	65.1	18.4	48	NE			6		7		NE	0.118	3.0		Prof. Costantino Pitter.
Leghorn	30.14	765.5	30.22	767.7	67.8	19.9	50	ESE	6.3	2.8			4			0	0		Prof. P. Monte.
Rome	29.94	760.4	30.11	764.8	68.4	20.2	42	ESE	11.2	5.0			2			0.512	13.0		Prof. P. S. Ferrari.
Lecce	29.85	758.2	30.10	764.6	68.0	20.0	55	NNW	9.4	4.2			5		NE	0.012	0.3		Prof. C. de Giorgi.
Cosenza	29.21	741.8	30.08	764.1	64.4	18.0	71	NNW	2.5	1.1			7		NW	0	0		Prof. D. Conti.
Cagliari	29.84	757.9	30.03	762.8	65.5	18.6	57	NE			2		8		E	0.146	3.7		Prof. A. Pacinotti.
Palermo	29.82	757.4	30.07	763.8	66.2	19.0	44	NW	0.7	0.3			10			0.138	3.5		Prof. G. Cincciatore.
Syracuse	30.03	762.7	30.07	763.8	68.4	20.2	86	E	1.8	0.8			3		SW	0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.54	750.4	30.06	763.4	70.2	21.2	57	S	1.8	0.8			8		S	0.012	0.3		Prof. F. Brioschi.
Stelvio	22.46	570.6			39.6	4.2	34	E			2	10S	0			0	0	Clear	Prof. P. F. Denza.
Valdobbia	22.44	569.9			41.9	5.5	64	SE			2		0			0	0	Misty.	Prof. P. F. Denza.

JAPANESE SERIES.

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

Hiroshima, I. M. Obs'y	29.63	752.6	29.65	753.1	61.0	16.1	99	WSW	1.1	0.5			10n			2.340	59.4	Raining	K. Sasaki.
Kioto	29.49	749.0	29.66	753.3	66.1	18.9	95	SSW					10n			2.390	60.7	Raining	M. Tojima.
Nagasaki, I. M. Obs'y	29.45	748.0	29.65	753.1	65.9	18.8	98	SSW	14.3	6.4			10n			1.560	39.6	Raining	S. Takehayashi.
Tokei Obs'y, Yeddo	29.66	753.3	29.73	755.1	65.7	18.7	96	S	18.6	8.3			10n		S	0.170	4.3	Raining	The Staff.
Wakayama	29.62	752.3	29.67	753.6	69.6	20.9	90	SW	29.6	13.2			10n		SW	1.557	39.6	Raining	Y. Kuwamuca.

MAURITIUS SERIES.

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

Mauritius Obs'y, Mauritius	29.90	759.4	30.09	764.2	77.8	25.4	69	E	17.0	7.6		0	4		E	0.41	10.4	Squally	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

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

Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez
Leon																			Prof. M. Leal.
Mazatlan	29.67	753.6	29.93	760.1	71.9	21.7	92	ENE	0.9	0.4		10S	0			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.

NETHERLANDS SERIES.

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

Flushing	30.38	771.6	30.38	771.6	60.1	15.6		W			4					0	0		
Groningen	30.24	768.0	30.29	769.4	54.9	12.7		SW			5					0	0		
Helder	30.25	768.3	30.25	768.3	52.0	11.1		SSW			5					0	0		
Hellevoetsluis	30.35	770.9	30.35	770.9	55.9	13.3	86	SW			3					0	0		
Utrecht	30.32	770.1	30.37	771.3	57.9	14.4	81	SW			4		10			0	0	Dull	H. van der Brink

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.70	754.4	29.76	756.0	46.0	7.8	92	S	14.8	6.6	.....	.....	10	.....	.....	0.685	17.4	Raining.....	
Christiania	29.72	754.8	29.87	758.6	42.3	5.7	96	SSW	9	4	.....	.....	10	.....	.....	0.358	9.1	Raining	
Gjæsvær	29.89	759.2	29.91	759.8	34.3	1.3	.....	SW	.....	.....	2	.....	10	.....	.....	.....	.....	Snowing.....	
Lodingen	29.75	755.6	29.80	756.8	40.8	4.9	57	NE	.....	.....	4	.....	1	.....	.....	0	0	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.13	765.3	30.28	769.2	63.7	17.6	80	SSE	9.8	4.4	.....	.....	4	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.21	741.9	30.19	766.7	74.8	23.8	30	NNE	6.9	3.1	.....	.....	0	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.00	761.9	30.08	764.0	76.8	24.9	29	NE	3.8	1.7	.....	.....	0	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.88	759.0	30.23	767.9	75.6	24.2	34	NE	15.4	6.9	.....	.....	0	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.26	758.5	30.33	770.9	66.2	19.0	64	SE	3.8	1.7	.....	.....	3	.....	.....	0	0	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	30.33	770.4	30.35	770.9	44.4	6.9	70	WSW	2	1	.....	.....	8ks	.....	.....	.....	.....	.....	Capt. Sseliwerstow.
Astrakhan	30.28	768.7	30.18	766.6	72.5	22.5	41	N	9	4	.....	.....	7ks	.....	.....	.....	.....	.....	Capt. Wisganow.
Barnaul	29.80	756.8	30.30	769.5	54.1	12.3	21	SW	2	1	.....	.....	9	.....	.....	.....	.....	Light clouds	Meteorological Obs'y.
Dorpat	30.10	764.6	30.35	771.0	38.1	3.4	93	Calm	0	0	.....	.....	10n	.....	.....	.....	.....	Light rain...	Observatory.
Ekaterinburg	29.19	741.3	30.11	764.9	73.6	23.1	31	W	13	6	.....	.....	8k;ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Kasan	29.97	761.2	30.23	767.8	74.8	23.8	35	SW	2	1	.....	7c	0	.....	.....	.....	.....	.....	Observatory.
Kertch	30.22	767.6	30.24	768.1	67.1	19.5	73	NE	4	2	.....	.....	0	.....	.....	.....	.....	.....	Lagorio & Sastyrez.
Kieff	29.63	752.6	30.24	768.1	74.3	23.5	34	SSW	9	4	.....	ck	1ks	.....	.....	.....	.....	.....	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.98	761.5	30.18	766.5	77.7	25.4	32	NNE	9	4	.....	.....	5	.....	.....	.....	.....	.....	Meteorological Obs'y.
Moscow	29.72	754.8	30.24	768.2	73.2	22.9	53	S	4	2	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.78	705.6	30.13	765.2	35.6	2.0	30	NNE	9	4	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaiev	30.24	768.0	30.31	769.8	78.8	26.0	44	NE	9	4	.....	.....	6ks	.....	.....	.....	.....	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lieut. Iwanow.
Pekin, China	29.68	753.8	29.82	757.4	61.0	16.1	70	Calm	0	0	.....	.....	1k	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	30.30	769.7	30.32	770.1	42.8	6.0	70	NW	7	3	.....	.....	10ks;n	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.69	728.6	30.22	767.5	72.1	22.3	53	Calm	0	0	.....	.....	4	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.77	730.7	30.15	765.7	72.1	22.3	41	SE	9	4	.....	.....	8ks	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	30.03	762.8	30.47	773.8	48.6	9.2	72	NW	7	3	.....	.....	10ks	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.93	760.1	30.35	771.0	50.5	10.3	76	NW	4	2	.....	.....	9	.....	.....	.....	.....	.....	Berg, Assistant.
Yeniseisk	29.95	760.6	30.23	767.9	50.7	10.4	31	SW	4	2	.....	.....	0	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	29.99	761.7	56.0	13.3	51	W	.....	.....	7	.....	5k	.....	.....	0.02	0.5	Cloudy.....	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.76	755.9	50	10.0	100	SW	.....	.....	7	.....	10	.....	.....	0.1	3.	Overcast.....	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	29.59	751.6	.....	.....	.....	W	.....	.....	4	2	4	W	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.20	767.0	30.30	769.7	66.2	19	57	SE	3.4	1.5	.....	.....	0	.....	.....	0	0	Clear.....	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.36	771.1	30.41	772.5	64.0	17.8	69	N	18.1	8.1	.....	1	8	.....	NE	0	0	Almost cov'd	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.39	695.8	.....	.....	54.0	12.2	70	NE	8.1	3.6	.....	0	0	.....	.....	0	0	Clear.....	Domingo Martin.
Madrid, Royal Obs'y	28.03	711.9	30.21	767.2	71.2	21.8	59	NE	5.8	2.6	.....	0	0	.....	.....	0	0	Clear.....	The Staff.
Murcia, Met. Obs'y	30.10	764.5	30.24	768.2	75.3	24.6	38	ENE	3.1	1.4	.....	0	0	.....	.....	0	0	Clear.....	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.37	746.1	30.26	768.5	71.6	22.0	53	NE	8.7	3.9	.....	.....	0	.....	.....	0	0	Clear.....	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.88	759.0	29.95	760.6	74.3	23.5	82	SE	1.1	0.5	.....	0	0	.....	.....	0	0	Clear.....	Benito Vines, S. J.
Manilla, Philippine Islands	29.87	758.6	29.92	759.9	84.8	29.3	79	SSW	7.0	3.2	.....	0	7k	.....	E	0	0	Covered.....	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.06	763.4	30.15	765.9	73.0	22.8	26	ENE	22.3	9.9	.....	0	0	.....	.....	0	0	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.89	759.2	29.98	761.5	79.2	26.2	82	S	0	0	.....	10s	5k	.....	.....	0.039	1.0	Clear.....	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.79	756.6	29.93	760.3	83.9	28.8	69	N	4.1	2.1	.....	.....	9ks	.....	NW	0	0	Covered.....	José L. Fastovrn.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.03	762.7	30.07	763.7	37.0	2.8	79	S	.....	.....	4	.....	10	.....	.....	0.421	10.7	.....	
Umea	30.00	761.9	30.01	762.2	34.5	1.4	96	SW	.....	.....	2	.....	10	.....	.....	0.465	11.8	.....	
Hernosand	29.96	760.9	30.01	762.2	36.9	2.7	84	S	.....	.....	4	.....	10	.....	.....	0	0	.....	
Stockholm	29.97	761.1	30.14	765.6	47.8	8.8	58	SW	.....	.....	6	.....	2	.....	.....	0	0	.....	
Wisby	30.13	765.4	30.19	766.9	52.9	11.6	59	WSW	.....	.....	4	.....	0	.....	.....	0	0	.....	
Sub-Series.																			
Upsala	30.00	762.0	30.09	764.2	49.8	9.9	64	SSW	19.2	8.6	.....	.....	10	.....	SW	0.059	1.5	.....	Nils Ekholm
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Observatory.
Zurich	28.74	729.9	30.35	770.8	63.0	17.2	41	E	.....	.....	4-6	.....	0	.....	.....	0	0	Clear.....	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —— mm.; Ther. ——° cent.; Hum. —— per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.20	767.1	58.1	14.5	69	NNE	19	8.5	.....	.....	8	.....	N	0	0	.....	The Observatory.
Valona	.....	.....	30.15	765.7	72.5	22.5	.....	W	.....	.....	1	.....	2	.....	.....	0	0	Slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.77	756.2	86.9	30.5	31?	NE	.....	.....	1	7ck	0	SW	.....	0	0	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instru-m'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.02	762.5	30.10	764.5	49.3	9.6	85	S	4	1.8			10n			0.06	1.5	Light rain	
Alpena, Michigan	29.39	746.5	30.05	763.3	38	3.3	100	NW	6	2.7			Fg			0.11	2.8	Light fog	
Atlanta, Georgia	28.94	735.1	30.08	764.0	58.2	14.6	87	E	3	1.3		2c	0	Calm		0	0	Clear	
Atlantic City, New Jersey	30.04	763.0	30.06	763.5	51	10.6	100	NE	8	3.6			10s		Calm	0.02	0.5	Cloudy	
Attou Id., Alaska ‡	30.23	767.8			34	1.1	100	SW	12	5.4		0	0			0	0	Clear	
Augusta, Georgia	29.93	760.2	30.13	765.3	60.4	15.8	88	NW	1	0.4		0	Fg			0	0	Clear	
Baltimore, Maryland	30.03	762.7	30.08	764.0	52	11.1	86	E	3	1.3			10n			0.03	0.8	Light rain	
Barnegat, New Jersey	30.02	762.5	30.04	763.0	49	9.4	100	NE	12	5.4			10n		NE	0.06	1.5	Light rain	
Bismarck, Dakota	27.86	707.6	29.71	754.6	58	14.4	81	Calm	0	0		5ck	0	SW		0	0	Fair	
Boise City, Idaho	27.11	688.6	30.07	763.8	41.2	5.1	82	Calm	0	0		0	0			0	0	Clear	
Boston, Massachusetts	30.01	762.2	30.16	766.1	45.0	7.2	92	SE	6	2.7			10n		SW	0.05	1.3	Light rain	
Brackettville, Texas	28.68	728.5	29.71	754.6	62	16.7	94	E	1	0.4			10s			0.73	18.5	Cloudy	
Brownsville, Texas	29.75	755.6	29.80	756.9	74	23.3	81	E	12	5.4			10s		E	0	0	Threatening	
Buffalo, New York	29.23	742.4	29.93	760.2	46.5	8.1	96	SW	3	1.3			Fg			0.36	9.1	Dense fog	
Burlington, Vermont	29.75	755.6	30.04	763.0	49.0	9.4	57	S	18	8.0			10n		S	Inap.	Inap.	Light rain	
Cairo, Illinois	29.67	753.6	30.05	763.3	65	18.3	89	Calm	0	0		0	8s		SW	0.64	16.3	Fair	
Campo, California	27.34	694.4	29.91	759.7	50	10.0	79	SW	4	1.8			10s		W	0	0	Cloudy	
Camp Thomas, Arizona	27.08	687.8			53	11.7	54	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	30.05	763.3	30.07	763.8	56	13.3	94	NW	3	1.3			Fg			0.06	1.5	Light fog	
Cape May, New Jersey	30.00	762.0	30.03	762.7	52	11.1	93	NE	4	1.8			10s			0.01	0.3	Threatening	
Castroville, Texas	29.09	738.9	29.78	756.4	63	17.2	89	SW	3	1.3			10n			0.95	24.1	Light rain	
Cedar Keys, Florida	30.01	762.2	30.03	762.7	68	20.0	84	N	8	3.6		0	5ks		E	Inap.	Inap.	Fair	
Champaign, Illinois	29.20	741.7	29.99	761.7	56.3	13.5	94	E	4	1.8			Fg			0.03	0.8	Foggy	
Charleston, S. Carolina	30.01	762.2	30.07	763.8	66	18.9	84	NE	6	2.7		0	0			0	0	Clear	
Charlotte, N. Carolina	29.23	742.4	30.02	762.5	64.6	18.1	49	N	1	0.4		5c	Hz			0	0	Fair	
Chattanooga, Tennessee	29.30	744.2	30.10	764.5	62	16.7	83	S	3	1.3		8ck	2ks,fg	S	S;C	0	0	Cloudy	
Cheyenne, Wyoming	23.89	606.8	29.83	757.7	44	6.7	60	Calm	0	0		0	0			0	0	Clear	
Chicago, Illinois	29.33	745.0	30.03	762.7	42.3	5.7	91	E	4	1.8			Fg			0.01	0.3	Dense fog	
Chincoteague, Virginia	30.04	763.0	30.06	763.5	54	12.2	100	S	3	1.3			Fg		Calm	0.01	0.3	Dense fog	
Cincinnati, Ohio	29.38	746.2	30.02	762.5	64	17.8	89	SW	4	1.8			10ks		W	0.42	10.7	Cloudy	
Cleveland, Ohio	29.28	743.7	30.00	762.0	48.5	9.2	100	W	4	1.8			Fg			0.14	3.6	Light rain	
Coleman City, Texas	28.06	712.7	29.68	753.9	60	15.6	94	S	4	1.8		0	8s		S	0.41	10.4	Cloudy	
Columbus, Ohio	29.16	740.7	29.98	761.5	61	16.1	82	NW	6	2.7		0	0			0.62	15.8	Clear	
Concho, Texas	27.94	709.7	29.57	751.1	61	16.1	94	Calm	0	0			10s		S	0.45	11.4	Cloudy	
Corsicana, Texas	29.44	747.8	29.90	759.4	65	18.3	94	SE	4	1.8			10s			0.03	0.8	Cloudy	
Davenport, Iowa	29.38	746.2	30.01	762.2	58	14.4	82	SE	2	0.9		0	Fg		Calm	0	0	Clear	
Dayton, Washington T'y	28.27	718.0	29.94	760.5	45	7.2	60	S	8	3.6			10s		Calm	0.04	1.0	Cloudy	
Deadwood, Dakota	25.17	639.3			53	11.7	73	S	5	2.2		5cs	0			0	0	Fair	
Decatur, Texas	28.72	729.5	29.86	758.4	65	18.3	94	SE	8	3.6			Fg			0.84	21.3	Dense fog	
Delaware Breakwater, Del.	30.04	763.0	30.06	763.5	52	11.1	93	NE	5	2.2			Fg			0	0	Dense fog	
Denison, Texas	29.11	739.4	29.88	758.9	68	20.0	90	S	5	2.2		0	5n		S	1.33	33.8	Thund'r st'm	
Denver, Colorado	24.60	624.8	29.82	757.4	54.2	12.3	55	S	2	0.9		0	0			0	0	Clear	
Des Moines, Iowa	29.09	738.9	29.95	760.7	57	13.9	87	NE	2	0.9		0	0			0	0	Clear	
Detroit, Michigan	29.30	744.2	29.99	761.7	54.0	12.2	74	NW	5	2.2		0	Hz			0.56	14.2	Clear	
Dodge City, Kansas	27.31	693.7	29.54	750.3	57	13.9	81	SW	3	1.3		2cs	0			0	0	Clear	
Dubuque, Iowa	29.31	744.5	30.00	762.0	54.2	12.3	74	Calm	0	0		0	Hz			0	0	Dense haze	
Duluth, Minnesota	29.26	743.2	29.94	760.5	43	6.1	83	Calm	0	0		0	5s;fg			0	0	Fair	
Eagle Pass, Texas	29.08	738.6	29.78	756.4	66	18.9	89	Calm	0	0			10s		Calm	0.24	6.1	Cloudy	
Eagle Rock, Idaho	25.09	637.3	29.74	755.4	48	8.9	70	SW	22	9.8			10s		SW	0	0	Cloudy	
Eastport, Maine	30.13	765.3	30.20	767.1	46	7.8	69	S	8	3.6		5c	Hz			0	0	Fair	
El Paso, Texas	25.10	662.9			57	13.9	58	NE	1	0.4		0	1s			0	0	Clear	
Erie, Pennsylvania	29.25	742.9	29.97	761.2	42	5.6	91	W	9	4.0			Fg			0.16	4.1	Dense fog	
Escanaba, Michigan	29.38	746.2	30.05	763.3	40	4.4	82	Calm	0	0		0	0			0.02	0.5	Clear	
Florence, Arizona	28.27	718.0	29.87	758.7	60	15.6	44	NE	2	0.9		0	0			0	0	Clear	
Fort Apache, Arizona	24.93	633.2	30.38	771.6	42	5.6	50	E	4	1.8		0	1s		Calm	0	0	Clear	
Fort Assinnatoine, Montana	27.00	685.8			45	7.2	53	SW	6	2.7		0	0			0	0	Clear	
Fort Bennett, Dakota	28.09	713.5			60	15.6	77	SW	2	0.9		8c;k	0	SW		0	0	Fair	
Fort Benton, Montana																			
Fort Buford, Dakota	27.73	704.3	29.53	750.0	48	8.9	100	Calm	0	0			Fg			0.04	1.0	Foggy	
Fort Custer, Montana	26.60	675.6			51	10.6	72	NW	6	2.7			10s		NW	0	0	Cloudy	
Fort Davis, Texas	25.11	637.8	30.07	763.8	52	11.1	60	SW	1	0.4		0	0			1.15	29.2	Clear	
Fort Elliott, Texas	27.16	689.9	29.38	746.2	57	13.9	94	SE	4	1.8			10s		SE	0	0	Threatening	
Fort Gibson, Indian T'y	29.38	746.2	29.90	759.4	68	20.0	79	E	2	0.9		5cs	0	S		0	0	Fair	
Fort Grant, Arizona	25.13	638.3	29.93	760.2	59	15.0	23	NW	5	2.2		0	0			0	0	Clear	
Fort Griffin, Texas	28.50	723.9	29.72	754.9	67.0	19.4	84	E	6	2.7			10s			0.22	5.6	Cloudy	
Fort Keogh, Montana	27.25	692.1			54	12.2	86	W	4	1.8			10n			0.02	0.5	Light rain	
Fort Macon, North Carolina	30.08	764.0	30.09	764.3	59	15.0	100	N	4	1.8			Fg		Calm	0	0	Dense fog	
Fort McKavett, Texas	27.61	701.3	29.47	748.5	60.7	15.9	82	S	4	1.8			10n			1.15	29.2	Light rain	
Fort Missoula, Montana	25.66	677.2			46	7.8	62	SW	4	1.8			10s			Inap.	Inap.	Threatening	
Fort St. Michaels																			
Fort Shaw, Montana	26.19	665.2			45	7.2	61	W	12	5.4		0	0			0	0	Clear	
Fort Sill, Indian Territory	28.66	728.0	29.73	755.1	64	17.8	94	E	8	3.6			10s		SE	0.01	0.3	Cloudy	
Fort Stevenson, Dakota	27.83	706.9			57	13.9	87	N	6	2.7		0	2s		N	0	0	Clear	
Fort Verde, Arizona					55.2	12.9	22	S			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.13	714.5	29.66	753.4	60	15.6	94	SW	5	2.2			10ks		SW	0.46	11.7	Cloudy	
Galveston, Texas	29.86	758.4	29.90	759.4	73	22.8	85	SE	9	4.0		5cs	5ks		S	0	0	Threatening	
Grand Haven, Michigan	29.38	746.2	30.03	762.7	50	10.0	86	NW	2	0.9		0	0			0	0	Clear	
Hatteras, North Carolina	30.05	763.3	30.07	763.8	61	16.1	100	N	6	2.7			Fg		Calm	0.50	12.7	Dense fog	
Helena, Montana	25.63	651.0			58	14.4	42	N	4	1.8		1c	0	Calm		0	0	Fair	
Henrietta, Texas	28.85	732.8	29.75	755.6	65	18.3	89	E	5	2.2			10s			0.18	4.6	Cloudy	
Indianapolis, Indiana	29.23	742.4	29.99	761.7	59.5	15.3	94	N	3	1.3			Fg		Calm	0.37	9.4	Dense fog	
Indianola, Texas	29.86	758.4	29.89	759.2	69.1	20.6	85	SE	21	9.4			10n;s		SE;C	0.15	3.8	Light rain	
Jacksboro, Texas	28.70	729.0	29.78	756.4	63	17.2	94	E	7	3.1			10ks		SE	0.26	6.6	Cloudy	
Jacksonville, Florida	29.98	761.5	30.03	762.7	71	21.7	85	NE	8	3.6		0	0			0.05	1.3	Clear	
Keokuk, Iowa	29.34	745.2	29.98	761.5	59.2	15.1	90	SE	4	1.8		2cs	Fg			0	0	Light fog	
Key West, Florida	29.93	760.2	29.96	761.0	77.8	25.4	78	N	4	1.8		2k	0			0	0	Fair	
Kittyhawk, North Carolina	30.09	764.3	30.12	765.0	57	13.9	100	NW	8	3.6			10s			0.01	0.3	Foggy	
Knoxville, Tennessee	29.11	739.4	30.10	764.5	61.5	16.4	85	W	6	2.7		1ck	7s	Calm	W	0	0	Cloudy	
La Crosse, Wisconsin	29.23	742.4	29.95	760.7	57	13.9	75	S	5	2.2		0	0			0	0	Clear	
La Mesilla, New Mexico	25.97	659.6	30.12	765.0	50	10.0	72	Calm	0	0		0	1ks			0	0	Clear	
Laredo, Texas	29.41	747.0	29.74	755.4	69	20.6	95	Calm	0	0		0	8s		SE	1.15	29.2	Fair	
Leavenworth, Kansas	29.07	738.4	29.88	758.9	65	18.3	78	SE	1	0.4		4k	0	S		0	0	Fair	
Lewiston, Idaho	29.13	739.9	29.77	756.1	51	10.6	48	W	16	7.2			10s		W	0	0	Cloudy	
Little Rock, Arkansas	29.68	753.9	29.99	761.7	68	20.0	95	Calm	0	0		1ck	5ks			0	0	Fair	
Los Angeles, California	29.54	750.3	29.90	759.4	56.3	13.5	87	Calm	0	0		0	1s		Calm	Inap.	Inap.	Clear	
Louisville, Kentucky	29.46	748.3	30.00	762.0	64.0	17.8	89	W	5	2.2			10s			0.31	7.9	Cloudy	
Lynchburg, Virginia	29.37	746.0	30.04	763.0	59	15.0	82	Calm	0	0		10k	0			0	0	Cloudy	
Madison, Wisconsin	28.99	736.3	29.96	761.0	54	12.2	87	W	1	0.4		0	Fg		Calm	0	0	Clear	
Marquette, Michigan	29.28	743.7	29.98	761.5	56	13.3	74	SW	10	4.5		0	0			0.15	3.8	Clear	
Mason, Texas	28.24	717.3	29.96	761.0	61	16.1	88	W	1	0.4		1cs	5s	NE	W	0.24	6.1	Cloudy	
Memphis, Tennessee	29.71	754.6	30.05	763.3	67	19.4	89	Calm	0	0		2cs	5s	Calm	SE	0.28	7.1	Fair	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.27	743.4	30.00	762.0	47	8.3	85	E	1	0.4			Fg			Inap.	Inap.	Dense fog.	
Mobile, Alabama	29.98	761.5	30.05	763.3	71.0	21.7	75	E	6	2.7		5cs	0					Fair	
Montgomery, Alabama	29.86	758.4	30.10	764.5	64	17.8	78	E	3	1.3		5c	0					Fair	
Moorhead, Minnesota	28.76	730.5	29.68	753.9	54	12.2	87	SE	20	8.9		2k	IIz					Fair	
Morgantown, W. Virginia	28.99	736.3	29.96	761.0	59	15.0	88	SW	1	0.4			10n		SW	1.44	36.6	Light rain	
Mt. Washington, N. H.	23.75	603.2	30.11	764.8	26	— 3.3	76	SW	58	25.9		10k	0	SW		0	0	Cloudy	
Nashville, Tennessee	29.54	750.3	30.06	763.5	67.8	19.9	81	SW	2	0.9		5ck	Sk	NW		0.54	13.7	Fair	
New Haven, Connecticut	29.96	761.0	30.08	764.0	48	8.9	93	E	5	2.2			10n		E	0.45	11.4	Heavy rain	
New London, Connecticut	30.08	764.0	30.13	765.3	46	7.8	100	S	12	5.4			10n		S	0.04	1.0	Light rain	
New Orleans, Louisiana	29.96	761.0	30.02	762.5	71.3	21.8	81	SE	1	0.4		2c	Sk			0	0	Fair	
Newport, Rhode Island	30.09	764.3	30.14	765.5	47.0	8.3	96	E	8	3.6			10n		Calm	0.23	5.8	Light rain	
New River, N. Carolina																			
New Shoreham, Rhode I'd	30.09	764.3	30.12	765.0	46.2	7.9	100	SE	10	4.5			10n		SE	0.04	1.0	Light rain	
New York, New York	29.89	759.2	30.07	763.8	47	8.3	100	NE	9	4.0			10n;fg			0.57	14.5	Light rain	
Norfolk, Virginia	30.03	762.7	30.09	764.3	58	14.4	94	S	5	2.2			Fg			Inap.	Inap.	Dense fog	
North Platte, Nebraska	26.92	683.8	29.39	746.5	60	15.6	71	SE	5	2.2		0	0			0	0	Clear	
Olympia, Washington T'y	29.98	761.5	30.02	762.5	43.0	6.1	92	SW	8	3.6		2ck	8n	W	SW	0.32	8.1	Light rain	
Omaha, Nebraska	28.77	730.7	29.83	757.7	66.2	19.0	88	S	9	4.0		2c	0			0	0	Clear	
Oswego, New York	29.63	752.6	29.95	760.7	50.0	10.0	75	SE	10	4.5			10s		SW	0.15	3.8	Cloudy	
Pensacola, Florida	30.02	762.5	30.05	763.3	71	21.7	80	E	10	4.5			10s		E	0	0	Cloudy	
Philadelphia, Pa	30.01	762.2	30.06	763.5	50	10.0	93	E	6	2.7			10n			0.24	6.1	Light rain	
Phœnix, Arizona	28.64	727.4	30.41	772.4	59	15.0	70	E	3	1.3		0	0			0	0	Clear	
Pike's Peak, Colorado	17.80	452.1	30.01	762.2	25	— 3.9	62	SW	10	4.5		1c	0			0	0	Clear	
Pioche, Nevada	23.86	606.0	29.63	752.6	49	9.4	37	S	7	3.1		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.14	740.1	29.94	760.5	58	14.4	91	W	5	2.2			10s		W	1.11	28.2	Cloudy	
Port Eads, Louisiana	29.99	761.7	29.99	761.7	71.0	21.7	90	E	10	4.5		1k	5ks	E	E	0	0	Fair	
Port Huron, Michigan	29.33	745.0	30.00	762.0	40.2	4.6	100	N	13	5.8			Fg			0.06	1.5	Dense fog	
Portland, Maine	30.11	764.8	30.16	766.1	51	10.6	59	S	8	3.6			10s		Calm	0	0	Cloudy	
Portland, Oregon	30.03	762.7	30.10	764.5	47	8.3	85	SW	4	1.8		0	8ks		SW	0.19	4.8	Fair	
Portsmouth, N. Carolina					62	16.7	88	NW	4	1.8		10k	0	NW		0	0	Cloudy	
Prescott, Arizona	24.62	625.3	29.98	761.5	49	9.4	37	SW	6	2.7		0	0			0	0	Clear	
Punta Rassa, Florida	29.93	760.2	29.95	760.7	72	22.2	80	N	5	2.2		0	2ks		NE	0.78	19.8	Fair	
Red Bluff, California	29.64	752.8	29.99	761.7	51.5	10.8	57	N	3	1.3		0	0			Inap.	Inap.	Clear	
Rio Grande City, Texas	29.66	753.4	29.86	758.4	67	19.4	89	E	14	6.3			10s		Calm	0.73	18.5	Cloudy	
Rochester, New York	29.32	744.7	29.93	760.2	50	10.0	93	SW	2	0.9			10s;fg		Calm	0.23	5.8	Cloudy	
Roseburg, Oregon	29.61	752.1	30.19	766.8	46	7.8	88	SE	1	0.4		0	5ks		SW	0	0	Fair	
Sacramento, California	29.91	759.7	29.98	761.5	50	10.0	79	SE	5	2.2		0	0			0	0	Clear	
St. Louis, Missouri	29.43	747.5	29.99	761.7	62.0	16.7	100	SW	3	1.3			Fg			Inap.	Inap.	Dense fog	
St. Paul, Minnesota	29.07	738.4	29.88	758.9	56	13.3	81	SE	1	0.4		5ck	Sk	NW		0	0	Fair	
Salt Lake City, Utah	25.44	646.2	29.77	756.1	56	13.3	40	Calm	0	0		0	1s		Calm	0	0	Clear	
San Antonio, Texas	29.18	741.2	29.86	758.4	63	17.2	89	Calm	0	0			10ks		SE	1.35	34.3	Threatening	
San Diego, California	29.82	757.4	29.89	759.2	60.0	15.6	82	SW	6	2.7			10s			0.02	0.5	Cloudy	
Sandusky, Ohio	29.33	745.0	29.99	761.7	55	12.8	93	W	10	4.5			10s;fg			0.29	7.4	Cloudy	
Sandy Hook, New Jersey	30.05	763.3	30.08	764.0	50.0	10.0	100	E	12	5.4			10n;fg			0.35	8.9	Heavy rain	
San Francisco, California	29.96	761.0	30.02	762.5	51	10.6	79	Calm	0	0		0	1s		Calm	0	0	Clear	
Santa Fé, New Mexico	23.20	589.3	29.74	755.4	53	11.7	54	E	3	1.3		5k	0			0	0	Fair	
Savannah, Georgia	29.99	761.7	30.08	764.0	64.5	18.1	94	NE	5	2.2			Fg			0	0	Dense fog	
Shreveport, Louisiana	29.73	755.1	29.97	761.2	70.6	21.4	85	E	4	1.8		0	8s			0	0	Fair	
Silver City, New Mexico	24.10	613.7	30.19	766.8	56	13.3	40	NW	8	3.6		2k	0	NW		0	0	Clear	
Sitka Alaska																0.02	0.5		
Smithville, North Carolina	30.08	764.0	30.12	765.0	61	16.1	100	N	5	2.2			10s			0	0	Cloudy	
Socorro, New Mexico	25.32	643.1	29.39	746.5	55	12.8	33	SW	2	0.9		0	0			0	0	Clear	
Spokane Falls, Wash. Ter.	27.88	708.1	29.72	754.9	43	6.1	67	S	16	7.2		5k	0	SW		0.02	0.5	Fair	
Springfield, Illinois	29.35	745.5	30.01	762.2	60	15.6	100	NE	2	0.9			Fg			Inap.	Inap.	Dense fog	
Springfield, Massachusetts	29.99	761.7	30.12	765.0	46	7.8	92	S	2	0.9			10n;fg		S	0.16	4.1	Light rain	
Stockton, Texas	26.83	681.5	29.83	757.7	55.0	12.8	100	Calm	0	0			10s		Calm	0.49	12.4	Cloudy	
St. Vincent, Minnesota	28.89	733.8	29.66	753.4	51	10.6	86	S	16	7.2			10n			0.05	1.3	Light rain	
Thatcher's Island, Mass	30.11	764.8	30.16	766.1	45	7.2	100	S	11	4.9			10n		S	0.07	1.8	Light rain	
Toledo, Ohio	29.33	745.0	30.01	762.2	55	12.8	93	W	4	1.8			10ks;fg		W;C	0.06	1.5	Clearing	
Tucson, Arizona	27 38	695.4	29.93	760.2	59	15.0	43	SE	3	1.3		0	c			0	0	Clear	
Umatilla, Oregon	29.68	753.9	30.18	766.6	43	6.1	70	SW	7	3.1		0	2s		W	0	0	Clear	
Uvalde, Texas	28.90	734.0	29.69	754.1	62	16.7	94	Calm	0	0			10s		Calm	0.70	17.8	Cloudy	
Vicksburg, Mississippi	29.78	756.4	30.04	763.0	69	20.6	90	E	4	1.8		2ck	2s	SW	SW	0.09	2.3	Fair	
Visalia, California	29.55	750.6	29.92	760.0	52	11.1	60	NW	6	2.7		0	0			0	0	Clear	
Washington, D. C.	29.90	701.0	30.07	763.8	54	12.2	93	SE	1	0.4			10n		SW	0.06	1.5	Light rain	
Wickenburg, Arizona					54	12.2	43	Calm			0	0	0			0	0	Clear	
Wilmington, N. Carolina	30.04	763.0	30.10	764.5	62	16.7	88	Calm	0	0			10s		Calm	0	0	Cloudy	
Winnemucca, Nevada	25.56	649.2	29.92	760.0	43	6.1	43	S	8	3.6		0	0			0	0	Clear	
Wood's Holl, Mass	30.09	764.3	30.12	765.0	50	10.0	93	SE	20	8.9			10n		SE	0.01	0.3	Light rain	
Yankton, Dakota	28.56	725.4	29.80	756.9	62	16.7	72	S	2	0.9		0	0			0	0	Clear	
Yuma, Arizona	29.58	751.3	29.72	754.9	67.8	19.9	51	N	4	1.8		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.08	560.8			56.0	13.3	83	Calm	0	0		5cs	5ks			0.04	1.0	Cloudy	Thomas Herran
Buff Bay Town, Jamaica	29.73	755.1	30.04	763.0	77	25.0	85	E				5c				Blank			
Havana, Cuba, W. I.	29.94	760.5	29.98	761.5	78	25.6	72	Calm	0	0		0	0			0	0	Clear	A. Van Caneghem, Ass't.
Jakobshavn, Greenland	29.94	760.5	29.99	761.8	30.2	— 1.		Calm			0		6			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	29.93	760.2	29.94	760.5	81.8	27.7	70	Calm	0	0		8cs	0			0	0	Fair	Robert Johnstone
Navassa, W. I.	29.86	758.4	29.94	760.5	80	26.7	82	E				5k;cs	0	N	SE	0.13	3.3	Fair	F. M. Everett.
Paramaribo, S. A.	29.96	761.0	29.96	761.0	80	26.7	78	E			2	3c	5k	E		0	0	½ cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia													10k		Calm	1.49	37.8	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua	29.44	747.8	30.00	762.0	77	25.0	94	Calm			0		10ks		SE	0	0		Earl Flint.
Santiago de Cuba, W. I.					78.8	26		SE			1		2ks						Robert Mason.
St. Thomas, W. I.	29.92	760.0	29.94	760.5	78	25.6	82	Calm	0	0		2cs				0.08	2.0	Fair	G. O. Gyllich.
York Factory, B. A.	30.06	763.5	30.11	764.8	19.0	—7.2	92	W	14	6.3		2c	1s	W	W	0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross, N. 34° 10′, E. 133° 13′	29.72	754.9	61	16.1		Calm			0		10							Heavy rain	Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Villafranca, France	30.22	767.6	70.5	21.4	59	S			1		2							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 25° 44′, E. 57° 47′	29.78	756.4	86	30.0	80	WSW			1		1	W						Misty	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			60	15.6		NNE			2		3	NNE				1	NNW	Misty	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	30.00	762.0	80	26.7	82	E			2		8	E				2	E	Squally	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 33° 34′, E. 28° 50′	29.97	761.2	65	18.3	94	WSW			5–6		5	SW				7	SW	Squally	Com. F. W. Richards.
H. M. S. Champion, N. 1° 47′, W. 0° 23′	29.88	758.9	82	27.8	75	SSE			4		6	SSW				3	SSE	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 25° 09′, E. 121° 45′	29.73	755.1	81	27.2	83	NNW			1		1							Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, Corfu, Ionian Islands	30.07	763.8	72	22.2		N			1		1	NNE						Blue sky	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, S. 20° 59′, W. 9° 04′	30.09	764.3	72	22.2	80	E			5		4	E				4	E	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring, N. 10° 04′, E. 65° 27′	29.85	758.2	86	30.0		N			2		3	NNE				1	SSE	D. clouds	Capt. F. J. Eliott.
H. M. S. Dido, S. 31° 46′, E. 30° 21′	30.00	762.0	67	19.4		WSW			5–6		5	SW				8	SSW	Squally	Capt. C. Domville.
H. M. Dock-Yard																			Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 46° 57′, W. 54° 12′	30.34	770.6	33.5	0.8	85	S			1		5					1	SW	D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad, N. 19° 00′, E. 57° 48′	29.81	757.2	84	28.9		SSW			1		2	SW				2	S	D. clouds	Capt. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 17° 00′, E. 107° 45′	29.68	753.9	77	25.0		ESE			3		4	ESE				2	SE	Misty	Comm. C. Johnstone.
H. M. S. Emerald, S. 18° 10′, E. 178° 20′	30.07	763.8	78	25.6	78	SE			2–4		7	SE						Showery	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Trincomalee, Ceylon, India	29.77	756.1	88	31.1	73	E			1		3							D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo, Great Inagua I'd, W. I	29.96	761.0	82	27.8	83	Calm			0		2	SE						D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish, Hong-Kong, China	29.86	758.4	78	25.6	91	SW			3		6	NE				1	SW	Misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 24° 50′, W. 130° 45′	30.15	765.8	67	19.4	82	NNE			1–5		10					3	N;NE	Drizzling	Comm. E. G. Bourke.
H. M. S. Garnet, S. 34° 54′, W. 56° 13′	29.96	761.0	60	15.6	82	NNE			3		4							D. clouds	Capt. L. F. Jones.
H. M. S. Griffon																			Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 14° 26′, W. 63° 21′	29.98	761.5	81	27.2		ENE			3		2	ENE				2	ENE	D. clouds	Capt. J. L. Way.
H. M. S. Inconstant, S. 39° 30′, E. 94° 30′	30.01	762.2	53	11.7	73	SW			6		4	WNW				6	WSW	D. clouds	Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 24° 28′, E. 118° 03′	29.71	754.6	78	25.6	91	S			2–3		3	E				2–3	W	D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	29.65	753.1	67	19.4	95	SW			2		10							Raining	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Hong-Kong, China	29.83	757.7	81.4	27.4	84	WSW			3		6							Squally	Capt. A. Carpenter.
H. M. S. Midge, N. 23° 19′, E. 115° 55′						WNW			1–2		2	SW				4	E	D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 33° 11′, W. 13° 47′	30.04	763.0	66	18.9	84	NNE			6		1	NNE				3	NNE	Blue sky	Capt. H. H. Rawson.
H. M. S. Modeste, N. 4° 30′ E. 112° 30′	29.87	758.7	82	27.8	96	Calm			0		4	S						D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Goletta, Tunis, N. Africa	30.03	762.7	64	17.8	100	WSW			2–3		10	WSW						Raining	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	o—10	o—10	o—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda, W. I.	30.16	766.1	68.5	20.3	79	ENE			3		9	ENE						D. clouds	Capt. E. B Drummond.
H. M. S. Orontes, S. 29° 36′, E. 31° 35′ †.	29.99	761.7	69.5	20.8	73	S			3		8	W				4	S	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.85	758.2	77	25.0		Calm			0		9							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin, S. 34° 00′, W. 72° 10′	29.93	760.2	56	13.3		E			3		8	ENE				2	NW	D. clouds	Capt. A. C. Paget.
H. M. S. Phœnix, St. Lucea, Jamaica, W. I.	29.89	759.2	75	23.9	95	SSE			1		3	SSE						D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	29.93	760.2	41	5.0		WSW			3		8							Raining	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.79	756.7	82.4	28.0	85	SE			1		2							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis.																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis, Port Said, Suez Canal	29.81	757.2	80	26.7	95	Calm			0							Sm'h		Blue sky	Capt. G. O. Twiss.
H. M. S. Shannon, S. 24° 28′, W. 34° 35′	30.15	765.8	74	23.3	72	ESE			3		2	ESE				3	S	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb, N. 39° 20′, E. 13° 20′ *.	30.11	764.8	67	19.4	74	ENE			2		1	WSW						Blue sky	Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A.	30.00	762.0	58	14.4	76	SSE			0–1		10	Calm						D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise, Callao Bay, Peru			66	18.9	97	Calm			0		5							D. clouds	Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne, N. 11° 17′, E. 54° 50′	29.85	758.2	86	30.0	61	Calm			0										Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.			76	24.4		Calm			0		2							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Wellington, New Zealand	30.15	765.8	59	15.0		NE			3–5		3	NE						Squally	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, N. 23° 44′, E. 61° 19′	29.79	756.7	84.5	29.2	77	SW			3–4		4	W				1	W	D. clouds	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Santiago, Cape Verd Id's	29.98	761.4	80.2	26.8	78	NNE			2		2					1	ESE	Blue sky	S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't
Tamega																			P. I. R. de Carvoattio, Comd'
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡ N. 40° 50′, W. 16° 30′	30.40	772.2	61.5	16.4	67	NE			4		2							D. clouds	Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

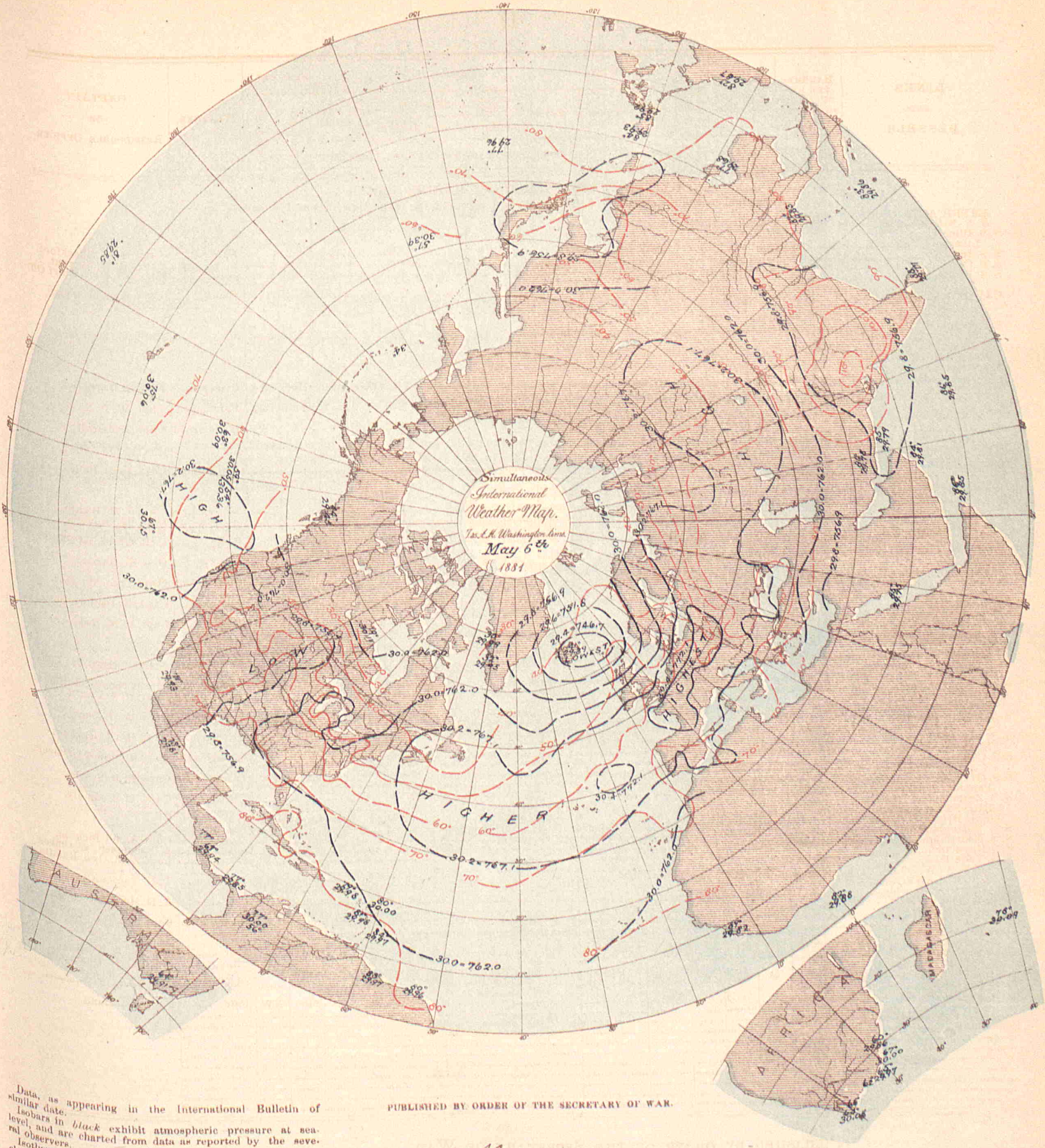
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.10	764.5	72	22.2	80	SE	12	5.4			8		SE	0	0			Fair	
N. Yard, Portsmouth, N. H.	30.16	766.1	47	8.3	70	SSW	8	3.6			10		SW	0	0			Cloudy	
Naval Hospital, Yokahama, Japan	29.63	752.6	55.5	13.1	90	SW			6		10		SW	0.23	5.8			Light rain	
Adams, Callao, Peru	29.78	756.4	66	18.9	94	Calm			0		2		S			Long	W	Fair	
Alaska, Callao, Peru	29.87	758.7	64	17.8	89	SE			1		2		SE			Sm'h		Hazy	
Alert, N. 24° 31′, E. 141° 27′ *	29.96	761.0	77	25.0	69	ESE			2		2		ESE			Long	E	Clear	
Alliance, Norfolk, Va	30.11	764.8	58	14.4	100	S			1		10			0	0	Sm'h		Foggy	
Ashuelot, Nagasaki, Japan	29.65	753.1	66	18.9	100	SW			4		10		Calm					Raining	
Colorado, New York, N. Y	30.09	764.3	47	8.3	100	NE	3	1.3			10			0.018	0.4			Heavy rain	
Constitution, Piney Point, Md	30.02	762.5	56	13.3	87	S	1	0.4			10							Misty	
Franklin, Norfolk, Va	30.04	763.0	57	13.9	94	SW	4	1.8			10			0	0			Cloudy	
Galena, Piraeus, Greece	30.03	762.7	76	24.4	79	NW			4		5							Hazy	
Independence, N. Yard, Mare I'd, Cal	29.99	761.7	52	11.1	86	W	2.4	1.1			2		W	0.01	0.3			Clear	
Jamestown, Sitka, Alaska *	29.45	748.0	44	6.7	92	ESE			3		10		E	0.04	1.0	Sm'h		Cloudy	
Kearsarge, Norfolk, Va	30.13	765.3	60	15.6	94	Calm			0		10					Sm'h		Misty	
Lackawanna, Juan Fernandez Id †	29.91	759.7	61	16.1	100	ENE			2-3		10		SW			Long	ENE	Cloudy	
Marion, Montevideo, Uruguay	30.12	765.0	59	15.0	82	NE			3		8		Calm	0	0	Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	29.94	760.5	42	5.6		W	3	1.3			10							Foggy	
Minnesota, Newport, R. I	30.14	765.5	50	10.0	93	E			2		10					Sm'h		Rainy	
Monocacy, Nagasaki, Japan	29.66	753.4	67	19.4	?	SW			2		10		Calm					Rainy	
New Hampshire, Port Royal, S. C	30.00	762.0	64	17.8	94	ENE	9	4.0			2		ENE	0	0			Clear	
Nipsic, Gibraltar, Mediterranean	30.20	767.1	66	18.9	68	NNE			5		0					Sm'h		Squally	
Onward, Callao, Peru †	29.96	761 0	64	17.8	94	Calm			0		2					Long	W	Clear	
Palos, Yokohama, Japan	29.78	756.4	69	20.6	90	SSW			5		10							Rainy	
Passaic, Washington, D. C	30.10	764.5	57	13.9	87	SE			2		10							Raining	
Pensacola, N. 21° 50′, W. 150° 54′	30.06	763.5	75	23.9	85	ENE			3-4		5?			Slight		Long		Clear?	
Portsmouth, Blackstone Id., Maryland	30.06	763.5	56	13.3	100	SSW			1		10							Cloudy	
Powhatan, New York, N. Y	30.07	763.8	49	9.4	93	NE			1		10							Overcast	
Quinnebaug, Gibraltar, Mediterranean	30.17	766.3	65	18.3	73	N			7		5		E					Squally	
Ranger, Acapulco, Mexico *	29.81	757.2	78	25.6	78	Calm			0		0					Sm'h		Clear	
Richmond, Nagasaki, Japan	29.67	753.6	65	18.3	100	Calm			0		10			0.612	15.5			Raining	
Saratoga, Potomac River	30.08	764.0	58	14.4	82	Var.			1-3		10		S	Light				Cloudy	
Shenandoah, Montevideo, Uruguay *	30.02	762.5	57	13.9	87	NE			3		8		NE			Sm'h		Fair	
St. Louis, League Island, Pa	29.62	752.3	50	10.0	93	NE	4	1.8			10			0.2	5.			Cloudy	
Swatara, Shangbai, China † *	29.75	755.6	59	15.0	88	NW			1		10		Calm					Raining	
Tennessee, Hampton Roads, Va	30.09	764.3	57	13.9	100	SW	4	1.8			10			0	0	Sm'h		Foggy	
Ticonderoga, S. 31° 23′, W. 127° 26′	30.22	767.6	66	18.9	89	ENE			4		10		ENE	Inap.	Inap.	Mod.	E	Drizzling	
Trenton, Castellamare, Italy *	30.04	763.0	73	22.8	63				0-1		5			7 h'rs	light	Sm'h		Fair	
Vandalia, Hampton Roads, Va. * †	30.33	770.4	57	13.9	100	SW			1		Fg							Foggy	
Wabash, Boston, Massachusetts	30.21	767.3	47	8.3	85	S	4	1.8			10		S	0.04	1.0			Light rain	
Wachusetts, N. 35° 29′, W. 147° 02′	30.09	764.3	63	17.2	100	SSE			4		10		SE	0	0	Long	N	Cloudy	
Wyoming, N. 20° 15′, W. 44° 25′	30.07	763.8	74	23.3	72	ENE			4		2		E			Mod.	E	Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 38° 51′, W. 142° 20′																			Capt. A. J. Brown.
British Merchant ‡	30.05	763.3	58.8	14.9	98	S			4–6		10							Raining	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, Demerara, Brit. Guiana	29.97	761.2	82.7	28.2	83	E			2		3							D. clouds	W. N. Lailey.
City of Agra ‡																			Capt. T. Young.
Barque Commewyne, N. 25° 53′, W. 31° 30′	30.15	765.8	77.3	25.2	65	NE			3		5							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra ‡																			Capt. H. Spalding.
Ship Ellen Stuart, N. 19° 11′, W. 41° 01′	30.06	763.5	76.1	24.5	74	ENE			3		5							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow, N. 5° 36′, E. 92° 00′ ‡	29.86	758.4	83.0	28.3	79	W			1	3c	0	E						D. clouds	Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope ‡																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee, S. 6° 30′, W. 160° 46′ ‡	29.95	760.7	81.7	27.6	79	ESE			5		6							Misty	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, N. 49° 47′, W. 180° 47′ ‡	30.22	767.6	55.5	13.1	81	WSW			4		8					3–4	WNW	D. clouds	Capt. H. W. Dyke.
Barque Mertola, N. 41° 31′, W. 17° 14′	30.46	773.7	61.2	16.2	85	ENE			3		1							D. clouds	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, S. 19° 12′, W. 0° 44′ ‡	30.12	765.0	71	21.7	75	E			4		9							Overcast	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, N. 16° 45′, E. 96° 14′ ‡	29.83	[illegible]	81.5	27.5	83	NW			2		3							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, N. 21° 30′, E. 38° 00′ ‡	29.75	755.6	85	29.4	83	NE			2		0							Blue sky	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean																			
S. S. Circassian, N. 52° 44′, W. 24° 52′	30.43	772.9	49	9.4	64	WNW			5	c	8n		WNW	8 minutes		4	NW	D. clouds	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia, N. 41° 34′, W. 59° 34′ *	30.40	772.1	50	10.0		NW			2		0			0	0	Sm'h		Fine	Capt. W. H. P. Hains.
S. S. Scythia, N. 46° 42′, W. 40° 25′	29.99	761.7	49	9.4	85	NW			3		10		NW	Showers		Con.	NNW	Overcast	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 40° 48′, W. 68° 47′	30.08	754.0	48	8.9		SSE			3		10		S	4h'rs	mod.	Sm'h		Overcast	Capt. Benj. Gleadell.
S. S. Germanic, N. 49° 17′, W. 25° 28′ †	30.33	770.4	51	10.6		SW			2		5?		WSW	0	0	Mod.	NW	Clear?	Capt. Ch. W. Kennedy.
S. S. Republic, N. 40° 34′, W. 68° 05′ †	30.24	768.1	50	10.0	86	E			4		10			4hrs	drizz.	Sm'h		Cloudy	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Thol.
S. S. Hermann, N. 45° 45′, W. 39° 50′	30.07	763.8	56	13.3		N			2		2		N	0	0	H'vy	N	Clear	Capt. H. Baur.
S. S. Köln, N. 50° 27′, W. 1° 27′	30.42	772.7	57.0	13.9	81	SSW			4		10		SSW	Fog	Fog	Mod.	SSW	Cloudy	Capt. Th. Jüngst.
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Helmbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Pern																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England	29.98	761.5	55	12.8	93	SSW			3		8		SSW					Fair	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio																			Wm. Shackford, Chief Off'r
S. S. Pennsylvania, Cape Henry, Va.*†	30.02	762.5	53	11.7	86	ENE			1		8		E					Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 30° 07′, E. 130° 49′††	29.92	760.0	76	24.4	86	SSW			5		10		SSW	Driz	zles	Mod.	S	Overcast	Capt. H. Davison.
S. S. Gaelic, N. 37° 40′, E. 156° 57′.*†	30.39	771.9	57	13.9	94	SE			1		2		E			Sm'h	NE	Fair	Capt. W. H. Kidley.
S. S. Oceanic, N. 40° 03′, W. 129° 55′	30.32	770.1	55	12.8	62	WNW			3		8		WNW	0	0	6	W	D. clouds	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon																			Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, San Francisco, Cal.†	30.02	762.5	51	10.6	79	Calm			0		0							Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 32° 40′, W. 117° 18′.†	29.92	760.0	64	17.8	73	SW			3		8		SW	Driz	zles	Long	SW	Cloudy	Geo. H. Harrison.
S. S. Senator, San Francisco, Cal.			51	10.6	86	SE			1		0							Clear	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal.††	29.99	761.7	50	10.0	79	W			2		5		W					Fair	Capt. G. Debney.
S. S. Victoria, Nanaimo, Vancouver Id.†	30.02	762.5	48	8.9	92	Calm			0		2					Sm'h		Fair	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, Sydney, N. S. Wales	30.08	764.0	68	20.0	79	NE			2		2?		NE					Cloudy?	A. Bannerman, 2d Officer.
S. S. City of New York, S. 33° 58′ E. 161° 59′.†	30.23	767.8	72	22.2	76	N			4		10					Mod.	N	Cloudy	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China.†	29.86	758.4	78	25.6	86	SW			2		5		SW			Sm'h		Fair	Capt. G. G. Berry.
S. S. City of Sidney, N. 5° 22′, W. 164° 32′.†	29.85	758.2	81	27.2	74	ENE			5		8		NE	0	0	H'vy	NE	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 37° 55′, W. 137° 42′.†	30.36	771.1	54	12.2	74	N			5		10		SE			R'gh	N	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 31° 27′, W. 119° 42′.†	30.02	762.5	58	14.4	82	NW			6		8		NW	0	0	R'gh	NW	Cloudy	Capt. R. R. Searle.
S. S. Granada, Panama, Panama.†	29.78	756.4	81	27.2	83	Calm			0		2		NNW	0	0			Clear	Capt. M. Connolly.
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhyniand																			Capt. Wm. Geo. Randle.
S. S. Vaderland, N. 42° 35′, W. 60° 22′	30.44	773.2				Calm			0		5		W	0	0	Sm'h	W	Fair	T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			A. R. Mehaffey, 2d Mate.
Sch'r Abby K. Bentley																			
Sch'r Addie Fuller, Savannah, Georgia	30.09	764.3	67	19.4	95	N					Fog			0	0			Foggy	Capt J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 25° 59′, W. 32° 40′.*†	30.24	768.1	72	22.2		E			3		5		E	0	0	Sm'h	E	Fair	Capt. B. F. Woodbury.
Brigantine George																			Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Chesapeake bay Md‡	30.10	764.5	50	10.0	93	ENE	2	0.9	2		10n			0.01	0.3			Cloudy	
Bark Sunbeam, N. 40° 45′, W. 22° 16′.†	30.42	772.7	63	17.2	83	ESE			6		2		SE	0	0	Mod.	NW	Fair	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 7, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco			30.03	762.8	72.7	22.6	72	E			1		1			0	0	Very fair	Dr. Ollive.
Nemours			30.22	767.7	70.2	21.2	87	ESE			4		0			0	0	Clear	Raynard.
Algiers			30.10	764.5	62.2	16.8	83	NNW			4		10			0.228	5.8	Covered	Nicolas.
La Calle			30.18	766.5	63.3	17.4	87	NE			3		3			Inap.	Inap.	Pretty fair	Fonfrède.
Tunis			30.15	765.8															Jacques.
Sfax			30.21	767.2															Gau.
Saida			30.23	767.8	63.3	17.4	27	N			6		5			0.063	1.6	Cloudy	Dumas.
Tebessa			30.24	768.1	52.2	11.2	68	SE			2		9			0.035	0.9	Very cloudy	Watrin.
Geriville																			Lonchamp.
Laghouat			30.14	765.5	63.7	17.6	32	N			4		2			0	0	Fair	Herbin.
Biskra			30.16	766.1															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.49	749.0	29.58	751.3	61.7	16.5	87	N	4	1.8			2			0.30	7.6	Fine	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.84	757.8	30.37	771.5	72.7	22.6	35	E			2		0			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.67	753.5	30.43	773.0	60.8	16.0	45	E	0.7	0.3			0			0	0		Dr. Wierzbicki.
Eperies	29.50	749.2	30.37	771.3	64.4	18.0	38	N			3		0			0	0		Julius Mikolik.
Gratz	29.17	740.9	30.40	772.1	67.5	19.7	37	S			2		0			0	0		Andreas Rospini.
Hermannstadt	28.89	733.8	30.27	768.8	75.9	24.4	39	NE			2		2			0.031	0.8		Prof. A. Gottschling.
Kremsmunster	29.05	737.8	30.37	771.3	66.7	19.3	49	ENE			1		0			0	0		The Staff.
Lemberg	29.41	747.0	30.40	772.2	57.9	13.9	61	NW			1		8			0	0		Dr. T. Stanecki.
Pola	30.22	767.5	30.33	770.3	70.3	21.3	42	E			4		9			0	0		I. R. Hydrographic Office.
Szathmar	29.89	759.2	30.35	770.9	65.3	18.5	60	NW			1		0			0	0		Beicht Peter, S. J.
Szegedin	30.10	764.6	30.38	771.7	65.1	18.4	52	N			3		0			0	0		Karl Stancel.
Trieste	30.24	768.0	30.34	770.6	73.6	23.1	37	ENE			3		5			0	0		Secco.
Vienna	29.72	754.9	30.43	772.9	66.6	19.2	39	NE			1		0			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.23	767.8	30.33	770.4	58.0	14.4	41	W	26	11.6			3			0	0	Squally	W. Boswell.
Armagh, Observatory	30.37	771.4	30.59	777.0	57.0	13.9	53	WNW	11	4.9			5					D. clouds	S. Call.
Bidston, Liverpool Obs'y			30.61	777.5	54.3	12.4	59	W	18	8.0			1					Blue sky	John Hartnup.
Bolton, Sharples	30.04	763.0	30.59	777.0	55.6	13.1	54	W					6					D. clouds	Thomas Mackerath.
Bradford, Yorkshire	30.13	765.3	30.52	775.2	58.0	14.4	58	W			1		3			0	0	D. clouds	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.88	758.9	29.91	759.7	82.0	27.8	75	NE			2		6					Gloomy	Corpl. J. Surgener,A.H.C.
Cardington			30.57	776.5	63.0	17.2	57	NW			0.6		1					Blue sky	John McLaren.
Chatham, School M. E.	30.45	773.4	30.58	776.7	64.4	18.0	51	SE			1		3					D. clouds	Lance Cpl. R. Tear, R.E.
Falmouth, Observatory	30 42	772.7	30.66	778.7	55.2	12.9	81	SSE			1		1					D. clouds	The Staff.
Fort Napier, Natal	27.56	700.0	29.77	756.1	72.1	22.3	94	SW			1		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.59	751.6	29.82	757.4	89	31.7	88	NW			1		4					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			30.58	776.7	57	13.9	69	SW			2		2			0	0	Blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	30.17	766.3	30.22	767.6	67.6	19.8	78	E			6		0					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.26	768.6	30.47	773.9	55.2	12.9	46	WSW			6		7					D. clouds	D. G. MacLean.
Greenwich, Royal Obs'y	30.41	772.4	30.58	776.7	56.0	18.9	53	NNW			1		0					Blue sky	The Staff.
Guernsey	30.37	771.4	30.59	777.0	57	13.9	78	NW			2		0					Blue sky	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.56	776.2	30.60	777.2	61.7	16.5	47	NNW	7	3.1			1					Blue sky	The Staff.
Leicester, Museum	30.33	770.4	30.59	777.0	60.0	15.6	54											Blue sky	J. E. Carryer.
Malta, Mediterranean	30.00	762.0	30.07	763.8	64.0	17.8	84	NE			1		4			0.03	0.8	D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas	29.87	758.7	29.92	760.0	83.0	28.3	81	S			1		5			Blank		D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	30.07	763.8	30.60	777.2	60.1	15.6	50	WNW			2		3					D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	30.37	771.4	30.60	777.2	62.2	16.8	47	WNW			2		1					Blue sky	The Staff.
Plymouth	30.55	776.0	30.63	778.0	58.9	14.9	75	SSW			2		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			30.21	767.3	49.1	9.5	83	W	30	13.4			0					Blue sky	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.11	764.8	30.18	766.6	69.8	21.0	63	NNE			2		1					Blue sky	Serg't W. H. Lyne.
Sheffield	30.32	770.1	30.60	777.2	60.9	16.1	52	WSW			1		2			0	0	D. clouds	W. F. Cooper.
Siloth Rectory	30.50	774.7	30.53	775.4	56.6	13.7	66	W			4		0			0	0	Blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.59	777.0	55.5	13.1	54	W	22	9.8			7					D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	30.38	771.6	30.59	777.0	67.2	19.6	41	NW			1		0					Blue sky	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	30.62	777.7	30.64	778.2	66	18.9	81	NW			6		0					Blue sky	W. Newcombe.
Valencia, Observatory	30.55	776.0	30.58	776.7	59.5	15.3	61	SE	16	7.2			10					D. clouds	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.05	763.3	30.09	764.3	40	4.4	92	SE	9	4.0			10n			0.035	0.9	Threatening	H. J. Cundall, C. E.
Chatham, N. B.*	30.00	762.0	30.07	763.8	41	5.0	82	S	4	1.8			10s		S	0	0	Cloudy	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.02	762.5	30.05	763.3	35	1.7	84	NE	10	4.5			10n			0.32	8.1	Threatening	J. McWilliams.
Fort Garry, Manitoba*	28.80	731.5	29.60	751.8	58	14.4	94	S	1	0.4		5k	5ks	W	W	0.110	2.8	Cloudy	James Stewart.
Fredericton, N. B.*																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.90	759.4	30.03	762.7	37	2.8	95	NE	12	5.4			10n			0.270	6.9	Light rain	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.74	755.4	30.08	764.0	42	5.6	96	SW	5	2.2			Fg		SW	0	0	Foggy	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.84	757.9	30.04	763.0	49	9.4	85	W	16	7.2			10s		N	Inap	Inap.	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.39	746.5	30.09	764.3	45	7.2	86	Calm	0	0		5k	0	NW		0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.41	747.0	30.11	764.8	46	7.8	100	Calm	0	0		2c	0			0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.45	748.0	30.11	764.8	43	6.1	99	E	2	0.9			Fg		E	0	0	Fair	M. Payne.
Quebec, Quebec*	29.72	754.9	30.05	763.3	45	7.2	84	NE			1	2k	Hz	NE		0.02	0.5	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.58	751.3	30.05	763.3	45	7.2	84	Calm	0	0		8ks	0	NW		0	0	Fair	W. H. McIntyre.
Saugeen, Ontario*	29.32	744.7	30.03	762.7	53	11.7	70	SE	6	2.7		0	0			0	0	Clear	K. Stewart.
St. Andrews, N. B.	29.98	761.5	30.03	762.7	42	5.6	81	E	1	0.4			10n			0.02	0.5	Cloudy	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.13	765.3	30.17	766.3	36	2.2	90	SE	6	2.7			10n		SE	Inap	Inap.	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.73	755.1	30.11	764.8	50	10.0	65	Calm	0	0		0	0			0	0	Clear	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	29.86	758.4	29.93	760.2	40	4.4	95	NE	6	2.7			10s		NE	0.36	9.1	Cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	30.12	765.0	30.38	771.6	36	2.2	80	SE	1	0.4		5k	5s			0	0	Fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd'g.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.86	758.4			64.3	17.9	86	W	13.7	6.1			5k			0	0		John Duthie.
Cape Town, C. G. H. Obs'y	30.02	762.5	30.06	763.5	59.8	15.4		WNW	5.8	2.6		5	5ks;n			0.098	2.5		The Staff, for D. Gill.
Worcester *†	28.90	734.0			63	17.2	59	NW			2	4	4			0	0	Dull	C. Stokes.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.92	760.0	29.95	760.7	60.6	15.9	96	SE	1.3	0.6		2k	0	W		0	0	Fair	M. Marc Dechevrens, S.J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
COSTA RICA SERIES. By authority of the Minister of Foreign Affairs. Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.16	664.4	29.88	758.9	70.7	21.5	82	SE			1	1cs	0			Inap.	Inap.	Clear	Amand Maison.
DANISH SERIES. Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.26	768.6	30.31	769.8	57.7	14.3	49	NW	22	10			7						Oversergent Fischer.
Faröe	30.40	772.1	30.42	772.6	49.5	9.7	78	W			6		2						Overloerer Lauridsen.
Godthaab, Greenland	30.11	764.7	30.15	765.8	35.1	1.7	80	Calm			0		7						S. Kleinschmidt.
Stykkisholm, Iceland	29.95	760.8	30.00	761.9	41.0	5.0		E			6		8						A. O. Thorlacius.
Thorshavn	29.98	761.5	30.02	762.4	47.5	8.6	74	NW	22	10			6						Overloerer Bergh.
Vestervig	30.21	767.3	30.30	769.7	46.8	8.2	87	WSW			6		1						Loearer Oesterbol.
FRENCH SERIES. Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.76	756.0	30.41	772.3	71.6	22	44	E			1	1c	0		W	0	0	Clear	M. Labroue, Director.
Alençon Normal School	30.04	763.0	30.59	777.0	59.7	15.4	85	N			2		2k		N	0	0	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	30.30	769.5	30.55	776.0	63.0	17.2	52	NE			3		ks		NE	0	0		M. Klein, Commandant
Avignon, Normal School	30.25	768.3	30.33	770.3	77.0	25	35	N			1		0			0	0	Clear.	M. Girand, Director.
Bar-sur-Seine	29.93	760.3	30.48	774.3	67.5	19.7	50	N			1		5kn		NE	0	0	Cloudy	M. Saillard, Director.
Beauvais, Normal School	30.31	769.8	30.58	776.6	63.9	17.7	43	N			1		2			0	0	Slightly cl'dy	M. Frère Eugene Marie.
Besançon, Normal School	29.56	750.8	30.44	773.1	64.4	18	60	SW			2				S	0	0		M. Gobin, Director.
Bordeaux, Observatory	30.15	765.8	30.41	772.4	71.6	22.0	42	ENE			2		0			0	0	Clear	M. Rayet, Director.
Bourges, Normal School	29.95	760.6	30.49	774.5	68.0	20	55	NNE			2		k		NNE	0	0		M. Postel, Director.
Brest, Naval Observatory	30.38	771.6	30.62	777.7	61.5	16.4	67	NE			2		2		NE	0	0		M. de Rermaree, Dir.
Caen, Normal School	30.50	774.8	30.57	776.5	62.8	17.1	70	NW			1		0			0.008	0.2	Clear	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.15	765.8	30.47	773.8	71.2	21.8	84	W			2		5	N	N	0	0	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.99	761.8	30.51	774.9	68.4	20.2	60	E			1		0			0	0	Clear.	M. Grimard, Director.
Clermont-Ferrand Obs'y	29.66	738.1	30.39	772.0	67.3	19.6	50	N			2		2k			0	0	Slightly cl'dy	M. Alluard, Director.
Cluny, Normal School	29.58	751.2	30.42	772.6	71.2	21.8	37	N			2		0			0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.62	752.3	30.49	774.4	69.8	21	41	NE			2		5kcs	NE	NE	0	0	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.78	705.7	30.25	768.3	72.9	22.7	26	NE			1		2c		E	0	0	¼ covered	M. Jeangirard, Director.
Grénasque, du. Rhone	29.26	743.3	30.41	772.3	75.7	24.3	33	NW			1		0		W	0	0	¼ covered	M. Ablard, Director.
Grenoble, Normal School	29.59	751.5	30.36	771.1	58.5	14.7	18	NW			1		2			0	0		M. Rivoire, Director.
Guéret, Normal School	28.89	733.7	30.45	773.4	66.2	19	47	NE			2		cs			0	0		M. Ollitrault, Director.
Lamballe, Normal School	30.38	771.7	30.66	778.7	62.6	17	66	N			2		k		NE	0	0		M. Chauvin, Director.
Lescar, Normal School	29.84	758.0	30.50	774.8	69.8	21	68	N			1				N	0	0		M. T. Carré, Director.
Lorient, Naval Observatory	30.50	774.8	30.61	777.4	68.7	20.4	55	NNE			1		cs		N	0	0		Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.35	745.5	30.40	772.2	68.4	20.2	40	NNW			1		2		NNE	0	0	¼ covered	M. André, Director.
Mans, Normal School	30.27	768.9	30.58	776.8	61.7	16.5	68	E			3		0			0	0	Clear	M. Piboen, Director.
Marseille, Observatory	30.04	763.0	30.30	769.7	73.9	23.3	29	SW			1		8		NNE	0	0	Very cloudy	M. Stephan, Director.
Montlouis l'instituteur	25.15	638.8	30.39	771.8	54.5	12.5	61	E	16.8	7.5			2		ENE	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	30.22	767.7	30.30	769.5	77.0	25	44	SSW			1		5			0	0		M. P. Galzin, Director.
Nancy, Normal School	29.70	754.3	30.46	773.6	68.4	20.2	39	NNE			1		0			0	0	Clear	M. Hasse.
Nantes, Observatory	30.42	772.7	30.58	776.8	65.1	18.4	47	NW			1–2		2k		NNE	0	0	Slightly cl'dy	M. Larocque, Director.
Nice	30.27	768.8	30.30	769.6	71.1	21.7	43	SE			2		8k		N	0	0		Capt. Boissière, Director.
Perpignan, Observatory	30.23	767.7	30.33	770.4	74.5	23.6	29	SE	11.2	5.0			10	NW	SE	0	0	Covered	Dr. Fines.
Pic-du-Midi, Plantade	22.84	580.1			39.6	4.2							1	NE		0	0		Gen'l de Nansouty, Dir.
Privas, Normal School	29.31	744.4	30.35	770.9	72.3	22.4	37	S			4		1		NE	0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.53	648.5			45.3	7.4	82	NE			6		0			0	0	Clear	M. Alluard, Director.
Rochefort, Naval Obs'y	30.46	773.6	30.49	774.4	71.6	22.0	57	ENE			2		2			0	0	¼ covered	M. Alluard, Director.
Roche-sur-Yon, N. School	30.31	769.9	30.53	775.4	65.1	18.4	73	NNE			2		2		ENE	0	0	¼ covered	Lt. E. Decante, Director.
Rodez, Normal School	28.24	717.3	30.35	771.0	68.4	20.2	42				1		0			0	0	Clear	M. Mouillot, Director.
Rouen, Normal School	30.48	774.2	30.57	776.4	66.2	19	49	NE					0			0	0	Clear	M. Richard, Director.
Saint Lô, Normal School	30.46	773.6	30.61	777.6	62.8	17.1	55	N			2		2		NE	0	0	Slightly cl'dy	M. Platrier, Director.
Saint Maur, Observatory	30.39	771.9	30.56	766.1	64.9	18.3	61	N			1		0			0	0	Clear	M. Delaplanche, Dir.
Toulouse, Observatory	29.71	754.6	30.54	773.2	69.4	20.8	68	NW			1		6		N	0	0		M. Renou, Director.
Tours	30.34	770.7	30.54	775.7	65.8	18.8	64	NE			1					0	0		M. Bailland, Director.
Versailles, Observatory	30.06	763.5	30.55	776.0	65.1	18.4	57	N			2		5		NNE	0	0	½ covered	M. de Tastes.
Sub-Series.											2								Dr. A. Bérigny, Director.
GERMAN SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.56	750.9	30.44	773.1	68.4	20.2	44	N			2		8k	W		0	0		Prof. Dr. Hoh.
Berlin	30.26	768.5	30.43	772.8	64.8	18.2	62	NW			1		5			0	0		Prof. Dr. Arndt.
Breslau	29.91	759.6	30.45	773.3	69.4	20.8	34	WNW			2		4			0	0		Royal University Obs'y.
Carlsruhe	30.02	762.6	30.45	773.5	68.4	20.2	51	NE			1		0			0	0		Albert Senz.
Cassel	29.75	755.7	30.47	774.0	64.8	18.2	57	NNW			5		8	NW		0	0		Dr. H. Möhl.
Frankfort on the Main	30.13	765.3	30.49	774.4	72.5	22.5	47	NNW			1		3			0	0		Physical Society.
Friedrichshafen	28.98	736.1	30.42	772.6	60.8	16.0	46	NE			8		0			0	0		Wilhelm, Chief Tel.
Hamburg	30.40	772.2	30.47	774.0	60.1	15.6	61	NW			5		3			0.016	0.4		Dr. R. Kleeman.
Kiel	30.39	772.0	30.41	772.4	50.4	10.2	56	W			3		5			0.079	2.0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	30.01	762.3	30.43	772.8	69.1	20.6	48	SSW			2		8	W		0	0		Prof. Dr. Bruhns.
Magdeburg	30.15	765.8	30.44	773.1	65.5	18.6	52	W			2	7cs	0	SW		0	0		Dr. Assmann.
Memel	30.28	769.2	30.33	770.4	48.4	9.1	80	W			4		10						Reinbrecht & Issermann.
Munich	28.61	726.7	30.50	774.8	63.9	17.7	32	NE			2		0			0	0		Central Station.
Neufahrwasser	30.34	770.7	30.36	771.1	60.1	15.6	71	W			2		10			0.004	0.1		A. Lothes.
Neustadt, Palatinate	29.96	761.0	30.50	774.6	71.8	22.1	41	NE			1		1			0	0		Dicknether.
Stuttgart	29.49	749.0	30.37	771.4	68.4	20.2	41	N			1		0			0	0		Prof. Dr. Schoder.
Thorn																0	0		Dr. O. Cunerth.
Weissenburg, Bavaria	28.94	735.0	30.44	773.2	65.7	18.7	47	E			4		1			0	0		Prof. Kemlein.
Wustrow	30.40	772.1	30.42	772.7	53.8	12.1	96	SW			2		10s			0.039	1.0		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.78	756.5	30.16	766.1	75.6	24.2		NE			5.0		0					Clear	A. Wourlisch
INDIAN SERIES.																			
Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.66	753.4	29.71	754.7	91.5	33.1	57	WSW	20.0	8.9			0			0	0	Misty	
Deesa	29.15	740.3	29.59	751.5	113.2	45.1	12	W	6.5	2.9			0			0	0	Blue sky	
Bombay	29.72	754.9	29.76	755.8	87.2	30.7	72	SW	15.0	6.7			0			0	0	Blue sky	
Poona, Yarrowda	27.88	708.1	29.67	753.7	94.0	34.4	40	SW	27.0	12.1			3		E	0	0	Misty	
Belgaum	27.27	692.7	29.77	756.2	83.5	28.6	54	SW	13.0	5.8			8	SW	NE	0.19	4.8	Thund'r st'm	
Lahore	28.84	732.6	29.54	750.4	107.1	41.7	15	E	1.1	0.5			3			0	0	Blue sky	
Roorkee	28.72	729.6	29.58	751.3	100.5	38.1	28	Calm	3.9	1.7			0			0	0		
Agra	29.03	737.4	29.56	750.7	111.1	43.9	14	S	6.2	2.8			0			0	0		
Nagpur	28.62	726.9	29.61	752.1	105.2	40.7	16	SW	4.2	1.9			0			0	0	Blue sky	
Jubbulpore	28.32	719.3	29.61	752.0	103.6	39.8	13	Calm	2.5	1.1			0			0	0	Blue sky	
Lucknow	29.25	742.9	29.61	752.0	101.4	38.6	23	SSE	2.6	1.2			0			0	0	Blue sky	
Allahabad	29.31	744.4	29.60	751.9	104.6	40.3	23	Calm	2.4	1.1			0			0	0	Blue sky	
Patna	29.47	748.5	29.65	753.0	96.7	35.9	36	NE	3.3	1.5			2	NE	NE	0	0	Blue sky	
Hazaribagh	27.69	703.3	29.62	752.4	95.8	35.4	22	N	7.7	3.4			0			0	0	Blue sky	
Cuttack	29.68	753.9	29.76	756.0	88.6	31.4	59	SSE	4.0	1.8			0			0	0	Blue sky	
Calcutta, Alipore	29.70	754.4	29.72	755.0	89.0	31.7	53	SSW	13.0	5.8			0			0	0	Blue sky	
Dhubri	29.63	752.5	29.75	755.5	85.4	29.7	61	SE	0.9	0.4			0			0	0	Blue sky	
Chittagong	29.70	754.3	29.79	756.6	82.2	27.9	74	WSW	3.7	1.6			0			0	0	Blue sky	
Sibsagur	29.41	747.0	29.74	755.4	84.3	29.1	73	S	2.8	1.2			4			0	0	Blue sky	
Zanzibar, Africa			29.90	759.4	79.8	26.6	86	SW	6	2.7			9		SW	0.15	3.8	Threatening	
ITALIAN SERIES.																			
By authority of the Minister of Agriculture, Industry and Commerce.																			
Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.95	760.7	30.36	771.1	71.4	21.9	32	E	0.7	0.3			0			0	0		Prof. Giovanni Clodig.
Milan	29.85	758.1	30.36	771.1	70.0	21.1	51	SSW	4.9	2.2			3			0	0		Prof. Schiaparelli.
Padua	30.26	768.7	30.37	771.5	69.4	20.8	43	ENE	7.4	3.3			1	ESE		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.45	748.1	30.35	770.9	68.9	20.5	48	S	1.8	0.8			1			0	0		Prof. P. F. Denza.
Genoa	30.13	765.2	30.32	770.1	72.0	22.2	35	NW	6.9	3.1			2	N		0	0		Prof. G. M. Garibaldi.
Mondovi	28.46	722.9	30.37	771.3	64.8	18.2	51	WNW			4		2	E		0	0		Prof. D. C. Bruno.
Pesaro	30.30	769.7	30.35	770.9	64.0	17.8	69	NW	12.5	5.6			6			0	0		Prof. Luigi Guidi.
Florence	30.02	762.6	30.28	769.0	72.5	22.5	37	NE			6		0			0	0		Prof. Costantino Pitter.
Leghorn	30.25	768.3	30.34	770.5	68.9	20.5	57	NW	13.0	5.8			5			0	0		Prof. P. Monte.
Rome	30.06	763.6	30.24	768.0	72.0	22.2	50	Calm	0	0			10			0.024	0.6		Prof. P. S. Ferrari.
Lecce	29.92	760.0	30.17	766.4	70.0	21.1	51	Calm	0	0			2			0	0		Prof. C. de Giorgi.
Cosenza	29.28	743.8	30.16	766.1	68.4	20.2	71	NNW	5.6	2.5			8	NW		0	0		Prof. D. Conti.
Cagliari	29.99	761.7	30.18	766.6	71.1	21.7	57	SE			4		5	SE		0.622	15.8		Prof. A. Pacinotti.
Palermo	29.95	760.8	30.21	767.2	66.0	18.9	63	Calm	0	0			2			0.020	0.5		Prof. G. Ciacciatore.
Syracuse	30.12	765.1	30.17	766.2	63.7	17.6	70	NE	2.5	1.1			10	WSW		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.67	753.6	30.18	766.6	70.2	21.2	55	E	0	0			4	NE		0.480	12.2		Prof. F. Brioschi.
Stelvio	22.53	572.2			42.4	5.8	28	E			2	ics	0			0	0	Clear	Prof. P. F. Denza.
Valdobbia	22.54	572.6			45.3	7.4	60	SE			2		0			0	0	Clear	Prof. P. F. Denza.
JAPANESE SERIES.																			
Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.82	757.4	29.83	757.7	55.3	12.9	81	E	4.4	2.0		9ck	0	NW		0.007	0.2	Overcast	K. Sasaki.
Kioto	29.57	751.1	29.74	755.4	56.5	13.6	80	NW				10ks;s			NW	0.358	9.1	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.75	755.6	29.93	760.2	55.0	12.8	87	N	4.4	2.0		10s				0.010	0.2	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	29.36	745.7	29.43	747.5	67.8	19.9	88	SSW	17.6	7.9		10s			SW	0.025	0.6	Cloudy	The Staff.
Wakayama	29.72	754.9	29.77	756.1	57.8	14.3	79	WNW	10.5	4.7			0			0.635	16.1	Clear	Y. Kuwamuca.
MAURITIUS SERIES.																			
Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.89	759.2	30.08	764.1	78.0	25.6	69	ENE	14.0	6.3		0	3		ENE	0.07	1.8	Fine	A. N. Figon.
MEXICAN SERIES.																			
By authority of the Secretary of Public Works.																			
Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.61	752.0	29.86	758.5	69.5	20.8	92	E	0.9	0.4		0	1k		ESE			Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES.																			
Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.59	777.0	30.59	777.0	58.1	14.5		N			3					0	0		
Groningen	30.47	773.8	30.52	775.2	57.4	14.1		NW			3					0.024	0.6		
Helder	30.54	775.8	30.54	775.8	50.9	10.5		W			2					0	0		
Hellevoetsluis	30.56	776.2	30.56	776.2	60.8	16.0	71	NNW			1					0	0		
Utrecht	30.52	775.1	30.56	776.3	62.8	17.1	52	WNW			2		5			0	0	Cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.89	759.3	29.96	760.9	45.7	7.6	86	SSW	32.0	14.3			10			0.339	8.6	Raining	
Christiania	29.79	756.6	29.93	760.3	54.5	12.5	63	SSW	18	8			4			0.008	0.2		
Gjæsvær	29.79	756.7	29.82	757.3	29.8	— 1.2		NE			2		10						
Lodingen	29.63	752.6	29.68	753.8	39.0	3.9	62	N			4		2			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.98	761.5	30.14	765.5	61.5	16.4	89	SSW	15.0	6.7			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.25	742.9	30.19	766.7	75.2	24.0	31	ENE	7.4	3.3			0			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.92	759.9	30.00	762.1	69.8	21.0	58	SW	6.3	2.8						0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.89	759.3	30.25	768.3	73.4	23.0	34	NE	9.4	4.2						0	0		The Staff.
Ponta Delgada, Azores	30.13	765.3	30.20	767.1	69.4	20.8	57	S	9.8	4.4			4			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski																			Capt. Lasarew.
Archangel	29.80	756.9	29.82	757.4	41.5	5.3	76	S	13	6			10						Capt. Sselliwerstow.
Astrakhan	30.29	769.3	30.21	767.2	73.6	23.1	34	N	2	1			2k						Capt. Wisganow.
Barnaul	29.65	753.1	30.13	765.3	68.2	20.1	30	Calm	0	0			9					Light clouds	Meteorological Obs'y.
Dorpat	29.86	758.5	30.11	764.8	52.2	11.2	72	WSW	11	5			8k						Observatory.
Ekaterinburg	29.09	738.8	30.00	762.1	75.7	24.3	28	SW	9	4			8kn						Meteorological Obs'y.
Kasan	29.83	757.7	30.09	764.3	76.6	24.8	42	WSW	4	2		6ck	0						Observatory.
Kertch	30.21	767.3	30.23	767.8	64.8	18.2	74	NNE	7	3			0						Lagorio & Sastyrez.
Kieff	29.63	752.6	30.25	768.4	66.4	19.1	61	W	11	5		0;ck;os	4ks						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	30.00	762.0	30.20	767.0	78.8	26.0	29	ESE	13	6			4						Meteorological Obs'y.
Moscow	29.68	753.9	30.22	767.5	66.0	18.9	53	N	7.8	3.5			0						Meteorological Obs'y.
Nertchinsk	27.82	706.5	30.21	767.2	28.9	— 1.7	32	N	13	6			0						Meteorological Obs'y.
Nikolaiev	30.22	767.7	30.30	769.5	81.1	27.3	33	E	4	2			5kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	29.71	754.5	29.85	758.1	58.3	14.6	33	NW	16	7			6k					Th'ndrstorm	Physical Observatory.
St. Petersburg	29.98	761.4	29.99	761.8	46.0	7.8	83	WSW	13	6			10n						Central Physical Obs'y.
Tashkend, Laboratory	28.59	726.2	30.11	764.7	75.2	24	47	Calm	0	0			0						Teich, A. M.
Tiflis	28.78	730.9	30.15	765.8	74.1	23.4	37	SSE	7	3			7ks						Physical Observatory.
Warsaw	29.98	761.4	30.39	772.0	64.6	18.1	46	W	11	5		5c	0						Astronomical Obs'y.
Wilna	29.87	758.7	30.28	769.2	64.8	18.2	50	SW	9	4			8						Berg, Assistant.
Yeniseisk	29.91	759.6	30.20	767.1	39.9	4.4	73	W	4	2			10						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.48	774.2	57.0	13.9	38	W			6		4k			0	0	Light clouds	Andrew Gibb.
Monach Lt. House, Hebrides			30.47	773.9	49	9.4	93	W			4	5	5	W		0.2	5.	D. clouds	J. Youngclause.
North Unst, Shetland Isl'ds			29.82	757.4				W			8		10						Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.21	767.4	30.32	770.0	68.0	20	56	NE	3.8	1.7			1k			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.28	769.2	30.34	770.6	69.8	21.0	62	N	0.9	0.4		3	2	SE		0	0	Cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.41	696.1			62.6	17.0	61	NE	13.0	5.8		0	0			0	0	Clear	Domingo Martin.
Madrid, Royal Obs'y	28.11	714.0	30.29	769.3	73.2	22.9	64	E	5.4	2.4		0	0			0	0	Light clouds	The Staff.
Murcia, Met. Obs'y	30.17	766.2	30.31	769.9	75.6	24.2	40	E	5.6	2.5		3	4	SW		0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.35	745.6	30.24	768.0	72.3	22.4	42	ENE	11.2	5.0			0			0	0	Clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.85	758.2	29.92	759.8	74.5	23.6	81	Calm	0	0		20	k	W		0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.86	758.4	29.91	759.7	85.3	29.6	71	SSW	4.4	2.0		8ck	0	E		0	0	Covered	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.11	764.8	30.21	767.3	71.4	21.9	35	E	34.0	15.2		0	0			0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.85	758.2	29.94	760.5	79.9	26.6	79	SE	0	0		10s	2k			0	0	Clear	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.80	756.8	29.94	760.5	83.3	28.5	71	NNW	5.8	2.6			9k		NW	0	0	Covered	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.53	750.0	29.57	751.0	38.5	3.6	83	NW			2		10			0.043	1.1		
Umea	29.67	753.6	29.72	754.9	53.2	11.8	54	NW			4		5			0	0		
Hernosand	29.81	757.1	29.86	758.4	54.5	12.5	39	WSW			2		3			0.417	10.6		
Stockholm	29.83	757.7	30.01	762.2	55.0	12.8	45	W			6		1			0.020	0.5		
Wisby	30.06	763.6	30.12	765.1	48.9	9.4	61	W			6		0			0.063	1.6		
Sub-Series.																			
Upsala	29.86	758.4	29.95	760.6	55.4	13.0	49	WSW	16.8	7.5			2		W	0	0		Nils Ekholm
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva																			The Observatory.
Zurich	28.79	731.2	30.38	771.6	68.0	20.0	47	E			4		0			0	0	Clear	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. — mm.; Ther. —° cent.; Hum. — per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.25	768.3	62.4	16.9	64	ENE	22	10.0			0			0	0		The Observatory.
Valona			30.24	768.2	78.4	25.8		SW			1		2			0	0	Slightly cl'd'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.92	759.9	75.9	24.4	73	NE			1		3k		SW	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
Albany, New York	30.04	763.0	30.13	765.3	55.1	12.8	74	N	1	0.4			10s		N	0.18	4.6	Cloudy	
Alpena, Michigan	29.38	746.2	30.03	762.7	43	6.1	83	W	3	1.3		2ck	0	NW		0	0	Fair	
Atlanta, Georgia	28.86	733.0	29.97	761.2	67.2	19.6	74	E	6	2.7		2c	0	Calm		0	0	Clear	
Atlantic City, New Jersey	30.12	765.0	30.13	765.3	51	10.6	93	NE	16	7.2			10s		Calm	0.13	3.3	Cloudy	
Attou Id., Alaska ‡	29.92	760.0			37	2.8	100	S	13	5.8			10ks		SW	0.49	12.4	Cloudy	
Augusta, Georgia	29.86	758.4	30.06	763.5	65.0	18.3	84	SW	1	0.4		0	Hz			0	0	Clear	
Baltimore, Maryland	30.08	764.0	30.13	765.3	58	14.4	76	N	4	1.8		0	0			0.33	8.4	Clear	
Barnegat, New Jersey	30.09	764.3	30.12	765.0	50	10.0	93	E	10	4.5			10s		NE	0.07	1.8	Cloudy	
Bismarck, Dakota	29.97	761.2	29.83	757.7	52	11.1	83	NW	16	7.2			10s		NW	0.08	2.0	Cloudy	
Boise City, Idaho	27.23	691.6	30.19	766.8	41	5.0	74	W	1	0.4		5cs	0	Calm		0	0	Fair	
Boston, Massachusetts	29.94	760.5	30.10	764.5	45.5	7.5	83	N	1	0.4			10s		N	0.42	10.7	Cloudy	
Brackettville, Texas	28.62	726.9	29.64	752.8	66	18.9	95	E	4	1.8			Fg			0	0	Dense fog	
Brownsville, Texas	29.71	754.6	29.76	755.9	77	25.0	86	SE	4	1.8		0	0			2.07	52.6	Clear	
Buffalo, New York	29.39	746.5	30.11	764.8	38	3.3	96	SW	5	2.2			Fg			0.02	0.5	Dense fog	
Burlington, Vermont	29.80	756.9	30.09	764.3	52.5	11.4	79	SW	5	2.2		5ck	0	W		0.01	0.3	Fair	
Cairo, Illinois	29.61	752.1	29.99	761.7	69	20.6	85	Calm	0	0		0	0			0	0	Clear	
Campo, California	27.28	692.9	29.85	758.2	40	4.4	73	E	2	0.9		0	0			0	0	Clear	
Camp Thomas, Arizona	27.04	686.8			54	12.2	43	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	30.07	763.8	30.08	764.0	58	14.4	82	N	12	5.4		0	0			Inap.	Inap.	Clear	
Cape May, New Jersey	30.09	764.3	30.12	765.0	54	12.2	93	NE	14	6.3			10s			0.11	2.8	Cloudy	
Castroville, Texas	29.00	736.6	29.68	753.9	69	20.6	95	SE	1	0.4			10s			0.57	14.5	Threatening	
Cedar Keys, Florida	29.97	761.2	29.99	761.7	70	21.1	85	NE	7	3.1		0	0			0	0	Clear	
Champaign, Illinois	29.17	740.9	29.94	760.5	63	17.2	89	SE	6	2.7		0	0			0	0	Clear	
Charleston, S. Carolina	29.98	761.5	30.03	762.7	68	20.0	84	SW	2	0.9		0	0			0	0	Clear	
Charlotte, N. Carolina	29.13	739.9	29.92	760.0	64.0	17.8	68	N	1	0.4		0	Sk			0	0	Clear	
Chattanooga, Tennessee	29.23	742.4	30.01	762.2	63	17.2	89	Calm	0	0		1cs	Fg	Calm	Calm	Inap.	Inap.	Dense fog	
Cheyenne, Wyoming	23.93	607.8	29.87	758.7	44	6.7	60	N	8	3.6		0	0			0	0	Clear	
Chicago, Illinois	29.29	744.0	29.97	761.2	53.9	12.2	81	SE	5	2.2		0	0			0	0	Clear	
Chincoteague, Virginia	30.08	764.0	30.10	764.5	55	12.8	87	NE	19	8.5		8k	0	NE		0.03	0.8	Cloudy	
Cincinnati, Ohio	29.43	747.5	30.06	763.5	63	17.2	78	E	2	0.9		0	Sk			0	0	Clear	
Cleveland, Ohio	29.38	746.2	30.12	765.0	43.5	6.4	100	SE	8	3.6			Fg			0.03	0.8	Dense fog	
Coleman City, Texas	27.99	710.9	29.60	751.8	63	17.2	89	SE	2	0.9			10s		S	0.07	1.8	Cloudy	
Columbus, Ohio	29.25	742.9	30.09	764.3	52	11.1	86	NE	1	0.4		0	Fg			0	0	Clear	
Concho, Texas	27.87	707.9	29.50	749.3	61	16.1	94	E	4	1.8			10ks		S	0	0	Cloudy	
Corsicana, Texas	29.39	746.5	29.84	757.9	67	19.4	95	S	4	1.8			10ks			0.06	1.5	Cloudy	
Davenport, Iowa	29.29	744.0	29.91	759.7	61	16.1	66	SE	3	1.3		2ck	0	Calm		0	0	Clear	
Dayton, Washington T'y	28.28	718.3	29.98	761.5	40	4.4	73	SE	3	1.3			10s			0.03	0.8	Cloudy	
Deadwood, Dakota	25.32	643.1			41	5.0	82	NE	4	1.8			10n			0.40	10.2	Light rain	
Decatur, Texas	28.61	726.7	29.73	755.1	66	18.9	89	SE	8	3.6			10s			1.08	27.4	Cloudy	
Delaware Breakwater, Del.	30.09	764.3	30.11	764.5	53	11.7	80	NE	16	7.2			10s			0.09	2.3	Cloudy	
Denison, Texas	29.03	737.3	29.79	756.7	66	18.9	95	S	3	1.3			10n		SW	0.37	9.4	Thund'rst'm	
Denver, Colorado	24.64	625.8	29.86	758.4	54.0	12.2	61	W	9	4.0		5ck	2s	W	Calm	0.11	2.8	Fair	
Des Moines, Iowa	28.97	735.8	29.82	757.4	64	17.8	83	S	1	0.4			10s		S	0	0	Cloudy	
Detroit, Michigan	29.37	746.0	30.06	763.5	53.4	11.9	80	SE	6	2.7		0	Hz			0	0	Clear	
Dodge City, Kansas	27.18	690.4	29.38	746.2	60	15.6	88	SW	9	4.0			10s			0.03	0.8	Cloudy	
Dubuque, Iowa	29.22	742.2	29.89	759.2	65.4	18.6	73	SE	2	0.9		2ck	Hz	S	Calm	0	0	Fair	
Duluth, Minnesota	29.09	738.9	29.76	755.9	44	6.7	84	NE	1	0.4		0	8s		NE	0.04	1.0	Fair	
Eagle Pass, Texas	28.97	735.8	29.67	753.6	66	20.0	95	SW	6	2.7			Fg		Calm	0	0	Dense fog	
Eagle Rock, Idaho	25.30	642.6	29.95	760.7	29	— 1.7	67	SW	3	1.3		0	0			0.04	1.0	Clear	
Eastport, Maine	29.97	761.2	30.04	763.0	41	5.0	82	NE	6	2.7			10s		NE	0.01	0.3	Cloudy	
El Paso, Texas	26.04	661.4			63	17.2	52	NW	6	2.7		0	1s			0	0	Clear	
Erie, Pennsylvania	29.40	746.7	30.12	765.0	44	6.7	92	NW	3	1.3			Fg			0	0	Dense fog	
Escanaba, Michigan	29.29	744.0	29.94	760.5	47	8.3	77	Calm	0	0		0	0			0	0	Clear	
Florence, Arizona	28.29	718.6	29.89	759.2	60	15.6	44	Calm	0	0		0	0			0	0	Clear	
Fort Apache, Arizona	24.89	632.2	30.34	770.6	42	5.6	50	E	4	1.8		0	0			0	0	Clear	
Fort Assinnaboine, Montana	27.07	687.6			38	3.3	54	SW	12	5.4		0	0			0	0	Clear	
Fort Bennett, Dakota	28.18	715.8			55	12.8	87	NW	21	9.4			10n		NW	0.07	1.8	Light rain	
Fort Benton, Montana																			
Fort Buford, Dakota	27.84	707.1	29.65	753.1	48	8.9	70	W	4	1.8		10cs	0	W		0.12	3.0	Cloudy	
Fort Custer, Montana	26.87	682.5			41	5.0	74	W	4	1.8		0	5s		Calm	0.23	5.8	Fair	
Fort Davis, Texas	25.06	636.5	30.02	762.5	61	16.1	66	SW	9	4.0		0	0			0.27	6.9	Clear	
Fort Elliott, Texas	27.10	688.3	29.31	744.5	57	13.9	94	SE	12	5.4			Fg			0.04	1.0	Dense fog	
Fort Gibson, Indian T'y	29.28	743.7	29.80	756.9	64	17.8	94	SE	5	2.2			10s		S	0.10	2.5	Cloudy	
Fort Grant, Arizona	25.09	637.3	29.89	759.2	54	12.2	26	N	7	3.1		10cs	0			0	0	Cloudy	
Fort Griffin, Texas	28.37	720.6	29.58	751.3	65.3	18.5	84	SE	6	2.7			10s			0.07	1.8	Cloudy	
Fort Keogh, Montana	27.46	697.5			43	6.1	83	NW	8	3.6		0	0			0.06	1.5	Clear	
Fort Macon, North Carolina	29.97	761.2	29.98	761.5	65	18.3	94	N	18	8.0			10ks		NE	0	0	Cloudy	
Fort McKavett, Texas	27.56	700.0	29.41	747.0	63.5	17.5	92	SE	3	1.3			10s			0.48	12.2	Cloudy	
Fort Missoula, Montana	26.70	678.2			38	3.3	72	SW	2	0.9		0	0			0	0	Clear	
Fort St. Michaels																			
Fort Shaw, Montana	25.35	669.5			38	3.3	63	W	16	7.2		10cs	0			0	0	Cloudy	
Fort Sill, Indian Territory	28.55	725.2	29.61	752.1	62	16.7	94	S	8	3.6			10s		S	0.39	9.9	Cloudy	
Fort Stevenson, Dakota	27.98	710.7			50	10.0	86	NW	14	6.3			10s		NW	0.07	1.8	Cloudy	
Fort Verde, Arizona					53	11.7	25	S			2	0	0			0	0	Clear	
Fredericksburg, Texas	28.08	713.2	29.59	751.6	65	18.3	89	SW	4	1.8			10ks		W	0.40	10.2	Cloudy	
Galveston, Texas	29.81	757.2	29.86	758.4	73	22.8	90	S	12	5.4			10s		SW	0.01	0.3	Cloudy	
Grand Haven, Michigan	29.36	745.7	30.00	762.0	54	12.2	87	E	3	1.3		0	0			0	0	Clear	
Hatteras, North Carolina	30.02	762.5	30.04	763.0	62	16.7	88	NE	26	11.6			10s		Calm	0	0	Cloudy	
Helena, Montana	25.82	655.8			49	9.4	31	S	2	0.9		0	0			0	0	Clear	
Henrietta, Texas																0.04	1.0		
Indianapolis, Indiana	29.23	742.4	29.98	761.5	65	18.3	78	E	4	1.8		0	Hz		Calm	0	0	Clear	
Indianola, Texas	29.80	756.9	29.82	757.4	73.6	23.1	95	S	3	1.3			10k;s		S	0.19	4.8	Cloudy	
Jacksboro, Texas	28.63	727.2	29.72	754.9	64	17.8	94	S	8	3.6			10s		S	Inap.	Inap.	Cloudy	
Jacksonville, Florida	29.96	761.0	30.01	762.2	70	21.1	85	NE	2	0.9		0	0			0	0	Clear	
Keokuk, Iowa	29.24	742.7	29.87	758.7	66.6	19.2	86	S	4	1.8		0	5s		S	0.14	3.6	Fair	
Key West, Florida	29.90	759.4	29.93	760.2	77.5	25.3	77	N	11	4.9		1k	0			0	0	Clear	
Kittyhawk, North Carolina	30.07	763.8	30.10	764.5	54	12.2	87	NE	20	8.9		10cs	0			Inap.	Inap.	Cloudy	
Knoxville, Tennessee	29.05	737.9	30.04	763.0	63	17.2	83	NE	4	1.8		0	0			0	0	Clear	
La Crosse, Wisconsin	29.12	739.6	29.82	757.4	65.3	18.5	73	S	4	1.8		2c	0	SW		0	0	Fair	
La Mesilla, New Mexico	25.91	658.1	30.06	763.5	62	16.7	67	NW	2	0.9		0	1s		NW	0	0	Clear	
Laredo, Texas	29.31	744.5	29.64	752.8	73	22.8	85	SE	1	0.4			10s		SE	0	0	Cloudy	
Leavenworth, Kansas	28.98	736.1	29.79	756.7	64	17.8	89	SE	4	1.8			10n		S	0.04	1.0	Light rain	
Lewiston, Idaho	29.26	743.2	29.92	760.0	41	5.0	48	NE	4	1.8			10s		Calm	0	0	Cloudy	
Little Rock, Arkansas	29.60	751.8	29.91	759.7	67	19.4	95	Calm	0	0			10n			0.51	13.0	Light rain	
Los Angeles, California	29.52	749.8	29.88	758.9	53.2	11.8	86	NE	4	1.8			10s		Calm	0	0	Cloudy	
Louisville, Kentucky	29.47	748.5	30.01	762.2	68.0	20.0	74	NE	3	1.3		0	0			Inap.	Inap.	Clear	
Lynchburg, Virginia	29.42	747.3	30.08	764.0	64	17.8	78	NE	3	1.3			10s		NE	0	0	Cloudy	
Madison, Wisconsin	28.94	735.1	29.90	759.4	57	13.9	88	SE	4	1.8		5c	0	W		0	0	Fair	
Marquette, Michigan	29.17	740.9	29.84	757.9	66	18.9	64	SW	20	8.9		5cs	0	SW		0	0	Fair	
Mason, Texas	28.18	715.8	29.87	758.7	65.8	18.8	89	S	2	0.9			10s		S	0.38	9.7	Cloudy	
Memphis, Tennessee	29.64	752 8	29.97	761.2	71	21.7	75	SE	3	1.3		1cs	1s	Calm	SE	0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill	Weather.	Observers.
United States Series—Continued.																			
Milwaukee, Wisconsin	29.24	742.7	29.96	761.0	54	12.2	74	S	2	0.9		5ck	Sk		SW	0	0	Fair	
Mobile, Alabama	29.92	760.0	29.99	761.7	68.2	20.1	90	N	3	1.3		5ck	1s	S		0	0	Fair	
Montgomery, Alabama	29.79	756.7	30.02	762.5	67	19.4	84	E	1	0.4		5c	0	W		0	0	Fair	
Moorhead, Minnesota	28.61	726.7	29.51	749.5	62	16.7	83	S	12	5.4		2c	0	S		0.46	11.7	Fair	
Morgantown, W. Virginia	29.11	739.4	30.10	764.5	51	10.6	79	Calm	0	0			Fg			0.14	3.6	Dense fog	
Mt. Washington, N. H.	23.76	603.5	30.12	765.0	28	— 2.2	88	NE	28	12.5		7ck;k	8s	NW	NE	0.31	7.9	Cloudy	
Nashville, Tennessee	29.49	749.0	30.02	762.5	64.0	17.8	90	Calm	0	0			Fg			0.03	0.8	Dense fog	
New Haven, Connecticut	30.00	762.0	30.12	765.0	52	11.1	73	NE	3	1.3			10s		NE	0.31	7.9	Cloudy	
New London, Connecticut	30.08	764.0	30.12	765.0	52	11.1	79	N	3	1.3		5k	0	N		0.64	16.3	Fair	
New Orleans, Louisiana	29.89	759.2	29.95	760.7	68.5	20.3	88	SE	5	2.2		1c	Sk			0.14	3.6	Clear	
Newport, Rhode Island	30.05	763.3	30.10	764.5	46.0	7.8	88	N	6	2.7			10s		NE	0.43	10.9	Cloudy	
New River, N. Carolina																			
New Shoreham, Rhode I'd	29.99	761.7	30.02	762.5	45.4	7.4	84	NE	12	5.4			10s		NE	0.15	3.8	Cloudy	
New York, New York	29.96	761.0	30.24	768.1	50.5	10.3	82	E	8	3.6			10s;fg			0.22	5.6	Cloudy	
Norfolk, Virginia	30.04	763.0	30.10	764.5	58	14.4	88	NE	6	2.7		0	8ks		NE	Inap.	Inap.	Fair	
North Platte, Nebraska	26.85	682.0	29.31	744.5	58	14.4	91	NE	11	4.9		8k	2ks	N		0.14	3.6	Cloudy	
Olympia, Washington T'y	30.00	762.0	30.04	763.0	43.0	6.1	92	S	2	0.9			10s		Calm	0.05	1.3	Cloudy	
Omaha, Nebraska	28.66	728.0	29.71	754.6	66.1	18.9	88	S	7	3.1		10cs	0	W		Inap.	Inap.	Cloudy	
Oswego, New York	29.77	756.1	30.09	764.3	49.0	9.4	82	S	5	2.2			Fg			Inap.	Inap.	Light fog	
Pensacola, Florida	29.97	761.2	30.00	762.0	72	22.2	90	NE	4	1.8		2ck	0	Calm		0	0	Fair	
Philadelphia, Pa	30.06	763.5	30.12	765.0	55	12.8	81	NE	10	4.5			10s		NE	0.10	2.5	Cloudy	
Phœnix, Arizona	28.66	728.0	30.42	772.7	60	15.6	55	E	5	2.2		0	0			0	0	Clear	
Pike's Peak, Colorado	17.73	450.3	29.94	760.5	20	— 6.7	85	N	10	4.5			Fg			0.19	4.8	Dense fog	
Pioche, Nevada	23.98	609.1	29.76	755.9	45	7.2	39	NW	7	3.1		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.29	744.0	30.11	764.8	49	9.4	93	N	3	1.3			Fg		Calm	0	0	Dense fog	
Port Eads, Louisiana	29.96	761.0	29.96	761.0	70.2	21.2	95	E	6	2.7		0	0			0	0	Clear	
Port Huron, Michigan	29.39	746.5	30.05	763.3	49.8	9.9	96	S	6	2.7		0	Fg			Inap.	Inap.	Clear	
Portland, Maine	30.02	762.5	30.08	764.0	47	8.3	85	NW	6	2.7			10s		W	0.50	12.7	Cloudy	
Portland, Oregon	29.99	761.7	30.07	763.8	48.5	9.2	78	NW	3	1.3			10n		W	Inap.	Inap.	Light rain	
Portsmouth, N. Carolina					68	20.0	74	NE	28	12.5		8k	0	NE		0	0	Cloudy	
Prescott, Arizona	24.63	625.6	29.99	761.7	46	7.8	40	SW	2	0.9		0	0			0	0	Clear	
Punta Rassa, Florida	29.91	759.7	29.92	760.0	74	23.3	81	NE	8	3.6		0	1ks		NE	0.39	9.9	Clear	
Red Bluff, California	29.55	750.6	29.90	759.4	57.0	13.9	52	N	2	0.9		0	5s		W	0	0	Fair	
Rio Grande City, Texas	29.57	751.1	29.78	756.4	73	22.8	90	SE			1		10s		Calm	0.03	0.8	Cloudy	
Rochester, New York	29.47	748.5	30.09	764.3	50	10.0	86	W	4	1.8		0	Fg			0	0	Clear	
Roseburg, Oregon	29.49	749.0	30.06	763.5	45	7.2	88	Calm	0	0			10ks			0.03	0.8	Cloudy	
Sacramento, California	29.85	758.2	29.93	760.2	51.5	10.8	86	S	2	0.9		0	0			0	0	Clear	
St. Louis, Missouri	29.37	746.0	29.92	760.0	66.0	18.9	95	SE	8	3.6		1c	8s		SE	0	0	Cloudy	
St. Paul, Minnesota	28.93	734.8	29.72	754.9	64	17.8	78	SE	12	5.4		5k	Hz	SW		0	0	Fair	
Salt Lake City, Utah	25.66	651.8	29.99	761.7	45	7.2	31	Calm	0	0		0	0			0	0	Clear	
San Antonio, Texas	29.10	739.1	29.77	756.1	70	21.1	95	Calm	0	0			Fg		Calm	1.44	36.6	Dense fog	
San Diego, California	29.79	756.7	29.86	758.4	59.1	15.1	70	E	4	1.8			10s			0.02	0.5	Cloudy	
Sandusky, Ohio	29.39	746.5	30.06	763.5	54	12.2	87	S	4	1.8		0	Fg			0	0	Clear	
Sandy Hook, New Jersey	30.10	764.5	30.13	765.3	51.2	10.7	85	E	16	7.2			10s			0.51	13.0	Cloudy	
San Francisco, California	29.91	759.7	29.98	761.5	52	11.1	79	SW	6	2.7		4cs	0	W		0	0	Fair	
Santa Fé, New Mexico	23.12	587.2	29.66	753.4	48	8.9	29	E	6	2.7		0	0			0	0	Clear	
Savannah, Georgia	29.94	760.5	30.03	762.7	69.5	20.8	83	SW	2	0.9		2cs	0			0	0	Fair	
Shreveport, Louisiana	29.94	760.5	30.03	762.7	69.5	20.8	83	SW	2	0.9		2cs	0			0	0	Fair	
Silver City, New Mexico	29.63	752.6	29.86	758.4	70	21.1	90	S	5	2.2		0	5s			0.18	4.6	Fair	
Sitka Alaska	24.11	612.4	30.26	768.6	45	7.2	53	Calm	0	0		0	2s		Calm	0	0	Clear	
Smithville, North Carolina																0.04	1.0		
Socorro, New Mexico	29.98	761.5	30.01	762.2	67	19.4	84	Calm	0	0		0	Hz			0	0	Clear	
Spokane Falls, Wash. Ter.	25.18	639.6	29.24	742.7	60	15.6	20	SE	3	1.3		0	0			0	0	Clear	
Springfield, Illinois	28.00	711.2	29.87	758.7	40	4.4	63	S	10	4.5			10s			0.02	0.5	Cloudy	
Springfield, Massachusetts	29.29	744.0	29.94	760.5	66	18.9	89	S	5	2.2		1c	0	W		0	0	Clear	
Stockton, Texas	29.98	761.5	30.12	765.0	51	10.6	86	N	3	1.3			10s		N	0.34	8.6	Cloudy	
St. Vincent, Minnesota	26.72	678.7	29.72	754.9	61.3	16.3	71	SW	10	4.5		0	1s			0	0	Clear	
Thatcher's Island, Mass	28.79	731.3	29.54	750.3	57	13.9	94	NW	4	1.8			10n		Calm	0.37	9.4	Light rain	
Toledo, Ohio	30.05	763.3	30.10	764.5	43	6.1	92	N	6	2.7			10s		N	0.91	23.1	Cloudy	
Tucson, Arizona	29.39	746.5	30.07	763.8	56	13.3	81	Calm	0	0		0	Sk			0	0	Clear	
Umatilla, Oregon	27.35	694.7	29.90	759.4	53	11.7	42	SE	5	2.2		2c	0			0	0	Clear	
Uvalde, Texas	29.73	755.1	30.23	767.8	44.5	6.9	68	S	5	2.2			10s		SW	0	0	Cloudy	
Vicksburg, Mississippi	28.80	731.5	29.59	751.6	69	20.6	95	SE	1	0.4			10s		Calm	0	0	Threatening	
Visalia, California	29.69	754.1	29.95	760.7	69	20.6	85	E	8	3.6		2cs	c			0	0	Fair	
Washington, D. C.	29.54	750.3	29.90	759.4	53	11.7	80	NW	1	0.4		0	0			0	0	Clear	
Wickenburg, Arizona	30.01	762.2	30.13	765.3	59	15.0	78	NE	3	1.3		0	0			0.04	1.0	Clear	
Wilmington, N. Carolina					51	10.6	53	Calm			0	0	0			0	0	Clear	
Winnemucca, Nevada	29.94	760.5	29.99	761.7	67	19.4	84	N	2	0.9		0	0			0	0	Clear	
Wood's Holl, Mass	25.63	651.0	29.99	761.7	37	2.8	45	NE	8	3.6		0	0			0	0	Clear	
Yankton, Dakota	30.06	763.5	30.10	764.5	45	7.2	92	N	6	2.7			10s		Calm	0.64	16.3	Cloudy	
Yuma, Arizona	28.47	723.1	29.69	754.1	68	20.0	79	S	12	5.4			10ks		SW	0.08	2.0	Cloudy	
	29.57	751.1	29.72	754.9	63.7	17.6	63	NW	2	0.9		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.05	560.1			56.0	13.3	83	Calm	0	0		5cs	2ks			0.52	13.2	Cloudy	Thomas Herman
Buff Bay Town, Jamaica	29.70	754.4	30.01	762.2	73	22.8	81	SE				0	0						
Havana, Cuba, W. I.	29.92	760.0	29.97	761.2	77	25.0	72	Calm	0	0		0	0			0	0	Clear	A. Van Caneghem, Ass't
Jakobshavn, Greenland	30.15	765.9	30.21	767.2	28.8	— 1.8		S			2		8			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	29.91	759.7	29.92	760.0	79.1	26.2	75	Calm	0	0		8cs	0			0	0	Fair	Robert Johnstone
Navassa, W. I.	29.84	757.9	29.92	760.0	81	27.2	78	E				8cs	2k	SE	N	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	29.96	761.0	29.97	761.2	79	26.1	87	E			3	4c	5k	E		0	0	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.43	747.5	29.99	761.7	79	25.1	80	Calm			0		10s		Calm	0.25	6.3	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					78.8	26		N			2	cs	2ks		N	0	0		Earl Flint.
Santiago de Cuba, W. I.	29.89	759.2	29.92	760.0	78	25.6	82	Calm	0	0		2k	3k			0.07	1.8	Cloudy	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.03	762.7	30.08	764.0	26.0	— 3.3	94	SW	12	5.4		0	0			0	0	Clear	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r.	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross, N. 34° 04′, E. 133°04′	29.90	759.4	57	13.9		NE			1		8							D. clouds	Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Villafranca, France	30.31	769.9	71	21.7	55	ESE			1		8							Misty	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 25° 44′, E. 57° 47′	29.75	755.6	85	29.4	68	SSW			1		1	NW						Misty	Comm. G. W. Haud.
H. M. S. Bittern, Constantinople, Turkey			62	16.7		NNW			1-2		2	NNW				2	NNW	D. clouds	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	29.97	761.2	81	27.2	78	E			2		4	E						Squally	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 22′, E. 25° 23′	29.86	758.4	67	19.4	84	W			6-7		4	W				6	W	Squally	Com. F. W. Richards.
H. M. S. Champion, S. 0° 05′, W. 0° 50′	29.89	759.2	77	25.0	91	SSE			2		5	Calm				4	SSE	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 25° 43′, E. 121° 29′	29.88	758.9	64	17.8	89	NE			4		4					3	NE	D. clouds	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer, Corfu, Ionian Islands	30.09	764.3	82	27.8		Calm			0		0							Blue sky	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, S. 19° 15′, W. 7° 57′	30.08	764.0	73	22.8	81	ESE			4-5		9	NW				4	E	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring, N. 9° 33′, E. 66° 35′	29.84	757.9	85	29.4		NW			2		2	N				1	SSE	D. clouds	Capt. F. J. Eliott.
H. M. S. Dido, S. 33° 49′, E. 27° 57′	29.90	759.4	65	18.3		WSW			6		2	WSW				5	WSW	D. clouds	Capt C. Domville.
H. M. Dock-Yard																			Capt. J. Barnardisten.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 08′, W. 53° 28′	30.29	769.4	40	4.4	86	Calm			0		4							D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad, N. 19° 00′, E. 57° 48′	29.82	757.4	84	28.9		S			2		4	SW				3	S	D. clouds	Capt. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 16° 40′, E. 108° 20′	29.72	754.9	73	22.8		SE			4							2	SE	Misty	Comm. C. Johnstone.
H. M. S. Emerald, S. 18° 10′, E. 178° 20′	30.03	762.7	77	25.0	86	E			4-6		6	E				4	E	Showery	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Trincomalee, Ceylon, India	29.77	756.1	87	30.6	76	NNE			1		4							D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo, Great Inagua I'd, W. I.	29.94	760.5	81	27.2	91	E			1		2	SE						D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish, Hong-Kong, China	29.82	757.4	82	27.8	79	SW			2		5	NE				1	SW	Misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 26° 30′, W. 132° 35′	30.15	765.8	64	17.8	70	NE			4-5		10					3	N;NE	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, N. 35° 54′, W. 55° 02	29.83	757.7	64	17.8	83	SSW			2		5					1		D. clouds	Capt. L. F. Jones.
H. M. S. Griffon																			Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 15° 31′, W. 67° 00′	29.92	760.0	84	28.9		ESE			3		1					2	ESE	Blue sky	Capt. J. L. Way.
H. M. S. Inconstant, S. 40° 00′, E. 98° 30′	29.86	758.4	54	12.2	93	W			4-5		6	WSW				7	SW	Drizzling	Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Naples, Italy	30.21	767.3	69	20.6	75	S			3		5					3	SSW	D. clouds	Capt. E. H. Seymour.
H. M. S. IronDuke, N. 24° 36′, E. 118° 43′	29.89	759.2	69	20.6	90	NE			2-4		8	SW				4	NE	Showery	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	29.97	761.2	58	14.4		N			1		6							D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Hong-Kong, China	29.87	757.2	79.9	26.6	90	S			1-3		6							Squally	Capt. A. Carpenter.
H. M. S. Midge, Swatow, China						E			2-4		8	E						Thund'r st'm	Capt. W. N. Lang.
H. M. S. Minotaur, N. 33° 50′, W. 12° 10	30.00	762.0	69	20.6	85	NE			2		1	ENE				2	ENE	Blue sky	Capt. H. H. Rawson.
H. M. S. Modeste, N. 3° 48′, E. 110° 55′	29.84	757.9	85	29.4	87	Calm			0		0							Blue sky	Capt. J. G. Mead.
H. M. S. Monarch Goletta, Tunis, N. Africa	30.19	766.8	65	18.3	94	NNE			3		8	NNW						Showery	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda Islands, W. I.	29.85	758.2	68.5	20.3	92	SSE			5-6		10	SSE						Raining	Capt. E. B. Drummond.
H. M. S. Orontes, S. 27° 41′, E. 35° 40′ †..	29.92	760.0	72.5	22.5	83	NNE			5-6		10	W				2	S	Squally	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.81	757.2	77	25.0		NNW			1		6							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin, S. 36° 50′, W. 73° 20′	29.97	761.2	55	12.8		SSE			5-6		10					4	ENE	Raining	Capt. A. C. Paget.
H. M. S. Phœnix, St. Lucea, Jamaica, W. I.	29.87	758.7	77	25.0	91	Calm			0		1	S						Blue sky	Capt. H. H. Grenfel.
H. M. S. Rambler, N. 4° 54′, E. 0° 33′	29.91	759.7	80	26.7		WSW			2		10	SSW				2	SSE	Raining	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	30.12	765.0	44	6.7		ESE			1		8							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.90	759.4	8[illegible]	28.6	85	ESE			1		2							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis, Port Said, Suez Canal	29.90	759.4	75	23.9	72	WNW			2		0					Sm'h		Blue sky	Capt. G. O. Twiss.
H. M. S. Shannon, S. 22° 35′, W. 33° 05′	30.15	765.8	75.5	24.2	68	ESE			4		1					3	SE	Blue sky	Capt. J. D'Arcy.
H. M. S. Superb, N. 39° 20′, E. 13° 20′ *..	30.24	768.1	74	23.3	63	Calm			0									Blue sky	Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A	30.03	762.7	64	17.8	58	SSE			0-1		10	N						D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise, Callao Bay, Peru			65	18.3	97	SSE			1		6							D. clouds	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 12° 11′, E. 50° 50′	29.81	757.2	85	29.4	87	E			1										Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I			79	26.1		Calm			0		2							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Wellington, New Zealand	30.21	767.3	55	12.8		SSW			1		1	SSW						Blue sky	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, N. 25° 02′, E. 59° 22′	29.77	756.1	84.5	29.2	81	WSW			2		4	W				Sm'h		D. clouds	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Santiago, Cape Verd I'ds	29.97	761.2	78.8	26.0	84	NE			3		0					1	ESE	Blue sky	S. C. da Silva Costa, Comd't. G. A. de Brito Capello, Comd't. P. I. R. de Carvealtio, Comd't.
Sado																			
Tamega																			
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, N. 43° 36′, W. 17° 34′ ‡	30.33	770.3	60.4	15.8	74	E			5		8							Overcast	Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.04	763.0	70	21.1	90	NE	1	0.4			8		NE	0	0			Fair	
N. Yard, Portsmouth, N. H.	30.17	766.3	47	8.3	85	N	6	2.7		10c	0	N		0.4	10.			Cloudy	
Naval Hospital, Yokahama, Japan	29.31	744.5	68	20.0	90	SW			5		8		SW	0.09	2.3			Clearing	
Adams, Callao, Peru	29.73	755.1	66	18.9	94	SSE			2		8					Long	SW	Cloudy	
Alaska, Callao, Peru	29.86	758.4	64	17.8	94	SSE			1		10					Sm'h		Hazy	
Alert, N. 25° 45′, E. 141° 37′	29.93	760.2	80	26.7	78	SSE			4		5?		SSE			Sm'h		Clear?	
Alliance, Norfolk, Va	30.06	763.5	59	15.0	94	ENE			2		8			0	0	Sm'h		Cloudy	
Ashuelot, Nagasaki, Japan	29.89	759.2	58	14.4	82	N			1		10		Calm					Cloudy	
Colorado, New York, N. Y	30.12	765.0	51	10.6	86	NE			1		2		NE	0.01	0.3			Overcast	
Constitution, N. 38° 04′, W. 76° 28′	30.06	763.5	58	14.4	82	NE	4	1.8			2							Clear	
Franklin, Norfolk, Va	30.00	762.0	59	15.0	88	NE	4	1.8			2			0	0			Clear	
Galena, N. 37° 30′, E. 23° 40′	30.15	765.8	71	21.7	62	NE			4		2					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	29.98	761.5	56	13.3	81	SW	1.2	0.5			2		SW	0	0			Clear	
Jamestown, Sitka, Alaska	29.62	752.3	40	4.4	91	E			3		8			0.07	1.8			Cloudy	
Kearsarge, Hampton Roads, Va	30.14	765.5	59	15.0	88	NE			2		2					Sm'h		Fair	
Lackawanna, S. 32° 19′, W. 81° 05′	30.27	768.8	62	16.7	100	SSW			4		8		S			Sm'h	SW	Fair	
Marion, Montevideo, Uruguay	29.99	761.7	60	15.6	94	NW			1		5		Calm	0	0	Sm'h		Fair	
Michigan, Erie, Pennsylvania	30.07	763.8	41	5.0		N	1	0.4										Foggy	
Minnesota, Newport, R. I	30.11	764.8	48	8.9	92	NNE			3		10		NNE			Sm'h		Overcast	
Monocacy, Nagasaki, Japan	29.92	760.0	57	13.9	87	NNW			1		10		Calm					Cloudy	
New Hampshire, Port Royal, S. C	29.98	761.5	70	21.1	85	WNW	7	3.1			5		WNW	0	0			Fair	
Nipsic, Gibraltar, Mediterranean	30.27	768.8	66	18.9	74	ENE			3		2					Sm'h		Squally	
Onward, Callao, Peru	29.93	760.2	65	18.3	94	SSE			1		5		NNW			Long	W	Fair	
Palos, Yokohama, Japan	29.46	748.3	66	18.9	100	SSW			4		10							Squally	
Passaic, Washington, D. C	30.12	765.0	56	13.3	100	NE			1		0							Clear	
Pensacola, N. 23° 44′, W. 154° 40′	30.10	764.5	75	23.9	86	ESE			2-3		0			Slight		Sm'h		Clear	
Portsmouth, Piney Point, Md	30.11	764.8	56	13.3	94	NNE			3		2							Fair	
Powhatan, New York, N. Y	30.13	765.3	53	11.7	80	NE			1		10							Overcast	
Quinnebaug, Gibraltar, Mediterranean	30.26	768.6	65	18.3	73	SW			6		2		ESE					Fair	
Ranger, N. 17° 20′, W. 101° 16′	29.84	757.9	78	25.6	82	NW			2		0			0	0	Sm'h		Clear	
Richmond, Nagasaki, Japan	29.87	758.7	56	13.3	94	N			2		10			0.6	15.			Cloudy	
Saratoga, Potomac River	30.07	763.8	57	13.9	94	NE			2		0			0	0			Clear	
Shenandoah, Montevideo, Uruguay	29.89	759.2	59	15.0	94	WSW			2		5					Sm'h		Fair	
St. Louis, League Island, Pa	30.68	779.3	56	13.3	81	E	8	3.6			8		NNE	0.14	3.6			Cloudy	
Swatara, Shanghai, China	29.90	759.4	68	20.0	84	Calm			0		5		Calm					D. clouds	
Tennessee, Hampton Roads, Va	30.10	764.5	59	15.0	94	NNE	6	2.7			2		NNE	Inap.	Inap.	Sm'h		Fair	
Ticonderoga, S. 34° 19′, W. 126° 42′	30.26	768.6	65	18.3	100	NE			3		10					Mod.		Drizzling	
Trenton, Castellamare, Italy	30.19	766.8	74	23.3	55	ENE			1		5			6 h'r	light	Sm'h		Fair	
Vandalia, Hampton Roads, Va	30.07	763.8	58	14.4	94	NNE			2		2		E					Fair	
Wabash, Boston, Massachusetts	30.11	764.8	52	11.1	73	N	1	0.4			10		N	0.07	1.8			Cloudy	
Wachusetts, N. 36° 02′, W. 143° 25′	30.03	762.7	63	17.2	94	SSW			4		10		Calm	Light		Mod.	SW	Cloudy	
Wyoming, N. 20° 15′, W. 47° 15′	30.04	763.0	74	23.3	81	E			3		10		E			Mod.	E	Cloudy	

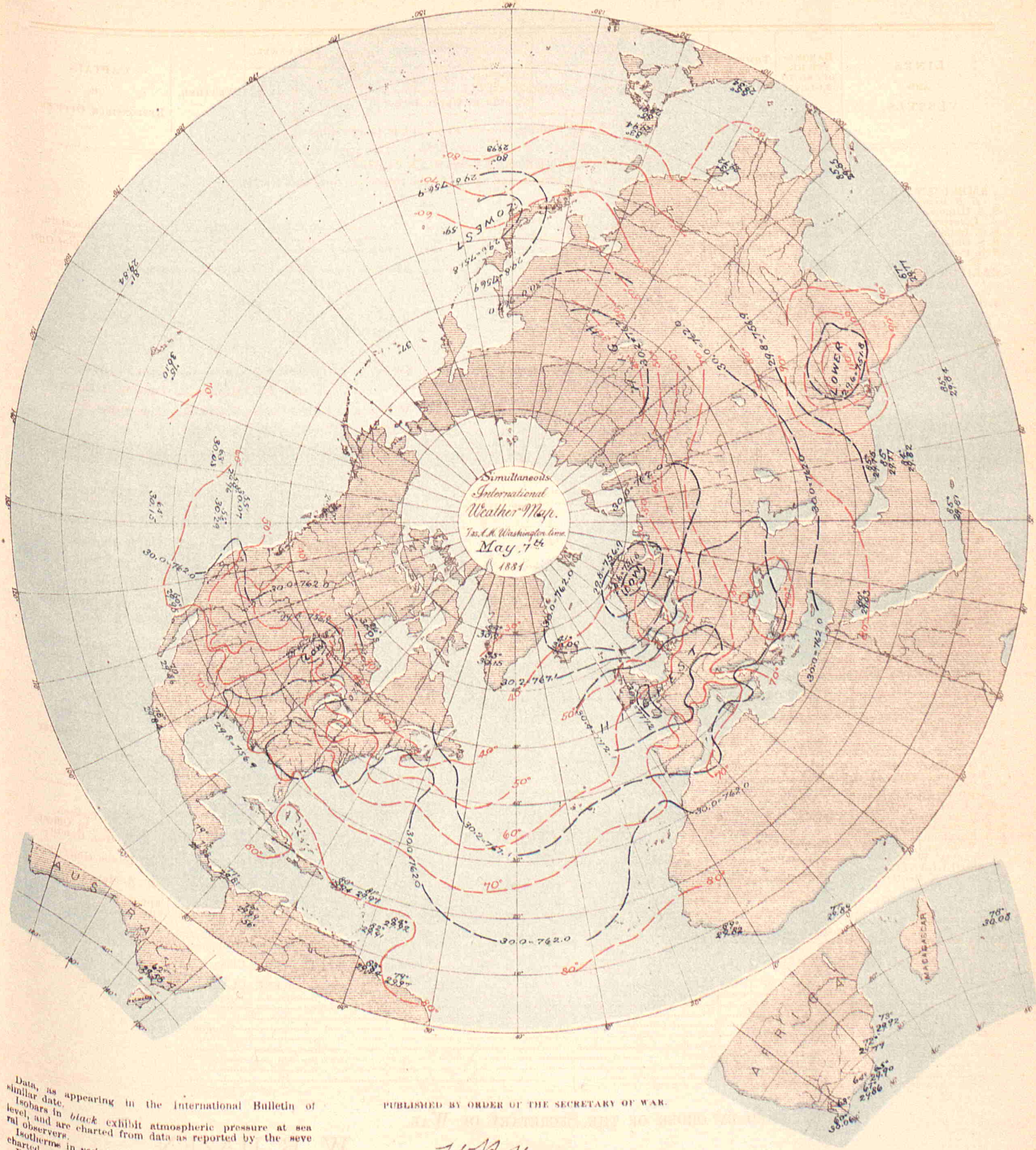
LINES AND VESSELS.	Barometer reduced to Sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	Up'er 0—10	Lo'er 0—10	Upper. From.	Lower. From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 39° 47′, W. 137° 23′	29.96	761.0	58	14.4	100	SW			4-5		10							Raining	Capt. E. J. Molony.
Chin Yang																			Capt. N. Youlden.
S. S. Cipero, Demerara, Brit. Guiana	29.94	760.5	83	28.3	87	ESE			1		3							D. clouds	Capt. W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne, N. 24° 51′, W. 32° 40′	30.18	766.6	72.4	22.4	80	NE			3		7							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 21° 44′, W. 42° 17′	30.04	763.0	74.5	23.6	76	NE			5		4							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow, ‡ N. 5° 52′, E. 96° 00′	29.85	758.2	84.5	29.2	79	Calm			0		2							Blue sky	Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee ‡ S. 5° 12′, W. 19° 47′	29.93	760.2	82.2	27.9	79	E			5		7							Misty	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 50° 08′, W. 16° 30′	30.53	775.4	58.3	14.6	82	SSE			5		4d		SSW			3	NW	Misty	Capt. H. W. Dyke.
Barque Mertola, N. 43° 47′, W. 17° 17′	30.36	771.1	58.7	14.8	94	ESE			6		8							D. clouds	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria, ‡ S. 18° 07′, E. 2° 23′	30.09	764.3	74	23.3	76	ENE			3		6							Showery	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven																			Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton, N. 25° 02′, E. 35° 50′ ‡	29.83	757.7	80	26.7	80	NNW			4		4							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean																			
S. S. Circassian, N. 54° 18′, W. 17° 05′	30.75	781.0	53	11.7	93	SE			3		8k		S	0	0	2	W	Gloomy	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Gallia, N. 42° 12′, W. 51° 21′ *	30.29	769.4	44	6.7		SE			3		5		SE	0	0	Sm'h		Gloomy	Capt. W. H. P. Hains.
S. S. Scythia, N. 44° 24′, W. 46° 14′	30.02	762.5	46	7.8	92	NNW			6		10		NNW	Showers		Long	NNW	Cloudy	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic, N. 51° 21′, W. 14° 43′ †	30.56	776.2	54	12.2	100	S			3		2		SW			Long	W	Misty	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, N. 50° 23′, W. 16° 45′ †	30.59	777.0	56	13.3		SE			4		10		SE	0	0	Sm'h		Hazy	Capt. Ch. W. Kennedy.
S. S. Republic, N. 41° 20′, W. 60° 53′ †	29.90	759.4	58	14.4	100	SSW			4		10			2h'rs	light	R'gh	SE	Cloudy	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH-GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann, N. 43° 20′, W. 45° 57′	30.22	767.6	50	10.0		NNW			6		5		NW	0	0	Very h'vy	NW	Foggy	Capt. H. Baur.
S. S. Köln, N. 49° 39′, W. 6° 34′	30.70	779.8	62.6	16.7	80	E			1		0?			16h'rs	fog	Sm'h	E	Cloudy?	Capt. Th. Jüngst.
S. S. Leipzig, N. 37° 07′, W. 71° 51′	30.02	762.5	58.0	14.4		NNE			4		10		NE	5 hours		Sm'h	NE	Misty	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Helmbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England	30.58	776.7	65	18.3	94	W			2		2		W					Clear	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio																			W. Shackford, Chief Off'r
S. S. Pennsylvania, N. 39° 14′, W. 69° 10′ *†	29.91	759.7	49	9.4	93	NE			4		10		NE			Mod.	ENE	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 35° 29′, W. 122° 16′ †	30.06	763.5	57	13.9	81	WNW			6		0			0	0	H'vy	WNW	Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 32° 16′, E. 133° 19′ †	30.05	763.3	69	20.6	70	WNW			6		5		SW	0	0	Mod.	SW	Fair	Capt. H. Davison.
S. S. Gaelic, N. 36° 51′, E. 151° 37′ *†	30.23	767.8	59	15.0	82	SSE			2		10		S			Sm'h	NE	Raining	Capt. W. H. Kidley.
S. S. Oceanic, N. 41° 33′, W. 134° 58′	30.07	763.8	55	12.8	93	W			2		8		W	0.18	4.6	5	NW;SW	D. clouds	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon																			Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, San Francisco, Cal. †	29.97	761.2	50	10.0	79	SW			3		5		W					Fair	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 33° 37′, W. 118° 07′ †	29.86	758.4	64	17.8	62	SSW			2		2		S	0	0	Mod.	S	Cloudy	Geo. H. Harrison.
S. S. Senator, San Francisco, Cal.			50	10.0	79	SW			1		0							Clear	Capt. Thos. Wallace.
S. S. State of California, N. 40° 26′, W. 124° 30′ †	29.96	761.0	53	11.7	61	NW			5		10		NW			Short	NW	Cloudy	Capt. G. Debney.
S. S. Victoria, Strait of Fuca †	30.03	762.7	47	8.3	85	SE			2		0					Sm'h		Clear	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, Sydney, N. S. W.	30.05	763.3	71	21.7	75	NNW			2		8		NW					Cloudy	A. Bannerman, 2d Officer
S. S. City of New York, S. 33° 50′, E. 156° 08′ †	30.31	769.9	72	22.2	90	N			4		10		N			Mod.	N	Cloudy	Wm.H.Hawes,2d Officer.
S. S. City of Panama.																			Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China †	29.88	758.9	77	25.0	82	SW			2		5		SW	0	0	Sm'h		Fair	Capt. G. G. Berry.
S. S. City of Sidney, N. 9° 48′, W. 162° 57′ †	29.84	757.9	81	27.2	78	NE			5		8		NE	0	0	H'vy	NE	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 37° 48′, W. 131° 02′ †	30.29	769.4	56	13.3	69	SSE			4		10		SSE			R'gh	N	Cloudy	A. L. Ritchie, 2d Officer
S. S. Colima, N. 28° 03′, W. 116° 19′ †	29.95	760.7	60	15.6	76	NW			3		10		WNW	0	0	Mod.	NW	Cloudy	Capt. R. R. Searle.
S. S. Granada, Panama, Panama †	29.80	756.9	78	25.6	91	SE			1		5?		SE	Showers				Clear?	Capt. M. Connolly.
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland																			Capt. W. Geo. Randle.
S. S. Vaderland, N. 41° 23′, W. 65° 55′	29.92	760.0				NNE			6		10			Drizzles		Short	SW	Overcast	T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Savannah, Georgia	30.01	762.2	72	22.2	76	Calm	0	0			0			0	0			Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 25° 32′, W. 34° 04′ *†	30.25	768.3	73	22.8		ENE			2		5		ENE	0	0	Sm'h	ENE	Raining	Capt B. F. Woodbury.
Brigantine George.																			Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Md. †	30.19	766.8	60	15.6	78	NNE	2	0.9		0	2s			0	0			Clear	
Bark Sunbeam, N. 39° 59′, W. 21° 26′ †	30.27	768.8	62	16.7	83	ESE			5		8		SE	0	0	R'gh	ESE	Cloudy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 8, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instru-m'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco	‡		29.98	761.4	74.1	23.4	72	NE			1	2				0	0	Fair	Dr. Ollive.
Nemours	‡		30.16	766.1	68.0	20.0	94	NNW			4	0				0	0	Clear	Raynard.
Algiers	‡		30.19	766.7	63.3	17.4	74	N			2	0				0.134	3.4	Clear	Nicolas.
La Calle	‡		30.12	765.1	65.8	18.8	86	E			1	4				0	0	Cloudy	Fonfrède.
Tunis	‡		30.06	763.4															Jacques.
Sfax	‡		30.15	765.7															Gau.
Saida	‡		30.20	767.0	61.5	16.4	66	N			3	7				0.402	10.2	Very cloudy	Dumas.
Tebessa	‡		30.14	765.5	59.4	15.2	52	NNW			2	9				Inap.	Inap.	Very cloudy	Watrin.
Geriville	‡																		Lonchamp.
Laghouat	‡		30.11	764.8	65.9	19.4	22	N			1	2				Inap.	Inap.	Fair	Herbin.
Biskra	‡		30.16	766.0															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.49	749.0	29.58	751.3	64.7	18.2	74	N	17	7.6		3				0	0	Fine	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.63	752.5	30.16	766.0	75.0	23.9	37	NNE			2	3				0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.49	749.0	30.26	768.7	54.0	12.2	87	W	1.3	0.6		10				0.157	4.0		Dr. Wierzbicki.
Eperies	29.29	744.0	30.15	765.9	65.8	18.8	49	N			3	10s				0	0		Julius Mikolik.
Gratz	28.97	735.7	30.18	766.6	69.4	20.8	45	SW			2	7				0	0		Andreas Rospini.
Hermannstadt	28.68	728.4	30.07	763.6	70.5	21.4	50	SSW			3	5				0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.91	734.2	30.22	767.6	66.7	19.3	61	ENE			1	10				0.008	0.2		The Staff.
Lemberg	29.19	741.3	30.17	766.4	55.4	13.0	67	NE			1	10				0.075	1.9		Dr. T. Stanecki.
Pola	30.04	762.9	30.15	765.7	73.4	23.0	41	E			4	2				0	0		I. R. Hydrographic Office.
Szathmar	29.66	753.4	30.11	764.9	69.4	20.8	63	SW			1	0				0	0		Beicht Peter, S. J.
Szegedin	29.88	758.9	30.15	765.9	67.3	19 6	52	Calm			0	4				0	0		Karl Stancel.
Trieste	30.08	764.0	30.18	766.6	76.1	24.5	19	ENE			3	5				0	0		Secco.
Vienna	29.56	750.7	30.26	768.7	64.8	18.2	55	N			2	8				0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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BRITISH SERIES.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Aberdeen	30.54	775.7	30.64	778.2	56.5	13.6	42	NW	22	9.8			2			0	0	Squally	W. Boswell.
Armagh, Observatory	30.47	773.9	30.70	779.8	58.0	14.4	59	NNE	2	0.9									S. Call.
Bidston, Liverpool Obs'y			30.70	779.8	55.1	12.8	56	NW	12	5.4			0					Blue sky	John Hartnup.
Bolton, Sharples	30.10	764.5	30.65	778.5	58.8	14.9	47	WNW					0					Blue sky	Thomas Mackereth.
Bradford, Yorkshire																0	0		J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.88	758.9	29.92	760.0	85.0	29.4	72	NE			2		4					D. clouds	Corpl. J. Surgener, A.H.C.
Cardington			30.63	778.0	61.6	16.4	46	N			0.6		0					Blue sky	John McLaren.
Chatham, School M. E	30.50	774.7	30.64	778.2	60.2	15.7	56	E			1		2					D. clouds	Lance Cpl. R. Tear, R.E.
Falmouth, Observatory	30.41	772.4	30.64	778.2	57.0	13.9	59	ESE			4		0					Blue sky	The Staff.
Fort Napier, Natal	27.38	695.4	29.60	751.8	58.0	14.4	44	Calm			0		2					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.59	751.6	29.82	757.4	89	31.7	88	W			1		3					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			30.60	777.2	68	20.0	56	W			2		6			0	0	D. clouds	J. O'Donaghue.
Gibraltar, Mediterranean	30.12	765.0	30.18	766.6	66.6	19.2	80	E			6		4					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.46	773.7	30.66	778.7	59.0	15.0	52	W			2		3					Blue sky	D. G. MacLean.
Greenwich, Royal Obs'y	30.45	773.4	30.62	777.7	62.3	16.8	54	NNE			1		0					Blue sky	The Staff.
Guernsey	30.35	770.9	30.57	776.5	54	12.2	80	NE			2		0					Blue sky	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.60	777.2	30.64	778.2	59.3	15.2	42	NE	12	5.4			1					Blue sky	The Staff.
Leicester, Museum	30.37	771.4	30.63	778.0	59.7	15.4	44	N			1		Hz					Misty	J. E. Carryer.
Malta, Mediterranean	29.91	759.7	29.99	761.7	62.8	17.1	95	NE			1		8			0.08	2.0	Overcast	F. S. Vine, A. H. C.
Nassau, Bahamas	29.51	749.5	30.00	762.0	77.0	25.0	84	NE			3		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	30.11	764.8	30.64	778.2	60.0	15.6	50	N			2		0					Blue sky	Robert Pate.
Oxford, Radcliffe Obs'y	30.40	772.1	30.63	778.0	63.7	17.6	48	NNE			2		0					Misty	The Staff.
Plymouth	30.55	776.0	30.62	777.7	62.4	16.9	44	SE			4		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			30.63	778.0	47	8.3	66	W	22	9.8			0					Blue sky	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.99	761.7	30.05	763.3	71.2	21.8	54	N			2		1					Blue sky	Serg't W. H. Lyne.
Sheffield	30.40	772.1	30.68	779.3	62.4	16.9	59	Calm			0		1			0	0	Blue sky	W. F. Cooper.
Silloth Rectory	30.64	778.2	30.67	779.0	57.9	14.4	67	W			2		0			0	0	Blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.68	779.3	57.5	14.2	55	WSW	6	2.7			0					Blue sky	Rev. S. J. Perry.
Stratfield Turgiss	30.40	772.1	30.62	777.7	66.5	19.2	37	E			2		0					Blue sky	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.60	777.2	30.62	777.7	67	19.4	56	E			4		0					Blue sky	W. Newcombe.
Valencia, Observatory	30.60	777.2	30.63	778.0	63.4	17.4	52	ESE	25	11.2			1					Misty	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.12	765.0	30.16	766.1	38	3.3	72	NE	6	2.7			10s			0	0	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	30.12	765.0	30.18	766.6	34	1.1	98	NE	6	2.7			10n		NE	0.34	8.6	Light snow	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	30.21	767.3	30.23	767.8	38	3.3	83	NE	10	4.5			10n		Calm	0	0	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.04	737.6	29.87	758.7	42	5.6	83	W	5	2.2		0	0			0	0	Clear	James Stewart.
Fredericton, N. B																			Prof. Harrison
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.99	761.7	30.13	765.3	38	3.3	91	E	4	1.8			10n		W	0.02	0.5	Cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.68	753.9	30.02	762.5	47	8.3	82	S	2	0.9		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	29.84	757.9	30.05	763.3	47	8.3	91	NE	12	5.4			10s		W	0.02	0.5	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.30	744.2	29.99	761.7	53	11.7	80	S	4	1.8		2cs	0	SE		0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.37	746.0	30.06	763.5	48	8.9	85	Calm	0	0		10c	0			0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.40	746.7	30.06	763.5	44	6.7	98	E	4	1.8		2ck	0	Calm		0	0	Clear	M. Payne.
Quebec, Quebec*	29.81	757.2	30.14	765.5	40	4.4	82	NE			6	2c	2s	SE	E	0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.53	750.0	29.99	761.7	49	9.4	78	Calm	0	0		5c	0	N		0	0	Fair	W. H. McIntyre.
Saugeen, Ontario*	29.27	743.4	29.96	761.0	60	15.6	55	S	10	4.5		8k	0	S		0	0	Hazy	K. Stewart.
St. Andrews, N .B	30.01	762.2	30.06	763.5	43	6.1	90	SE	1	0.4			10n			0.03	0.8	Cloudy	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.07	763.8	30.11	764.8	40	4.4	62	NE	10	4.5		8c	0	Calm		Inap.	Inap.	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.67	753.6	30.05	763.3	50	10.0	80	W	5	2.2		2cs	0	W		0	0	Fair	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.02	762.5	30.09	764.3	40	4.4	95	Calm	0	0			10s		S	0.04	1.0	Light rain	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.87	758.7	30.13	765.3	36	2.2	100	NE	4	1.8			10s			0	0	Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Cape St. Francis Lt. House	29.78	756.4			61.0	16.1	77	SW	57.0	25.5			8n			0.152	3.9	Showery	John Duthie.
Cape Town, C. G. H. Obs'y	30.12	765.0	30.16	766.1	61.9	16.6		WSW	8.1	3.6		3	4ks			0.051	1.3		The Staff, for D. Gill.
Worcester *†	28.93	734.8			59.6	15.3	51	NW			1	3	4			0.01	0.3	Dull	C. Stokes.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.21	767.4	30.24	768.0	54.9	12.7	77	NE	1.3	0.6		10k	0	W		0.016	0.4	Covered	M. Marc Dechevrens, S.J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

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

San José	26.16	664.5	29.88	758.9	68.0	20.0	91	SE			2	10	1d			0	0	Clear	Amand Maison.

DANISH SERIES.

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

Copenhagen	30.11	764.9	30.16	766.1	52.7	11.5	54	NW	25	11			8						Oversergent Fischer.
Fanöe	29.32	770.1	30.34	770.6	48.2	9.0	78	WNW			6		9						Overloerer Lauridsen.
Godthaab, Greenland	30.02	762.6	30.07	763.7	38.8	3.8	70	NE			4		6						S. Kleinschmidt.
Stykkisholm, Iceland	30.35	771.0	30.40	772.1	47.1	8.4		SE			2		8						A. O. Thorlacius.
Thorshavn	30.58	776.7	30.61	777.6	50.2	10.1	75	E	7	3			5						Overloerer Bergh.
Vestervig	30.17	766.2	30.26	768.6	47.1	8.4	88	NW			7		1						Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.61	752.2	30.25	768.4	70.9	21.6	57	NNE			1		0			0	0	Clear	M. Labroue, Director.
Alençon Normal School	29.97	761.2	30.52	775.2	60.1	15.6	62	NE			3		0			0	0	Clear	M. Nicot, Director.
Arras, Engineer School	30.30	769.5	30.56	776.1	59.4	15.2	41	NE			2		ks		NE	0	0		M. Klein, Commandant
Avignon, Normal School	30.12	765.0	30.20	767.0	77.7	25.4	39	N			1		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.86	758.4	30.41	772.5	65.1	18.4	46	ENE			2		0			0	0	Clear	M. Saillard, Director.
Beauvais, Normal School	30.29	769.4	30.56	776.3	60.3	15.7	37	NNE			3		0			0	0	Clear	M. Frère Eugene Marie.
Besançon, Normal School	29.44	747.8	30.31	769.9	68.0	20	57	SE			3	ck	0	SE		0	0		M. Gobin, Director.
Bordeaux, Observatory	30.04	762.9	30.29	769.4	73.0	22.8	50	NE			2		0			0	0	Clear	M. Rayet, Director.
Bourges, Normal School	29.83	757.6	30.37	771.4	68.4	20.2	44	NE			2	ck	0	NE		0	0		M. Postel, Director.
Brest, Naval Observatory	30.29	769.3	30.53	775.5	65.1	18.4	53	NE			2		0			0	0		M. de Rermaree, Dir.
Caen, Normal School	30.47	774.0	30.55	775.9	61.0	16.1	69	ENE			3		0			0	0	Clear	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.03	762.8	30.35	770.8	69.8	21.0	43	NW			2		0			0	0	Clear	M. Jadot, Director.
Charleville, Normal School	29.98	761.6	30.50	774.7	63.7	17.6	49	E			2		0			0	0	Clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.96	735.5	30.28	769.2	67.6	19.8	50	NNE			2		1k			0	0	Clear	M. Alluard, Director.
Cluny, Normal School	29.57	751.0	30.33	770.4	71.6	22.	48	N			4		1		NNE	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.58	751.2	30.44	773.2	63.7	17.6	37	N			3		0			0	0	Clear	Dr. Coulet, Director.
Gap, Normal School	27.66	702.6	30.13	765.3	70.7	21.5	25	NW			1		sk		N	0	0	½ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	29.13	739.9	30.27	768.9	73.8	23.2	33	W			1		2		SW	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.45	747.9	30.23	767.8	72.3	22.4	45	NW			3	cs	0			0	0		M. Ablard, Director.
Guéret, Normal School	28.79	731.3	30.34	770.7	64.4	18	65	NE			1	c	0	NE		0	0		M. Rivoire, Director.
Lamballe, Normal School	30.26	768.7	30.54	775.6	64.4	18	56	N			2				N	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.73	755.2	30.39	772.0	69.8	21	67	NW			1	c	0	N		0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.43	772.8	30.53	775.4	69.8	21.0	41	NE			3		0			0	0	Clear	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.22	742.3	30.27	768.8	68.5	20.3	40	N			1		2		N	0	0	Slightly cl'dy	M. André, Director.
Mans, Normal School	30.21	767.3	30.52	775.1	62.8	17.1	28	E			6		0			0	0	Clear	M. Piboen, Director.
Marseille, Observatory	29.93	760.3	30.24	768.0	75.7	24.3	30	SW			1		1		SW	0	0		M. Stephan, Director.
Montlouis l'institute	25.05	636.3	30.29	769.3	55.8	13.2	52	NW	11.2	5.0			7		E	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal	30.08	764.0	30.19	766.8	75.2	24	54	S			3		0			0	0	Clear	M. P. Galzin, Director.
Nancy, Normal Schoo	29.65	753.0	30.41	772.4	65.1	18.4	34	N			1		0			0	0	Clear	M. Hasse.
Nantes, Observatory	30.34	770.5	30.50	774.6	66.6	19.2	42	NE			3-4		0			0	0	Hazy	M. Larocque, Director.
Nice	30.13	765.2	30.16	766.0	71.6	22.0	58	S			1		1	S	S	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	30.08	764.	30.19	766.7	79 2	26.2	25	NE	11.2	5.0			1	NW	NW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.79	578.8			45.5	7.5							1		NE	0	0	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.18	741.2	30.21	767.4	74.3	23.5	34	N			1		0			0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.44	646.2			47.1	8.4	82	NE			4		5		NE	0.008	0.2	½ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.37	771.3	30.40	772.1	71.2	21.8	53	NE			4		0			0	0	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.21	767.3	30.43	772.8	67.3	19.6	49	NE			4		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	28.10	713.8	30.21	767.3	69.1	20.6	35	NE			2		0			0	0	Clear	M. Richard, Director.
Rouen, Normal School	30.47	773.8	30.55	776.0	65.1	18.4	42	NE			2		0			0	0	Clear	M. Platrier, Director.
Saint Lô, Normal School	30.41	772.4	30.57	776.4	60.3	15.7	52	E			2		0			0	0	Clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.34	770.7	30.51	774.9	63.7	17.6	35	NNE			3		0			0	0		M. Renou, Director.
Toulouse, Observatory	29.59	751.5	30.32	770.0	70.9	21.6	48	NW			1					0	0		M. Bailland, Director.
Tours	30.24	768.1	30.44	773.1	60.8	16.0	47	NE			4		0			0	0	Clear	M. de Tastes.
Versailles, Observatory	30.02	762.4	30.50	774.8	61.9	16.6	30	NE			6					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			

GERMAN SERIES.

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

Bamberg	29.55	750.5	30.42	772.7	61.7	16.5	30	NE			3		1s			0	0		Prof. Dr. Hoh.
Berlin	30.17	766.2	30.34	770.6	59.7	15.4	66	NW			5		8			0	0		Prof. Dr. Arndt.
Breslau	29.80	756.8	30.33	770.4	57.0	13.9	27	NW			3		1			0	0		Royal University Obs'y.
Carlsruhe	29.97	761.1	30.39	772.0	63.5	17.5	50	NE			2		0			0	0		Albert Senz.
Cassel	29.70	754.4	30.42	772.6	59.4	15.2	35	WNW			4		7	NW		0	0		Dr. H. Möhl.
Frankfort on the Main	30.11	764.7	30.47	773.9	61.9	16.6	26	NNE			2		1			0	0		Physical Society.
Friedrichshafen	28.87	733.2	30.28	769.0	66.6	19.2	52	NE			8		5	NE		0	0		Wilhelm, Chief Tel.
Hamburg	30.35	770.9	30.42	772.7	51.8	11.0	64	NW			7		10			0	0		Dr. R. Kleeman.
Kiel	30.34	770.6	30.35	771.0	45.1	7.3	63	WNW			6		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.99	761.7	30.41	772.5	57.4	14.1	46	NW			2		8	NW		0	0		Prof. Dr. Bruhns.
Magdeburg	30.11	764.7	30.40	772.1	58.5	14.7	39	W			5		8ks	NW		0	0	Squally	Dr. Assmann.
Memel	30.08	763.9	30.12	765.1	44.8	7.1	78	WSW			6		10k						Reinbrecht & Issermann.
Munich	28.49	723.6	30.37	771.5	63.7	17.6	53	NE			2		2	NE		0	0		Central Station.
Neufahrwasser	30.18	766.6	30.20	767.0	48.7	9.3	61	W			4		10			0	0		A. Lothes.
Neustadt, Palatinate																			Dicknether.
Stuttgart	29.42	747.3	30.31	769.8	64.0	17.8	46	N			1		2	N		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28 84	732.6	30.35	770.8	61.2	16.2	49	NW			4		4	NW		0	0		Prof. Kemlein.
Wustrow	30.28	769.1	30.30	769.7	49.8	9.9	82	W			5		10ks			0	0		Prof. J. Reimer.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.65	753.1	30.03	762.8	74.8	23.8		NE			4.0		Mist					Misty	A. Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.67	753.6	29.72	754.8	98.5	36.9	30	W	24.0	10.7		0				0	0	Misty	
Deesa	29.12	739.8	29.57	751.0	113.7	45.4	12	S	7.8	3.5		3		S		0	0	D. clouds	
Bombay	29.74	755.4	29.78	756.4	87.4	30.8	72	WSW	13.0	5.8		3				0	0	D. clouds	
Poona, Yarrowda	27.92	709.3	29.73	755.2	91.5	33.1	42	WSW	17.0	7.6		7			E	0	0	Misty	
Belgaum	27.28	692.8	29.78	756.3	83.0	28.3	62	SW	10.0	4.5		9		NE	SW	0	0	Misty	
Lahore	28.83	732.2	29.52	749.9	108.3	42.4	12	W	1.5	0.7		3				0	0	Blue sky	
Roorkee	28.67	728.2	29.52	749.8	103.3	39.6	21	NW	2.5	1.1		0				0	0		
Agra	29.02	737.1	29.55	750.4	113.1	45.1	16	S	3.8	1.7		0				0	0		
Nagpur	28.59	726.1	29.57	751.0	107.7	42.1	20	SSE	5.1	2.3		4		NW		0	0	D. clouds	
Jubbulpore	28.29	718.6	29.58	751.4	103.7	39.8	18	Calm	3.1	1.4		4		S		0	0	D. clouds	
Lucknow	29.22	742.1	29.57	751.1	106.4	41.3	33	N	2.9	1.3		0				0	0	Blue sky	
Allahabad	29.22	742.4	29.52	749.7	108.0	42.2	18	N	2.0	0.9		0				0	0	Blue sky	
Patna	29.41	747.0	29.58	751.4	98.9	37.2	34	NE	3.3	1.5		2		NE	NE	0	0		
Hazaribagh	27.63	701.9	29.56	750.7	97.6	36.4	16	NW	9.0	4.0		0				0	0	Misty	
Cuttack	29.62	752.4	29.70	754.5	89.0	31.7	66	S	7.0	3.1		0				0	0	Blue sky	
Calcutta, Alipore	29.65	753.2	29.67	753.7	88.2	31.2	57	S	15.0	6.7		0				0	0	Blue sky	
Dhubri	29.59	751.5	29.71	754.6	79.2	26.2	80	ESE	4.9	2.2		2		W		0.69	17.5	D. clouds	
Chittagong	29.68	754.0	29.78	756.3	82.9	28.3	75	SW	3.8	1.7		0				0	0	Blue sky	
Sibsagar	29.44	747.7	29.77	756.2	81.4	27.4	77	SW	3.0	1.3		10		W	W	0	0	D. clouds	
Zanzibar, Africa			29.87	758.7	84.1	28.9	73	S	6	2.7		7			S	1.41	35.8	D. clouds	
ITALIAN SERIES. By authority of the MINISTER OF AGRICULTURE, INDUSTRY AND COMMERCE. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.78	756.5	30.19	766.9	73.9	23.3	39	Calm	0	0		6				0	0		Prof. Giovanni Clodig.
Milan	29.69	754.1	30.20	767.1	72.7	22.6	42	SW	2.5	1.1		4				0	0		Prof. Schiaparelli.
Padua	30.09	764.2	30.20	767.0	72.9	22.7	34	ESE	8.7	3.9		1				0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.30	744.3	30.20	767.1	70.0	21.1	57	SE	3.1	1.4		5				0	0		Prof. P. F. Denza.
Genoa	29.97	761.1	30.16	766.0	75.6	24.2	38	N	5.6	2.5		0				0	0		Prof. G. M. Garibaldi.
Mondovi	28.32	719.3	30.22	767.7	67.3	19.6	42	W			2	0				0	0		Prof. D. C. Bruno.
Pesaro	30.11	764.9	30.16	766.1	64.8	18.2	73	W	11.9	5.3		1		NE		0	0		Prof. Luigi Guidi.
Florence	29.87	758.6	30.12	765.0	73.4	23.0	38	NE			6	1				0	0		Prof. Costantino Pittei.
Leghorn	30.00	762.1	30.09	764.3	74.5	23.6	40	ENE	6.9	3.1		8		ENE		0	0		Prof. P. Monte.
Rome	29.90	759.5	30.08	763.9	74.3	23.5	44	W	4.9	2.2		3				0.071	1.8		Prof. P. S. Ferrari.
Lecce	29.80	756.8	30.05	763.2	72.3	22.4	77	NW	13.6	6.1		3				0	0		Prof. C. de Giorgi.
Cosenza	29.16	740.7	30.04	763.0	68.0	20.0	72	NNW	4.3	1.9		9		WNW		0	0		Prof. D. Conti.
Cagliari	29.88	758.9	30.07	763.8	68.4	20.2	47	NW			2	8		E		0	0		Prof. A. Pacinotti.
Palermo	29.82	757.4	30.07	763.8	64.2	17.9	71	E	0.7	0.3		10				0.024	0.6		[illegible] G. Cincciatore.
Syracuse	30.00	762.0	30.04	763.1	64.2	17.9	73	SE	11.2	5.0		10		E		0.110	2.8		[illegible] Vincenzo Guiliano.
SUB-SERIES.																			
Naples, S. R	29.54	750.2	30.05	763.2	70.5	21.4	54	WSW	0	0		6		S		0	0		Prof. F. Brioschi.
Stelvio	22.41	569.2			41.5	5.3	44	E			2	10s		0		0	0	Clear	Prof. P. F. Denza.
Valdobbia	22.44	569.9			50.5	10.3	60	SE			2			4k	NE	0	0	Fair	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.89	759.2	29.90	759.4	63.2	17.3	55	WSW	6.9	3.1		10ck;cs		0	W		0	0	Very cloudy	K. Sasaki.
Kioto	29.71	754.6	29.88	758.9	55.7	13.2	91	ESE				10cs		0			0	0	Fair	M. Tojima.
Nagasaki, I. M. Obs'y	29.80	756.9	30.00	762.0	60.6	15.9	78	W	3.8	1.7							0.040	1.0	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	29.82	757.4	29.89	759.2	62.7	17.1	83	SE	3.5	1.6		5cs;ck		W			0	0	Fair	The Staff.
Wakayama	29.86	758.4	29.92	759.9	60.1	15.6	78	S	2.8	1.3		10cs					0	0	Cloudy	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.84	757.9	30.03	762.8	78.0	25.6	68	ENE	12.0	5.4		0	2			0.08	2.0	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the SECRETARY of PUBLIC WORKS. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.64	752.8	29.90	759.4	70.0	21.1	90	E	0.9	0.4				1s		0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.61	777.6	30.61	777.6	56.7	13.7		NNW			4					0	0		
Groningen	30.47	774.0	30.53	775.4	52.7	11.5		NNW			5					0	0		
Helder	30.58	776.6	30.58	776.6	50.0	10.0		NNW			4					0	0		
Hellevoetsluis	30.59	777.0	30.59	777.0	58.1	14.5	70	N			3					0	0		
Utrecht	30.54	775.6	30.58	776.8	58.5	14.7	81	N			3		2			0	0	Lt'ly cl'dy	H. van der Brink

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction, Upper.	CLOUDS. Direction, Lower.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.30	769.6	30.36	771.2	44.6	7.0	66	N	24.6	11.0	.....	.....	8	.....	.....	0	0	.....	
Christiania	29.97	761.3	30.12	765.0	57.9	14.4	28	N	13	6	.....	.....	6	.....	.....	0	0	.....	
Gjæsvær	29.76	755.8	29.78	756.4	27.0	— 2.8	.....	N	.....	.....	4	.....	10	.....	.....	.....	.....	.....	
Lodingen	30.15	765.9	30.20	767.1	34.2	1.2	60	ENE	.....	.....	6	.....	3	.....	.....	0	0	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.17	766.3	30.33	770.3	60.1	15.6	64	NNE	18.6	8.3	.....	.....	3	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.23	742.4	30.20	767.1	77.0	25.0	26	ENE	5.6	2.5	.....	.....	1	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	29.93	760.2	30.02	762.4	72.7	22.6	55	Calm	0	0	.....	.....	2	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.90	759.5	30.25	768.4	72.9	22.7	40	NNE	14.3	6.4	.....	.....	0	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.24	768.2	30.32	770.0	61.9	16.6	52	NNE	22.4	10.0	.....	.....	4	E	.....	0	0	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	29.73	755.1	29.75	755.6	34.7	1.5	91	SW	13	6	.....	.....	10	.....	.....	.....	.....	.....	Capt. Sseliwerstow.
Astrakhan	30.14	765.5	30.06	763.4	77.7	25.5	33	NW	4	2	.....	.....	3k	.....	.....	.....	.....	.....	Capt. Wisganow.
Barnaul	29.52	749.8	30.00	761.9	72.3	22.4	13	NW	4	2	.....	.....	2	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	29.72	754.8	29.97	761.1	52.0	11.1	58	WSW	11	5	.....	.....	8k	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	28.88	733.5	29.79	756.7	75.4	24.1	21	W	11	5	.....	.....	3k;ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Kasan	29.60	751.9	29.86	758.5	66.6	19.2	60	Calm	0	0	.....	.....	10	.....	.....	.....	.....	.....	Observatory.
Kertch	30.06	763.5	30.08	764.0	59.7	15.4	96	S	4	2	.....	.....	3	.....	.....	.....	.....	Light clouds	Lagorio & Sastyrez.
Kieff	29.39	746.4	30.00	762.0	66.6	19.2	46	ENE	4	2	.....	ck	4ks	.....	.....	.....	.....	.....	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Meteorological Obs'y.
Moscow	29.77	756.2	29.97	761.2	77.2	25.1	29	S	9	4	.....	.....	2	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	29.42	747.3	30.00	761.9	50.7	10.4	74	S	4	2	.....	.....	10s	.....	.....	.....	.....	Light rain.	Meteorological Obs'y.
Nikolaiev	27.58	700.4	29.96	760.9	26.4	— 3.1	33	NW	2	1	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaievsk, on the Amoor	30.06	763.4	30.13	765.2	71.1	21.7	51	W	9	4	.....	.....	2k	.....	.....	.....	.....	.....	Capt. Kurdakow.
Pekin, China	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lieut. Iwanow.
St. Petersburg	29.95	760.7	30.09	764.3	53.1	11.7	48	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Physical Observatory.
Tashkend, Laboratory	29.89	759.1	29.90	759.5	46.0	7.8	73	NW	18	8	.....	.....	2k;ks	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tiflis	28.48	723.5	29.99	761.8	76.1	24.5	52	Calm	0	0	.....	.....	10	.....	.....	.....	.....	.....	Teich, A. M.
Warsaw	28.65	727.6	30.02	762.4	72.5	22.5	36	SE	9	4	.....	.....	6ks	.....	.....	.....	.....	.....	Physical Observatory.
Wilna	29.79	756.6	30.21	767.3	57.7	14.3	47	NW	11	5	.....	.....	6ks	.....	.....	.....	.....	.....	Astronomical Obs'y.
Yeniseisk	29.69	754.0	30.10	764.6	57.6	14.2	48	W	7	3	.....	.....	5	.....	.....	.....	.....	.....	Berg, Assistant.
	29.77	756.2	30.07	763.7	42.1	5.6	77	N	4	2	.....	.....	1	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	30.67	779.0	62.9	17.2	42	NW	.....	.....	1	.....	0	.....	.....	0	0	Hazy	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	30.72	780.3	53	11.7	93	S	.....	.....	2	0	0	.....	.....	0	0	Clear	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	30.49	774.4	.....	.....	.....	NW	.....	.....	6	.....	10	.....	.....	Blank		.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.12	765.0	30.22	767.6	68.9	20.5	55	SSE	2.7	1.2	.....	.....	4	.....	.....	0	0	.....	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.29	769.4	30.35	770.8	74.5	23.6	56	N	2.5	1.1	.....	0	0	.....	.....	0	0	Clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.35	694.7	.....	.....	66.2	19.0	60	NE	7.6	3.4	.....	0	1	.....	.....	0	0	Almost clear	Domingo Martin.
Madrid, Royal Obs'y	28.04	712.2	30.21	767.2	73.2	22.9	40	SW	5.8	2.6	.....	0	0	.....	.....	0	0	Clear	The Staff.
Murcia, Met. Obs'y	30.08	763.9	30.22	767.6	77.0	25.0	40	SE	3.4	1.5	.....	2	4	W	.....	0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.32	744.8	30.19	766.7	80.2	26.8	47	NE	2	1	.....	0	1	.....	.....	0	0	Almost clear	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I.	29.89	759.2	29.95	760.8	75.6	24.2	85	E	1.8	0.8	.....	6c;cs	0	WSW	.....	0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.88	759.0	29.93	760.3	83.9	28.8	83	NW	6.6	3.0	.....	0	8km	.....	E	0	0	Covered	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.10	764.5	30.20	767.0	71.8	22.1	42	ENE	26.0	11.6	.....	0	0	.....	.....	0	0	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.85	758.3	29.95	760.6	80.6	27.0	79	SE	7.6	3.4	.....	5cs	4k	SE	SE	0	0	D. clouds	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.82	757.4	29.97	761.2	81.7	27.6	81	WNW	22	11	.....	rock	0	NW	.....	Inap.	Inap.	Covered	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.06	763.5	30.10	764.5	33.4	0.8	75	N	.....	.....	4	.....	10	.....	.....	0	0	.....	
Umea	30.04	763.0	30.09	764.3	42.1	5.6	52	NNE	.....	.....	4	.....	8	.....	.....	0	0	.....	
Hernosand	30.04	763.1	30.10	764.4	41.2	5.1	64	NE	.....	.....	2	.....	10	.....	.....	0	0	.....	
Stockholm	29.78	756.5	29.96	761.0	48.9	9.4	61	NE	.....	.....	4	.....	10	.....	.....	0	0	.....	
Wisby	29.91	759.6	29.97	761.1	47.5	8.6	63	W	.....	.....	4	.....	5	.....	.....	0	0	.....	
SUB-SERIES.																			
Upsala	29.90	759.4	29.98	761.6	41.9	5.5	77	N	17.2	7.7	.....	.....	10	.....	NE	0	0	.....	Nils Ekholm
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour. Director of the Observatory at Geneva.																			
Geneva	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Observatory.
Zurich	1.. 28.67	728.2	30.25	768.5	69.8	21.0	52	E	.....	.....	4-6	.....	3	.....	.....	0	0	Fair	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —— mm.; Ther. —— cent.; Hum. —— per cent.																			
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.11	764.8	66.4	19.1	50	NNE	15	6.5	.....	.....	0	.....	.....	0	0	.....	The Observatory.
Valona	.....	.....	30.08	764.1	77.5	25.3	.....	SW	.....	.....	1	.....	5	.....	.....	0	0	Cloudy	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.90	759.5	75.2	24.0	74	NW	.....	.....	1	1c	0	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.01	762.2	30.09	764.3	60	15.6	65	S	8	3.6	.....	Hz	Hz	.....	.....	0	0	Dense haze.	
Alpena, Michigan	29.28	743.7	29.92	760.0	53	11.7	86	S	2	0.9	.....	5k	5ks	SW	SW	0.07	1.8	Cloudy..	
Atlanta, Georgia	28.92	734.6	30.04	763.0	66.2	19.0	78	E	6	2.7	.....	2k	0	Calm	.....	0	0	Fair.....	
Atlantic City, New Jersey	30.18	766.6	30.20	767.1	52	11.1	86	SW	7	3.1	.....	0	0	.....	.....	0	0	Clear.....	
Attou Id., Alaska.....‡	29.85	758.2	.....	.....	33	0.6	89	NW	20	8.9	.....	.....	10s	.....	W	0.04	1.0	Cloudy.....	
Augusta, Georgia	29.96	761.0	30.16	766.1	69.0	20.6	85	E	3	1.3	.....	.....	10s	.....	E	0	0	Cloudy.....	
Baltimore, Maryland	30.15	765.8	30.20	767.1	56	13.3	81	S	8	3.6	.....	0	0	.....	.....	0	0	Clear.....	
Barnegat, New Jersey	30.14	765.5	30.16	766.1	56	13.3	75	W	11	4.9	.....	0	0	.....	.....	0	0	Clear.....	
Bismarck, Dakota	28.14	714.7	29.99	761.7	42	5.6	65	Calm	0	0	.....	10c	0	S	.....	0	0	Cloudy.....	
Boise City, Idaho	27.12	688.8	30.08	764.0	47.2	8.4	77	W	2	0.9	.....	.....	10s	.....	W	0.01	0.3	Cloudy.....	
Boston, Massachusetts	29.89	759.2	30.04	763.0	53.5	11.9	77	SW	8	3.6	.....	0	10s	.....	W	0	0	Cloudy.	
Brackettville, Texas	28.62	726.9	29.64	752.8	65	18.3	84	W	6	2.7	.....	0	5s	.....	.....	0.12	3.0	Fair.....	
Brownsville, Texas	29.75	755.6	29.80	756.9	77	25.0	91	E	2	0.9	.....	.....	10s	.....	S	0	0	Cloudy.....	
Buffalo, New York	29.34	745.2	30.03	762.7	56	13.3	63	SW	2	0.9	.....	10s	Hz	.....	.....	0	0	Clear.....	
Burlington, Vermont	29.75	755.6	30.03	762.7	58.5	14.7	70	S	3	1.3	.....	.....	10n	.....	S	Inap.	Inap.	Light rain....	
Cairo, Illinois	29.58	751.3	29.96	761.0	70	21.1	85	Calm	0	0	.....	5k	0	SE	.....	0	0	Fair...	
Campo, California	27.27	692.6	29.84	757.9	44	6.7	84	S	3	1.3	.....	0	0	.....	.....	0	0	Clear.....	
Camp Thomas, Arizona	27.07	687.6	.....	.....	51	10.6	59	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear.....	
Cape Henry, Virginia	30.1[illegible]	766.6	30.20	767.1	56	13.3	81	E	1	0.4	.....	2k	0	NW	.....	0	0	Clear.....	
Cape May, New Jersey	30.1[illegible]	765.8	30.18	766.6	52	11.1	86	W	9	4.0	.....	0	0	.....	.....	0	0	Clear.....	
Castroville, Texas	28.97	735.8	29.64	752.8	73	22.8	46	S	18	8.0	.....	.....	10s	.....	S	0.20	5.1	Cloudy... ...	
Cedar Keys, Florida	30.05	763.3	30.08	764.0	71	21.7	85	NE	5	2.2	.....	0	0	.....	.....	0	0	Clear.....	
Champaign, Illinois	29.13	739.9	29.87	758.7	66.3	19.1	84	S	6	2.7	.....	0	0	.....	.....	0	0	Clear...	
Charleston, S. Carolina	30.09	764.3	30.15	765.8	69	20.6	75	E	8	3.6	.....	0	0	.....	.....	0	0	Clear.....	
Charlotte, N. Carolina	30.30	744.2	30.10	764.5	63.0	17.2	83	SE	4	1.8	.....	.....	10s	.....	.....	0	0	Cloudy.....	
Chattanooga, Tennessee	29.27	743.4	30.06	763.5	67	19.4	84	Calm	0	0	.....	2k	Fg	S	Calm	0	0	Fair.....	
Cheyenne, Wyoming	23.99	609.3	29.92	760.0	44	6.7	84	SW	6	2.7	.....	0	0	.....	.....	0	0	Clear.....	
Chicago, Illinois	29.20	741.7	29.86	758.4	67.1	19.5	79	S	4	1.8	.....	0	0	.....	.....	0.03	0.8	Clear.....	
Chincoteague, Virginia	30.18	766.6	30.20	767.1	52	11.1	93	SE	2	0.9	.....	0	Hz	.....	.....	0	0	Clear.....	
Cincinnati, Ohio	29.38	746.2	30.02	762.5	65	18.3	78	E	1	0.4	.....	4k	4ks	W	W	0	0	Fair	
Cleveland, Ohio	29.33	745.0	30.05	763.3	56.2	13.4	63	SE	8	3.6	.....	0	0	.....	.....	0	0	Clear.	
Coleman City, Texas	28.08	713.2	29.69	754.1	63	17.2	89	NE	10	4.5	.....	.....	10s	.....	S	0.23	5.8	Cloudy..... ..	
Columbus, Ohio	29.21	741.9	30.04	763.0	60	15.6	77	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Concho, Texas	27.97	710.4	29.58	751.3	67	19.4	69	S	8	3.6	.....	0	2s	.....	.....	0	0	Fair.....	
Corsicana, Texas	29.39	746.5	29.84	757.9	73	22.8	95	S	8	3.6	.....	.....	10n	.....	.....	0.08	2.0	Light rain ..	
Davenport, Iowa	29.23	742.4	29.84	757.9	66	18.9	89	S	2	0.9	.....	.....	10ks	.....	S	Inap.	Inap.	Cloudy.	
Dayton, Washington T'y	28.13	714.5	29.76	755.9	51	10.6	59	SW	3	1.3	.....	.....	10ks	.....	S	0	0	Cloudy.....	
Deadwood, Dakota	25.27	641.8	.....	.....	47	8.3	70	SE	2	0.9	.....	.....	10s	.....	.....	0.04	1.0	Cloudy.....	
Decatur, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Delaware Breakwater, Del.	30.16	766.1	30.19	766.8	49	9.4	85	SW	5	2.2	.....	0	0	.....	.....	0	0	Clear.....	
Denison, Texas	29.06	738.1	29.82	757.4	64	17.8	94	NW	6	2.7	.....	.....	10n	.....	Calm	0.52	13.2	Light rain...	
Denver, Colorado	24.74	628.4	29.96	761.0	43.2	6.2	88	SW	2	0.9	.....	0	0	.....	.....	0.01	0.3	Clear.....	
Des Moines, Iowa	28.94	735.1	29.79	756.7	63	17.2	94	SW	2	0.9	.....	.....	10s	.....	.....	0.07	1.8	Cloudy.....	
Detroit, Michigan	29.32	744.7	30.00	762.0	61.0	16.1	71	S	8	3.6	.....	2cs	Sk	Calm	.....	0	0	Clear.....	
Dodge City, Kansas	27.32	693.9	29.55	750.6	56	13.3	87	N	11	4.9	.....	.....	10ks	.....	N	0.11	2.8	Cloudy.....	
Dubuque, Iowa	29.15	740.4	29.82	757.4	66.2	19.0	79	S	2	0.9	.....	.....	10s	.....	S	0.19	4.8	Cloudy.....	
Duluth, Minnesota	29.15	740.4	29.81	757.2	56	13.3	87	Calm	0	0	.....	.....	10s	.....	.....	0.08	2.0	Cloudy.....	
Eagle Pass, Texas	29.02	737.1	29.72	754.9	68	20.0	74	NW	8	3.6	.....	.....	10s	.....	NW	1.02	25.9	Cloudy... . .	
Eagle Rock, Idaho	25.14	638.5	29.79	756.7	46	7.8	54	Calm	0	0	.....	5cs	0	W	.....	0	0	Fair,.....	
Eastport, Maine	30.02	762.5	30.09	764.3	42.8	6.0	85	Calm	0	0	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy.....	
El Paso, Texas	26.10	662.9	.....	.....	62	16.7	33	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear.....	
Erie, Pennsylvania	29.34	745.2	30.04	763.0	60	15.6	71	S	9	4.0	.....	0	Fg	.....	.....	0	0	Clear.....	
Escanaba, Michigan	29.18	741.2	29.82	757.4	49	9.4	97	S	3	1.3	.....	.....	Fg	.....	Calm	0.95	24.1	Dense fog...	
Florence, Arizona	28.24	717.3	29.84	757.9	67	19.4	37	NE	2	0.9	.....	2c	2s	Calm	Calm	0	0	Fair.....	
Fort Apache, Arizona	24.93	633.2	30.38	771.6	41	5.0	57	NE	2	0.9	.....	0	2s	.....	Calm	0	0	Fair.....	
Fort Assinnaboine, Montana	27.05	687.1	.....	.....	36	2.2	61	SW	6	2.7	.....	0	0	.....	.....	0	0	Clear.....	
Fort Bennett, Dakota	28.34	719.8	.....	.....	39	3.9	73	NW	2	0.9	.....	1c	0	.....	.....	Inap.	Inap.	Clear.....	
Fort Benton, Montana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Buford, Dakota	27.88	708.1	29.70	754.4	44	6.7	84	Calm	0	0	.....	5cs	0	NW	.....	0	0	Fair	
Fort Custer, Montana	20.76	679.7	.....	.....	45	7.2	76	SE	10	4.5	.....	0	0	.....	.....	0	0	Clear.....	
Fort Davis, Texas	25.13	638.3	30.09	764.3	54	12.2	74	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear.....	
Fort Elliott, Texas	27.18	690.4	29.41	747.0	55	12.8	68	NE	16	7.2	.....	.....	10s	.....	NE	0.11	2.8	Cloudy.....	
Fort Gibson, Indian T'y	29.26	743.2	29.78	756.4	66	18.9	95	E	8	3.6	.....	.....	10s	.....	S	0.50	12.7	Threatening	
Fort Grant, Arizona	25.15	638.8	29.95	760.7	56	13.3	35	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear.....	
Fort Griffin, Texas	26.45	722.6	29.07	753.6	65.4	18.6	84	E	14	6.3	.....	.....	10n	.....	.....	0.75	19.0	Light rain..	
Fort Keogh, Montana	27.42	696.5	.....	.....	47	8.3	85	SE	23	10.3	.....	5c	0	.....	.....	0	0	Fair.....	
Fort Macon, North Carolina	30.17	766.3	30.18	766.6	56	13.3	94	N	6	2.7	.....	2k	Hz	N	Calm	0	0	Clear.....	
Fort McKavett, Texas	27.57	700.3	29.42	747.3	63	17.2	72	SW	2	0.9	.....	5ck	0	.....	.....	0.07	1.8	Fair	
Fort Missoula, Montana	26.60	675.6	.....	.....	44	6.7	68	W	1	0.4	.....	0	0	.....	.....	0	0	Clear.....	
Fort St. Michaels	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Shaw, Montana	26.29	667.8	.....	.....	30	— 1.1	68	W	6	2.7	.....	0	0	.....	.....	0	0	Clear.....	
Fort Sill, Indian Territory	28.57	725.7	29.04	752.8	60	15.6	94	NW	5	2.2	.....	.....	10s	.....	.....	1.00	25.4	Cloudy.....	
Fort Stevenson, Dakota	28.34	719.8	.....	.....	43	6.1	75	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy.....	
Fort Verde, Arizona	.....	.....	.....	.....	59.2	15.1	54	SW	.....	.....	1	.....	10s	.....	SW	0	0	Cloudy.....	
Fredericksburg, Texas	28.07	713.0	29.56	750.8	70	21.1	53	SW	8	3.6	.....	.....	10s	.....	.....	0	0	Cloudy.....	
Galveston, Texas	29.87	758.7	29.91	759.7	75	23.9	95	S	6	2.7	.....	.....	10ks	.....	SW	0.44	11.2	Cloudy.....	
Grand Haven, Michigan	29.27	743.4	29.89	759.2	68	20.0	70	SW	12	5.4	.....	.....	10s	.....	SW	0	0	Cloudy	
Hatteras, North Carolina	30.10	766.1	30.18	766.6	56	13.3	81	NE	14	6.3	.....	0	8ks	.....	NE	0	0	Fair.....	
Helena, Montana	25.70	652.8	.....	.....	50	10.0	45	S	2	0.9	.....	2c	0	Calm	.....	0	0	Fair...	
Henrietta, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Indianapolis, Indiana	29.19	741.4	29.94	760.5	69	20.6	65	SE	2	0.9	.....	.....	0	.....	.....	0	0	Clear.	
Indianola, Texas	29.85	758.2	29.88	758.9	73.4	23.0	90	S	4	1.8	.....	2cs	5s	Calm	Calm	0.30	7.6	Fair	
Jacksboro, Texas	28.70	729.0	29.79	756.7	65	18.3	84	SW	4	1.8	.....	.....	10n	.....	Calm	0.14	3.6	Light rain..	
Jacksonville, Florida	30.05	763.3	30.09	764.3	73	22.8	85	E	4	1.8	.....	0	0	.....	.....	0	0	Clear.....	
Keokuk, Iowa	29.17	740.9	29.79	756.7	66.0	18.9	89	SE	5	2.2	.....	.....	10s	.....	S	0.29	7.4	Cloudy.....	
Key West, Florida	29.94	760.5	29.98	761.5	80.4	26.9	74	E	6	2.7	.....	5k	0	E	.....	0.06	1.5	Fair.....	
Kittyhawk, North Carolina	30.19	766.8	30.22	767.6	53	11.7	86	NE	11	4.9	.....	2k	0	NE	.....	0	0	Clear.	
Knoxville, Tennessee	29.09	738.9	30.07	763.8	67	19.4	74	NE	1	0.4	.....	5k	0	Calm	.....	0	0	Fair...	
La Crosse, Wisconsin	29.06	738.1	29.70	755.9	66.4	19.1	84	S	9	4.0	.....	.....	10n	.....	.....	0.20	5.1	Light rain...	
La Mesilla, New Mexico	25.96	659.4	30.11	764.8	47	8.3	41	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Laredo, Texas	29.35	745.5	29.68	753.9	67	19.4	84	E	18	8.0	.....	.....	10ks	.....	S	0.87	22.1	Cloudy.....	
Leavenworth, Kansas	29.94	760.5	29.75	755.6	64	17.8	89	S	1	0.4	.....	.....	10s	.....	.....	0.13	3.3	Cloudy.....	
Lewiston, Idaho	29.07	738.4	29.71	754.6	49	9.4	59	S	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy.....	
Little Rock, Arkansas	29.58	751.3	29.89	759.2	68	20.0	95	S	4	1.8	.....	2cs	5ks	.....	S	0.49	12.4	Fair.....	
Los Angeles, California	29.48	748.8	29.84	757.9	59.0	15.0	94	SE	1	0.4	.....	.....	Fg	.....	Calm	0	0	Light fog....	
Louisville, Kentucky	29.42	747.3	29.95	760.7	70.0	21.1	75	E	1	0.4	.....	0	0	.....	.....	0	0	Clear.....	
Lynchburg, Virginia	29.48	748.8	30.15	765.8	61	16.1	71	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.....	
Madison, Wisconsin	28.84	732.5	29.78	756.4	65	18.3	89	S	4	1.8	.....	8cs	0	W	.....	0.35	8.9	Fair	
Marquette, Michigan	29.10	739.1	29.78	756.4	60	15.6	88	E	1	0.4	.....	.....	10s	.....	S	0.34	8.6	Cloudy	
Mason, Texas	28.20	716.3	29.89	759.2	67.8	19.9	79	Calm	0	0	.....	9cs	0	SW	.....	0	0	Cloudy.....	
Memphis, Tennessee	29.64	752.8	29.98	761.5	68	20.0	90	Calm	0	0	.....	7cs	Hz	SW	Calm	0.24	6.1	Fair...	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
														Up'er	Lo'er	Upper.	Lower.				
	Inch	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.14	740.1	29.84	757.9	63	17.2	78	Calm	0	0	.....	5c	Hz	.....	.....	Inap.	Inap.	Fair	
Mobile, Alabama	29.96	761.0	30.03	762.7	72	22.2	90	SE	2	0.9	.....	5k	0	S	.....	0	0	Fair	
Montgomery, Alabama	29.83	757.7	30.06	763.5	70	21.1	79	SE	1	0.4	.....	5k	0	SE	.....	0	0	Fair	
Moorhead, Minnesota	28.89	733.8	29.84	757.9	49	9.4	85	Calm	0	0	.....	0	0	.....	.....	0.03	0.8	Clear	
Morgantown, W. Virginia	29.10	739.1	30.08	764.0	54	12.2	87	Calm	0	0	.....	.....	Fg	.....	.....	0	0	Dense fog	
Mt. Washington, N. H.	23.82	605.0	30.18	766.6	35	1.7	95	NW	32	14.3	.....	.....	10s;sk	.....	NW	0	0	Cloudy	
Nashville, Tennessee	29.47	748.5	29.99	761.7	71.6	22.0	73	SE	1	0.4	.....	5cs	Fg	SW	.....	Inap.	Inap	Fair	
New Haven, Connecticut	29.98	761.5	30.10	764.5	52	11.1	79	SW	4	1.8	.....	Hz	Hz	.....	.....	0	0	Dense haze	
New London, Connecticut	30.07	763.8	30.12	765.0	56	13.3	75	W	4	1.8	.....	0	0	.....	.....	0	0	Clear	
New Orleans, Louisiana	29.93	760.2	29.99	761.7	69	20.6	87	SE	8	3.6	.....	.....	10s	.....	SE	0.06	1.5	Cloudy	
Newport, Rhode Island	30.04	763.0	30.09	764.3	49.0	9.4	89	SW	8	3.6	.....	.....	10s	.....	SW	0	0	Cloudy	
New River, N. Carolina	.....	.....	.....	.....	58	14.4	81	N	.....	.....	1	Hz	Hz	.....	.....	0	0	Hazy	
New Shoreham, Rhode I'd	30.09	764.3	30.12	765.0	50.0	10.0	52	SW	13	5.8	.....	2ck	0	NE	.....	0	0	Fair	
New York, New York	29.97	761.2	30.15	765.8	51	10.6	83	W	6	2.7	.....	0	Hz	.....	.....	0.	0	Clear	
Norfolk, Virginia	30.15	765.8	30.21	767.3	55	12.8	81	Calm	0	0	.....	0	Hz	.....	.....	0	0	Clear	
North Platte, Nebraska	27.04	686.8	29.62	752.3	43	6.1	92	NW	9	4.0	.....	2c	0	.....	.....	0	0	Clear	
Olympia, Washington T'y	29.89	759.2	29.93	760.2	44.0	6.7	92	E	1	0.4	.....	.....	10s	.....	S	0.01	0.3	Cloudy	
Omaha, Nebraska	28.68	728.5	29.73	755.1	62	16.7	94	N	12	5.4	.....	.....	10s	.....	NE	0.58	14.7	Cloudy	
Oswego, New York	29.72	754.9	30.04	763.0	56.8	13.8	78	S	6	2.7	.....	5c	Sk	.....	.....	0	0	Fair	
Pensacola, Florida	30.00	762.0	30.04	763.0	73	22.8	81	S	3	1.3	.....	0	2ks	.....	SW	0	0	Fair	
Philadelphia, Pa	30.12	765.0	30.17	766.3	51	10.6	86	W	6	2.7	.....	0	Fg	.....	.....	0	0	Clear	
Phœnix, Arizona	28.66	728.0	30.42	772.7	60	15.6	55	E	5	2.2	.....	0	8ks	.....	.....	0	0	Cloudy	
Pike's Peak, Colorado	17.77	451.3	29.98	761.5	22	— 5.6	58	W	5	2.2	.....	1c	0	.....	.....	0.24	6.1	Clear	
Plocche, Nevada	23.90	607.0	29.67	753.6	52	11.1	23	W	5	2.2	.....	.....	10ks	.....	Calm	0	0	Cloudy	
Pittsburg, Pennsylvania	29.28	743.7	30.10	764.5	50	10.0	86	N	1	0.4	.....	0	Fg	.....	Calm	0	0	Clear	
Port Eads, Louisiana	29.98	761.5	29.99	761.7	73.1	22.8	95	SE	9	4.0	.....	0	5ks	.....	SE	0	0	Fair	
Port Huron, Michigan	29.33	745.0	29.98	761.5	59.2	15.1	54	S	9	4.0	.....	5c	Hz	NE	.....	0	0	Fair	
Portland, Maine	29.98	761.5	30.03	762.7	53	11.7	73	SW	1	0.4	.....	2k	5s	NW	Calm	0	0	Fair	
Portland, Oregon	29.86	758.4	29.93	760.2	51	10.6	93	S	3	1.3	.....	.....	10s	.....	NW	0.03	0.8	Cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	56	13.3	81	NE	16	7.2	.....	10k	0	N	.....	0	0	Cloudy	
Prescott, Arizona	24.66	626.4	30.02	762.5	49	9.4	37	SW	2	0.9	.....	5ck	0	SW	.....	0	0	Fair	
Punta Rassa, Florida	29.96	761.0	29.98	761.5	73	22.8	78	NE	11	4.9	.....	0	0	.....	.....	0	0	Clear	
Red Bluff, California	29.52	749.8	29.86	758.4	61.0	16.1	88	N	3	1.3	.....	.....	10s	.....	Calm	0.05	1.3	Cloudy	
Rio Grande City, Texas	29.65	753.1	29.86	758.4	78	25.6	82	NE	.....	.....	1	.....	10s	.....	SE	0	0	Cloudy	
Rochester, New York	29.42	747.3	30.02	762.5	56	13.3	75	SW	4	1.8	.....	1c	Hz	SW	.....	0	0	Clear	
Roseburg, Oregon	29.35	745.5	29.91	759.7	55.1	12.8	93	Calm	0	0	.....	.....	10s	.....	.....	0.37	9.4	Cloudy	
Sacramento, California	29.85	758.2	29.92	760.0	57.2	14.0	87	SE	4	1.8	.....	0	5s	.....	.....	0	0	Fair	
St. Louis, Missouri	29.33	745.0	29.88	758.9	64.7	18.2	94	S	8	3.6	.....	7c;ck	0	.....	.....	0.70	17.8	Fair	
St. Paul, Minnesota	28.97	735.8	29.77	756.1	56	13.3	94	N	12	5.4	.....	.....	10n	.....	N	1.05	26.7	Light rain	
Salt Lake City, Utah	25.52	648.2	29.85	758.2	51	10.6	34	Calm	0	0	.....	9k	0	W	.....	0	0	Cloudy	
San Antonio, Texas	29.10	739.1	29.77	756.1	71.3	21.8	62	S	10	4.5	.....	.....	10s	.....	SW	0.06	1.5	Cloudy	
San Diego, California	29.75	755.6	29.82	757.4	60.7	15.9	77	S	6	2.7	.....	.....	10s	.....	.....	0	0	Cloudy	
Sandusky, Ohio	29.35	745.5	30.01	762.2	62	16.7	61	SE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Sandy Hook, New Jersey	30.11	764.8	30.14	765.5	53.2	11.8	80	NW	11	4.9	.....	0	0	.....	.....	0	0	Clear	
San Francisco, California	29.91	759.7	29.98	761.5	56	13.3	97	W	7	3.1	.....	.....	Fg	.....	W	0	0	Foggy	
Santa Fé, New Mexico	23.20	589.3	29.74	755.4	46	7.8	40	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Savannah, Georgia	30.04	763.0	30.13	765.3	71.5	21.9	85	E	6	2.7	.....	8k	Fg	E	.....	0	0	Fair	
Shreveport, Louisiana	29.67	753.6	29.91	759.7	71.3	21.8	90	S	2	0.9	.....	.....	10s	.....	.....	0.90	22.9	Cloudy	
Silver City, New Mexico	24.16	613.7	30.32	770.1	45	7.2	46	N	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Sitka Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.07	1.8	.....	
Smithville, North Carolina	30.15	765.8	30.19	766.8	62	16.7	77	NE	5	2.2	.....	0	Hz	.....	.....	0	0	Clear	
Socorro, New Mexico	25.25	641.3	29.32	744.7	52	11.1	23	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Spokane Falls, Wash. Ter.	27.90	708.6	29.74	755.4	44	6.7	67	NE	5	2.2	.....	.....	10s	.....	W	0	0	Cloudy	
Springfield, Illinois	29.23	742.4	29.87	758.7	66.5	19.2	87	S	11	4.9	.....	5c	0	W	.....	0	0	Fair	
Springfield, Massachusetts	29.96	761.0	30.10	764.5	53	11.7	80	S	2	0.9	.....	10ck	Hz	.....	.....	0	0	Cloudy	
Stockton, Texas	26.80	680.7	29.80	756.9	56.1	13.4	81	N	8	3.6	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	29.02	737.1	29.81	757.2	44	6.7	68	NW	4	1.8	.....	8ck	0	W	.....	0.02	0.5	Fair	
Thatcher's Island, Mass	30.01	762.2	30.06	763.5	49	9.4	85	S	6	2.7	.....	10ck	0	SW	.....	0	0	Cloudy	
Toledo, Ohio	29.34	745.2	30.00	762.0	66	18.9	59	S	4	1.8	.....	0	5ks	.....	SW	0	0	Fair	
Tucson, Arizona	27.40	695.9	29.95	760.7	59	15.0	43	SE	2	0.9	.....	2c	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.56	750.8	30.05	763.3	53.5	11.9	77	S	2	0.9	.....	.....	10s	.....	.....	0	0	Cloudy	
Uvalde, Texas	28.78	731.0	29.57	751.1	69	20.6	65	S	6	2.7	.....	.....	10s	.....	NW	0.37	9.4	Cloudy	
Vicksburg, Mississippi	29.70	754.4	29.96	761.0	70	21.1	90	SE	1	0.4	.....	.....	10n	.....	SW	0.43	10.9	Light rain	
Visalia, California	29.50	749.3	29.86	758.4	57	13.9	69	N	4	1.8	.....	2ck	0	.....	.....	0	0	Clear	
Washington, D. C.	30.07	763.8	30.19	766.8	56	13.3	81	S	6	2.7	.....	2k	0	S	.....	0	0	Clear	
Wickenburg, Arizona	.....	.....	.....	.....	56	13.3	51	Calm	.....	.....	0	0	8s	.....	.....	0	0	Cloudy	
Wilmington, N. Carolina	30.13	765.3	30.18	766.6	60	15.6	76	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Winnemucca, Nevada	25.51	647.9	29.87	758.7	51	10.6	89	S	3	1.3	.....	0	8ks	.....	SW	0	0	Cloudy	
Wood's Holl, Mass	30.06	763.5	30.09	764.3	49	9.4	85	SW	15	6.7	.....	.....	10s	.....	NW	0	0	Cloudy	
Yankton, Dakota	28.62	726.9	29.88	758.9	58	14.4	76	N	10	4.5	.....	8k	2s	.....	.....	0.26	6.6	Cloudy	
Yuma, Arizona	29.57	751.1	29.71	754.6	65.5	18.6	78	S	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.06	560.3	.....	.....	52.5	11.4	85	Calm	0	0	.....	2cs	0	.....	.....	0.75	19.0	Fair	Thomas Herman
Buff Bay Town, Jamaica	29.74	755.4	30.05	763.3	75	23.9	85	E	.....	.....	.....	0	0	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.96	761.0	30.00	762.0	79	26.1	74	Calm	0	0	.....	8cs	0	Calm	.....	0	0	Fair	A. Van Caneghem, Ass't
Jakobshavn, Greenland	30.29	769.4	30.34	770.7	31.1	— 0.5	.....	W	.....	.....	2	.....	0	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I.	29.93	760.2	29.94	760.5	79.1	26.2	73	N	1	0.4	.....	8cs	0	.....	.....	0	0	Fair	Robert Johnstone
Navassa, W. I.	29.85	758.2	29.93	760.2	81	27.2	78	NE	.....	.....	.....	5cs	5k	NE	SE	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	29.96	761.0	29.97	761.2	79	26.1	87	E	.....	.....	1	.....	8ks	E	.....	0.200	5.1	½ cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.43	747.5	29.98	761.5	80	26.7	80	Calm	.....	.....	0	.....	8ks	.....	Calm	0	0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	78.8	26	.....	NE	.....	.....	7	0s	1ks	.....	NE	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	29.91	759.7	29.94	760.5	78	25.6	82	Calm	0	0	.....	2cs	2k	.....	.....	Inap.	Inap.	Fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.94	760.5	29.99	761.7	33.0	0.6	95	NE	10	4.5	.....	2k	2s	SE	NE	0	0	Fair	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
H. M. S. Albatross, N. 34° 04′, E. 133° 00′	29.97	761.2	60	15.6	...	SSW			4		2	SW						D. clouds	Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, N. 42° 18′, E 8° 29′	30.12	765.0	66.7	19.3	78	WSW			1		2							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 28° 00′, E. 56° 00′	29.75	755.6	85	29.4	68	WNW			2–3		0					2	NW	Misty	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			70	21.1		NNE			3		4	NNE				2	NNW	D. clouds	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	29.97	761.2	80	26.7	82	ESE			2		4							Squally	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 10′, E. 24° 55′	29.77	756.1	59	15.0	88	WSW			9–10		10					9	SW	Showery	Com. F. W. Richards.
H. M. S. Champion, S. 2° 26′, W. 1° 43′	29.90	759.4	77	25.0	91	SSE			2		7	Calm				2	SSE	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 26° 50′, E. 121° 09′	30.16	766.1	62	16.7	88	NE			5–6		8					5	NNE	Raining	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, S. 17° 35′, W. 6° 44′	30.05	763.3	73	22.8	81	ENE			4		0					4	E	Blue sky	Capt. J. C. Parvis.
H. M. S. Daring, N. 9° 04′, E. 67° 25′	29.83	757.7	86	30.0		NW			2		3	S				1	SSE	D. clouds	Capt. F. J. Eliott.
H. M. S. Dido, S. 34° 55′, E. 26° 56′	29.60	751.8	61	16.1		WSW			7–10		5	W				9	WSW	Showery	Capt. C. Domville.
H. M. Dock-Yard																			Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 08′, W. 53° 29′	29.96	761.0	37	2.8	71	NNE			5–6		2							Squally	Capt. W. R. Kennedy.
H. M. S. Dryad, N. 19° 00′, E. 57° 48′	29.80	756.9	89	31.7		S			2		2	SW				4	S	Blue sky	Capt. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 16° 10′, E. 109° 00′	29.73	755.1	76	24.4		ESE			2		3	ESE				2	SE	Misty	Comm. C. Johnstone.
H. M. S. Emerald, S. 15° 40′, E. 177° 30′	29.87	758.7	80	26.7	78	E			5		7	SE				4	ENE	D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Trincomalee, Ceylon, India	29.76	755.9	90	32.2	63	E			1		7							D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo, Great Inagua I'd, W. I.	29.95	760.7	83	28.3	83	SE			2		2	SE						D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish, Hong-Kong, China	29.90	759.4	82	27.8	79	Calm			0		6	SE						Misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 28° 00′, W. 134° 15′	30.18	766.6	64	17.8	73	NE			3		6					2	N	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 37° 52′, W. 55° 42′	30.03	762.7	52	11.1	79	SSE			3		3					2	SE	Blue sky	Capt. L. F. Jones.
H. M. S. Griffon, N 17° 47′, W. 77° 41′	29.95	760.7	82	27.8	81	E			1		1							Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 16° 25′, W. 70° 32′	29.96	761.0	82	27.8		NE			2		1					Sm'h		Blue sky	Capt. J. L. Way.
H. M. S. Inconstant, S. 39° 55′, E. 103° 30′	29.62	752.3	56	13.3	94	W			6		10					7	W	Drizzling	Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Naples, Italy	30.06	763.5	68	20.0	79	SSW			2		7							D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 25° 09′, E. 119° 31′	30.05	763.3	66	18.9	89	NNE			6		10	SSW				5	SSE	Raining	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	30.01	762.2	62	16.7	77	W			1–2		9							D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Hong-Kong, China	29.91	759.7	83.5	28.6	75	Calm			0		9							D. clouds	Capt. A. Carpenter.
H. M. S. Midge, Swatow, China	29.99	761.7				NE			3		2	NE						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 34° 34′, W. 10° 38′	30.02	762.5	68	20.0	84	NNE			5		2	ENE				3	ENE	D. clouds	Capt. H. H. Rawson.
H. M. S. Modeste, N. 3° 07′ E. 108° 53′	29.89	759.3	85	29.4	83	Calm			0		1							Blue sky	Capt. J. G. Mead.
H. M. S. Monarch, Goletta, Tunis, N. Africa	30.08	764.0	64	17.8	94	NNW			3		4	NNW						D. clouds	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda, W. I.	29.85	758.2	70	21.1	85	NNW			5		5	NNW						D. clouds	Capt. E. B Drummond.
H. M. S. Orontes, S. 26° 40′, E. 39° 55′ †	29.85	758.2	74.5	23.6	84	SW			1-2		1	SW				1	S	Blue sky	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.81	757.2	79.5	26.4		WNW			1		7							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin, S. 37° 05′, W. 73° 12′	30.14	765.5	54	12.2		S			2		10							Raining	Capt. A. C. Paget.
H. M. S. Phœnix, St. Lucea, Jamaica, W. I.	29.88	758.9	79	26.1	86	SE			2		1	ESE						Blue sky	Capt. H. H. Grenfel.
H. M. S. Rambler, N. 4° 50′, E. 1° 46′	29.86	758.4	82	27.8		Calm			0		7	SSW				1	SSE	D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	29.93	760.2	42	5.6		Calm			0		6							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.87	758.7	83.4	28.6	85	ESE			1		1							Blue sky	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis, N. 32° 31′, E. 28° 30′	29.98	751.5	66	18.9	91	NW			3		5	NW				2	NW	D. clouds	Capt. G. O. Twiss.
H. M. S. Shannon, S. 20° 31′, W. 31° 51′	30.10	764.5	76.5	24.7	70	ESE			3-4		2					3	SE	Blue sky	Capt. J. D'Arcy.
H. M. S. Superb, N. 38° 05′, E. 13° 21′ *.	30.10	764.5	64	17.8	78	Calm			0									Blue sky	Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A.	30.15	765.8	55	12.8	87	N			0-1		0							Blue sky	Capt. A. H. Markham.
H. M. S. Turquoise, Callao Bay, Peru	29.94	760.5	65	18.3	97	Calm			0		10							Overcast	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 12° 05′, E. 47° 15′			85	29.4	92	W			1										Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.			78	25.6		N			1		1							Blue sky	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Wellington, New Zealand	30.01	762.2	60	15.6		NNE			2		7	NNE						D. clouds	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, N. 25° 38′, E. 57° 46′	29.71	754.6	88.5	31.4	68	SW			3-4		0					1	Sm'h	Misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Santiago, Cape Verd Id's	30.02	762.4	77.9	25.5	80	NE			3		0					1	ESE	Blue sky	S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't
Tamega																			P. I. R. de Carvealho, Comd'
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡ N. 45° 31′, W. 16° 02′	30.26	768.6	59.4	15.2	82	ESE			3		10							Misty	Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	OBSERVERS.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.13	765.3	74	23.3	81	SE	4	1.8			8		SE	0	0			Fair.	
N. Yard. Portsmouth, N. H.	30.03	762.7	52	11.1	85	Calm	0	0		8c.	0			0	0			Cloudy	
Naval Hospital, Yokahama, Japan	29.69	754.1	62	16.7	86	Calm			0		10		W	0	0			Covered	
Adams, Callao, Peru	29.75	755.6	65	18.3	94	SE			1		8					Long	SW	Cloudy	
Alaska, Callao, Peru	29.89	759.2	63	17.2	94	SSE			1		2		SSE			Sm'h		Fair	
Alert, N. 23° 00′, E. 142° 53′	29.96	761.0	80	26.7	74	ESE			3		5		SW			Long	ESE	Fair	
Alliance, Norfolk, Va	30.19	766.8	54	12.2	93	W			1		0			0	0	Sm'h		Clear	
Ashuelot, Nagasaki, Japan	29.99	761.7	63	17.2	72	W			1		10		Calm					Cloudy	
Colorado, New York, N. Y	30.14	765.5	56	13.3	75	SW	6	2.7			0			0	0			Light haze	
Constitution, N. 37° 38′, W. 76° 08′	30.15	765.8	54	12.2	87	Calm	0	0			0							Hazy	
Franklin, Norfolk, Va	30.14	765.5	54	12.2	80	WNW	3	1.3			0			0	0			Clear	
Galena, N. 36° 50′, E. 20° 02′	30.06	763.5	69	20.6	85	W			2		5					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	29.97	761.2	53	11.7	80	WSW	7.2	3.2			8		WSW	0	0			Cloudy	
Jamestown, Sitka, Alaska	29.67	753.6	40	4.4	91	NE			1		8			0.08	2.0			Cloudy	
Kearsarge, N. 35° 30′, W. 75° 15′	30.21	767.3	55	12.8	87	N			3		5		NE			Long	NE	Fair	
Lackawanna, S. 30° 53′, W. 83° 03′ †	30.45	773.4	62	16.7	100	S			1-2		8		SW			Sm'h	SW	Fair	
Marion, Montevideo, Uruguay	30.13	765.3	59	15.0	65	SE			5		10		NW	0	0	Mod.	SE	Cloudy	
Michigan, Erie, Pennsylvania	29.99	761.7	59	15.0		S	3	1.3			0							Clear	
Minnesota, Newport, R. I	30.11	764.8	51	10.6	86	SW			3		10		NW			Sm'h		Overcast	
Monocacy, Nagasaki, Japan	29.97	761.2	63	17.2	83	SW			1		10		SW					Cloudy	
New Hampshire, Port Royal, S. C	30.07	763.8	72	22.2	90	NE	12	5.4			5		Calm	0	0			Fair	
Nipsic, Gibraltar, Mediterranean	30.24	768.1	66	18.9	79	E			3		2		E			Sm'h		Squally	
Onward, Callao, Peru †	29.93	760.2	64	17.8	94	SSE			1		10		NW			Long	W	Cloudy	
Palos, Yokohama, Japan	29.89	759.2	61	16.1	100	SSW			1		8							Cloudy	
Passaic, Washington, D. C	30.21	767.3	55	12.8	93	SE			3		0							Clear	
Pensacola, N. 25° 42′, W. 153° 13′	30.13	765.3	73	22.8	95	SE			2		0			0	0			Clear	
Portsmouth, Chesapeake Bay	30.19	766.8	56	13.3	94	E			1		0							Clear	
Powhatan, New York, N. Y	30.14	765.5	56	13.3	75	SW			3		0							Clear	
Quinnebaug, N. 35° 13′, W. 8- 06′	30.07	763.8	71	21.7	71	E			5		2		ESE			Mod.	E	Fair	
Ranger, IslaGrande *	29.78	756.4	72	22.2	85	NE			2		0			0	0	Sm'h		Clear	
Richmond, Nagasaki, Japan	29.96	761.0	64	17.8	68	SW			1		8		SW	0	0			Cloudy	
Saratoga, Chesapeake Bay	30.18	766.6	67	19.4	69	Calm			0		2		Calm	0	0			Fair	
Shenandoah, Montevideo, Uruguay *	30.04	763.0	58	14.4	64	SE			4		8		SE			Mod.	SE	Fair	
St. Louis, League Island, Pa	29.76	755.9	56	13.3	81	SW	4	1.8			2			0	0			Clear	
Swatara, Shanghai, China †*	30.14	765.5	60	15.6	65	NNE			2		10		Calm					Overcast	
Tennessee, Hampton Roads, Va	30.21	767.3	56	13.3	87	NW	5	2.2			2		Calm	0	0	Sm'h		Hazy	
Ticonderoga, S. 36° 38′, W. 125° 34′	30.27	768.8	64	17.8	94	NNE			4		10		NNE	Inap.	Inap.	Mod.	NE	Cloudy	
Trenton, Castellamare, Italy *	30.07	763.8	75	23.9	49	S			1		5			2 h'rs	light	Sm'h		Fair	
Vandalia, Hampton Roads, Va	30.16	766.1	54	12.2	93	NW			1		2		Calm					Hazy	
Wabash, Boston, Massachusetts	30.08	764.0	57	13.9	75	WSW	6	2.7			10		NW	0	0			Hazy	
Wachusetts, N. 36° 02′, W. 140° 22′	30.07	763.8	64	17.8	94	SSW			5		10			Dri	zzles	Mod.	SW	Cloudy	
Wyoming, N. 20° 18′, W. 49° 12′	30.07	763.8	74	23.3	81	ESE			3		5		ESE			Sm h	ESE	Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 39° 47′, W. 183° 40′	30.02	762.5	55.2	12.9	92	NNE			2-3		10							Raining	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, Demerara, Brit. Guiana	29.94	760.5	83	28.3	83	E			2		4							D. clouds	W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne, N. 23° 14′, W. 34° 09′	30.21	767.3	73.8	23.2	69	NE			4		7							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 24° 58′, W. 43° 43′	30.21	767.3	73.0	22.8	77	E			5		6							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee, ‡ S. 2° 47′, W. 22° 21′	29.91	759.7	82.3	27.9	79	E			5		6							Misty	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 50° 53′, W. 13° 25′	30.52	775.2	54.7	12.6	93	ESE			5		0						NW	Misty	Capt. H. W. Dyke.
Barque Mertola, N. 45° 41′, W. 15° 34′	30.29	769.4	57.9	14.4	99	SE			3		10							Overcast	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ S. 17° 23′, W. 3° 40′	30.07	763.8	73.3	22.9	85	ENE			3		7							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 16° 45′, E. 96° 14′	29.76	755.9	79.0	26.1	91	SSW			2		10							Overcast	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, ‡ N. 28° 05′, E. 32° 29′	29.83	757.7	75.5	24.2	79	NW			4		0							Blue sky	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean																			
S. S. Circassian, N. 55° 14′, W. 10° 25′	30.87	784.1	52	11.1	100	SW			2	5c	0	SW		0	0	Sm'h		D. clouds	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia, N. 44° 53′, W. 43° 43′ *	30.03	762.7	49	9.4	.....	SSW			6		10			Ra	in	Con.	NE	Raining	Capt. W. H. P. Hains.
S. S. Scythia, N. 42° 41′, W. 52° 23′	29.35	745.5	48	8.9	?	WSW			5		Fog			He	avy	H'vy	SW	Foggy	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic, N. 50° 50′, W. 24° 18′ †	30.13?	765.3?	56	13.3	94	W			5		2		W			Long	W	D. clouds	Capt. H. Perry.
S. S. Celtic																			
S. S. Germanic, Queenstown, Ireland †	30.78	781.8	50	10.0	.....	ENE			3		0			0	0	Sm'h		Clear	Capt. Benj. Gleadell. Capt. Ch. W. Kennedy
S. S. Republic, N. 42° 00′, W. 53° 51′ †	29.52	749.8	53	11.7	93	S			2		10			12h'rs	mist	H'vy	S	Cloudy	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Thol.
S. S. Hermann, N. 42° 00′, W. 51° 49′	29.59	751.6	57	13.9	.....	SSW			5		10		SW	8 ho	urs	Very h'vy	SW	Cloudy	Capt. H. Baur.
S. S. Köln, N. 49° 36′, W. 13° 05′	30.53	775.4	61.0	16.1	71	SSE			4		0?			7 h'rs	Fog	Mod.	SSE	Cloudy?	Capt. Th. Jüngst.
S. S. Leipzig, N. 38° 09′, W. 66° 29′	30.06	763.5	58.0	14.4	.....	NNE			6		5?		NE	1 ho	ur	H'vy	ENE	Clear?	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. Liverpool, England	30.63	778.0	66	18.9	94	W			1		5?		W					Clear?	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio																			Wm. Shackford, Chief Off'r
S. S. Pennsylvania, N. 40° 05′, W. 63° 11′...*†	29.92	760.0	49	9.4	93	NE			5		10		NE			Mod.	ENE	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 32° 10′, W. 119° 45′ ...†	29.92	760.0	60	15.6	82	NW			5		0			0	0	L'ge	WNW	Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 34° 01′, E. 137° 39′.....†	30.01	762.2	70	21.1	70	S			3		5		W	0	0	Light	SW	Fair	Capt. H. Davison.
S. S. Gaelic, N. 36° 00′, E. 147° 46′....*†	30.12	765.0	65	18.3	94	SSW			5		10		SSW			Sl't	S	Misty	Capt. W. H. Kidley.
S. S. Oceanic, N. 43° 21′, W. 139° 53′.....	30.18	766.6	50	10.0	58	N			1		10		NW	0	0	3	NW	Overcast	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			Capt. Fred. Bolles.
S. S. Columbia																			Capt. E. Polemann.
S. S. Oregon																			
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			Capt. J. N. Ingalls.
S. S. Ancon																			Capt. H. G. Morse.
S. S. Dakota																			
S. S. Idaho, San Francisco, Cal.....†	29.97	761.2	55	12.8	93	W			3		10		W					Foggy	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 34° 25′, W. 120° 25′...†	29.84	757.9	57	13.9	81	NW			7		8		NW	0	0	Cross	WSW	Cloudy	Geo. H. Harrison.
S. S. Senator, San Francisco, Cal.			55	12.8	100	SW			2		10		WSW					Misty	Capt. Thos. Wallace.
S. S. State of California, N. 45° 42′, W. 124° 04′.....†	30.01	762.2	55	12.8	93	N			4		5		NW			Sm'h	NW	Fair	Capt. G. Debney.
S. S. Victoria, N. 47° 00′, W. 124° 55′...†	30.08	764.0	48	8.9	85	NNW			2		0					Sm'h		Clear	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, Sydney, N. S. Wales	29.77	756.1	67	19.4	79	Calm			0		10		NW					Hazy	A. Bannerman, 2d Officer.
S. S. City of New York, S. 33° 51′ E. 151° 14′.....†	29.92	760.0	72	22.2	85	N			4		10		N			Mod.	N	Cloudy	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China.....†	29.95	760.7	80	26.7	87	S			1		10		NE			Sm'h		Cloudy	Capt. G. G. Berry.
S. S. City of Sidney, N. 13° 57′, W. 161° 09′.....†	29.93	760.2	78	25.6	69	NE			4		2		NE	0	0	Mod.	NE	Fair	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 37° 37′, W. 124° 27′....†	30.06	763.5	57	13.9	81	SSW			4		10		SW			Mod.	NW	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 24° 59′, W. 112° 48′...†	29.92	760.0	64	17.8	73	Var.			0-1		10		Calm	0	0	Con.	NW	Cloudy	Capt. R. R. Searle.
S. S. Granada, Panama, Panama.....†	29.76	755.9	80	26.7	82	E			2		5?		NE	Sho	wers			Clear?	Capt. M. Connolly.
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			Capt. Sam'l Jackson.
S. S. Belgenland																			A. Feddersen, 2d Officer.
S. S. Nederland																			Capt. Wm. Geo. Randle.
S. S. Rhyniand																			
S. S. Vaderland, N. 40° 40′, W. 71° 24′	30.18	766.6				SW			2		0			0	0	Sm'h	SW	Clear	T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			A. R. Mehaffey, 2d Mate.
Sch'r Abby K. Bentley																			
Sch'r Addie Fuller, Savannah, Georgia	30.11	764.8	74	23.3	81	NE					5d		NE	0	0			Fair	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, N. 24° 45′, W. 36° 48′...*†	30.30	769.6	74	23.3		ENE			5		2		ENE	0	0	Mod.	ENE	Fair	Capt. B. F. Woodbury.
Brigantine George																			Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Chesapeake bay Md†	30.27	768.8	60	15.6	82	SW	3	1.3			4k			0	0			Fine	
Bark Sunbeam, N. 40° 16′, W. 21° 04′.....†	30.22	767.6	62	16.7	88	NNE			2		2		NE	0	0	R'gh	ESE	Clear	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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W. B. Hazen

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

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 9, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of G[illegible]al Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco‡			29.95	760.6	71.6	22.0	77	NE			1		1			0	0	Very fair	Dr. Ollive.
Nemours‡			29.95	760.6	68.0	20.0	89	N			1		0			0	0	Clear	Raynard.
Algiers‡			30.03	762 8	71.2	21.8	44	NW			3		0			0	0	Clear	Nicolas.
La Calle‡			30.04	763.1	67.3	19.6	83	NW			3		7			0.126	3.2	Very cloudy	Fonfréde.
Tunis‡			29.95	760.6															Jacques.
Sfax‡			30.07	763.8															Gau.
Saida‡			29.99	761.8	66.9	19.4	36	N			4		0			0	0	Clear	Dumas.
Tebessa‡			30.01	762.2	51.4	10.8	86	N			3		9			0.240	6.1	Covered	Watrin.
Geriville‡																			Lonchamp.
Laghouat‡			30.00	761.9	72.7	22.6	24	E			3		1			0	0	Very fair	Herbin.
Biskra‡			30.00	761.9															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.76	755.9	29.85	758.2	56.5	13.6	66	N	13	5.8			5			0.27	6.9	Squally	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.50	749.4	30.04	763.1	63.7	17.6	46	SE			2		10			0.102	2.6	Raining	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.28	743.6	30.05	763.2	51.4	10.8	51	NW	7.4	3.3			8			0	0		Dr. Wierzbicki.
Eperies	29.10	739.0	29.97	761.2	56.1	13.4	48	N			3		10s			0.043	1.1		Julius Mikolik.
Gratz	28.78	731.1	30.01	762.3	61.7	16.5	44	NE			2		6			0	0		Andreas Rospini.
Hermannstadt‡	28.44	722.3	29.81	757.1	70.5	21.4	50	S			3		10			0.516	13.1		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.79	731.3	30.15	765.8	49.3	9.6	70	WNW			2		10			0.134	3.4		The Staff.
Lemberg	28.99	736.3	29.98	761.5	49.3	9.6	80	SW			1		9			0.047	1.2		Dr. T. Stanecki.
Pola	29.84	758.0	29.95	760.8	64.8	18.2	41	E			8		0			0.276	7.0		I. R. HydrographicOffice.
Szathmar	29.44	747.8	29.85	758.3	65.5	18.6	71	S			1		4			0	0		Beicht Peter, S. J.
Szegedin	29.67	753.6	29.95	760.6	62.1	16.7	63	SW			3		6			0	0		Karl Stancel.
Trieste	29.88	759.0	29.98	761.6	66.2	19.0	33	ENE			2		10			0.402	10.2	Rainy	Secco.
Vienna	29.41	746.9	30.13	765.2	53.2	11.8	41	NW			2		8			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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

BRITISH SERIES.

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

Aberdeen	30.63	778.0	30.74	780.8	46.0	7.8	69	ENE	20	8.9			2			0	0	Blue sky	W. Boswell.
Armagh, Observatory	30.47	773.9	30.69	779.5	59.0	15.0	61	NE	7	3.1			1					D. clouds	S. Call.
Bidston, Liverpool Obs'y			30.65	778.5	58.2	14.6	55	ESE	7	3.1			9					Overcast	John Hartnup.
Bolton, Sharples	30.08	764.0	30.63	778.0	55.8	13.2	52	NE	18	8.0			3					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	30.25	768.3	30.64	778.2	52.5	11.4	56	NE			2		4			0	0	D. clouds	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.86	758.4	29.90	759.4	85.0	29.4	76	NE			1		3					D. clouds	Corpl. J. Surgener, A.H.C.
Cardington			30.60	777.2	56.2	13.4	53	N			1.0		4					D. clouds	John McLaren.
Chatham, School M. E.	30.46	773.7	30.59	777.0	54.1	12.3	68	NE			1		6					D. clouds	Lance Cpl. R. Tear, R.E.
Falmouth, Observatory	30.41	772.4	30.64	778.2	54.9	12.7	65	ESE			1		0					Blue sky	The Staff.
Fort Napier, Natal	27.47	697.7	29.68	753.9	68.2	20.1	69	S			3		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.60	751.8	29.84	757.9	87	30.6	88	W			1		2					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			30.61	777.5	65	18.3	58	N			2		2			0	0	Blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	30.06	763.5	30.12	765.0	71.4	21.9	72	ENE			3		3					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.49	774.4	30.69	779.5	55.6	13.1	53	E			1		4					D. clouds	D. G. MacLean.
Greenwich, Royal Obs'y	30.42	772.7	30.60	777.2	55.8	13.2	58	N			2		5					D. clouds	The Staff.
Guernsey	30.36	771.1	30.58	776.7	52.5	11.4	76	NE			3		0					Blue sky	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.56	776.2	30.60	777.2	55.4	13.0	49	N	20	8.9			3					Blue sky	The Staff.
Leicester, Museum	30.37	771.4	30.63	778.0	56.8	13.8	49	NE			1		5					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.79	756.7	29.88	758.4	65.0	18.3	73	NE			1		3			0	0	Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	30.04	763.0	30.09	764.3	75.5	24.2	75	NE			2		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	30.11	764.8	30.64	778.2	56.4	13.6	59	NNE			1		8					D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	30.38	771.6	30.61	777.5	56.1	13.4	60	N			2		10					Overcast	The Staff.
Plymouth	30.55	776.0	30.62	777.7	61.3	16.3	48	SE			2		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			30.77	781.5	46.8	8.2	73	NE	10	4.5			0					Blue sky	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.74	755.4	29.81	757.2	63.2	17.3	71	NNE			2		8					D. clouds	Serg't W. H. Lyne.
Sheffield	30.39	771.9	30.67	779.0	57.0	13.9	63	NNE			2		4			0	0	D. clouds	W. F. Cooper.
Silloth Rectory	30.66	778.7	30.69	779.5	56.7	13.7	63	SE			5		0			0	0	Blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.66	778.7	56.4	13.6	50	ENE	11	4.9			7					D. clouds	Rev. S. J. Perry.
Straitfield Turgiss	30.39	771.9	30.61	777.5	59.4	15.2	51	NE			3–5		8					Squally	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.59	777.0	30.60	777.2	66	18.9	46	NE			4		3					D. clouds	W. Newcombe.
Valencia, Observatory	30.61	777.5	30.63	778.0	63.7	17.6	48	WNW	8	3.6			2					Misty	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B													10s						Hon. J. Ferguson.
Charlottetown, P. E. Island	30.23	767.8	30.27	768.8	38	3.3	83	S	8	3.6			10s			0	0	Fair	H. J. Cundall, C. E.
Chatham, N. B.*	30.15	765.8	30.22	767.6	35	1.7	96	S	4	1.8			10s		Calm	0.01	0.3	Cloudy	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	29.93	760.2	29.95	760.7	42	5.6	80	NW	5	2.2			10n			0.50	12.7	Light rain	J. McWilliams.
Fort Garry, Manitoba*	29.06	738.1	29.89	759.2	46	7.8	77	SW	4	1.8		2ck	2ks	W	W	0	0	Fair	James Stewart.
Fredericton, N. B																			Prof. Harrison
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.18	766.6	30.32	770.1	34	1.1	99	N	1	0.4			Fg			0	0	Foggy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.62	752.3	29.96	761.0	53	11.7	79	S	4	1.8		Hz	0	Calm		0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	29.74	755.4	29.94	760.5	58	14.4	70	S	16	7.2			10s		W	Inap.	Inap.	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.21	741.9	29.88	758.9	62	16.7	88	SE	3	1.3		2k	5ks	W	W	0.08	2.0	Fair	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.29	744.0	29.97	761.2	60	15.6	71	S	7	3.1		8k	0	SW		0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.34	745.2	29.98	761.5	58	14.4	82	SE	3	1.3		5ck	Hz	SW		0	0	Cloudy	M. Payne.
Quebec, Quebec*	29.67	753.6	29.99	761.7	45	7.2	92	NE			1		10n		NE	0.03	0.8	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.45	748.0	29.90	759.4	52	11.1	93	Calm	0	0			10ks		W	0.20	5.1	Light rain	W. H. McIntyre.
Saugeen, Ontario*	29.19	741.4	29.88	758.9	64	17.8	42	S	10	4.5		5cs	0			0.20	5.1	Fair	K. Stewart.
St. Andrews, N. B	30.18	766.6	30.23	767.8	41	5.0	89	SW	3	1.3			10n			0	0	Cloudy	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.25	768.3	30.29	769.4	41	5.0	70	W	4	1.8		2c	0			0	0	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.59	751.6	29.97	761.2	54	12.2	73	E	1	0.4		5cs	Hz	W		0	0	Fair	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.22	767.6	30.29	769.4	41	5.0	85	S	2	0.9		8k	2s	W	S	Inap.	Inap.	Cloudy	Lt. F. E. Wilmot, R. N
SUB-SERIES.																			
St. Johns, Newfoundland	29.93	760.2	30.19	766.8	32	0.0	100	NE	2	0.9		8k	Sk			0	0	Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Cape St. Francis Lt. House	30.04	763.0			60.0	15.6	79	SSW	56.8	25.4			7n			1.155	29.3	Raining	John Duthie.
Cape Town, C. G. H. Obs'y	30.23	767.8	30.27	768.8	65.0	18.3		S	4	1.8		1	4ks			0	0		The Staff, for D. Gill.
Worcester*†	29.12	739.6			61	16.1	54	E			1	5	4			0	0	Dull	C. Stokes.

CHINESE SERIES.

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

SUB-SERIES.																			
Zi-Ka-Wei, near Shanghai	30.27	768.9	30.30	769.5	57.0	13.9	62	SSE	3.1	1.4		rock	0	W		0	0	Covered	M. Marc Dechevrens, S.J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

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

San José	26.16	664.5	29.88	758.9	68.0	20.0	91	SE			2	ck	10d		NE	0	0	Cloudy	Amand Maison.

DANISH SERIES.

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

Copenhagen	30.23	767.7	30.27	768.9	45.5	7.5	73	NNE	9	4			9					Raining	Oversergent Fischer.
Fanöe	30.32	770.2	30.34	770.7	49.8	9.9	47	N			4		7						Overloerer Lauridsen.
Godthaab, Greenland	29.56	750.9	29.61	752.0	34.2	1.2	85	SSW			5		1						S. Kleinschmidt.
Stykkisholm, Iceland	30.21	767.2	30.25	768.3	46.0	7.8		SE			4		10					Raining	A. O. Thorlacius.
Thorshavn	30.71	779.9	30.74	780.8	51.6	10.9	71	SSW	13	6			5						Overloerer Bergh.
Vestervig	30.32	770.2	30.42	772.6	46.4	8.0	52	NE			6		1						Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.63	752.7	30.27	768.9	69.1	20.6	34	NNE			2	o				o	o	Clear	M. Labroue, Director.
Alençon Normal School	29.98	761.6	30.54	775.6	56.8	13.8	55	E			3	2k		N		o	o	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	30.27	768.8	30.53	775.5	50.7	10.4	50	NE			3	k		NE		o	o		M. Klein, Commandaut.
Avignon, Normal School	29.97	761.3	30.05	763.3	68.0	20	39	N			6	o				o	o	Clear	M. Giraud, Director.
Bar-sur-Seine	29.85	758.1	30.41	772.5	54.3	12.4	57	E			4	8kn		NE		o	o	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	30.25	768.3	30.52	775.2	56.3	13.5	40	N			3			NE		o	o		M. Frère Eugene Marie.
Besançon, Normal School	29.42	747.2	30.30	769.6	57.2	14	49	NE			3	s		NE		o	o		M. Gobin, Director.
Bordeaux, Observatory	30.02	762.6	30.28	769.1	65.8	18.8	36	NE			3	o				o	o	Clear	M. Rayet, Director.
Bourges, Normal School	29.84	757.8	30.39	771.9	58.1	14.5	47	NE			4	ck	o	NE		o	o		M. Postel, Director.
Brest, Naval Observatory	30.30	769.7	30.54	775.8	61.5	16.4	44	NE			2		o			o	o		M. de Rermaree, Dir.
Caen, Normal School	30.46	773.7	30.54	775.8	55.6	13.1	66	NE			3		2		E	o	o	Slightly cl'dy	M. Bétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.10	764.5	30.45	773.4	55.2	12.9	65	NW			2		8		NE	o	o	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.92	759.9	30.43	773.0	53.2	11.8	57	NW			2		8			o	o	¼ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.93	734.9	30.29	769.3	59.7	15.4	39	N			3		1		NE	o	o	Clear	M. Alluard, Director.
Cluny, Normal School	29.52	749.8	30.20	769.3	62.2	16.8	38	N			3		1		NW	o	o		M. de Villemontée, Dir.
Commercy, Normal School	29.56	750.7	30.43	773.0	53.6	12	50	N			3		5kn	N	N	o	o	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.50	698.4	29.95	760.7	69.5	20.8	40	NE			2					o	o		M. Jeangirard, Director.
Gréasque, du. Rhone	28.92	734.6	30.07	763.6	75.6	24.2	40	SW			2		2		SW	o	o	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.37	745.9	30.12	765.0	64.0	17.8	38	NW			6	ck	o	NNE		o	o		M. Ablard, Director.
Guéret, Normal School	28.76	730.5	30.34	770.6	55.4	13	40	NE			3	2c	o	NE		o	o	Slightly cl'dy	M. Rivoire, Director.
Lamballe, Normal School	30.32	770.1	30.59	777.0	60.1	15.6	56	N			2				N	o	o		M. Ollitrault, Director.
Lescar, Normal School	29.72	755.0	30.39	771.8	70.2	21.2	62	W			3		s		N	0.055	1.4		M. Chauvin, Director.
Lorient, Naval Observatory	30.43	773.0	30.54	775.6	66.2	19.0	54	NE			2		o			o	o	Clear	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.19	741.5	30.26	768.5	60.1	15.6	41	N			1		o			o	o	Clear	M. André, Director.
Mans, Normal School	30.20	767.1	30.51	775.0	57.2	14	48	E			4		o			o	o	Clear	M. Piboen, Director.
Marseille, Observatory	29.72	754.9	29.98	761.6	75.4	24.1	43	WNW			2		1		NE	o	o		M. Stephan, Director.
Montlouis l'instituteur	24.97	634.2	30.20	767.1	55.4	13.0	55	N	20.6	9.2			3		NW	o	o		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.94	760.4	30.04	763.1	76.6	24.8	36	N			4		o			o	o	Clear	M. P. Galzin, Director.
Nancy, Normal School	29.61	752.1	30.39	772.0	51.1	10.6	44	N			1		8kn		NE	o	o	Very cloudy	M. Hasse.
Nantes, Observatory	30.33	770.4	30.49	774.5	61.9	16.6	53	ENE			2-3		o			o	o	Clear	M. Larocque, Director.
Nice	29.92	759.9	29.95	760.8	72.0	22.2	59	W			1		1	W	W	o	o	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.97	761.2	30.08	763.9	77.2	25.1	31	NW	13.0	5.8			o			o	o		Dr. Fines.
Pic-du-Midi, Plantade	22.72	577.2			42.8	6.0							1		NNE	o	o	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.08	738.5	30.12	765.0	66.2	19	30	N			4		o			o	o	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.35	643.8			38.5	3.6	71	NNE			4		2k			o	o	¼ covered	M. Alluard, Director
Rochefort, Naval Obs'y	30.36	771.2	30.43	773.0	66.2	19.0	53	NE			6		o			o	o	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.22	767.6	30.40	772.1	61.3	16.3	40	NE			6		o			o	o	Clear	M. Mouillot, Director.
Rodez, Normal School	28.04	712.3	30.15	765.8	66.9	19.4	37	NE			1		o			o	o	Clear	M. Richard, Director.
Rouen, Normal School	30.47	773.9	30.56	776.1	60.8	16	46	N			2		5		N	o	o	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	30.43	772.9	30.59	776.9	55.4	13	59	ENE			1		2		E	o	o	Slightly cl'dy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.31	769.9	30.48	774.1	55.8	13.2	43	NNE			3		7		NNE	o	o		M. Renou, Director.
Toulouse, Observatory	29.52	749.7	30.24	768.2	70.3	21.3	48	NW			3		o			o	o		M. Baillard, Director.
Tours	30.24	768.0	30.43	773.0	59.0	15.0	41	NE			4		o			o	o	Clear	M. de Tastes.
Versailles, Observatory	29.98	761.4	30.47	773.9	56.8	13.8	40	NE			4					o	o		Dr. A. Bérigny, Director.
Sub-Series.																			

GERMAN SERIES.

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

Bamberg	29.41	747.0	30.28	769.1	48.4	9.1	46	NE			2	4k		N		0.004	0.1		Prof. Dr. Hoh.
Berlin	30.03	762.7	30.21	767.2	48.6	8.2	86	NW			4	9				0.248	6.3		Prof. Dr. Arndt.
Breslau	29.61	752.1	30.14	765.6	44.4	6.9	80	WNW			4	10				0.008	0.2		Royal University Obs'y.
Carlsruhe	29.92	759.9	30.36	771.1	50.9	10.5	63	N			1	10		NE		0.004	0.1		Albert Senz.
Cassel	29.56	750.9	30.28	769.2	47.5	8.6	45	NNW			7	6		NW		0.020	0.5		Dr. H. Möhl.
Frankfort on the Main	29.99	761.7	30.36	771.1	55.6	13.1	40	NNW			2	8				0	0		Physical Society.
Friedrichshafen	28.80	731.5	30.25	768.3	52.9	11.6	51	NE			6	6		W		0.051	1.3		Wilhelm, Chief Tel.
Hamburg	30.20	767.0	30.27	768.8	48.6	9.2	83	WNW			3	10				0.276	7.0		Dr. R. Kleeman.
Kiel	30.26	768.7	30.28	769.1	46.2	7.9	72	NNE			4	5				0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.82	757.5	30.25	768.4	46.4	8.0	69	NW			3	10		NW				Sprinkling.	Prof. Dr. Bruhns.
Magdeburg	29.95	760.6	30.24	768.1	48.0	8.9	72	W			4	10n		N		0.039	1.0		Dr. Assmann.
Memel	30.04	762.9	30.08	764.1	42.1	5.6	85	NNW			5	10k							Reinbrecht & Issermann.
Munich	28.40	721.4	30.28	769.1	49.3	9.6	43	NW			3	5		N		0	0		Central Station.
Neufahrwasser	30.15	765.9	30.17	766.3	37.9	3.3	82	N			4	10				0.051	1.3		A. Lothes.
Neustadt, Palatinate	29.86	758.4	30.39	771.9	52.2	11.2	49	N			4	10				0	0		Dicknether.
Stuttgart	29.36	745.8	30.27	768.9	50.4	10.2	45	N			5	8		N		0.028	0.7		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.75	730.2	30.28	769.1	48.4	9.1	54	NW			4	9		NW		0	0		Prof. Kemlein.
Wustrow	30.26	768.7	30.29	769.3	48.7	9.3	67	E			3	3s				0	0		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.49	749.0	29.87	758.8	67.6	19.8		S		1.0		5						½ Clear	A. Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.67	753.6	29.72	754.8	87.0	30.6	88	S	31.0	13.8		0				0	0	Misty	
Deesa	29.18	741.0	29.62	752.3	111.3	44.1	18	W	9.5	4.2		0				0	0	Blue sky	
Bombay	29.75	755.7	29.79	756.6	88.0	31.1	73	W	11.0	4.9		7			WSW	0	0	D. clouds	
Poona, Yarrowda	27.90	708.6	29.70	754.3	94.1	34.5	42	WNW	12.0	5.4		2			E	0	0	Misty	
Belgaum	27.28	693.0	29.78	756.3	84.5	29.2	56	WSW	8.0	3.6		2			SW	0	0	D. clouds	
Lahore	28.79	731.2	29.48	748.8	110.9	43.8	17	SW	2.8	1.2		2				0	0	Blue sky	
Roorkee	28.65	727.6	29.50	749.2	103.3	39.6	21	Calm	4.7	2.1		2				0	0		
Agra	28.97	735.9	29.50	749.3	111.6	44.2	17	W	2.6	1.2		0				0	0		
Nagpur	28.56	725.5	29.55	750.7	103.7	39.8	25	SW	5.4	2.5		9			NW	0	0	Drizzling	
Jubbulpore	28.28	718.3	29.56	750.9	105.7	40.9	18	Calm	3.3	1.5		3			W	0	0	D. clouds	
Lucknow	29.19	741.3	29.54	750.4	104.4	40.2	25	SE	3.9	1.7		0				0	0	Blue sky	
Allahabad	29.24	742.7	29.53	750.2	106.0	41.1	28	NE	3.2	1.4		0				0	0	Blue sky	
Patna	29.43	747.4	29.60	751.9	92.3	33.5	53	E	7.0	3.1		0				0	0	Blue sky	
Hazaribagh	27.60	701.2	29.53	750.1	96.6	35.9	32	ENE	10.0	4.5		0				0	0	Misty	
Cuttack	29.58	751.4	29.66	753.4	89.2	31.8	58	S	8.0	3.6		3				0	0		
Calcutta, Alipore	29.63	752.7	29.66	753.2	87.3	30.7	64	S	17.0	7.6		0				0	0	Blue sky	
Dhubri	29.64	753.0	29.77	756.1	77.7	25.4	80	ESE	9.8	4.4		9			W	3.11	79.0	Gloomy	
Chittagong	29.70	754.3	29.79	756.6	82.9	28.3	79	S	4.6	2.1		8				0	0	D. clouds	
Sibsagar	29.51	749.5	29.85	758.2	75.1	23.9	89	S	3.2	1.4		10		SW	SW	1.88	47.8	D. clouds	
Zanzibar, Africa			29.89	759.2	82.0	27.8	68	S	5	2.2		2				0	0	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.61	752.1	30.02	762.5	59.7	15.4	56	E	3.1	1.4			10			0.008	0.2		Prof. Giovanni Clodig.
Milan	29.38	746.2	29.89	759.2	74.8	23.8	38	ESE	4.3	1.9			3			0	0		Prof. Schiaparelli.
Padua	29.86	758.4	29.97	761.2	69.1	20.6	55	ESE	11.9	5.3			8	SSW		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.00	736.6	29.90	759.4	72.3	22.4	48	SE	4.9	2.2			1			0	0		Prof. P. F. Denza.
Genoa	29.78	756.4	29.97	761.3	72.5	22.5	35	SW	3.8	1.7			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.03	712.0	29.94	760.4	72.3	22.4	32	N			4		0			0	0		Prof. D. C. Bruno.
Pesaro	29.91	759.7	29.96	760.9	63.0	17.2	60	NE	8.7	3.9			2			0	0		Prof. Luigi Guidi.
Florence	29.64	752.9	29.89	759.3	75.7	24.3	30	NE			2		3			0	0		Prof. Costantino Pitter.
Leghorn	29.86	758.5	29.95	760.7	71.2	21.8	52	W	3.1	1.4			2			0	0		Prof. P. Monte.
Rome	29.68	753.9	29.85	758.3	75.9	24.4	36	WSW	3.8	1.7			2			0.020	0.5		Prof. P. S. Ferrari.
Lecce	29.60	751.9	29.85	758.3	65.8	18.8	59	SSW	9.4	4.2			9			0.008	0.2		Prof. O. de Giorgi.
Cosenza	28.98	736.2	29.86	758.5	66.2	19.0	72	ENE	1.8	0.8			9	NE		0	0		Prof. D. Conti.
Cagliari	29.74	755.3	29.93	760.2	67.8	19.9	64	S			2		3	S		0.008	0.2		Prof. A. Pacinotti.
Palermo	29.67	753.6	29.92	760.0	68.7	20.4	53	WNW	15.4	6.9			10			0.024	0.6		Prof. G. Ciaccintore.
Syracuse	29.83	757.7	29.87	758.8	66.0	18.9	63	NE	4.9	2.2			10	WSW		0.055	1.4		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.34	745.2	29.85	758.1	72.0	22.2	50	NW	0.7	0.3			10	W		0	0		Prof. F. Brioschi.
Stelvio	22.23	564.7			37.8	3.2	52	SW			2	6ck	0	NW		0	0	Cloudy	Prof. P. F. Denza.
Valdobbia	22.20	563.9			42.3	5.7	48	N			8		4k	N		0	0	Fair	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	30.19	766.8	30.21	767.3	52.5	11.4	58	NNE	5.1	2.3		0	0			0	0	Very clear	K. Sasaki.
Kioto	30.03	762.7	30.21	767.3	45.8	7.7	86	NW	1.2	0.5		0	0			0	0	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.08	764.0	30.28	769.1	50.8	10.4	65	NE	2.9	1.3			0			0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	29.99	761.7	30.06	763.5	57.1	13.9	76	NE	4.9	2.2			10s			0.030	0.8	Cloudy	The Staff.
Wakayama	30.12	765.0	30.17	766.3	53.8	12.1	75	NE	3.9	1.7		0	0			0	0	Clear	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.84	757.9	30.03	762.6	77.5	25.3	77	NNE	11.0	4.9		1	6		NNE	0.03	0.8	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.66	753.2	29.91	759.8	71.0	21.7	85	NE	0	0			18			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.54	775.8	30.54	775.8	49.6	9.8		N			5					0	0		
Groningen	30.33	770.3	30.38	771.7	46.4	8.0		N			5					0	0		
Helder	30.45	773.4	30.45	773.4	45.7	7.6		NW			5					0	0		
Hellevoetsluis	30.51	774.9	30.51	774.9	48.7	9.3	72	NNW			4					0	0		
Utrecht	30.43	772.8	30.47	774.0	50.4	10.2	56	NNW			4		8			0	0	Very cloudy	H. van der Brill.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Upper	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES.																			
Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.45	773.4	30.51	775.0	47.5	8.6	37	N	16.1	7.2			0			0	0		
Christiania	30.31	769.9	30.46	773.7	47.3	8.5	41	NE	11	5			9			0	0		
Gjæsvær	30.21	767.4	30.25	768.4	30.0	— 1.1		WNW			6		10						
Lodingen	30.44	773.1	30.48	774.3	36.7	2.6	46	Calm			0		10			0	0		
PORTUGUESE SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.28	769.1	30.44	773.1	63.0	17.2	68	ENE	11.2	5.0			4			0	0		Dr. J. A. Sampaio.
Campo Major	29.16	740.6	30.12	765.1	79.9	26.6	27	NNE	6.9	3.1			2			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.97	761.3	30.06	763.5	70.0	21.1	67	SW	6.3	2.8			3			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.82	757.5	30.17	766.4	78.1	25.6	32	NE	11.2	5.0			1			0	0		The Staff.
Ponta Delgada, Azores	30.34	770.5	30.41	772.3	62.2	16.8	68	NE	15.0	6.7			3			0.020	0.5		
RUSSIAN SERIES.																			
Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski																			Capt. Lasarew.
Archangel	30.17	766.3	30.19	766.8	29.1	— 1.6	84	NW	18	8			10						Capt. Sseliwerstow.
Astrakhan	30.06	763.4	29.97	761.3	78.6	25.9	31	SW	2	1			7ks;s					Light clouds	Capt. Wisganow.
Barnaul	29.36	745.7	29.84	757.8	75.0	23.9	15	SSW	2	1			1					Light clouds	Meteorological Obs'y.
Dorpat ‡	29.78	756.5	30.03	762.8	46.0	7.8	75	NE	7	3			10ks						Observatory.
Ekaterinburg	28.77	730.8	29.69	754.2	69.6	20.9	38	W	13	6			ck	8kn					Meteorological Obs'y.
Kasan	29.66	753.3	29.93	760.1	56.1	13.4	67	WSW	2	1				8k					Observatory.
Kertch	29.94	760.5	29.96	761.0	55.9	13.3	93	S	4	2				5					Lagorio & Sastyrez.
Kieff	29.27	743.4	29.90	759.5	49.3	9.6	88	NNE	4	2			cs	10ks;n				Light rain	Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.63	752.6	29.83	757.7	68.2	20.1	46	SSE	13	6				8		Blank			Meteorological Obs'y.
Moscow	29.40	746.8	29.94	760.5	57.2	14.0	47	W	7.8	3.5				8ks					Meteorological Obs'y.
Nertchinsk	27.49	698.2	29.81	757.2	35.6	2.0	32	NW	2	1				4				Light clouds	Meteorological Obs'y.
Nikolajev	29.82	757.3	29.89	759.1	72.9	22.7	51	NE	4	2			cs	9k					Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	29.81	757.2	29.95	760.8	62.8	17.1	38	Calm	0	0				0					Physical Observatory.
St. Petersburg	30.10	764.4	30.11	764.8	40.5	4.7	56	NE	13	6			cs	2ks					Central Physical Obs'y.
Tashkend, Laboratory	28.39	721.2	29.89	759.3	77.5	25.3	54	Calm	0	0				6					Teich, A. M.
Tiflis	28.59	726.2	29.98	761.4	68.2	20.1	56	SE	2	1				8k					Physical Observatory.
Warsaw	29.57	751.1	30.00	761.9	52.3	11.3	61	W	13	6				4k				Heavy cl'ds.	Astronomical Obs'y.
Wilna	29.55	750.5	29.97	761.2	50.7	10.4	64	SW	4	2				9				Heavy cld's	Berg, Assistant.
Yeniseisk	29.52	749.9	29.80	757.0	59.5	15.3	41	S	4	2				8					M. O. Marks.
SCOTTISH SERIES.																			
Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.77	781.5	51.9	11.1	66	E			2		0			0	0	Fine	Andrew Gibb.
Monach Lt. House, Hebrides			30.73	780.5	58	14.4	94	SSE			3	0	0			0	0		J. Youngclause.
North Unst, Shetland Isl'ds			30.74	780.8				N			3	0	4						Robert Burnet.
SPANISH SERIES.																			
Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.98	761.4	30.08	764.1	72.1	22.3	51	SE	2.0	0.9			0			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.28	769.0	30.33	770.4	70.0	21.1	54	NW	2.5	1.1		0	0			0	0	Clear	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.29	693.2			64.4	18.0	90	NE	6.7	3.0		0	3			0	0	Light clouds	Domingo Martin.
Madrid, Royal Obs'y	27.95	710.0	30.10	764.6	75.7	24.3	46	NE	7.6	3.4		0	0			0	0	Clear	The Staff.
Murcia, Met. Obs'y ‡	29.95	760.6	30.09	764.3	84.0	28.9	33	SE	2.5	1.1		0	2			0	0	Almost clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.28	743.6	30.14	765.6	77.4	25.2	45	NE	6.3	2.8			0			0	0	Clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.94	760.4	30.00	762.1	77.5	25.3	79	ENE	6.3	2.8		0	0			0	0	Clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.94	760.4	29.99	761.7	86.2	30.1	56	E	4.4	2.0		0	0			0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.06	763.5	30.16	765.9	75.9	24.4	36	ENE	18.8	8.4		0	0			0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.85	758.3	29.95	760.6	77.7	25.4	84	SE	0	0		6s	3k		SE	0	0	D. clouds	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.91	759.8	30.05	763.5	78.9	25.6	89	NW	6.0	2.7		3ck	0	NW		Inap.	Inap.	Lightly cl'dy	José L. Fastovra.
SWEDISH SERIES.																			
Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.38	771.6	30.42	772.6	34.2	1.2	62	N			2		5			0	0		
Umea	30.46	773.6	30.51	774.9	36.3	2.4	57	NE			4		8			0	0		
Hernosand	30.40	772.1	30.45	773.4	35.4	1.9	62	ENE			4		3			0	0		
Stockholm	30.15	765.8	30.33	770.3	35.2	1.8	67	NNE			7		10			0	0		
Wisby	30.12	765.0	30.18	766.5	36.3	2.4	72	NE			7		10			0	0		
Sub-Series.																			
Upsala	30.26	768.7	30.35	770.9	34.7	1.5	64	NNE	22.1	9.9			10		NNE	0	•0		Nils Ekholm
SWISS SERIES.																			
Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.76	730.5	30.17	765.2	60.1	15.6	43	N			3		0			0	0	Clear	The Observatory.
Zurich	28.59	726.2	30.21	767.4	58.1	14.5	47	N			4		7			0.201	5.1	Cloudy	The Observatory.
At Geneva the corresponding departures from the normal values are: Bar. —— mm.; Ther. ——° cent.; Hum. —— per cent.																			
TURKISH SERIES.																			
Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.88	759.0	58.3	14.6	74	NNE	15	6.5			10		NE	0	0		The Observatory.
Valona			29.89	759.1	68.4	20.2		SE			1		10			0	0	Covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.84	757.8	76.6	24.8	71	N			1	10	0			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.05	763.3	30.13	765.3	62.6	17.0	57	S	10	4.5	.....	0	Hz	.....	.....	0	0	Clear.	
Alpena, Michigan	29.24	742.7	29.86	758.4	54	12.2	100	E	4	1.8	.....	.....	10ca	.....	.....	2.38	60.4	Light rain.	
Atlanta, Georgia	28.97	735.8	30.09	764.3	67.8	19.9	78	E	10	4.5	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy.	
Atlantic City, New Jersey	30.24	768.1	30.25	768.3	54	12.2	87	W	11	4.9	.....	Hz	0	Calm	.....	0	0	Clear.	
Attou Id., Alaska ‡	29.62	752.3	.....	.....	33	0.6	100	N	30	13.4	.....	.....	10ks	.....	N	0.19	4.8	Cloudy	
Augusta, Georgia	30.02	762.5	30.22	767.6	67.0	19.4	79	SE	2	0.9	.....	1k	0	.....	.....	0	0	Clear.	
Baltimore, Maryland	30.17	766.3	30.22	767.6	59	15.0	76	E	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Barnegat, New Jersey	30.21	767.3	30.23	767.8	60	15.6	77	SW	17	7.6	.....	0	0	.....	.....	0	0	Clear.	
Bismarck, Dakota	27.98	710.7	29.84	757.9	54	12.2	49	N	8	3.6	.....	10cs	0	S	.....	0	0	Cloudy.	
Boise City, Idaho	27.00	685.8	29.96	761.0	40	4.4	82	Calm	0	0	.....	.....	Fg	.....	Calm	0.06	1.5	Dense fog.	
Boston, Massachusetts	30.07	763.8	30.23	767.8	47.0	8.3	88	SW	1	0.4	.....	.....	10s	.....	SW	0	0	Cloudy.	
Brackettville, Texas	28.67	728.2	29.68	753.9	72	22.2	95	E	6	2.7	.....	.....	10s	.....	.....	0	0	Cloudy.	
Brownsville, Texas	29.80	756.9	29.84	757.9	78	25.6	91	SE	8	3.6	.....	.....	10ks	.....	SE	Inap.	Inap.	Cloudy.	
Buffalo, New York	29.27	743.4	29.94	760.5	66.6	19.2	50	SW	4	1.8	.....	5k	0	W	.....	0	0	Fair.	
Burlington, Vermont	29.75	755.6	30.03	762.7	60.2	15.7	65	S	21	9.4	.....	5cs	Sk	W	.....	Inap.	Inap.	Light sm'e.	
Cairo, Illinois	29.57	751.1	29.94	760.5	69	20.6	90	S	4	1.8	.....	5k	0	S	.....	Inap.	Inap.	Fair.	
Campo, California	27.26	692.4	29.83	757.7	52	11.1	93	W	1	0.4	.....	.....	10s	.....	.....	0	0	Cloudy.	
Camp Thomas, Arizona	27.02	686.3	.....	.....	54	12.2	49	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear.	
Cape Henry, Virginia	30.24	768.1	30.25	768.3	61	16.1	82	SE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Cape May, New Jersey	30.21	767.3	30.24	768.1	56	13.3	87	S	11	4.9	.....	0	0	.....	.....	0	0	Clear.	
Castroville, Texas	29.08	738.6	29.75	755.6	72	22.2	90	SE	5	2.2	.....	.....	10s	.....	.....	0	0	Cloudy.	
Cedar Keys, Florida	30.11	764.8	30.13	765.3	73	22.8	76	NE	9	4.0	.....	0	0	.....	.....	0	0	Clear.	
Champaign, Illinois	29.09	738.9	29.85	758.2	60	18.9	89	S	10	4.5	.....	2k	0	S	.....	0	0	Fair.	
Charleston, S. Carolina	30.14	765.5	30.20	767.1	66	18.9	84	NE	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Charlotte, N. Carolina	29.33	745.0	30.13	765.3	64.2	17.9	73	S	3	1.3	.....	5k	0	S	.....	0	0	Fair.	
Chattanooga, Tennessee	29.30	744.2	30.08	764.0	70	21.1	80	SE	3	1.3	.....	3ck;k	0	S	.....	0.21	5.3	Fair.	
Cheyenne, Wyoming	23.86	606.0	29.80	756.9	48	8.9	85	S	8	3.6	.....	0	2s	.....	S	0	0	Clear.	
Chicago, Illinois	29.16	740.7	29.81	757.2	69.5	20.8	75	SW	7	3.1	.....	8ck	0	SW	.....	0.56	14.2	Fair.	
Chincoteague, Virginia	30.24	768.1	30.26	768.6	54	12.2	93	SE	12	5.4	.....	0	0	.....	.....	0	0	Clear.	
Cincinnati, Ohio	29.40	746.7	30.03	762.7	70	21.1	70	S	9	4.0	.....	9c	1ks	SW	SW	Inap.	Inap.	Cloudy.	
Cleveland, Ohio	29.28	743.7	29.97	761.2	71.8	22.1	61	S	10	4.5	.....	2ck	2s	W	.....	Inap.	Inap.	Fair.	
Coleman City, Texas	28.05	712.5	29.64	752.8	67	19.4	95	SE	4	1.8	.....	.....	10s	.....	S	0	0	Cloudy.	
Columbus, Ohio	29.20	741.7	30.00	762.0	69	20.6	75	S	8	3.6	.....	8ck	2ks	SW	SW	0	0	Cloudy.	
Concho, Texas	27.93	709.4	29.54	750.3	67	19.4	89	Calm	0	0	.....	0	5s	.....	.....	0	0	Fair.	
Corsicana, Texas	29.48	748.8	29.94	760.5	63	17.2	78	Calm	0	0	.....	0	8ks	.....	.....	0.05	1.3	Cloudy.	
Davenport, Iowa	29.19	741.4	29.80	756.9	67	19.4	84	Calm	0	0	.....	7cs	0	.....	.....	Inap.	Inap.	Fair.	
Dayton, Washington T'y	28.08	713.2	29.74	755.4	44	6.7	75	SW	4	1.8	.....	2k	0	Calm	.....	0	0	Fair.	
Deadwood, Dakota	25.12	638.0	.....	.....	50	10.0	79	S	5	2.2	.....	.....	10s	.....	S	0.27	6.9	Cloudy.	
Decatur, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Delaware Breakwater, Del.	30.22	767.6	30.24	768.1	56	13.3	87	SW	17	7.6	.....	1k	2s	SW	SW	0	0	Fair.	
Denison, Texas	29.11	739.4	29.87	758.7	69	20.6	85	SW	8	3.6	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy.	
Denver, Colorado	24.58	624.3	29.80	756.9	51.0	10.6	75	W	3	1.3	.....	0	0	.....	.....	0	0	Clear.	
Des Moines, Iowa	28.91	734.3	29.76	755.9	64	17.8	94	NE	6	2.7	.....	.....	10s	.....	.....	0.28	7.1	Cloudy.	
Detroit, Michigan	29.26	743.2	29.93	760.2	68.2	20.1	74	S	10	4.5	.....	5k	0	SW	.....	0	0	Fair.	
Dodge City, Kansas	27.27	692.6	29.52	749.8	51	10.6	79	N	1	0.4	.....	2k	0	S	.....	0	0	Clear.	
Dubuque, Iowa	29.13	739.9	29.80	756.9	64	17.8	89	NW	3	1.3	.....	.....	10s	.....	Calm	0.15	3.8	Cloudy.	
Duluth, Minnesota	29.26	743.2	29.94	760.5	44	6.7	76	Calm	0	0	.....	2cs	0	.....	.....	0	0	Clear.	
Eagle Pass, Texas	29.06	738.1	29.76	755.9	73	22.8	95	SE	4	1.8	.....	.....	10n	.....	Calm	Inap.	Inap.	Light rain.	
Eagle Rock, Idaho	25.07	636.8	29.72	754.9	43	6.1	83	SW	7	3.1	.....	.....	10ks	.....	SW	0.17	4.3	Cloudy.	
Eastport, Maine	30.18	766.6	30.25	768.3	42	5.6	74	S	8	3.6	.....	.....	10s	.....	S	0	0	Cloudy.	
El Paso, Texas	26.06	661.9	.....	.....	62	16.7	14	W	4	1.8	.....	0	1s	.....	.....	0	0	Clear.	
Erie, Pennsylvania	29.28	743.7	29.96	761.0	67	19.4	64	S	14	6.3	.....	8k	0	W	.....	0.01	0.3	Fair.	
Escanaba, Michigan	29.28	743.7	29.94	760.5	47	8.3	85	N	13	5.8	.....	5c	0	W	.....	0.69	17.5	Fair.	
Florence, Arizona	28.25	717.5	29.85	758.2	69	20.6	31	SW	1	0.4	.....	0	0	.....	.....	0	0	Clear.	
Fort Apache, Arizona	24.87	631.7	30.32	770.1	42	5.6	50	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Fort Assinnaboine, Montana	26.87	682.5	.....	.....	44	6.7	100	NE	10	4.5	.....	.....	10n	.....	NE	0.20	5.1	Heavy rain.	
Fort Bennett, Dakota	28.19	716.0	.....	.....	54	12.2	67	SE	8	3.6	.....	10c	0	W	.....	0	0	Cloudy.	
Fort Benton, Montana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Buford, Dakota	27.79	705.9	29.62	752.3	43	6.1	75	Calm	0	0	.....	5cs	0	SW	.....	0	0	Fair.	
Fort Custer, Montana	26.48	672.6	.....	.....	53	11.7	79	SE	18	8.0	.....	0	0	.....	.....	0	0	Clear.	
Fort Davis, Texas	25.01	635.2	29.97	761.2	60	15.6	71	SW	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Fort Elliott, Texas	27.12	688.8	29.37	746.0	50	10.0	72	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Gibson, Indian T'y	29.33	745.0	29.85	758.2	65	18.3	94	Calm	0	0	.....	.....	10s	.....	S	0.26	6.6	Cloudy	
Fort Grant, Arizona	25.09	637.3	29.89	759.2	57	13.9	25	N	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Fort Griffin, Texas	28.50	723.9	29.71	754.6	67.8	19.9	84	E	3	1.3	.....	5cs	Fg	S	.....	0.03	0.8	Foggy.	
Fort Keogh, Montana	27.21	691.1	.....	.....	49	9.4	85	NE	1	0.4	.....	10cs	0	.....	.....	0	0	Cloudy.	
Fort Macon, North Carolina	30.22	767.6	30.24	768.1	63	17.2	94	E	8	3.6	.....	8k	0	E	.....	0	0	Cloudy.	
Fort McKavett, Texas	27.60	701.0	29.43	747.5	67.8	19.9	90	S	5	2.2	.....	.....	10ks	.....	S	0	0	Cloudy.	
Fort Missoula, Montana	26.48	672.6	.....	.....	52	11.1	73	NW	1	0.4	.....	.....	10ks	.....	.....	0	0	Cloudy.	
Fort St. Michaels	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Shaw, Montana	26.10	662.9	.....	.....	42	5.6	66	W	1	0.4	.....	0	0	.....	.....	0	0	Clear.	
Fort Sill, Indian Territory	28.64	727.4	29.71	754.6	63	17.2	94	Calm	0	0	.....	1k	0	.....	.....	0.17	4.3	Clear.	
Fort Stevenson, Dakota	29.96	761.0	.....	.....	50	10.0	72	E	6	2.7	.....	.....	10s	.....	E	0.03	0.8	Cloudy.	
Fort Verde, Arizona	.....	.....	.....	.....	56	13.3	51	SW	1	0.4	0	0	0	.....	.....	0	0	Clear.	
Fredericksburg, Texas	28.14	714.7	29.64	752.8	68	20.0	95	SE	8	3.6	.....	.....	10s	.....	.....	0	0	Cloudy.	
Galveston, Texas	29.91	759.7	29.95	760.7	72	22.2	85	SW	14	6.3	.....	.....	10s	.....	W	0.66	16.8	Cloudy.	
Grand Haven, Michigan	29.22	742.2	29.85	758.2	60	15.6	94	S	12	5.4	.....	0	8s	.....	SW	0.29	7.4	Fair.	
Hatteras, North Carolina	30.21	767.3	30.23	767.8	63	17.2	83	NE	9	4.0	.....	.....	10s	.....	Calm	0	0	Cloudy.	
Helena, Montana	25.54	648.7	.....	.....	48	8.9	43	N	1	0.4	.....	2k	0	Calm	.....	0.30	7.6	Fair.	
Henrietta, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Indianapolis, Indiana	29.17	740.9	29.92	760.0	68.5	20.3	74	SE	8	3.6	.....	9cs	0	SW	.....	0.05	1.3	Fair.	
Indianola, Texas	29.89	759.2	29.92	760.0	73.9	23.3	95	E	17	7.6	.....	5cs	5s	S	S	0.30	7.6	Cloudy.	
Jacksboro, Texas	28.71	729.2	29.80	756.9	69	20.6	90	SE	6	2.7	.....	.....	10s	.....	SE	0.02	0.5	Threatening	
Jacksonville, Florida	30.12	765.0	30.16	766.1	74	23.3	72	E	3	1.3	.....	0	0	.....	.....	0	0	Clear.	
Keokuk, Iowa	29.16	740.7	29.78	756.4	64.8	18.2	94	S	2	0.9	.....	.....	8s;fg	.....	.....	0.27	6.9	Cloudy.	
Key West, Florida	30.01	762.2	30.04	763.0	78.8	26.0	75	E	12	5.4	.....	0	0	.....	.....	0	0	Clear.	
Kittyhawk, North Carolina	30.25	768.3	30.28	769.1	59	15.0	94	E	5	2.2	.....	0	2s	.....	.....	0	0	Fair.	
Knoxville, Tennessee	29.13	739.9	30.12	765.0	63	17.2	94	E	5	2.2	.....	0	2s;fg	.....	Calm	0	0	Fair.	
La Crosse, Wisconsin	29.10	739.1	29.81	757.2	60	15.6	77	NE	4	1.8	.....	.....	10s	.....	.....	0.37	9.4	Cloudy.	
La Mesilla, New Mexico	25.93	658.6	30.08	764.0	53	11.7	25	Calm	0	0	.....	2c	1s	.....	.....	0	0	Fair.	
Laredo, Texas	29.37	746.0	29.69	754.1	76	24.4	91	SE	6	2.7	.....	.....	10s	.....	SE	0	0	Cloudy.	
Leavenworth, Kansas	28.92	734.6	29.72	754.9	67	19.4	84	SE	4	1.8	.....	.....	10s	.....	SE	0.32	8.1	Cloudy.	
Lewiston, Idaho	28.98	736.1	29.62	752.3	45	7.2	54	Calm	0	0	.....	0	2s	.....	Calm	Inap.	Inap.	Clear.	
Little Rock, Arkansas	29.61	752.1	29.92	760.0	65	18.3	94	SW	4	1.8	.....	.....	10n	.....	.....	0.27	6.9	Light rain.	
Los Angeles, California	29.46	748.3	29.82	757.4	60.4	15.8	88	E	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy.	
Louisville, Kentucky	29.44	747.8	29.98	761.5	69.0	20.6	80	SE	8	3.6	.....	.....	10n	.....	.....	Inap.	Inap.	Light rain.	
Lynchburg, Virginia	29.50	749.3	30.17	766.3	67	19.4	69	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Madison, Wisconsin	28.84	732.5	29.80	756.9	56	13.3	94	N	8	3.6	.....	.....	Fg	.....	Calm	0.54	13.7	Dense fog.	
Marquette, Michigan	29.25	742.9	29.96	761.0	42	5.6	91	Calm	0	0	.....	.....	Fg	.....	.....	0.35	8.9	Dense fog.	
Mason, Texas	28.22	716.8	29.90	759.4	73	22.8	81	S	4	1.8	.....	.....	10s	.....	S	0	0	Cloudy.	
Memphis, Tennessee	29.62	752.3	29.94	760.5	68	20.0	95	Calm	0	0	.....	.....	10n	.....	SE	0.13	3.3	Light rain.	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.12	739.6	29.84	757.9	48	8.9	93	N	8	3.6			Fg			1.17	29.7	Dense fog	
Mobile, Alabama	30.00	762.0	30.07	763.8	74	23.3	83	SE	9	4.0		5k	o	SW		o	o	Fair	
Montgomery, Alabama	29.88	758.9	30.11	764.8	72	22.2	75	SE	4	1.8		5k	o	SW		o	o	Fair	
Moorhead, Minnesota	28.87	733.3	29.81	757.2	52	11.1	66	SE	7	3.1		o	2s		S	o	o	Fair	
Morgantown, W. Virginia	29.12	739.6	30.07	763.8	70	21.1	75	SW	1	0.4		8cs	o	W		o	o	Fair	
Mt. Washington, N. H.	23.86	606.0	30.22	767.6	42	5.6	87	NW	60	26.8		8c	8s;slc	N	S	o	o	Fair	
Nashville, Tennessee	29.49	749.0	30.01	762.2	69.4	20.8	78	SE	5	2.2		10ck	o	SE		0.18	4.6	Cloudy	
New Haven, Connecticut	30.10	764.5	30.22	767.6	56	13.3	81	E	3	1.3		o	1Iz			o	o	Clear	
New London, Connecticut	30.20	767.1	30.25	768.3	55	12.8	74	S	5	2.2		5k	o	S		o	o	Fair	
New Orleans, Louisiana	29.98	761.5	30.04	763.0	71.5	21.9	93	SE	1	0.4			Fg			1.20	30.5	Dense fog	
Newport, Rhode Island	30.19	766.8	30.24	768.1	50.8	10.4	86	SW	8	3.6			10s		Calm	o	o	Cloudy	
New River, N. Carolina					69	20.6	72	NE			1	Hz	Hz			o	o	Hazy	
New Shoreham, Rhode I'd	30.21	767.3	30.24	768.1	52.1	11.2	73	SW	22	9.8		o	o			o	o	Clear	
New York, New York	30.05	763.3	30.23	767.8	54	12.2	80	SE	5	2.2		o	o			o	o	Clear	
Norfolk, Virginia	30.21	767.3	30.26	768.6	58	14.4	88	SE	4	1.8			Fg			o	o	Dense fog	
North Platte, Nebraska	26.91	683.5	29.40	746.7	55	12.8	81	SE	16	7.2		5k	5s	W	SE	o	o	Cloudy	
Olympia, Washington T'y	29.91	759.7	29.95	760.7	40.0	4.4	91	W	1	0.4			10s		W	o	o	Cloudy	
Omaha, Nebraska	28.67	728.2	29.72	754.9	62	16.7	88	NE	16	7.2			10s			0.10	2.5	Cloudy	
Oswego, New York	29.66	753.4	29.97	761.2	62.3	16.8	76	S	6	2.7		1c	Hz	W		o	o	Clear	
Pensacola, Florida	30.05	763.3	30.08	764.0	75	23.9	81	SE	12	5.4			10s		S	o	o	Cloudy	
Philadelphia, Pa	30.16	766.1	30.21	767.3	56	13.3	81	SW	11	4.9		o	Hz			o	o	Clear	
Phœnix, Arizona	28.61	726.7	30.37	771.4	59	15.0	59	E	4	1.8		o	o			o	o	Clear	
Pike's Peak, Colorado	17.68	449.1	29.89	759.2	22	— 5.6	58	SW	28	12.5		2cs	o			0.28	7.1	Clear	
Pioche, Nevada	23.78	604.0	29.55	750.6	47	8.3	70	NW	2	0.9		2k	4ks	W	W	Inap.	Inap.	Fair	
Pittsburg, Pennsylvania	29.27	743.4	30.06	763.5	66	18.9	69	W	3	1.3			10n		SW	Inap.	Inap.	Light rain	
Port Eads, Louisiana	30.05	763.3	30.06	763.5	72.2	22.3	90	SE	9	4.0		1ck	2ks	SE	SE	0.05	1.3	Fair	
Port Huron, Michigan	29.27	743.4	29.91	759.7	66.6	19.2	74	SW	12	5.4		8cs	o	SE		o	o	Fair	
Portland, Maine	30.16	766.1	30.21	767.3	50	10.0	72	SE	10	4.5			10s		Calm	o	o	Cloudy	
Portland, Oregon	29.90	759.4	29.97	761.2	45	7.2	72	Calm	o	o		8cs	o			Inap.	Inap.	Fair	
Portsmouth, N. Carolina					66	18.9	84	NE	8	3.6		10k	o	W		o	o	Cloudy	
Prescott, Arizona	24.56	623.8	29.92	760.0	53	11.7	36	S	8	3.6		o	o			o	o	Clear	
Punta Rassa, Florida	30.05	763.3	30.06	763.5	73	22.8	76	E	7	3.1		1ck	o	W		o	o	Clear	
Red Bluff, California	29.39	746.5	29.73	755.1	58.0	14.4	91	S	10	4.5			10n		S	0.39	9.9	Heavy rain	
Rio Grande City, Texas	29.66	753.4	29.87	758.7	76	24.4	86	SE			1		10s		Calm	Inap.	Inap.	Cloudy	
Rochester, New York	29.35	745.5	29.94	760.5	68	20.0	51	SW	4	1.8		5ck	Fg	W		o	o	Fair	
Roseburg, Oregon	29.38	746.2	29.96	761.0	46	7.8	69	N	5	2.2		o	5ks		N	o	o	Fair	
Sacramento, California	29.74	755.4	29.82	757.4	52.8	11.6	80	S	15	6.7			8s		S	o	o	Cloudy	
St. Louis, Missouri	29.30	744.2	29.85	758.2	67.0	19.4	95	S	9	4.0		5c	o	S		0.10	2.5	Fair	
St. Paul, Minnesota	29.04	737.6	29.84	757.9	54	12.2	80	NE	3	1.3		5c	o	NW		0.03	0.8	Fair	
Salt Lake City, Utah	25.37	644.4	29.70	754.4	53	11.7	67	Calm	o	o			10ks		W	0.03	0.8	Cloudy	
San Antonio, Texas	29.18	741.2	29.85	758.2	73.1	22.8	85	SE	4	1.8			10s		SE	o	o	Threatening	
San Diego, California	29.74	755.4	29.81	757.2	62.1	16.7	67	S	6	2.7			10s			o	o	Cloudy	
Sandusky, Ohio	29.31	744.5	29.95	760.7	70	21.1	70	S	12	5.4		5ck	o	SW		o	o	Fair	
Sandy Hook, New Jersey	30.18	766.6	30.21	767.3	57.0	13.9	81	SW	6	2.7		o	o			o	o	Clear	
San Francisco, California	29.80	756.9	29.86	758.4	53	11.7	89	W	8	3.6			10n;fg		W	0.03	0.8	Light rain	
Santa Fé, New Mexico	23.13	587.5	29.67	753.6	51	10.6	34	SE	4	1.8		o	5s		S	o	o	Fair	
Savannah, Georgia	30.11	764.8	30.20	767.1	67.5	19.7	79	NE	3	1.3		o	c			o	o	Clear	
Shreveport, Louisiana	29.74	755.4	29.98	761.5	64	17.8	100	SE	2	0.9			10s			2.73	69.3	Cloudy	
Silver City, New Mexico	24.13	612.9	30.26	768.6	48	8.9	29	Calm	o	o		o	o			o	o	Clear	
Sitka, Alaska																0.02	0.5		
Smithville, North Carolina	30.19	766.8	30.23	767.8	63	17.2	100	N	5	2.2		o	Fg			o	o	Clear	
Socorro, New Mexico	25.20	640.1	29.26	743.2	59	15.0	23	S	7	3.1		5ck	o	NW		o	o	Fair	
Spokane Falls, Wash. Ter.	27.73	704.3	29.54	750.3	47	8.3	77	SW	3	1.3			10s		Calm	0.01	0.3	Cloudy	
Springfield, Illinois	29.21	741.9	29.86	758.4	66	18.9	89	S	12	5.4		1c	1s	SW	S	0.02	0.5	Fair	
Springfield, Massachusetts	30.09	764.3	30.22	767.6	51	10.6	86	S	4	1.8			10s;fg		S	o	o	Cloudy	
Stockton, Texas	26.77	679.9	29.77	756.1	66.3	19.1	89	SE	20	8.9		2cs	o	SE		o	o	Fair	
St. Vincent, Minnesota	29.03	737.3	29.81	757.2	53	11.7	73	SE	1	0.4			10s		W	o	o	Cloudy	
Thatcher's Island, Mass	30.18	766.6	30.23	767.8	46	7.8	100	S	13	5.8			Fg			o	o	Dense fog	
Toledo, Ohio	29.28	743.7	29.93	760.2	72	22.2	67	SW	11	4.9		5c	o	N		Inap.	Inap.	Fair	
Tucson, Arizona	27.33	694.2	29.88	758.9	58	14.4	42	SE	2	0.9		o	o			o	o	Clear	
Umatilla, Oregon	29.52	749.8	30.01	762.2	41	5.0	82	SW	2	0.9		o	o			o	o	Clear	
Uvalde, Texas	28.88	733.5	29.67	753.6	72	22.2	85	SE	4	1.8			10s		Calm	o	o	Cloudy	
Vicksburg, Mississippi	29.77	756.1	30.02	762.5	69	20.6	95	S	3	1.3			10s		SW	2.09	53.1	Cloudy	
Visalia, California	29.42	747.3	29.78	756.4	56	13.3	87	NW	7	3.1		o	o			o	o	Clear	
Washington, D. C.	30.09	764.3	30.20	767.1	61	16.1	77	S	5	2.2		o	o			o	o	Clear	
Wickenburg, Arizona					56	13.3	51	Calm			0	1c	o			o	o	Clear	
Wilmington, N. Carolina	30.18	766.6	30.23	767.8	63	17.2	83	E	1	0.4		o	o			o	o	Clear	
Winnemucca, Nevada	25.39	644.9	29.75	755.6	42	5.6	83	NE	6	2.7		o	5ks		SW	0.34	8.6	Cloudy	
Wood's Holl, Mass	30.20	767.1	30.24	768.1	54	12.2	80	SW	12	5.4		1cs	Hz	W		o	o	Clear	
Yankton, Dakota	28.61	726.7	29.88	758.9	54	12.2	67	NE	3	1.3		o	o			o	o	Clear	
Yuma, Arizona	29.51	749.5	29.65	753.1	68.3	20.2	74	SE	8	3.6		o	o			o	o	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.08	560.8			54.5	12.5	88	Calm	o	o			10n			0.03	0.8	Raining	Thomas Herran
Buff Bay Town, Jamaica.‡	29.74	755.4	30.05	763.3	73	22.8	95	E					10k			Blank			
Havana, Cuba, W. I.	30.00	762.0	30.05	763.3	80	26.7	74	Calm	o	o		o	o			0.03	0.8	Clear	A. Van Caneghem, Ass't.
Jakobshavn, Greenland	29.61	752.0	29.66	753.3	42.8	6		W			2		3			o	o		K. V. Möller.
Kingston, Jamaica, W. I.	29.93	760.2	29.94	760.5	79.7	26.5	73	Calm	o	o		10c	o			o	o		Robert Johnstone
Navassa, W. I.	29.87	758.7	29.95	760.7	82	27.8	75	NE				8cs	2k	NE	N	Fair			F. M. Everett.
Paramaribo, S. A.	29.97	761.2	29.97	761.2	80	26.7	87	E			2	5k	7ks	E		0.800	20.3		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.36	745.7	29.91	759.7	79	26.1	95	Calm			o		8n		Calm	0.27	6.9	Rainy	Francesco J. Cisneros.
Rivas, Nicaragua					78.8	26.		NE			2	7ck	2ks	SE	NE	o	o		Earl Flint.
Santiago de Cuba, W. I.	29.95	760.7	29.97	761.2	79	26.1	78	N	3.6	1.6		2ks	2n			0.35	8.9	Fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.93	760.2	29.98	761.5	32.0	0.0	94	W	18	8.0		2k	2s	NW	W	o	o	Fair	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross, N. 33° 57′, E. 132°38′	30.24	768.1	55	12.8		Calm			0		1							Blue sky	Comm A. J.Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, N. 41° 06′, E. 9° 53′	29.95	760.7	68	20.0	72	NW			3		3							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab,																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 28° 00′, E. 56° 00′	29.73	755.1	90	32.2	63	SW			1		1	SW						Blue sky	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			62	16.7		NNE			2–4		8	NNE				2	NNW	Showery	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	29.95	760.7	80	26.7	91	SE			1		8							Misty	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 08′, E. 25° 40′	30.02	762.5	60	15.6	71	SSW			6		7	SW				6	SW	Squally	Com. F. W. Richards.
H. M. S. Champion, S. 4° 15′, W. 3° 53′	29.88	758.9	79	26.1	82	SE			2		5	Calm				2	SSE	D. clouds	Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 27° 02′, E. 121° 12′	30.20	769.4	60	15.6	94	ENE			3		2	SW				2	NE	D. clouds	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S.Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, S. 15° 55′, W. 5° 44′	30.07	763.8	74	23.3	86	ENE			2		3	NNE				2	ENE	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring, N. 9° 01′, E. 68° 06′	29.83	757.7	86	30.0		NW			1		0					1	SSE	Blue sky	Capt. F. J. Elliott.
H. M. S. Dido, S. 34° 49′, E. 26° 28′	29.93	760.2	61	16.1		SW			7–9		6	SSW				9	SSW	Showery	Capt C. Domville.
H. M. Dock-Yard																			Capt. J. Barnardisten.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 08′, W. 53° 28′	30.12	765.0	35	1.7	80	NNE			2–3		5	NW						D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad, N. 19° 10′, E. 58° 10′	29.77	756.1	86	30.0		SW			3		5	SW				4	SW	D. clouds	Capt. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 15° 30′, E. 109° 30′	29.87	758.7	76	24.4		N			6		10	N				4	N	Misty	Comm. C. Johnstone.
H. M. S. Emerald, S. 13° 05′, E. 178° 10′	29.83	757.7	83	28.3		E			3		8	E				3	NNE	D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Trincomalee, Ceylon, India.	29.76	755.9	89	31.7	73	ENE			1		2							D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S Flamingo, N. 20° 56′, W. 73° 42′	30.01	762.2	81	27.2	91	NE			2–3		2	E				2	E	D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish, Hong-Kong, China	30.12	765.0	71	21.7	83	E			3		8	W				2	E	Misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 28° 50′, W. 135° 10′	30.18	766.6	66	18.9	74	Calm			0		10					1	NW;E	Overcast	Comm. E. G. Bourke.
H. M. S. Garnet, S. 39° 36′, W. 57° 00	29.76	755.9	58	14.4	88	W			2		6					2	WNW	D. clouds	Capt. L. F. Jones.
H. M. S. Griffon, N. 17° 50′, W. 78° 40′	29.96	761.0	82	27.8	83	N			1		1							Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 17° 34′, W. 74° 30′	29.96	761.0	81	27.2		N			1		1					Sm'h		Blue sky	Capt. J. L. Way.
H. M. S. Inconstant, S. 39° 45′, E. 105° 30′	29.97	761.2	55	12.8	81	NW			1–2		10	NNW				4	WNW	D. clouds	Capt. C. C.P. Fitzgerald.
H. M. S. Iris, Naples, Italy	29.85	758.2	67	19.4	64	SSW			1		8					1	SSW	D. clouds	Capt. E. H. Seymour.
H. M. S. IronDuke, N. 25° 09′, E. 119° 31′	30.20	767.1	65	18.3	94	NNE			4–6		10	SSW				5	SSE	Showery	Capt. R. E. Tracey.
H. M. S. Kingfisher																			Coinm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	30.17	766.3	55	12.8		Calm			0		0							Blue sky	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Hong-Kong, China	30.14	765.5	70.7	21.5	84	E			3–4		9							D. clouds	Capt. A. Carpenter.
H. M. S. Midge, Swatow, China	30.15	765.8				NE			4–5		4	NE						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 34° 57′, W. 9° 12	29.99	761.7	67	19.4	76	NE			6		1	ENE				3	ENE	Blue sky	Capt. H. H. Rawson.
H. M. S. Modeste, N. 2° 20′, E. 107° 08′	29.87	758.7	86	30.0	96	S			2		1							Blue sky	Capt. J. G. Mead.
H. M. S. Monarch Goletta, Tunis, N. Africa	30.02	762.5	65	18.3	89	NW			3		3	NNW						D. clouds	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda Islands, W. I.	30.15	765.8	64.5	18.1	70	NNE			6		10	NNE						Overcast	Capt. E. B. Drummond.
H. M. S. Orontes, S. 25° 56′, E. 44° 20′ †.	29.78	756.4	72.5	22.5	95	WSW			4		10	WSW				2	SW	Thund'r st'm	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.84	757.9	80	26.7		Calm			0		7							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin, S. 38° 36′, W. 74° 25′	29.80	756.9	54	12.2		SE			2		10					6	SSW	Raining	Capt. A. C. Paget.
H. M. S. Phœnix, St. Lucea, Jamaica, W. I.	29.92	760.0	77	25.0	91	Calm			0		1	SW						Blue sky	Capt. H. H. Grenfel.
H. M. S. Rambler, N. 4° 22′, E. 3° 38′	29.85	758.2	84	28.9		ESE			1		3	ESE				2	SE	D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	29.89	759.2	41	5.0		WSW			1		7							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.90	759.4	82.4	28.0	85	ESE			1		4							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis, N. 33° 48′, E. 24° 05′	29.98	761.5	66	18.9	95	NW			2		4	NW				Sm'h		D. clouds	Capt. G. O. Twiss.
H. M. S. Shannon, S. 18° 34′, W. 30° 50′	30.07	763.8	77	25.0	69	ESE			3-4		3	ESE				3	ESE	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb, N. 38° 06′, E. 13° 21′ *	29.96	761.0	67	19.4	69	W			3-4		3	S						D. clouds	Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A	29.89	759.2	55	12.8	93	N			0-1		10	Calm						D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise, Callao Bay, Peru	29.93	760.2	65	18.3	97	S			1		8							D. clouds	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, Aden, Arabia	29.85	758.2	88	31.1	80	S			1										Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.			78	25.6		Calm			0		1							Blue sky	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Wellington, New Zealand	29.74	755.4	62	16.7		NNW			5-7		10	NNW						Squally	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Task, West Bay, Persia	29.73	755.1	88.5	31.4	71	WSW			2		0					3-4	W	Misty	Capt. T. P. Nesham.
H. M. S. Zephyr, N. 27° 12′, E. 120° 35′	30.31	769.9	60	15.6	82	NE			4		2	NE				4	NE	D. clouds	Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Santiago, Cape Verd I'ds.	29.95	760.8	77.4	25.2	84	NNE			4		1					2	SE	D. clouds	S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't.
Tamega																			P. I. B. de Carvoatllo, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, N. 46° 54′, W. 12° 51′ ‡	30.43	772.8	58.8	14.9	87	E			3		0							Blue sky	Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.13	765.3	75	23.9	86	SE	15	6.7			8		SE	0	0			Fair	
N. Yard, Portsmouth, N. H.	30.20	767.1	46	7.8	92	SE	7	3.1			10		E	0	0			Cloudy	
Naval Hospital, Yokahama, Japan	29.84	757.9	58.5	14.7	67	E			3		10		W	Slight				Cloudy	
Adams, Callao, Peru	29.76	755.9	65	18.3	94	NW			0-1		10					Long	SW	Cloudy	
Alaska, Callao, Peru	29.83	757.7	64	17.8	89	WNW			1		10					Sm'h		Overcast	
Alert, N. 22° 55′, E. 142° 47′ *	30.04	763.0	80	26.7	74	E			3		5		E			Sm'h		Fair	
Alliance, Norfolk, Va	30.25	768.3	55	12.8	100	Calm			0		0			0	0	Sm'h		Foggy	
Ashuelot, Nagasaki, Japan	30.25	768.3	55	12.8	62	NE			1		0							Clear	
Colorado, New York, N. Y	30.16	766.1	60	15.6	71	SW	3	1.3			0			0	0			Clear	
Constitution, N. 37° 08′, W. 76° 10′	30.22	767.6	57	13.9	94	S	2	0.9			0							Hazy	
Franklin, Norfolk, Va	30.19	766.8	57	13.9	87	S	8	3.6			2			0	0			Foggy	
Galena, N. 37° 40′, E. 16° 39′	29.89	759.2	65	18.3	89	NW			3		2					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	29.87	758.7	55	12.8	87	WSW	2.4	1.1			10		WSW	0	0			Overcast	
Jamestown, Sitka, Alaska *	29.71	754.6	40	4.4	91	E			2		10			0.05	1.3			Rain & snow	
Kearsarge, N. 33° 14′, W. 78° 16′	30.25	768.3	69	20.6	90	NE			2		2		SE			Mod.	NE	Fair	
Lackawanna, S. 29° 40′, W. 84° 48′ †	30.34	770.6	62	16.7	77	SSW			2-3		8		SW			Sm'h	SW	Fair	
Marion, Montevideo, Uruguay	30.10	764.5	54	12.2	87	NNW			2		0			0	0	Sm'h		Clear	
Michigan, Erie, Pennsylvania	29.95	760.7	67	19.4		S	2	0.9										Fair	
Minnesota, Newport, R. I	30.26	768.6	54	12.2	93	SW			2		10					Sm'h		Overcast	
Monocacy, Nagasaki, Japan	30.27	768.8	54	12.2	74	N			1		0							Clear	
New Hampshire, Port Royal, S. C	30.19	766.8	70	21.1	75	NE	12	5.4			0			0	0			Clear	
Nipsic, Gibraltar, Mediterranean	30.17	766.3	67	19.4	79	N			5		2					Sm'h		Squally	
Onward, Callao, Peru †	29.90	759.4	64	17.8	94	NW			1		10					Long	W	Cloudy	
Palos, Yokohama, Japan	30.05	763.3	60	15.6	55	NNE			3		10							Overcast	
Passaic, Washington, D. C	30.20	767.1	61	16.1	100	SE			1		0							Clear	
Pensacola, N. 27° 27′, W. 151° 35′	30.17	766.3	72	22.2	100	E			2		8		E	0	0	Long	SE	Cloudy	
Portsmouth, Thimble Light, Va	30.27	768.8	56	13.3	94	SSE			1		2							Clear	
Powhatan, New York, N. Y	30.19	766.8	62	16.7	77	SW			2		0							Clear	
Quinnebaug, N. 34° 07′, W. 110° 36′	30.05	763.3	72	22.2	71	ENE			5		2		ENE			Long	ENE	Hazy	
Ranger, Isla Grande, Mexico *	29.80	756.9	72	22.2	90	NNE			1		0			0	0	Sm'h		Clear	
Richmond, Nagasaki, Japan	30.24	768.1	56	13.3	51	N			2		1		N	0	0			Clear	
Saratoga, Chesapeake Bay	30.23	767.8	56	13.3	94	S			3		0			0	0			Clear	
Shenandoah, Montevideo, Uruguay *	30.01	762.2	52	11.1	93	NNW			1		8					Sm'h		Fair	
St. Louis, League Island, Pa	29.78	756.4	58	14.4	76	SW	14	6.3			0			0	0			Clear	
Swatara, Shanghai, China † *	30.25	768.3	61	16.1	66	S			2		10		Calm					Overcast	
Tennessee, Hampton Roads, Va	30.25	768.3	58	14.4	94	SSE	6	2.7			2		Calm	0	0	Sm'h		Hazy	
Ticonderoga, S. 39° 09′, W. 122° 01′	30.18	766.6	61	16.1	94	N			5		10		N	Inap.	Inap.	Mod.	N	Cloudy	
Trenton, Castellamare, Italy *	29.85	758.2	73	22.8	59	NNW			2		10			0	0	Sm'h		Cloudy	
Vandalia, Hampton Roads, Va	30.24	768.1	58	14.4	94	SSE			2		0							Clear	
Wabash, Boston, Massachusetts	30.48	774.2	48	8.9	85	SW	6	2.7			10		Calm	0	0			Hazy	
Wachusetts, N. 35° 35′, W. 137° 36′	30.21	767.3	59	15.0	88	NNE			3		10		N	Showers		Mod.	N	Cloudy	
Wyoming, N. 20° 26′, W. 51° 18′	30.02	762.5	77	25.0	73	ESE			3		2		ESE			Sm'h	ESE	Clear	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 38° 41′, W. 130° 42′	30.14	765.5	54.8	12.7	72	NNE			4-5		6							D. clouds	Capt. E. J. Molony.
Chin Yang																			Capt. N. Youlden.
S. S. Clipero, N. 86° 20′, W. 58° 40′	29.90	759.4	81.5	27.5	89	NE			3		2					3	NE	Blue sky	Capt. W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne, N. 21° 02′, W. 36° 13′	30.15	765.8	75	23.9	68	NE			5		8							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 38° 24′, W. 42° 54′	30.21	767.3	72.0	22.2	67	ESE			5		5							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow, ‡ N. 2° 01′, E. 102° 20′	29.91	759.7	83.5	28.6	87	S			2		2							Blue sky	Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ S. 0° 14′, W. 24° 18′	29.91	759.7	81.7	27.6	79	E			5		5							D. clouds	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 49° 56′, W. 14° 03′	30.53	775.4	56.5	13.6	87	E			4		0						W	Misty	Capt. H. W. Dyke.
Barque Mertola, N. 45° 55′, W. 15° 22′	30.43	772.9	58.2	14.6	88	E			3		10							Overcast	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria, ‡ S. 16° 08′, W. 5° 19′	30.04	763.0	74	23.3	86	ENE			4		3							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 16° 45′, E. 96° 14′	29.84	757.9	83.0	28.3	85	Calm			0		8							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton, Suez Canal, ‡	29.82	757.4	79	26.1	58	W			3		0							Blue sky	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean																			
S. S. Circassian, N. 53° 55′, W. 4° 30′	30.92	785.4	51	10.6	86	ENE			3		3k		E	0	0	Sm'h		Misty	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Gallia, N. 47° 37′, W. 35° 45′ *	30.07	763.8	55	12.8		S			7		8		SW	Ra	in	Mod.	SW;S	Raining	Capt. W. H. P. Hains.
S. S. Scythia, N. 41° 45′, W. 59° 27′	30.12	765.0	46	7.8	84	NNW			4		0			Sho	wers	Mod.	NNE	Clear	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic, N. 49° 14′, W. 32° 33′ †	30.35	770.9	54	12.2		S			6		2		W			H'vy	SW	D. clouds	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England †	30.77	781.5	58	14.4		NE			3		5?		NE	0	0			Clear?	Capt. Ch. W. Kennedy.
S. S. Republic, N. 44° 00′, W. 46° 21′ †	29.75	755.6	56	13.3	87	Var.			1		10			8h'rs	mist	Very h'vy	SW	Cloudy	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—OF BREMEN. *A. Schumacher & Co.*																			
S. S. Hermann, N. 41° 23′, W. 56° 56′	30.10	764.5	50	10.0		NNE			6		1		NE	0	0	H'vy	NE	Clear	Capt. H. Baur.
S. S. Köln, N. 49° 36′, W. 19° 50′	30.52	775.2	61.5	16.4	88	NNE			2		10		NNE	5h'rs	fog	Sm'h long	NNE; WNW	Cloudy	Capt. Th. Jüngst.
S. S. Leipzig, N. 39° 08′, W. 61° 38′	30.29	769.4	54.0	12.2		NNE			5		2		NE	0	0	R'gh	NNE	Fair	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England	30.60	777.2	63	17.2	78	NNW			2		5?		W					Clear?	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio																			W. Shackford, Chief Off'r
S. S. Pennsylvania, N. 40° 33′, W. 57° 56′ *†	30.11	764.8	48	8.9	92	NE			6		8		NE			R'gh	ENE	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 29° 00′, W. 116° 51′ †‡	29.89	759.2	64	17.8	78	NNW			3		8		NNW	0	0	Mod.	WNW	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, Yokohama, Japan †	30.12	765.0	63	17.2	62	NE			3		10		NE	0	0	Sm'h		Cloudy	Capt. H. Davison.
S. S. Gaelic, N. 35° 08′, E. 143° 10′ *†	30.12	765.0	66	18.9	89	Var.			1		5		WSW			Mod.	W	Fair	Capt. W. H. Kidley.
S. S. Oceanic, N. 44° 21′, W. 145° 55′	30.41	772.4	46	7.8	62	NW			1		10		W	0	0	2	NW	Overcast	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, Astoria, Oregon †	30.03	762.7	50	10.0	79	NNW			2		10		N					Cloudy	Capt. Fred. Bolles.
S. S. Oregon																			Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, San Francisco, Cal. †	29.88	758.9	53	11.7	86	W			4		10		W					Raining	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 36° 20′, W. 121° 53′ †	29.96	761.0	56	13.3	81	NW			7		8		NW	0	0	Long	NW	Cloudy	Geo. H. Harrison.
S. S. Senator, N. 35° 35′, W. 121° 25′ †	29.86	758.4	55	12.8	93	NW			2		10		NW			Mod.		Misty	Capt. Thos. Wallace.
S. S. State of California, Portland, Oregon †	29.91	759.7	44	6.7	76	N			3		5		N					Fair	Capt. G. Debney.
S. S. Victoria, N. 43° 40′, W. 124° 25′ †	29.99	761.7	54	12.2	74	NW			3		8					Long	NW	Cloudy	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, Sydney, N. S. W	29.78	756.4	70	21.1	54	Calm			0		0							Clear	A. Bannerman, 2d Officer
S. S. City of New York, Sydney, N. S. W †	29.98	761.5	66	18.9	79	Calm			0		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China †	30.09	764.3	69	20.6	75	E			5		10		NE			Sm'h		Cloudy	Capt. G. G. Berry.
S. S. City of Sidney, N. 18° 24′, W. 159° 16′ †	29.99	761.7	74	23.3	86	E			3		5		NE	0	0	Mod.	NE	Fair	Capt. H. C. Dearborn.
S. S. City of Tokio																			A. L. Ritchie, 2d Officer
S. S. Colima, N. 22° 56′, W. 109° 05′ †	29.85	758.2	68	20.0	90	E			2		2		Calm	0	0	Mod.	W	Clear	
S. S. Granada, Panama, Panama †	29.74	755.4	79	26.1	86	NW			2		10		NW	Showers				Sprinkling	Capt. R. R. Searle.
S. S. Zealandia, N. 36° 16′, W. 125′ 14°	29.94	760.5	58	14.4	76	WNW			4		2?		NW	0	0	Mod.	NW	Cloudy?	Capt. M. Connolly.
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland																			Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Savannah, Georgia	30.16	766.1	70	21.1	75	N					0			0	0			Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, N. 24° 06′, W. 39° 49′ *†	30.28	769.1	74	23.3		E			6		10		E	0	0	Cross	E	Fair	Capt B. F. Woodbury.
Brigantine George																			Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Md. †	30.27	768.8	59	15.0	88	SSW	3	1.3		2c	2s			0	0			Clear	
Bark Sunbeam, N. 39° 41′, W. 19° 27′ †	30.32	770.1	62	16.7	94	ENE			5		5		NE	0	0	Mod.	E	Foggy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 10, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco	‡		29.96	761.0	72.3	22.4	71	Calm			0		7			0	0	Very cloudy	Dr. Ollive.
Nemours	‡		29.91	759.7	74.5	23.6	91	SSW			5		0			0	0	Clear.	Raynard.
Algiers	‡		30.01	762.3	73.0	22.8	59	N			3		0			0	0	Clear.	Nicolas.
La Calle	‡		30.00	762.1	70.2	21.2	70	NW			4		1			0	0	Very fair.	Fonfrède.
Tunis	‡		29.97	761.3															Jacques.
Stax	‡		30.03	762.8															Gau.
Saida	‡		29.92	760.0	81.3	27.4	94	W			5		0			0	0	Clear.	Dumas.
Tebessa	‡		29.97	761.2	65.8	18.8	36	W			3		4			0	0	Cloudy.	Watrin.
Geriville	‡																		Lonchamp.
Laghouat	‡		29.95	760.8	77.4	25.2	30	S			2		0			0	0	Clear.	Herbin.
Biskra	‡		29.93	760.2															Bandassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria		29.65	753.1	29.74	755.4	57.8	14.3	71	NW	12	5.4		10			0.52	13.2	Showery	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram																			
Cracow, I. R. Obs'y		29.41	747.0	29.97	761.1	50.0	10.0	55	NE			3	10			0.051	1.3	Raining	Prof. Ivan Stozir.
Eperies		29.35	745.6	30.14	765.6	43.2	6.2	76	N	8.7	3.9		10			0.051	1.3		Dr. Wierzbicki.
Gratz		29.12	739.7	30.02	762.5	45.0	7.2	72	N			3	10S		S	0	0		Julius Mikolik.
Hermannstadt	‡	28.77	730.8	30.03	762.7	52.0	11.1	33	WNW			4	6			0	0		Andreas Rospini.
Kremsmunster		28.40	721.4	29.83	757.6	54.1	12.3	91	NW			1	10			0.047	1.2	Light rain	Prof. A. Gottschling.
Lemberg, Obs'y		28.77	730.7	30.13	765.4	46.2	7.9	50	NNE			3	5			0.224	5.7	Rain & hail.	The Staff.
Pola		28.98	736.2	29.97	761.2	54.1	12.3	58	NE			1	10			0	0		Dr. T. Stanecki.
Szathmar		29.82	757.3	29.93	760.2	54.7	12.6	48	ENE			4	4			0.039	1.0		I. R. HydrographicOffice.
Szegedin		29.41	747.1	29.87	758.8	56.1	13.4	56	NE			1	10			0	0		Beicht Peter, S. J.
Trieste		29.58	751.3	29.86	758.4	54.3	12.4	65	NW			4	10			0.315	8.0		Karl Stancel.
Vienna		29.86	758.5	29.97	761.1	55.6	13.1	45	E			2	8			0	0	Cloudy	Secco.
		29.41	747.0	30.14	765.6	46.9	8.3	45	NNW			3	9			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30 64	778.2	30.74	780.8	44.9	7.2	62	SSE	17	7.6			1			0	0	Blue sky	W. Boswell.
Armagh, Observatory	30.52	775.2	30.74	780.8	57.0	13.9	58	E	5	2.2			1					D. clouds	S. Call.
Bidston, Liverpool Obs'y			30.72	780.3	49.3	9.6	49	NE	8	3.6			9					Overcast	John Hartnup.
Bolton, Sharples	30.15	765.8	30.70	779.8	50.4	10.2	53	ENE	9	4.0			3					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	30.30	769.6	30.69	779.5	48.3	9.1	58	E			1		5			0	0	D. clouds	J. McLandsbo ough, F.R.S
Bridgetown, Barbadoes	29.85	758.2	29.88	758.9	83.0	28.3	71	NE			2		8					D. clouds	Corpl. J. Surgener, A.H.C.
Cardington			30.64	778.2	52.0	11.1	55	NE			1.0		9					Overcast	John McLaren.
Chatham, School M. E.	30.50	774.7	30.63	778.0	50.6	10.3	53	E			4		4					D. clouds	Lance Cpl. R. Tear, R.E.
Falmouth, Observatory	30.43	772.9	30.67	779.0	48.6	9.2	54	ESE			3		1					D. clouds	The Staff.
Fort Napier, Natal	27.78	705.6	29.99	761.7	70.1	21.2	100	Calm			0		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.59	751.6	29.83	757.7	87	30.6	84	W			1		3					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			30.62	777.7	64	17.8	48	NW			2		2			0	0	Blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	29.91	759.7	29.96	761.0	71.8	22.1	84	E			1		4					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.50	749.3	29.71	754.6	52.3	11.3	54	NE			1		0					Blue sky	D. G. MacLean.
Greenwich, Royal Obs'y	30.46	773.7	30.63	778.0	50.4	10.2	63	NE			1		9					D. clouds	The Staff.
Guernsey	30.35	770.9	30.57	776.5	48.5	9.2	63	NE			3		0					Blue sky	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.60	777.2	30.64	778.2	50.4	10.2	54	NE	16	7.2			8					D. clouds	The Staff.
Leicester, Museum	30.42	772.7	30.69	779.5	49.0	9.4	57	NE			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.78	756.4	29.86	758.4	67.6	19.8	72	NW			3		7			0	0	D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas	30.04	763.0	30.08	764.0	71.0	21.7	100	SE			1		8					Drizzling	C. S. Duncombe.
Oscott, St. Mary's College	30.21	767.3	30.76	781.3	45.7	7.6	58	NNE			2		8					D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	30.42	772.7	30.66	778.7	48.2	9.0	63	ENE			3		10					Overcast	The Staff.
Plymouth	30.57	776.5	30.65	778.5	52.6	11.4	52	E			4		2					D. clouds	John Merrifield.
Sandwick Manse, Orkneys			30.69	779.5	54	12.2	66	S	8	3.6			5					Light clouds	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey					70.0	21.1	59	SSW			1		3					D. clouds	Serg't W. H. Lyne.
Sheffield	30.44	773.2	30.73	780.5	50.1	10.1	70	NE			1		5			0	0	D. clouds	W. F. Cooper.
Silloth Rectory	30.71	780.0	30.74	780.8	52.9	11.6	69	SE			2		0			0	0	Blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.73	780.5	49.0	9.4	52	NE	9	4.0			6					D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	30.42	772.7	30.64	778.2	51.0	10.6	50	NE			2		5					Squally	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.63	778.0	30.65	778.5	60	15.6	60	E			6		4					D. clouds	W. Newcombe.
Valencia, Observatory	30.63	778.0	30.65	778.5	62.0	16.7	51	ESE	22	9.8			0					Misty	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.04	763.0	30.09	764.3	42	5.6	90	N	8	3.6			10n			0.205	5.2	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	30.05	763.3	30.12	765.0	47	8.3	83	W	2	0.9		5c	0	W		0.39	9.9	Fair	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huard.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.12	765.0	30.15	765.8	38	3.3	95	Calm	0	0			Fg		Calm	0.19	4.8	Dense fog	J. McWilliams.
Fort Garry, Manitoba*	28.83	732.3	29.63	752.6	55	12.8	77	SE	12	5.4		5ck	5n	SE	SE	0	0	Cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.94	760.5	30.07	763.8	45	7.2	97	W	1	0.4			Fg			0.103	2.6	Foggy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.65	753.1	29.97	761.2	58	14.4	94	S	3	1.3		2ck	8ks	Calm	S	0.24	6.1	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.83	757.7	30.03	762.7	52	11.1	96	NE	13	5.8			10n			0.64	16.3	Light rain	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.25	742.9	29.92	760.0	63	17.2	98	SE	8	3.6			10n		SE	0.52	13.2	Cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.31	744.5	29.99	761.7	60	15.6	82	S	7	3.1		5cs	0	SW		0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.33	745.0	29.97	761.2	58	14.4	83	SE	7	3.1		5ck	0	W		0.01	0.3	Fair	M. Payne.
Quebec, Quebec*	29.78	756.4	30.11	764.8	50	10.0	77	E			1	0	2s		E	0.16	4.1	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.56	750.8	30.02	762.5	51	10.6	93	SE	2	0.9			10ks		SE	0.27	6.9	Cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.19	741.4	29.88	758.9	68	20.0	84	S	13	5.8		8cs	0			0.13	3.3	Cloudy	K. Stewart.
St. Andrews, N. B.	30.02	762.5	30.07	763.8	45	7.2	94	E	1	0.4			Fg			0.17	4.3	Foggy	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.02	762.5	30.06	763.5	42	5.6	95	SW	3	1.3		8k	2n	NW	SW	0.33	8.4	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.61	752.1	29.99	761.7	58	14.4	87	E	1	0.4		5cs	0	W		0.15	3.8	Fair	Magnetic Observatory.
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.00	762.0	30.06	763.5	45	7.2	98	S	1	0.4		10k	Fg	W	S	0.09	2.3	Light fog	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	30.05	763.3	30.31	769.9	35	1.7	100	SE	1	0.4		8k	8k			0	0	Fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd'g
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	30.02	762.5			60.5	15.8	91	SW	33.6	15.0		0	3k			1.365	34.7		John Duthie.
Cape Town, C. G. H. Obs'y.	30.06	763.5	30.10	764.5	62.0	16.7		NW	6.5	2.9		4	5cs			0	0	Vapory	The Staff, for D. Gill.
Worcester	28.98	*736.1			65.8	18.8	46	NW			1	0	1			0	0	Fine	C. Stokes.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.17	766.2	30.19	766.8	55.8	13.2	92	SE	2.7	1.2		4ks	0	WSW		0	0	Cloudy	M. Marc Dechevrens, S.J.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.16	664.5	29.88	758.9	68.0	20.0	91					ck	0			0.83	21.	Hazy	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.45	773.5	30.50	774.7	43.7	6.5	58	N	9	4			3						Oversergent Fischer.
Fanöe	30.50	774.8	30.52	775.3	49.6	9.8	62	NW			6		6						Overloerer Lauridsen.
Godthaab, Greenland	29.52	749.8	29.56	750.9	35.2	1.8	84	NNE			4		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.98	761.5	30.02	762.6	45.0	7.2		S			8		10					Raining	A. O. Thorlacius.
Thorshavn	30.49	774.4	30.52	775.3	51.4	10.8	89	Calm	0	0			10					Foggy	Overloerer Bergh.
Vestervig	30.48	774.2	30.58	776.6	45.7	7.6	59	NNW			4		1						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.63	752.5	30.28	759.1	58.6	14.8	44	NNE			1	2ck	0	S		0	0	Slightly cl'dy	M. Labroue, Director.
Alençon Normal School	30.00	761.9	30.55	775.9	50.0	10	54	N			3		8kn		NE	0	0	Very cloudy	M. Nicot, Director.
Arras, Engineer School	30.23	767.9	30.50	774.6	48.6	9.2	53				2		k			0	0		M. Klein, Commandant.
Avignon, Normal School	29.97	761.2	30.05	763.2	59.5	15.3	48	N			8		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.80	757.0	30.37	771.4	48.7	9.3	72	N			3		8		NE	0.057	.1.7	Light rain	M. Saillard, Director.
Beauvais, Normal School	30.24	768.1	30.51	775.0	51.3	10.7	43	NE			3		8		NE	0	0	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.39	746.5	30.30	769.5	48.6	9.2	61	NNE			3		10n		NNE			Rain & sleet	M. Gobin, Director.
Bordeaux, Observatory	30.07	763.8	30.34	770.5	56.1	13.4	53	ESE			2		0			0	0	Clear	M. Rayet, Director.
Bourges, Normal School	29.84	757.8	30.40	772.2	50.0	10	52	N			4		kn		N	0	0		M. Postel, Director.
Brest, Naval Observatory	30.32	770.0	30.56	776.2	50.0	10.0	52	NE			2		6		NE	0	0		M. de Rermaree, Dir.
Caen, Normal School	30.45	773.3	30.52	775.3	49.6	9.8	76	N			4		5		N	0.008	0.2	Cloudy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	30.10	764.4	30.43	772.8	50.5	10.3	70	WNW			3		8	NE	NE	0	0	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.90	759.5	30.42	772.6	48.2	9	81	NNE			2		5			0	0	½ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.92	734.5	30.31	769.9	46.9	8.3	54	NNE			2		8			0	0	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.45	748.0	30.25	768.4	54.3	12.4	40	NNE			3		6		N	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.47	748.5	30.35	770.9	49.3	9.6	50	NE			3	5ck	0			0	0	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.42	696.4	29.93	760.2	57.2	14	37	N			3		5		SW	0	0	½ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	28.91	734.2	30.05	763.2	60.3	15.7	38	S			2		8			0	0	¾ covered	M. Kina, Director.
Grenoble, Normal School	29.32	744.8	30.10	764.4	53.1	11.7	48	NNW			6		kn		NNW	0	0		M. Ablard, Director.
Guéret, Normal School	28.80	731.5	30.44	773.2	45.1	7.3	55	N			1		10kn		N	0	0	Covered	M. Rivoire, Director.
Lamballe, Normal School	30.33	770.4	30.61	777.5	52.9	11.6	57	NNE			4				NNE	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.79	756.7	30.46	773.7	63.0	17.2	61	NE			3					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.44	773.1	30.54	775.7	55.4	13.0	48	NE			2		8		NE	0	0	¼ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.15	740.4	30.23	767.7	50.4	10.2	37	NNW			2		5		NNW	0	0	Cloudy	M. André, Director.
Mans, Normal School	30.16	766.0	30.48	774.1	51.3	10.7	49	E			4		8		NE	0	0	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.72	755.0	29.99	761.8	62.1	16.7	43	WNW			2		5		SSE	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.88	631.9	30.11	764.9	46.4	8.0	23	NW	16.8	7.5			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.96	761.0	30.07	763.7	61.2	16.2	41	N			4		0			0	0	Clear	M. P. Galzin, Director.
Nancy, Normal School	29.55	750.6	30.33	770.4	48.2	9	58	N			2		10kn		NE			Sprinkling	M. Hasse.
Nantes, Observatory	30.34	770.6	30.50	774.7	51.4	10.8	58	NNE			2-3		7k		ENE	0	0		M. Larocque, Director.
Nice	29.92	760.0	29.96	760.9	54.0	12.2	76	E			1		10	E	E	0.134	3.4	Light rain	Capt. Boissière, Director.
Perpignan, Observatory	29.98	761.6	30.09	764.3	62.6	17.0	25	NW	15.0	6.7			0			0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.60	574.0			33.8	1.0							1		NE	0	0	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.09	738.9	30.17	766.3	51.8	11	32	N			4		5k	N	N	0	0	Cloudy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.27	641.8			27.7	—2.4	96	NNE			4		10		NNE	0.008	0.2	Covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.40	772.1	30.43	772.9	55.9	13.3	45	NE			6		5		NE	0	0	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.24	768.1	30.46	773.7	51.8	11	54	NE			1		5		NE	0	0	Cloudy	M. Mouillot, Director.
Rodez, Normal School	28.02	711.8	30.19	766.9	49.3	9.6	34	NE			4		1		E	0	0	Clear	M. Richard, Director.
Rouen, Normal School	30.43	773.0	30.52	775.2	51.1	10.6	53	NE			2		8		NE	0	0	Very cloudy	M. Platrier, Director.
Saint Lô, Normal School	30.41	772.3	30.56	776.3	46.9	8.3	92	E			2		10		NE	0	0	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	30.28	769.2	30.45	773.4	50.4	10.2	42	NNE			3		10		NE	0	0		M. Renou, Director.
Toulouse, Observatory	29.55	750.5	30.28	769.0	59.7	15.4	54	NW			2					0	0		M. Bailland, Director.
Tours	30.24	768.0	30.43	773.0	53.6	12.0	50	NE			3		8			0	0	¾ covered	M. de Tastes.
Versailles, Observatory	29.96	760.9	30.45	773.4	49.3	9.6	44	NE			6					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.45	747.9	30.32	770.0	43.9	6.6	52	N			5		5k	N		0.051	1.3		Prof. Dr. Hoh.
Berlin	30.23	767.8	30.41	772.3	48.2	9.0	48	NE			4		10			0.028	0.7		Prof. Dr. Arndt.
Breslau	29.74	755.4	30.28	769.0	40.8	4.9	78	N			4		10			0.079	2.0	Raining	Royal University Obs'y.
Carlsruhe	29.87	758.7	30.31	769.9	46.0	7.8	79	NE			2		10		NE	0.016	0.4		Albert Senz.
Cassel	29.69	754.1	30.41	772.3	44.2	6.8	51	N			5		7		N	0.079	2.0		Dr. H. Möhl.
Frankfort on the Main	30.03	762.8	30.41	772.3	50.0	10.0	37	NE			3		7			0.035	0.9		Physical Society.
Friedrichshafen	28.74	730.1	30.21	767.4	46.8	8.2	68	NE			5		10		NE	0.201	5.1		Wilhelm, Chief Tel.
Hamburg	30.45	773.5	30.52	775.3	43.9	6.6	65	NE			4		8			0.134	3.4		Dr. R. Kleeman.
Kiel	30.51	775.0	30.53	775.4	39.9	4.4	59	NNE			5		2			0.094	2.4		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.97	761.2	30.41	772.3	43.3	6.3	62	NE			5		10	ENE		0.280	7.1	Sprinkling	Prof. Dr. Bruhns.
Magdeburg	30.13	765.4	30.44	773.2	44.1	6.7	61	N			4		10ks	NE		0.169	4.3		Dr. Assmann.
Memel	30.25	768.3	30.30	769.5	47.5	8.6	56	N			5		6k						Reinbrecht & Issermann.
Munich	28.35	720.1	30.22	767.7	42.8	6.0	79	SE			1		7	E		0.138	3.5		Central Station.
Neufahrwasser	30.37	771.4	30.39	771.8	39.2	4.0	77	N			4		10			0.028	0.7		A. Lothes.
Neustadt, Palatinate	29.78	756.4	30.32	770.0	47.7	8.7	70	SW			1		8	NE		0.067	1.7		Dicknether.
Stuttgart	29.30	744.1	30.21	767.3	47.3	8.5	56	NE			1		9	N		0.024	0.6		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.72	729.5	30.21	767.4	47.3	8.5	59	NE			8		9	NE		0.114	2.9		Prof. Kemlein.
Wustrow	30.51	774.9	30.53	775.5	41.9	5.5	77	N			4		3s			0	0.		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.41	747.1	29.80	756.9	68.0	20.0		SW			2.0	5ck	0					½ clear	A. Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.68	753.9	29.73	755.1	88.5	31.4	98	SSW	26.0	11.6			1			0	0	Blue sky	
Deesa	29.22	742.3	29.67	753.6	108.0	42.2	17	W	10.6	4.7			4	SW		0	0	D. clouds	
Bombay	29.77	756.2	29.81	757.1	87.3	30.7	76	WNW	12.0	5.4			1	SE		0	0	D. clouds	
Poona, Yarrowda	27.91	709.0	29.71	754.6	95.0	35.0	35	W	13.0	5.8			2		E	0	0	Misty	
Belgaum	27.28	692.9	29.80	756.8	79.6	26.4	78	WSW	13.0	5.8			10			0.83	21.1	Thund'r st'm	
Lahore	28.83	732.2	29.52	749.8	111.3	44.1	9	SW	1.5	0.7			0			0	0	Blue sky	
Roorkee	28.73	729.6	29.58	751.4	100.7	38.2	41	SW	6.0	2.7			0			0	0		
Agra	29.03	737.4	29.56	750.7	111.1	43.9	18	W	6.1	2.7			0			0	0		
Nagpur	28.57	725.7	29.55	750.6	108.3	42.4	24	S	7.4	3.3			5		W	0	0	D. clouds	
Jubbulpore	28.30	718.8	29.58	751.4	105.7	40.9	14	Calm	2.5	1.1			2			0	0	D. clouds	
Lucknow	29.28	743.8	29.64	752.9	99.0	37.2	38	ESE	7.1	3.2			0			0	0	Blue sky	
Allahabad	29.31	744.4	29.60	752.0	101.6	38.7	37	ENE	6.1	2.7			0			0	0	Blue sky	
Patna	29.54	750.2	29.71	754.7	90.6	32.6	51	E	11.3	5.0			0			0	0	Blue sky	
Hazaribagh	27.71	703.8	29.67	753.6	90.0	32.2	51	E	11.3	5.0			3			0	0		
Cuttack	29.63	752.6	29.71	754.6	90.0	32.2	47	S	8.0	3.6			2			0	0	D. clouds	
Calcutta, Alipore	29.70	754.3	29.72	754.9	87.9	31.1	62	S	10.0	4.5			4		SW	0.03	0.8	D. clouds	
Dhubri	29.72	754.8	29.84	757.9	77.4	25.2	82	ESE	16.5	7.4			9	W	W	0.03	0.8	Gloomy	*y
Chittagong	29.75	755.7	29.84	757.9	83.7	28.7	80	W	4.5	2.0			5			0	0	Blue sky'	
Sibsagar	29.56	750.8	29.90	759.3	78.9	26.1	78	E	2.7	1.2			7	SW	SW	0	0	D. clouds	
Zanzibar, Africa			29.91	759.7	83.0	28.3	71	SSW	4	1.8			6			0	0	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.55	750.6	29.96	761.0	58.8	14.9	27	NE	4.3	1.9			8			0.051	1.3		Prof. Giovanni Clodig.
Milan	29.45	748.1	29.97	761.1	60.6	15.9	33	ESE	9.8	4.4			7			0	0		Prof. Schiaparelli.
Padua	29.87	758.8	29.98	761.6	57.9	14.4	45	ESE	10.5	4.7			9	NNE		0.445	11.3		Prof. Dott. Lorenzoni.
Moncalieri	29.09	738.9	29.99	761.7	52.9	11.6	49	NW	5.6	2.5			8			0.146	3.7		Prof. P. F. Denza.
Genoa	29.76	756.0	29.96	760.9	61.7	16.5	22	N	6.9	3.1			4	NE		0.012	0.3		Prof. G. M. Garibaldi.
Mondovi	28.06	712.8	29.97	761.2	54.3	12.4	40	W			6		6			0	0		Prof. D. C. Bruno.
Pesaro	29.88	759.0	29.93	760.2	55.8	13.2	51	NE	20.6	9.2			7	NE		0	0		Prof. Luigi Guidi.
Florence	29.64	752.9	29.89	759.3	59.0	15.0	26	N			8		4			0.051	1.3		Prof. Costantino Pitter.
Leghorn	29.84	757.8	29.92	760.0	62.2	16.8	27	NE	11.9	5.3			5	SW		0	0		Prof. P. Monte.
Rome	29.60	751.8	29.77	756.2	53.8	12.1	68	NNE	1.8	0.8			10			0.067	1.7		Prof. P. S. Ferrari.
Lecce	29.51	749.6	29.76	756.0	64.4	18.0	72	NNW	9.4	4.2			10	NW		0.035	0.9		Prof. C. de Giorgi.
Cosenza	28.89	733.9	29.77	756.2	69.4	20.8	73	WSW	2.5	1.1			4	SW		0	0		Prof. D. Conti.
Cagliari	29.62	752.3	29.81	757.2	65.5	18.6	56	NW			4		10	NW		0.039	1.0		Prof. A. Pacinotti.
Palermo	29.55	750.5	29.80	756.9	72.0	22.2	47	SSW	4.9	2.2			3	W		0	0		Prof. G. Ciacciatore.
Syracuse	29.76	755.8	29.80	756.9	67.3	19.6	49	S	6.3	2.8			4	WNW		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.23	742.4	29.74	755.5	64.8	18.2	74	WNW	3.8	1.7			9	NW		0.634	16.1		Prof. F. Brioschi.
Stelvio	22.06	560.2			21.6	— 5.8	55	NE			2		rocks	NE		0	0	Covered	Prof. P. F. Denza.
Valdobbia	22.08	560.7			33.3	0.7	60	E			6		10kn	N		0	0	Overcast	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y †	30.20	767.1	30.21	767.3	54.8	12.7	76	NNE	3.9	1.7		0	0			0	0	Clear	K. Sasaki.
Kioto	30.05	763.3	30.23	767.8	51.6	10.9	76	S	0.6	0.3		0	0			0	0	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	30.06	763.5	30.26	768.6	57.4	14.1	74	WSW	0.5	0.2			0			0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	30.18	766.6	30.25	768.3	59.7	15.4	77	S	4.0	1.8		5cs	0	SSW		0	0	Fair	The Staff.
Wakayama	30.18	766.6	30.23	767.8	57.3	14.1	78	ENE	1.5	0.7		0	0			0	0	Clear	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.87	758.7	30.06	763.4	79.5	26.4	68	NE	10.0	4.5		0	2		ENE	0.05	1.3	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.66	753.4	29.92	760.0	70.5	21.4	92	E	0.9	0.4			3n		SSW	0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.57	776.4	30.57	776.4	48.7	9.3		NNE			5					0	0		
Groningen	30.51	775.0	30.57	776.4	47.8	8.8		NE			5					0	0		
Helder	30.57	776.5	30.57	776.5	45.0	7.2		NE			4					0	0		
Hellevoetsluis	30.55	775.9	30.55	775.9	48.0	8.9	58	NE			4					0	0		
Utrecht	30.50	774.8	30.55	776.0	49.5	9.7	42	NNE			5		5			0	0	Cloudy	H. van der Brill

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

NORWEGIAN SERIES.

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

Bergen	30.52	775.2	30.58	776.8	46.8	8.2	55	NNW	5.4	2.4			0			0	0		
Christiania	30.34	770.7	30.49	774.5	50.0	10.0	37	SW	7	3			10			0	0		
Gjæsvær	30.21	767.2	30.23	767.8	22.8	— 5.1		NNW			4		10						
Lodingen	30.28	769.0	30.32	770.2	35.1	1.7	66	WSW			2		9			0.020	0.5		

PORTUGUESE SERIES.

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

Angra, Azores	30.19	766.9	30.35	770.9	62.4	16.9	75	E	9.8	4.4			3			0	0		Dr. J. A. Sampaio.
Campo Major	28.98	736.0	29.94	760.4	78.1	25.6	31	NNE	9.4	4.2			2			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.83	757.6	29.91	759.7	79.3	25.3	27	NNE	15.4	6.9			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.63	752.7	29.98	761.6	74.8	23.8	34	NNE	16.1	7.2			0			0.071	1.8		The Staff.
Ponta Delgada, Azores	30.23	767.9	30.30	769.7	65.1	18.4	69	NE	14.3	6.4			4			0	0		

RUSSIAN SERIES.

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

Akmolinski																			Capt. Lasarew.
Archangel	30.11	764.8	30.13	765.3	32.0	0.0	78	W	2	1			10					Light clouds	Capt. Sselliwerstow.
Astrakhan	30.08	764.0	30.00	761.9	79.3	26.3	35	S	7	3			2k						Capt. Wisganow.
Barnaul	‡ 29.20	741.6	29.67	753.5	79.0	26.1	13	WSW	4	2			3						Meteorological Obs'y.
Dorpat	30.04	763.0	30.29	769.4	38.3	3.5	52	N	7	3			10ks						Observatory.
Ekaterinburg	28.96	735.6	29.90	759.5	65.1	18.4	30	W	4	2		90k	0					Light clouds	Meteorological Obs'y.
Kasan	29.64	752.9	29.91	759.8	51.3	10.7	74	ENE	7	3			10n						Observatory.
Kertch	29.83	757.7	29.85	758.2	61.5	16.4	89	SSE	2	1			3						Lagorio & Sastyrez.
Kieff	29.32	744.6	29.95	760.8	52.0	11.1	70	N	4	2			10n					Raining	Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.63	752.6	29.83	757.6	75.4	24.1	36	SSW	4	2			7						Meteorological Obs'y.
Moscow	29.44	747.7	29.99	761.7	49.8	9.9	82	E	7.8	3.5			8ks					Raining	Meteorological Obs'y.
Nertchinsk	27.68	703.0	29.99	761.7	41.0	5.0	31	Calm	0	0			0					Lunar cor'na	Meteorological Obs'y.
Nikolaiev	29.78	756.3	29.85	758.1	70.0	21.1	70	SSW	13	6			10kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	29.80	757.0	29.95	760.6	70.0	21.1	27	Calm	0	0			2k						Physical Observatory.
St. Petersburg	30.21	767.3	30.22	767.7	35.6	2.0	53	NNE	7	3			10ks; n...						Central Physical Obs'y.
Tashkend, Laboratory	28.42	721.9	29.95	760.7	67.1	19.5	88	Calm	0	0			10					Blank	Teich, A. M.
Tiflis	28.56	725.4	29.92	759.9	76.1	24.5	42	SE	2	1			0						Physical Observatory.
Warsaw	29.76	755.8	30.19	766.7	46.0	7.8	79	NNE	11	5			10ks						Astronomical Obs'y.
Wilna	29.75	755.6	30.17	766.4	52.3	11.3	59	NNE	9	4			9					Heavy cl'ds	Berg, Assistant.
Yeniseisk	29.35	745.4	29.63	752.5	57.7	14.3	66	W	7	3			10					Raining	M. O. Marks.

SCOTTISH SERIES.

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

Leith, Restalrig Park			30.78	781.8	49.0	9.4	57	E			2		0			0	0	Fine	Andrew Gibb.
Monach Lt. House, Hebrides			30.67	779.0	53	11.7	93	SSE			3	0	0			0	0		J. Youngclause.
North Unst, Shetland Isl'ds			30.61	777.5				SW			6		10						Robert Burnet.

SPANISH SERIES.

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

Barcelona, Met. Obs'y	29.93	760.2	30.03	762.8	67.5	19.7	53	SE	4.0	1.8			0			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.30	769.7	30.36	771.1	63.1	17.3	53	N	2.2	1.0		3	2	NE		0	0	Cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.22	691.4			53.6	12.0	58	NE	11.2	5.0		0	0			0	0	Clear	Domingo Martin.
Madrid, Royal Obs'y	27.82	706.6	29.97	761.2	73.4	23.0	23	NE	13.4	6.0		0	0			0	0	Clear	The Staff.
Murcia, Met. Obs'y	‡ 29.81	757.2	29.95	760.8	85.5	29.7	36	NE	6.3	2.8		0	1			0	0	Almost clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.21	741.9	30.09	764.2	68.0	20.0	41	NE	26.2	11.7			0			0	0	Clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.96	761.0	30.03	762.6	76.0	24.4	78	ENE	5.4	2.4		4c;cs	1k	W		0.142	3.6	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.94	760.5	29.99	761.8	84.6	29.2	62	E	6.6	3.0		0	0			0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.84	757.9	29.94	760.4	79.3	26.3	21	E	17.6	7.9		4	2	W	W	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.85	758.1	29.94	760.4	79.2	26.2	83	E	17.0	7.6		6cs	5kn	E	E	0.012	0.3	Clou[illegible]	Enrique Gadea, Chief Engineer.
Tuguegurao, Philippine Ids	29.89	759.8	30.04	763.0	80.8	27.1	73	NNW	4.9	2.2		1ck	0	NW		0	0	Clear	José L. Fastovra.

SWEDISH SERIES.

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

Haparanda	30.26	768.5	30.30	769.5	39.9	4.4	50	N			2		8			0	0		
Umea	30.29	769.3	30.34	770.8	43.9	6.6	46	SW			2		9			0	0		
Hernosand	30.37	771.5	30.43	772.8	43.3	6.3	41	NW			4		10			0	0		
Stockholm	30.25	768.3	30.43	772.8	40.3	4.6	47	NNE			4		10			0	0		
Wisby	30.30	769.7	30.36	771.2	35.2	1.8	71	NNE			6		3			0	0		
Sub-Series.																			
Upsala	30.31	769.9	30.40	772.1	40.1	4.5	52	N	10.3	4.6			10		WNW	0	0		Nils Ekholm

SWISS SERIES.

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

Geneva	28.72	729.4	30.15	765.9	49.5	9.7	44	NE			S		3			0	0		The Observatory.
Zurich	‡ 28.56	725.4	30.22	767.7	45.5	7.5	78	SE			1		7			0.335	8.5	Raining	The Observatory.

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

TURKISH SERIES.

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

Constantinople			29.80	757.0	68.7	20.4	54	NE	7	3.0			5		SW	0.087	2.2		The Observatory.
Valona			29.85	758.1	73.8	23.2		SW			1		5			0	0	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.88	759.0	74.7	23.7	72	NW			1		0			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.00	762.0	30.08	764.0	72	22.2	62	S	7	3.1	.....	Hz	5ks;hz	Calm	W	Inap.	Inap.	Fair	
Alpena, Michigan	29.25	742.9	29.90	759.4	45	7.2	100	E	7	3.1	.....	.....	Fg	.....	.....	0.26	6.6	Dense fog	
Atlanta, Georgia	29.02	737.1	30.15	765.8	65.8	18.8	76	SE	11	4.9	.....	8k	2s	Calm	Calm	0	0	Cloudy	
Atlantic City, New Jersey	30.18	766.6	30.20	767.1	56	13.3	87	SW	10	4.5	.....	Hz	Fg	Calm	Calm	0	0	Fair	
Attou Id., Alaska‡	29.77	756.1	.....	.....	39	3.9	81	S	43	19.2	.....	.....	10n	.....	.....	0.12	3.0	Sleeting	
Augusta, Georgia	30.06	763.5	30.26	768.6	67.2	19.6	79	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Baltimore, Maryland	30.13	765.3	30.18	766.6	66	18.9	74	S	4	1.8	.....	Hz	0	.....	.....	0	0	Clear	
Barnegat, New Jersey	30.15	765.8	30.18	766.6	56	13.3	81	S	13	5.8	.....	0	Fg	Calm	0	0	0	Clear	
Bismarck, Dakota	27.75	704.8	29.60	751.8	56	13.3	87	E	4	1.8	.....	8c	2s	SE	Calm	0.06	1.5	Cloudy	
Boise City, Idaho	27.01	686.0	29.97	761.2	39.2	4.0	64	W	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Boston, Massachusetts	29.92	760.0	30.07	763.8	65.0	18.3	66	SW	4	1.8	.....	5k	5s	W	.....	0	0	Cloudy	
Brackettville, Texas	28.64	727.4	29.65	753.1	72	22.2	95	E	10	4.5	.....	.....	10s	.....	.....	0	0	Cloudy	
Brownsville, Texas	29.79	756.7	29.84	757.9	78	25.6	86	SE	11	4.9	.....	0	0	.....	.....	0	0	Clear	
Buffalo, New York	29.31	744.5	29.99	761.7	66	18.9	69	SW	8	3.6	.....	1k	0	.....	.....	0.04	1.0	Clear	
Burlington, Vermont	29.72	754.9	30.00	762.0	62.0	16.7	91	SW	3	1.3	.....	.....	10s	.....	W	0.33	8.4	Cloudy	
Cairo, Illinois	29.63	752.6	30.00	762.0	69	20.6	90	S	10	4.5	.....	8k	0	S	.....	0.13	3.3	Fair	
Campo, California	27.28	692.9	29.85	758.2	43	6.1	100	SW	11	4.9	.....	.....	10n	.....	SW	0.07	1.8	Light rain	
Camp Thomas, Arizona	26.98	685.3	.....	.....	61	16.1	45	W	.....	.....	2	5c	0	.....	.....	0	0	Fair	
Cape Henry, Virginia	30.25	768.3	30.26	768.6	69	20.6	75	S	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Cape May, New Jersey	30.16	766.1	30.19	766.8	60	15.6	82	S	16	7.2	.....	1c	0	.....	.....	0	0	Clear	
Castroville, Texas	29.05	737.9	29.72	754.9	75	23.9	85	SE	6	2.7	.....	.....	10s	.....	SE	0.01	0.3	Threatening	
Cedar Keys, Florida	30.14	765.5	30.17	766.3	72	22.2	76	NE	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Champaign, Illinois	29.09	738.9	29.85	758.2	67.3	19.6	89	SW	16	7.2	.....	.....	10s	.....	SW	0.14	3.6	Cloudy	
Charleston, S. Carolina	30.18	766.6	30.23	767.8	70	21.1	85	NE	6	2.7	.....	5ck	2s	E	NE	Inap.	Inap.	Cloudy	
Charlotte, N. Carolina	29.38	746.2	30.19	766.8	65.8	18.8	74	S	1	0.4	.....	0	Sk	.....	.....	0	0	Clear	
Chattanooga, Tennessee	29.37	746.0	30.16	766.1	65	18.3	94	S	5	2.2	.....	.....	10n	.....	S	1.28	32.5	Heavy rain	
Cheyenne, Wyoming	23.85	605.8	29.79	756.7	46	7.8	77	Calm	0	0	.....	.....	10s	.....	SW	0.20	5.1	Cloudy	
Chicago, Illinois	29.13	739.9	29.79	756.7	63.6	17.6	94	SW	8	3.6	.....	.....	10n	.....	.....	0.30	7.6	Light rain	
Chincoteague, Virginia	30.24	768.1	30.26	768.6	57	13.9	94	SW	17	7.6	.....	1c	0	E	.....	0	0	Clear	
Cincinnati, Ohio	29.40	746.7	30.02	762.5	71	21.7	71	S	9	4.0	.....	.....	10ks	.....	SW	0.02	0.5	Cloudy	
Cleveland, Ohio	29.28	743.7	29.98	761.5	70	21.1	70	S	13	5.8	.....	2cs	0	.....	.....	0	0	Clear	
Coleman City, Texas	28.01	711.4	29.59	751.6	70	21.1	85	S	12	5.4	.....	.....	10s	.....	S	0	0	Cloudy	
Columbus, Ohio	29.20	741.7	30.00	762.0	68	20.0	79	S	9	4.0	.....	5ck	0	SW	.....	0.07	1.8	Fair	
Concho, Texas	27.91	708.9	29.50	749.3	71	21.7	90	S	14	6.3	.....	.....	10s	.....	S	0	0	Cloudy	
Corsicana, Texas	29.46	748.3	29.91	759.7	73	22.8	85	S	4	1.8	.....	.....	10s	.....	.....	0	0	Cloudy	
Davenport, Iowa	29.17	740.9	29.77	756.1	68	20.0	79	SW	8	3.6	.....	0	7s	.....	SW	Inap.	Inap.	Fair	
Dayton, Washington T'y	28.23	717.0	29.92	760.0	40	4.4	64	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Deadwood, Dakota	25.14	638.5	.....	.....	46	7.8	84	SW	1	0.4	.....	.....	10s	.....	Calm	0.14	3.6	Cloudy	
Decatur, Texas																			
Delaware Breakwater, Del.	30.18	766.6	30.20	767.1	65	18.3	73	SW	28	12.5	.....	4ck	0	W	.....	0	0	Fair	
Denison, Texas	29.07	738.4	29.83	757.7	74	23.3	90	S	12	5.4	.....	.....	10s	.....	S	0	0	Cloudy	
Denver, Colorado	24.58	624.3	29.80	756.9	47.4	8.6	74	S	1	0.4	.....	2ck	0	W	.....	0	0	Clear	
Des Moines, Iowa	28.74	730.0	29.57	751.1	62	16.7	88	S	10	4.5	.....	.....	10ks	.....	SW	1.37	34.8	Cloudy	
Detroit, Michigan	29.23	742.4	29.89	759.2	69.3	20.7	70	S	16	7.2	.....	5ck	2s	W	W	0.02	0.5	Cloudy	
Dodge City, Kansas	27.06	687.3	29.21	741.9	65	18.3	84	S	13	5.8	.....	2cs	0	.....	.....	0	0	Fair	
Dubuque, Iowa	29.06	738.1	29.73	755.1	65.8	18.8	89	S	8	3.6	.....	.....	10s	.....	S	0.57	14.5	Cloudy	
Duluth, Minnesota	29.08	738.6	29.75	755.6	43	6.1	83	NE	5	2.2	.....	.....	10s	.....	.....	0	0	Cloudy	
Eagle Pass, Texas	29.02	737.1	29.72	754.9	73	22.8	100	SE	6	2.7	.....	.....	10n	.....	Calm	0.02	0.5	Light rain	
Eagle Rock, Idaho	24.98	634.5	29.63	752.6	36	2.2	71	N	7	3.1	.....	.....	10s	.....	NW	0	0	Cloudy	
Eastport, Maine	30.02	762.5	30.08	764.0	44	6.7	92	N	1	0.4	.....	.....	Fg	.....	.....	0.22	5.6	Dense fog	
El Paso, Texas	26.03	661.2	.....	.....	66	18.9	28	NW	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Erie, Pennsylvania	29.30	744.2	29.96	761.5	71	21.7	66	SW	10	4.5	.....	5k	0	W	.....	0.14	3.6	Fair	
Escanaba, Michigan	29.14	740.1	29.78	756.4	51	10.6	100	E	5	2.2	.....	.....	10n	.....	Calm	0.84	21.3	Light rain	
Florence, Arizona	28.23	717.0	29.83	757.7	65	18.3	54	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Apache, Arizona	24.80	629.9	30.25	768.3	54	12.2	32	SE	7	3.1	.....	0	1s	.....	Calm	0	0	Clear	
Fort Assinnaboine, Montana	26.91	683.5	.....	.....	50	10.0	65	NE	12	5.4	.....	0	0	.....	.....	0.70	17.8	Clear	
Fort Bennett, Dakota	27.96	710.2	.....	.....	58	14.4	76	SW	12	5.4	.....	1c	0	W	.....	0	0	Clear	
Fort Benton, Montana																			
Fort Buford, Dakota	27.71	703.8	29.52	749.8	47	8.3	77	W	12	5.4	.....	5cs	0	W	.....	0.03	0.8	Fair	
Fort Custer, Montana	26.62	676.1	.....	.....	41	5.0	65	S	4	1.8	.....	5k	0	W	.....	0	0	Fair	
Fort Davis, Texas	25.01	635.2	29.97	761.2	62	16.7	41	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Elliott, Texas	26.99	685.5	29.14	740.1	65	18.3	89	S	16	7.2	.....	5c	0	S	.....	Inap.	Inap.	Fair	
Fort Gibson, Indian T'y	29.30	744.2	29.82	757.4	71	21.7	85	S	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Fort Grant, Arizona	25.04	636.0	29.84	757.9	58	14.4	27	E	6	2.7	.....	8cs	0	.....	.....	0	0	Cloudy	
Fort Griffin, Texas	28.44	722.4	29.62	752.3	73.6	23.1	81	S	10	4.5	.....	.....	10s	.....	SE	0	0	Cloudy	
Fort Keogh, Montana	27.21	691.1	.....	.....	45	7.2	68	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Macon, North Carolina	30.26	768.6	30.28	769.1	67	19.4	84	SE	5	2.2	.....	5k	0	SE	.....	0	0	Fair	
Fort McKavett, Texas	27.[illegible]	700.5	29.38	746.2	74.8	23.8	68	S	7	3.1	.....	.....	10s	.....	S	0	0	Cloudy	
Fort Missoula, Montana	26[illegible]	675.4	.....	.....	50	10.0	72	NE	1	0.4	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Fort St. Michaels																			
Fort Shaw, Montana	26.16	664.4	.....	.....	34	1.1	61	W	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Fort Sill, Indian Territory	28.57	725.7	29.62	752.3	70	21.1	90	S	19	8.5	.....	.....	10s	.....	S	0	0	Cloudy	
Fort Stevenson, Dakota	27.75	704.8	.....	.....	53	11.7	92	NW	4	1.8	.....	.....	10s	.....	NW	0.28	7.1	Cloudy	
Fort Verde, Arizona					62	16.7	67	S	.....	.....	4	.....	10s	.....	S	0	0	Cloudy	
Fredericksburg, Texas	28.10	713.7	29.60	751.8	70	21.1	90	SW	12	5.4	.....	.....	10ks	.....	SW	0	0	Cloudy	
Galveston, Texas	29.92	760.0	29.96	761.0	75	23.9	90	SE	16	7.2	.....	0	8ks	.....	SE	Inap.	Inap.	Cloudy	
Grand Haven, Michigan	29.18	741.2	29.80	756.9	62	16.7	94	SW	15	6.7	.....	.....	10n	.....	Calm	0.29	7.4	Heavy rain	
Hatteras, North Carolina	30.28	769.1	30.30	769.6	66	18.9	79	SE	4	1.8	.....	10k	0	Calm	.....	0	0	Cloudy	
Helena, Montana	25.62	650.7	.....	.....	44	6.7	52	S	8	3.6	.....	2c	0	Calm	.....	Inap.	Inap.	Fair	
Henrietta, Texas																			
Indianapolis, Indiana	29.17	740.9	29.92	760.0	68	20.0	81	S	9	4.0	.....	.....	9ks	.....	SW	0.01	0.3	Cloudy	
Indianola, Texas	29.91	759.7	29.93	760.2	75.4	24.1	86	SE	11	4.9	.....	1c	2s	N	Calm	0	0	Fair	
Jacksboro, Texas	28.66	728.0	29.73	755.1	72	22.2	80	SE	12	5.4	.....	.....	10ks	.....	SE	0	0	Cloudy	
Jacksonville, Florida	30.15	765.8	30.19	766.8	73	22.8	76	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Keokuk, Iowa	29.14	740.1	29.75	755.6	67.4	19.7	86	S	9	4.0	.....	.....	10s	.....	S	0.04	1.0	Cloudy	
Key West, Florida	30.04	763.0	30.07	763.8	76.0	24.4	73	E	8	3.6	.....	5k	0	E	.....	0	0	Fair	
Kittyhawk, North Carolina	30.28	769.1	30.30	769.6	69	20.6	70	S	12	5.4	.....	Hz	Hz	.....	.....	0	0	Light haze	
Knoxville, Tennessee	29.16	740.7	30.15	765.8	65	18.3	91	SW	3	1.3	.....	0	8s	.....	SW	Inap.	Inap.	Fair	
La Crosse, Wisconsin	28.97	735.8	29.67	753.6	61.6	16.4	88	SE	1	0.4	.....	.....	10s	.....	.....	0.25	6.3	Cloudy	
La Mesilla, New Mexico	25.92	658.4	30.07	763.8	53	11.7	36	Calm	0	0	.....	0	1s	.....	.....	0	0	Clear	
Laredo, Texas	29.37	746.0	29.69	754.1	77	25.0	86	SE	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Leavenworth, Kansas	28.92	734.6	29.73	755.1	61	16.1	94	NE	7	3.1	.....	.....	10n	.....	SW	0.97	24.6	Heavy rain	
Lewiston, Idaho	29.13	739.9	29.78	756.4	43	6.1	42	SW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Little Rock, Arkansas	29.65	753.1	29.96	761.0	68	20.0	95	S	6	2.7	.....	5cs	0	.....	SW	0.48	12.2	Fair	
Los Angeles, California	29.46	748.3	29.82	757.4	46.4	8.0	77	NE	7	3.1	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Louisville, Kentucky	29.46	748.3	29.99	761.7	70.0	21.1	80	S	9	4.0	.....	0	5s	.....	.....	0.05	1.3	Fair	
Lynchburg, Virginia	29.53	750.0	30.20	767.1	70	21.1	70	Calm	0	0	.....	1k	0	SW	.....	0	0	Clear	
Madison, Wisconsin	28.76	730.5	29.70	754.4	59	15.0	95	E	5	2.2	.....	.....	Fg	.....	Calm	1.48	37.6	Dense fog	
Marquette, Michigan	29.11	739.4	29.82	757.4	45	7.2	100	E	6	2.7	.....	.....	10n;1g	.....	Calm	0.56	14.2	Heavy rain	
Mason, Texas	28.21	716.5	29.88	758.9	72.8	22.7	85	S	8	3.6	.....	.....	10s	.....	S	0	0	Cloudy	
Memphis, Tennessee	29.71	754.6	30.04	763.0	71	21.7	90	S	2	0.9	.....	.....	10s	.....	S	0.23	5.8	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.07	738.4	29.78	756.4	50	10.0	93	NE	2	0.9			Fg			0.61	15.5	Dense fog...	
Mobile, Alabama	30.04	763.0	30.11	764.8	74	23.3	86	SE	11	4.9		1cs	0			Inap.	Inap.	Clear.	
Montgomery, Alabama	29.93	760.2	30.16	766.1	72	22.2	85	SE	6	2.7		2k	0	SE		0.14	3.6	Clear.	
Moorhead, Minnesota	28.58	725.9	29.49	749.0	58	14.4	88	SE	12	5.4			10s		SE	0	0	Cloudy.	
Morgantown, W. Virginia	29.13	739.9	30.10	764.5	66	18.9	84	Calm	0	0		8k	Hz	W		0.34	8.6	Fair	
Mt. Washington, N. H.	23.86	606.0	30.22	767.6	46	7.8	100	NW	56	25.0			Fg			1.50	38.1	Dense fog....	
Nashville, Tennessee	29.55	750.6	30.06	763.5	74.1	23.4	72	SE	3	1.3		2ck	0	SW		0.35	8.9	Clear	
New Haven, Connecticut	30.02	762.5	30.13	765.3	63	17.2	78	SW	6	2.7		8ck	0			0	0	Fair	
New London, Connecticut	30.10	764.5	30.15	765.8	63	17.2	78	W	8	3.6		0	0			0	0	Clear.	
New Orleans, Louisiana	30.01	762.2	30.06	763.5	72.7	22.6	92	SE	7	3.1		0	2ks		SE	0	0	Fair.....	
Newport, Rhode Island	30.08	764.0	30.13	765.3	55.0	12.8	79	SW	10	4.5		1ck	Hz	SW		0	0	Fair	
New River, N. Carolina					71	21.7	75	SE			2	5k	0	S		0	0	Fair...	
New Shoreham, Rhode I'd	30.11	764.8	30.14	765.5	55.6	13.1	87	SW	24	10.7		0	0			0	0	Clear.	
New York, New York	29.99	761.7	30.16	766.1	61	16.1	82	SW	8	3.6		1cs	0			0	0	Clear.	
Norfolk, Virginia	30.21	767.3	30.27	768.8	70	21.1	80	SW	8	3.6		0	0			0	0	Clear.	
North Platte, Nebraska	26.80	680.7	29.30	744.2	48	8.9	93	NW	8	3.6		0	0			1.15	29.2	Clear.	
Olympia, Washington T'y	30.10	764.5	30.14	765.5	44.0	6.7	79	S	3	1.3		5cs	2s	NW	NW	0	0	Fair	
Omaha, Nebraska	28.45	722.6	29.48	748.8	63 4	17.4	76	S	15	6.7		0	5s		S	0.71	18.0	Fair	
Oswego, New York	29.68	753.9	29.98	761.5	70.0	21.1	70	S	6	2.7		5ck	0	W		0.01	0.3	Fair	
Pensacola, Florida	30.11	764.8	30.14	765.5	74	23.3	86	SE	7	3.1		0	8ks		SE	0	0	Fair	
Philadelphia, Pa	30.12	765.0	30.17	766.3	64	17.8	83	W	12	5.4		0	Hz			0	0	Clear.	
Phœnix, Arizona	28.61	726.7	30.34	770.6	68	20.0	90	SW	5	2.2			10s;fg		SW	0	0	Threatening	
Pike's Peak, Colorado	17.65	448.3	29.86	758.4	23	— 5.0	47	SW	42	18.8		1c	0			0.17	4.3	Clear.	
Picche, Nevada	23.60	599.4	29.37	746.0	43	6.1	59	S	7	3.1		0	5ks		SW	0	0	Fair	
Pittsburg, Pennsylvania	29.29	744.0	30.07	763.8	70	21.1	68	S	8	3.6		1cs	0	S		Inap.	Inap.	Clear	
Port Eads, Louisiana	30.06	763.5	30.07	763.8	74.1	23.4	90	SE	12	5.4		5ck	0	SE		0	0	Fair	
Port Huron, Michigan	29.25	742.9	29.88	758.9	65.5	18.6	78	S	16	7.2		8cs	0	W		0.16	4.1	Fair	
Portland, Maine	30.00	762.0	30.05	763.3	57	13.9	81	NE	2	0.9			10n		NE	Inap.	Inap.	Light rain...	
Portland, Oregon	30.15	765.8	30.22	767.6	47	8.3	70	W	5	2.2		0	8s		NW	0	0	Cloudy	
Portsmouth, N. Carolina					65	18.3	84	SW	8	2.7		5k	0	W		0	0	Fair	
Prescott, Arizona	24.47	621.5	29.83	757.7	47	8.3	77	S	14	6.3			10n		S	0.08	2.0	Light rain...	
Punta Rassa, Florida	30.07	763.8	30.08	764.0	73	22.8	76	E	8	3.6		1ck	0	E		0	0	**Clear.**	
Red Bluff, California	29.53	750.0	29.88	758.9	52.0	11.1	87	N	12	5.4		0	0			0.33	8.4	Clear.	
Rio Grande City, Texas	29.60	751.8	29.80	756.9	77	25.0	82	SE			2		10s		SE	0	0	Cloudy	
Rochester, New York	29.39	746.5	29.98	761.5	71	21.7	66	SW	4	1.8		1ck	0	SW		Inap.	Inap.	Clear	
Roseburg, Oregon	29.67	753.6	30.25	768.3	43.5	6.4	83	N	1	0.4			10s			0.02	0.5	Cloudy	
Sacramento, California	29.77	756.1	29.84	757.9	58	14.4	64	N	14	6.3		0	0			0	0	Clear	
St. Louis, Missouri	29.30	744.2	29.86	758.4	66.0	18.9	92	S	11	4.9		5c;ck	0	SW		0.35	8.9	Fair	
St. Paul, Minnesota	28.82	732.0	29.61	752.1	57	13.9	87	E	11	4.9			10s		E	0	0	Cloudy	
Salt Lake City, Utah	25.25	641.3	29.58	751.3	48	8.9	78	NW	4	1.8			10s		Calm	0.04	1.0	Cloudy	
San Antonio, Texas	29.16	740.7	29.83	757.7	74.8	23.8	95	SE	6	2.7			10n		SE	Inap.	Inap.	Light rain...	
San Diego, California	29.80	756.9	29.88	758.9	58.3	14.6	53	W	12	5.4			10ks		W	0	0	Cloudy	
Sandusky, Ohio	29.29	744.0	29.93	760.2	69	20.6	75	SW	17	7.6		5k	0	SW		0.01	0.3	Fair	
Sandy Hook, New Jersey	30.12	765.0	30.15	765.8	65.0	18.3	80	W	4	1.8		0	Hz			0	0	Clear	
San Francisco, California	29.82	757.4	29.88	758.9	52	11.1	76	SW	5	2.2		0	0			0.02	0.5	Clear	
Santa Fé, New Mexico	23.09	586.5	29.63	752.6	47	8.3	34	E	4	1.8		2c	2s			0	0	Fair	
Savannah, Georgia	30.14	765.5	30.24	768.1	69	20.6	85	E	2	0.9		8k	2ks	E	E	0	0	Cloudy	
Shreveport, Louisiana	29.75	755.6	29.98	761.5	72	22.2	90	SE	4	1.8		0	2s			0	0	Fair	
Silver City, New Mexico	24.10	612.1	30.19	766.8	50	10.0	32	Calm	0	0		0	0			0	0	Clear.	
Sitka Alaska																0.55	14.0		
Smithville, North Carolina	30.22	767.6	30.26	768.6	71	21.7	85	E	5	2.2		1k	Hz	SE		0	0	Clear	
Socorro, New Mexico	25.16	639.1	29.22	742.2	58	14.4	22	S	12	5.4		0	0			0	0	Clear	
Spokane Falls, Wash. Ter.	27.83	706.9	29.68	753.9	38	3.3	63	S	12	5.4		0	2s		Calm	0.01	0.3	Fair	
Springfield, Illinois	29.20	741.7	29.85	758.2	66	18.9	95	S	10	4.5		1c	0	W		0.22	5.6	Clear	
Springfield, Massachusetts	29.96	761.0	30.09	764.3	65	18.3	73	S	4	1.8		8k	0	S		0	0	Fair	
Stockton, Texas	26.76	679.7	29.76	755.9	65.2	18.4	94	SW	12	5.4		5c	0	SW		0	0	Fair	
St. Vincent, Minnesota	28.75	730.2	29.52	749.8	53	11.7	67	SE	8	3.6			10s		Calm	0	0	Cloudy	
Thatcher's Island, Mass	30.02	762.5	30.07	763.8	51	10.6	100	S	11	4.9			10n		S	0.02	0.5	Light rain...	
Toledo, Ohio	29.24	742.7	29.89	759.2	71	21.7	66	S	14	6.3		8ck;k	0	W;S		Inap	Inap.	Fair	
Tucson, Arizona	27.31	693.7	29.86	758.4	65	18.3	26	SW	1	0.4		2c	0			0	0	Clear	
Umatilla, Oregon	29.70	754.4	30.20	767.1	46.0	7.8	69	W	8	3.6		2cs	0			0	0	Clear	
Uvalde, Texas	28.88	733.5	29.67	753.6	72	22.2	90	SE	3	1.3			10s		Calm	0	0	Cloudy	
Vicksburg, Mississippi	29.81	757.2	30.06	763.5	71	21.7	90	SE	6	2.7			10s		S	0	0	Cloudy	
Visalia, California	29.46	748.3	29.83	757.7	52	11.1	86	SE	2	0.9			10n		SE	0.24	6.1	Light rain...	
Washington, D. C.	30.07	763.8	30.18	766.6	68	20.0	74	S	6	2.7		0	0			0	0	Clear.	
Wickenburg, Arizona					54	12.2	74	S			2		10s			0	0	Cloudy	
Wilmington, N. Carolina	30.20	767.1	30.25	768.3	70	21.1	75	SE	1	0.4		0	0			0	0	Clear.	
Winnemucca, Nevada	25.37	644.4	29.73	755.1	43	6.1	43	N	24	10.7			10ks		N	0.19	4.8	Cloudy	
Wood's Holl, Mass	30.09	764.3	30.13	765.3	57	13.9	81	SW	24	10.7		2ck	Hz	NW		0	0	Fair	
Yankton, Dakota	28.33	719.6	29.56	750.8	64	17.8	79	SW	13	5.8		0	0			0.80	20.3	Clear	
Yuma, Arizona	29.61	752.1	29.76	755.9	61.6	16.4	51	NW	16	7.2		5ck	Hz	W		0	0	Fair.	
Sub-Series.																			
Bogota, U. S. Columbia	22.05	560.1			56.5	13.6	80	Calm	0	0		5c;cs	5ks			0.02	0.5	Fair	Thomas Herran
Buff Bay Town, Jamaica ‡	29.74	755.4	30.06	763.5	72	22.2	90	SE				k	k			Blank			
Havana, Cuba, W. I	30.02	762.5	30.08	764.0	79	26.1	69	Calm	0	0		8cs	0	Calm		0	0	Cloudy	A. Van Cangheim, Ass't.
Jakobshavn, Greenland	29.61	752.0	29.66	753.3	32.7	0.4		Calm			0		2			0	0		K. V. Möller.
Kingston, Jamaica, W. I	29.93	760.2	29.94	760.5	80.9	27.2	71	Calm	0	0		10cs	0			0.11	2.8	Cloudy	Robert Johnstone
Navassa, W. I	29.85	758.2	29.93	760.2	76	24.4	91	N				2ck	8	N	SE	0.47	11.9	Misty	F. M. Everett.
Paramaribo, S. A	29.95	760.7	29.95	760.7	79	26.1	91	E			1		8ks	E		0	0	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.34	745.2	29.90	759.4	78	25.6	95	Calm			0					0	0	Foggy	Francesco J. Cisneros.
Rivas, Nicaragua					78.8	26		NE			3	6ck	3ks	E	NE	0	0		Earl Flint.
Santiago de Cuba, W. I	29.94	760.5	29.97	761.2	76	24.4	78	N	2.4	1.1		4c	2k		NE	0.10	2.5	Fair	Robert Mason.
St. Thomas, W. I																			G. O. Gyllich.
York Factory, B. A	29.65	753.1	29.70	754.4	31.0	— 0.6	95	NW	8	3.6		0	0			0	0	Clear	J. Fortescue & W Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross, N. 33° 46′, E. 132° 26′	30.26	768.6	58	14.4	...	W			1		1							Blue sky	Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, N. 39° 34′, E 12° 52′	29.76	755.9	67	19.4	84	SSW			3		6	SSW						Misty	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 28° 00′, E. 56° 00′	29.71	754.6	89	31.7	63	WSW			1		1	SW						Misty	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			69	20.6		SSE			1		0							Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	29.93	760.2	80	26.7	82	E			1		8							Misty	Capt. C. G. F. Knowles.
H. M. S. Boadicea, Port Elizabeth, C. Colony	30.01	762.2	65	18.3	68	SW			4		3	SW				6	ESE	D. clouds	Com. F. W. Richards.
H. M. S. Champion, S. 5° 21′, W. 6° 28′	29.90	759.4	80	26.7	87	SE			4		2					3	S	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 27° 23′, E. 121° 20′	30.19	766.8	61	16.1	94	N			1–2		4							D. clouds	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, James Bay, St. Helena	30.06	763.5				E			2–3									D. clouds	Capt. J. C. Parvis.
H. M. S. Daring, N. 9° 02′, E. 69° 04′	29.86	758.4	87	30.6		WNW			1		2					1	SSE	D. clouds	Capt. F. J. Eliott.
H. M. S. Dido, S. 33° 58′, E. 25° 38′	30.07	763.8	60	15.6		WSW			4		3	SSW						D. clouds	Capt. C. Domville.
H. M. Dock-Yard																			Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 08′, W. 53° 28′	30.23	767.8	36.5	2.5	90	SSW			2–3		10							Misty	Capt. W. R. Kennedy.
H. M. S. Dryad, N. 19° 59′, E. 58° 52′	29.76	755.9	88	31.1		SSW			2		3	SW				3	SW	D. clouds	Capt. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 13° 00′, E. 109° 40′	29.89	759.2	80	26.7		N			4		4	N				3	N	Misty	Comm. C. Johnstone.
H. M. S. Emerald, S. 11° 20′, E. 179° 20′	29.86	758.4	83	28.3		ESE			3		3	SE				2	ENE	D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Trincomalee, Ceylon, India	29.81	757.2	86	30.0	68	S			1		9							D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo, N. 18° 43′, W. 74° 44′	29.93	760.2	82	27.8	87	NNE			3		2	E				2	E	D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish, Hong-Kong, China	30.10	764.5	72	22.2	80	E			1		6	SW						Misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 30° 10′, W. 135° 30′	30.25	768.3	65	18.3	73	ENE			3		7	NW				3	N; ENE	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 41° 44′, W. 59° 00′	29.94	760.5	52	11.1	93	Var.			1		6					2	W	Misty	Capt. L. F. Jones.
H. M. S. Griffon, N 18° 35′, W. 80° 20′	29.94	760.5	81	27.2	85	ENE			4		2	NE				2	ENE	D. clouds	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant, S. 39° 50′, E. 109° 10′	29.97	761.2	54	12.2	80	W			5–6		8	SW				3	wsw	D. clouds	Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Naples, Italy	29.76	755.9	65	18.3	84	SSE			2		8	WSW				2	SSE	D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 25° 09′, E. 119° 31′	30.13	765.3	65	18.3	94	NE			3–4		7	SW				3–4	SE	Gloomy	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.92	760.0	63	17.2		N			1		0							Blue sky	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	30.13	765.3	62	16.7		SW			1		0							Blue sky	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Stone Cutter's Id., China	30.12	765.0	77.4	25.2	61	ESE			1		9							D. clouds	Capt. A. Carpenter.
H. M. S. Midge, Swatow, China	30.11	764.8				NE			4		4	NE						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 35° 33′, W. 7° 33′	29.85	758.2	67	19.4	74	NE			4–5		7	WSW				2	ENE	D. clouds	Capt. H. H. Rawson.
H. M. S. Modeste, N. 2° 10′ E. 106° 30′	29.89	759.2	85	29.4	83	Calm			0		1							Blue sky	Capt. J. G. Mead.
H. M. S. Monarch, Goletta, Tunis, N. Africa	29.92	760.0	69	20.6	90	WNW			6		5	WNW				1		D. clouds	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda, W. I.	30.24	768.1	64	17.8	62	ENE			4		10	ENE						D. clouds	Capt. E. B Drummond.
H. M. S. Orontes, S. 24° 45′, E. 49° 25′ †	29.85	758.2	80.5	26.9	89	SSW			3		3	SW				3	SSW	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.84	757.9	79	26.1		Calm			0		5					2	SE	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin, S. 41° 37′, W. 74° 31′	29.57	751.1	51	10.6		ESE			5-6		10					2	WSW	Raining	Capt. A. C. Paget.
H. M. S. Phœnix, N. 17° 52′, W. 78° 12′	29.87	758.7	80	26.7	82	E			1		5	SSE				1	SE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler, N. 3° 49′, E. 5° 42′	29.85	758.2	86	30.0		E			1		3	ESE						D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id	30.10	764.5	44	6.7		WSW			2-4		7							Squally	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.87	758.7	82.4	28.0	89	ESE			2		4							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis.																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis, N. 34° 40′, E. 19° 40′	29.92	760.0	65	18.3	94	WNW			4		5	WNW				3	WNW	D. clouds	Capt. G. O. Twiss.
H. M. S. Shannon, S. 16° 31′, W. 29° 58′	30.04	763.0	78	25.6	78	ESE			3-4		4	ESE				3	ESE	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb, N. 38° 06′, E. 13° 21′ *	29.84	757.9	69	20.6	75	ENE			2-3		2	W						D. clouds	Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A.	29.89	759.2	58	14.4	82	NNW			4		10	NNW						Overcast	Capt. A. H. Markham.
H. M. S. Turquoise, S. 13° 20′, W. 76° 35′	29.91	759.7	64	17.8	97	Calm			0		10					3	S	Overcast	Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne, N. 12° 35′, E. 43° 34′	29.85	758.2	88	31.1	80	SE			2										Capt. J. E. Stokes.
H. M. S. Urgent, Fort Royal, Jamaica, W. I.			78	25.6		NE			1		2							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Wellington, New Zealand	29.62	752.3	62	16.7		WNW			1-4		2	WNW						Squally	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, Task, West Bay, Persia	29.76	755.9	87.5	30.8	78	SW			3-4		3	W				3-4	W	Misty	Capt. T. P. Nesham.
H. M. S. Zephyr, N. 28° 10′, E. 121° 40′	30.23	767.8	63	17.2	89	NE			1-2		8					1	NE	D. clouds	Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Santiago, Cape Verd Id's	29.97	761.3	77.4	25.2	83	NE			4		2					1	SE	D. clouds	S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't
Tamega																			P. I. R. de Carvoattlo, Comd'
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, N. 48° 16′, W. 9° 42′ ‡	30.53	775.5	55.9	13.3	79	ENE			4		0							Blue sky	Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

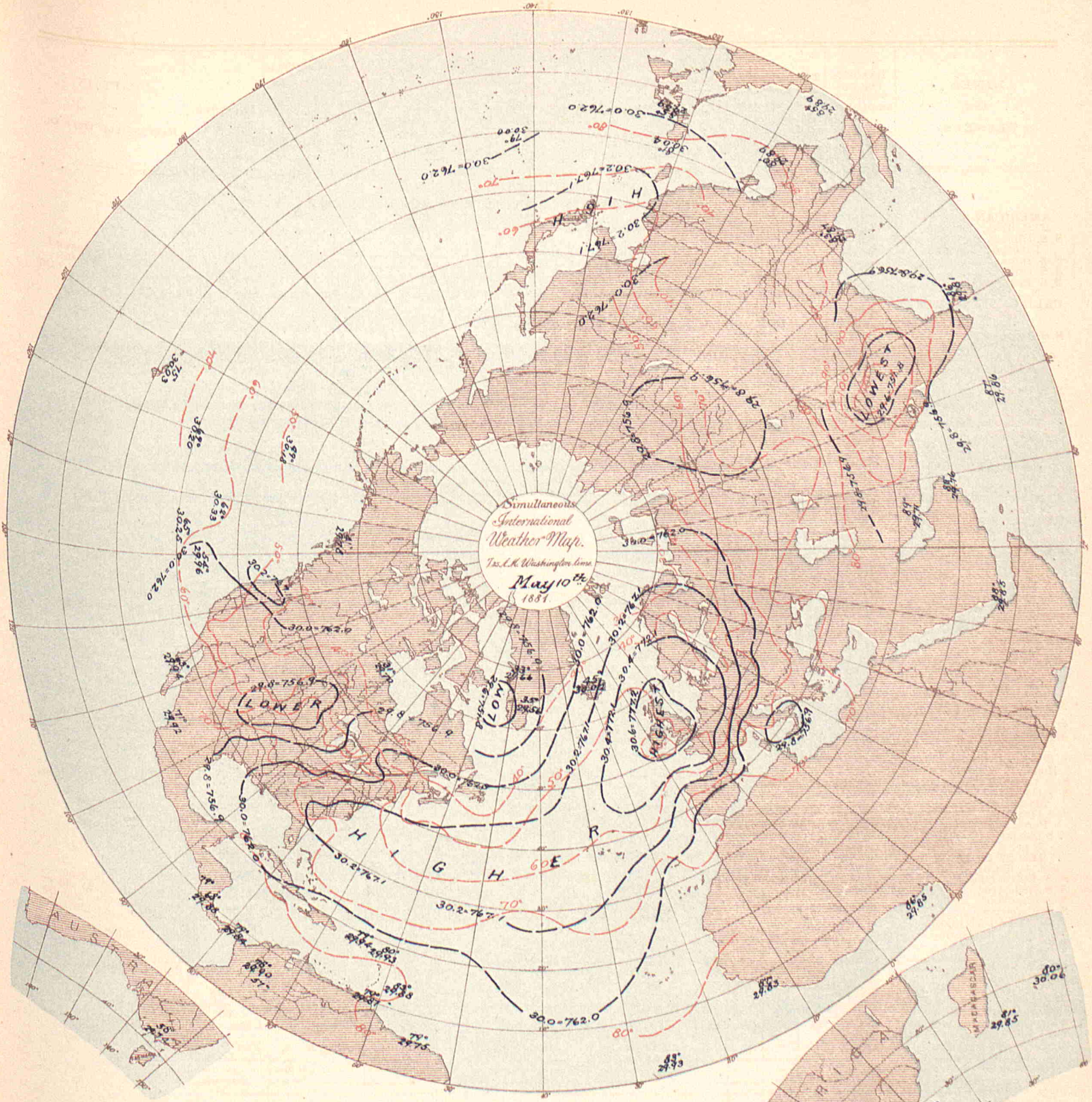
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.18	766.6	75	23.9	86	ESE	12	5.4			8		ESE	0	0			Fair	
N. Yard, Portsmouth, N. H.	30.04	763.0	66	18.9	84	SW	2	0.9			10		SW	0	0			Cloudy	
Naval Hospital, Yokahama, Japan	30.04	763.0	60.5	15.8	86	Calm			0		8		W	0	0			Fair	
Adams, Callao, Peru	29.77	756.1	66	18.9	89	Calm			0		10		SSE			Long	SW	Cloudy	
Alaska, Callao, Peru	29.85	758.2	64	17.8	94	Calm			0		10					Sm'h		Overcast	
Alert, N. 22° 10′, E. 142° 53′	30.00	762.0	79	26.1	78	ENE			4		8		ENE			Mod.	ENE	Cloudy	
Alliance, Norfolk, Va	30.27	768.8	66	18.9	89	S			1		0			0	0	Sm'h		Clear	
Ashuelot, Nagasaki, Japan	30.23	767.8	61	16.1	77	SW			1		2		Calm					Clear	
Colorado, New York, N. Y	30.14	765.5	68	20.0	74	SW	10	4.5			2			0	0			Clear	
Constitution, Hampton Roads, Va	30.22	767.6	64	17.8	89	S	6	2.7			0							Clear	
Franklin, Norfolk, Va	30.21	767.3	65	18.3	78	S	9	4.0			0			0	0			Clear	
Galena, N. 39° 20′, E. 15° 11′	29.80	756.9	67	19.4	84	SW			3		2					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	29.86	758.4	52	11.1	86	W	2.4	1.1			2		W	0	0			Clear	
Jamestown, Sitka, Alaska	29.78	756.4	41	5.0	91	ESE			1		10			0.44	11.2			Cloudy	
Kearsarge, N. 32° 14′, W. 80° 38′	30.27	768.8	71	21.7	85														
Lackawanna, S. 27° 34′, W. 86° 49′ †	30.05	763.3	68	20.0	95	SW			4–6		2		SW			Sm'h	SW	Fair	
Marion, Montevideo, Uruguay	30.14	765.5	56	13.3	75	NNE			3		2		Calm	0	0	Sm'h		Fair	
Michigan, Erie, Pennsylvania	29.90	759.4	65	18.3		S	3	1.3			2							Fair	
Minnesota, Newport, R. I	30.13	765.3	59	15.0	82	SW			4		1					Sm'h		Fair	
Monocacy, Nagasaki, Japan	30.21	767.3	63	17.2	78	Calm			0		0							Hazy	
New Hampshire, Port Royal, S. C	30.22	767.6	71	21.7	85	ENE	6	2.7			8		E	0	0			Fair	
Nipsic, Gibraltar, Mediterranean	29.95	761.0	72	22.2	41	NW			2		8		SE			Sm'h		D. clouds	
Onward, Callao, Peru †	29.93	760.2	65	18.3	94	NE			2		10		NW			Long	W	Foggy	
Palos, Yokohama, Japan	30.24	768.1	60	15.6	88	ESE			1		2							Fair	
Passaic, Washington, D. C	30.17	766.3	66	18.9	94	S			4		0							Clear	
Pensacola, N. 29° 08′, W. 150° 03′	30.20	767.1	69	20.6	95	ESE			4		5		ESE;S	0	0	Sm'h		Fair	
Portsmouth, Hampton Roads, Va	30.26	768.6	65	18.3	89	SW			3		2							Clear	
Powhatan, New York, N. Y	30.14	765.5	64	17.8	83	SW			2		5		S					Fair	
Quinnebaug, N. 32° 55′, W. 15° 06′	29.89	759.2	67	19.4	84	NE			5		8		NE			Long	ENE	Hazy	
Ranger, Sihuanlanyo, Mexico	29.81	757.2	75	23.9	90	NE			1		5		Calm	0	0	Sm'h		Fair	
Richmond, N. 31° 29′, E. 129° 36′	30.25	768.3	66	18.9	54	SSE			2		2		SE	0	0	Sm'h	S	Hazy	
Saratoga, Hampton Roads, Va	30.26	768.6	65	18.3	84	S			3		0			0	0			Clear	
Shenandoah, Montevideo, Uruguay	30.07	763.8	55	12.8	80	NNE			2		8					Sm'h		Fair	
St. Louis, League Island, Pa	29.71	754.6	64	17.8	89	SW	12	5.4			0			0	0			Clear	
Swatara, Shanghai, China †	30.14	765.5	65	18.3	73	WSW			2		0							Blue sky	
Tennessee, Hampton Roads, Va	30.27	768.8	65	18.3	94	SSW	10	4.5			2		Calm	0	0	Sm'h		Hazy	
Ticonderoga, S. 41° 22′, W. 120° 11′	30.04	763.0	59	15.0	94	NNW			4		10		NNW	0.01	0.3	Mod.	NNW	Cloudy	
Trenton, Castellamare, Italy	29.76	755.9	78	25.6	57	N			1		10			4 h'r	s h'vy	Sm'h		Cloudy	
Vandalia, N. 39° 08′, W. 73° 12′	30.25	768.3	64	17.8	73	S			4		0							Clear	
Wabash, Boston, Massachusetts	30.09	764.3	66	18.9	68	WSW	4	1.8			10		W	0	0			Cloudy	
Wachusetts, N. 36° 53′, W. 138° 15′	30.33	770.4	62	16.7	77	ESE			3		10		SE	0	0	Sm'h		Cloudy	
Wyoming, N. 20° 30′, W. 52° 40′	29.92	760.0	76	24.4	82	SSE			1		8		S			Mod. H'vy	ESE	Cloudy	

LINES AND VESSELS.	BAROMETER REDUCED TO SEA-LEVEL.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND.				CLOUDS.				RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		SEA-SWELL.		WEATHER.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	Up'er 0—10	Lo'er 0—10	Upper. From.	Lower. From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 38° 32′, W. 124° 56′	29.95	760.7	51.8	11.0	97	N			7		5					High		Misty	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Clpero, Off Trinidad, W. I.	29.87	758.7	79.1	26.2	91	ENE			1		2							Blue sky	W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne, N. 18° 55′, W. 38° 41′	30.08	764.0	75.6	24.2	72	E			4		5							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbighshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 31° 33′, W. 41° 43′	30.22	767.6	68.5	20.3	80	E			4		5							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kyrolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee, ‡ N. 2° 07′, W. 26° 00′	29.93	760.2	82.7	28.2	71	ESE			3		6							D. clouds	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 48° 12′, W. 14° 15′	30.54	775.7	57.0	13.9	87	E			5		0					3-4	SE	Misty	Capt. H. W. Dyke.
Barque Mertola, N. 47° 40′, W. 15° 47′	30.51	774.9	56.2	13.4	97	ENE			5		0							Blue sky	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ S. 15° 17′, W. 5° 55′	29.99	761.7	76.9	24.9	82	ESE			2		4							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 16° 45′, E. 96° 14′	29.87	758.7	82.5	28.1	87	SW			2		10							Overcast	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, ‡ Port Said, Suez Canal	29.91	759.7	71	21.7	80	N			3		6							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean																			
S. S. Circassian Liverpool, England	30.96	786.4	50	10.0	93	ENE			3		4k		NE	0	0			Misty	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia, N. 49° 26′, W. 25° 40′	30.40	772.1	56	13.3		S			4		8		S	0	0	Mod.	W;SW	Cloudy	Capt. W. H. P. Hains.
S. S. Scythia, N. 41° 02′, W. 66° 02′	29.99	761.7	49	9.4	100	SW			5		2		SW	0	0	Long	NE	Hazy	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic, N. 47° 04′, W. 39° 11′ †	30.18	766.6	54	12.2		NE			2		2		W			Mod.	SW	Raining	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England †	30.84	783.3	51	10.6		E			2		8		E	0	0			Hazy	Capt. Ch. W. Kennedy
S. S. Republic, N. 46° 30′, W. 39° 25′ †	30.25	768.3	55	12.8	93	NE			4		10			24h'rs	light	H'vy	SW	Cloudy	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—OF BREMEN. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Thol.
S. S. Hermann, N. 40° 48′, W. 63° 32′	30.20	767.1	66	18.9		SW			3		1		W	0	0	Mod.	W	Clear	Capt. H. Baur.
S. S. Köln, N. 49° 32′, W. 25° 50′	30.53	775.4	66.0	18.9	59	S			4		8		S	6 h'rs	Fog	Mod. long	S;SW	Cloudy	Capt. Th. Jüngst.
S. S. Leipzig, N. 39° 34′, W. 56° 43′	30.36	771.1	52.0	11.1		E			0-1		8		ESE	0	0	Long	NNE	Fair	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Heimbeurh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Skoldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. Liverpool, England	30.64	778.2	61	16.1	88	ENE			2		2		ENE					Clear	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio																			Wm. Shackford, Chief Off'r
S. S. Pennsylvania, N. 41° 12′, W. 52° 10′...*†	30.27	768.8	40	4.4	100	ENE			3		5		ENE			Sm'h	E	Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 26° 05′, W. 113° 42′ ...†	29.94	760.5	63	17.2	89	NNW			2		10		NW	Lig	ht	Mod.	WNW	Cloudy	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, Yokohama, Japan †	30.26	768.6	63	17.2	67	S			2		8		W	0	0	Sm'h		Fair	Capt. H. Davison.
S. S. Gaelic, Yokohama, Japan †*	30.37	771.4	64	17.8	78	W			1		2		E			Sm'h	W	Fair	Capt. W. H. Kidley.
S. S. Oceanic, N. 45° 00′, W. 152° 11′	30.18	766.6	49	9.4	64	SW			2		10		W	0	0	3	W;NW	Overcast	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 41° 36′, W. 124° 32′...†	30.15	765.8	50.5	10.3	75	N			6		0					Mod.	N	Clear	Capt. Fred. Bolles.
S. S. Oregon																			Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, San Francisco, Cal. †	29.88	758.9	51	10.6	79	SW			2		0							Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, N. 34° 09′, W. 118° 25′...†	29.80	756.9	55	12.8	80	W			3		0					Mod.	W	Clear	Capt. Thos. Wallace.
S. S. State of California, Portland, Oregon †	30.17	766.3	45	7.2	76	NW			3		5		N					Fair	Capt. G. Debney.
S. S. Victoria, N. 39° 22′, W. 124° 00′...†	29.99	761.8	54	12.2	87	NW			4		5					H'vy	NW	Fair	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, Sydney, N. S. Wales	30.04	763.0	68	20.0	60	NW			2		2		NW					Clear	A. Bannerman, 2d Officer.
S. S. City of New York, Sydney, N. S. W. †	29.97	761.2	69	20.6	90	NW			1		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China †	30.12	765.0	70	21.1	70	E			3		2		E			Sm'h		Clear	Capt. G. G. Berry.
S. S. City of Sidney, Honolulu, Sandwich I'ds.†	30.03	762.7	75	23.9	68	ENE			3		5		NE	0	0	Sm'h		Fair	Capt. H. C. Dearborn.
S. S. City of Tokio																			A. L. Ritchie, 2d Officer.
S. S. Colima, Mazatlan, Mexico †	29.93	760.2	74	23.3	81	Calm			0		2		Calm	0.	0	Mod.	SSW	Clear	Capt. R. R. Searle.
S. S. Granada, Panama, Panama †	29.82	757.4	81	27.2	87	Calm			0		5?		N	Sho	wers			Clear?	Capt. M. Connolly.
S. S. Zealandia, N. 33° 48′, W. 131° 11′	29.96	761.0	54	12.2	74	NW			6		2?		NW	0	0	R'gh	NW	Cloudy?	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland																			Capt. Wm. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, Tybee River, Ga	30.19	766.8	71	21.7	80	E	3	1.3			8k		E	0	0			D. clouds	Capt J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 23° 20′, W. 42° 20′...*†	30.18	766.6	75	23.9		E					2		E			Cross	E	Showery	Capt. B. F. Woodbury.
Brigantine George																			Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Chesapeake bay Md†	30.26	768.6	68	20.0	90	SSW	3	1.3			0			0	0			Clear	
Bark Sunbeam, N. 39° 08′, W. 16° 44′ †	30.22	767.6	61	16.1	88	N			6		5		N	0	0	R'gh	E	Fair	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 11, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco‡			29.84	757.9	70.9	21.6	80	SW			2		6			0.079	2.0	Cloudy	Dr. Ollive.
Nemours‡			29.88	759.0	63.1	17.3	94	ENE			5		3			0	0	Pretty fair	Raynard.
Algiers‡			30.05	763.2	62.6	17.0	64	NE			6		5			0	0	Cloudy	Nicolas.
La Calle‡			30.04	763.1	62.2	16.8	70	NNW			2		6			Inap.	Inap.	Cloudy	Fonfrède.
Tunis‡			30.02	762.4															Jacques.
Stax‡			30.10	764.4															Gau.
Saida‡			29.92	760.0	64.4	18.0	62	NW			1		10			0.008	0.2	Covered	Dumas.
Tebessa‡			30.00	762.0	75.2	24.0	14	SE			3		3			0.024	0.6	Cloudy	Watrin.
Geriville‡																			Lonchamp.
Laghouat‡			30.06	763.6	78.4	25.8	29	W			4		4			0	0	Cloudy	Herbin.
Biskra‡			29.92	760.0															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.96	761.0	30.05	763.3	51.2	10.7	72	NNW	5	2.2			10			0	0	Dull	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.35	745.5	29.91	759.7	45.9	7.7	71	NE			2		10			0.079	2.0	Raining	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.33	745.0	30.11	764.7	50.0	10.0	76	NNE	15.0	6.7			10			0.130	3.3		Dr. Wierzbicki.
Eperies	29.09	738.9	29.97	761.3	51.1	10.6	85	N			3		10ks		S	1.504	38.2	Raining	Julius Mikolik.
Gratz‡	28.67	728.3	29.97	761.1	38.5	3.6	93	WNW			5		10			0	0		Andreas Rospini.
Hermannstadt	28.41	721.5	29.80	756.8	64.0	17.8	63	S			4		3			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.78	730.9	30.18	766.6	34.0	1.1	96	WSW			1		10			3.323	84.4		The Staff.
Lemberg	29.02	737.2	30.01	762.2	56.3	13.5	57	NE			1		10			0	0		Dr. T. Stanecki.
Pola	29.83	757.6	29.94	760.5	54.1	12.3	47	WNW			2		10			0	0		I. R. HydrographicOffice.
Szathmar	29.41	747.1	29.87	758.8	57.9	14.4	71	N			3		10			0.374	9.5		Beicht Peter, S. J.
Szegedin	29.58	751.2	29.86	758.4	48.9	9.4	96	SE			1		10			0.417	10.6		Karl Stancel.
Trieste	29.85	758.2	29.95	760.5	57.9	14.4	36	Calm			0		10			0	0		Secco.
Vienna	29.30	744.3	30.04	763.0	41.7	5.4	87	NNW			3		10			1.913	48.6	Cloudy	I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.41	772.4	30.51	774.9	58.0	14.4	50	SE	11	4.9			5			0	0	Blue sky	W. Boswell.
Armagh, Observatory	30.40	772.1	30.62	777.7	60.9	16.1	49	SSW	3	1.3			2					D. clouds	S. Call.
Bidston, Liverpool Obs'y			30.62	777.7	53.6	12.0	62	WNW	12	5.4			3					Blue sky	John Hartnup.
Bolton, Sharples	30.04	763.0	30.59	777.0	57.8	14.3	56	WNW	9	4.0			6					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	30.15	765.8	30.55	776.0	59.3	15.2	49	S			1		3			0	0	D. clouds	J. McLandsbo ough, F.R.S
Bridgetown, Barbadoes	29.83	757.7	29.86	758.4	86.0	30.0	68	NE			1		6					Gloomy	Corpl. J. Surgener, A.H.C.
Cardington			30.59	777.0	60.0	15.6	63	N			0.6		5					D. clouds	John McLaren.
Chatham, School M. E.	30.48	774.2	30.61	777.5	52.6	11.4	55	N			1		10					Misty	Lance Cpl. R. Tear, R.E.
Falmouth, Observatory	30.42	772.7	30.66	778.7	51.4	10.8	55	SSE			2		2					D. clouds	The Staff.
Fort Napier, Natal	27.75	704.8	29.97	761.2	64.1	17.8	74	NE			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.59	751.6	29.82	757.4	88	31.1	88	NW			1		3					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			30.54	775.7	60	15.6	65	NW			3		2			0	0	Blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	29.93	760.2	29.98	761.5	62.4	16.9	90	E			7		6					D. clouds	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.36	771.1	30.57	776.3	59.0	15.0	58	W			1	7c	0					D. clouds	D. G. MacLean.
Greenwich, Royal Obs'y	30.43	772.9	30.60	777.2	53.5	11.9	61	NNE			1		0					Blue sky	The Staff.
Guernsey	30.34	770.6	30.56	776.2	50	10.0	72	NE			3		0					Blue sky	Dr. S. E. Hoskins, F.R.S.
Kew, Observatory	30.57	776.5	30.61	777.5	51.4	10.8	50	NNE	8	3.6			8					D. clouds	The Staff.
Leicester, Museum	30.32	770.1	30.58	776.7	58.8	14.9	44	N			1		Hz					Misty	J. E. Carryer.
Malta, Mediterranean	29.88	758.9	29.96	761.0	66.0	18.9	78	NE			1		2			0	0	Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	30.04	763.0	30.09	764.3	76.0	24.4	68	NE			4		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	30.05	763.3	30.58	776.7	59.1	15.1	49	N			0–1		4					D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	30.36	771.1	30.60	777.2	55.5	13.1	57	N			2		7					D. clouds	The Staff.
Plymouth	30.56	776.2	30.63	778.0	55.2	12.9	55	SW			3		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			30.44	773.2	55.3	12.9	66	SW	20	8.9			2					Light clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.81	757.2	29.88	758.9	69.0	20.6	65	WSW			1		2			Blank		D. clouds	Serg't W. H. Lyne.
Sheffield	30.30	769.6	30.58	776.7	61.8	16.6	53	NE			1		6?			0	0	Overcast?	W. F. Cooper.
Silloth Rectory	30.57	776.5	30.60	777.2	58.4	14.7	63	W			4		0			0	0	Blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.59	777.0	58.1	14.5	48	W	15	6.7			0					Blue sky	Rev. S. J. Perry.
Strathfield Turgiss	30.38	771.6	30.60	777.2	57.6	14.2	44	NE			1		5					D. clouds	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.60	777.2	30.62	777.7	62	16.7	56	E			4		6					D. clouds	W. Newcombe.
Valencia, Observatory	30.63	778.0	30.66	778.7	56.6	13.7	62	SSE	12	5.4			3					Misty	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.09	764.3	30.13	765.3	46	7.8	79	S	3	1.3			10s			0	0	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	30.03	762.7	30.09	764.3	49	9.4	86	Calm	0	0			10ks		SE	0	0	Cloudy	G. A. Blair.
Chicoutimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	29.94	760.5	29.96	761.0	48	8.9	91	NW	1	0.4			10n			0.15	3.8	Light rain	J. McWilliams.
Fort Garry, Manitoba*	28.97	735.8	29.78	756.4	52	11.1	93	E	1	0.4			10n			0.270	6.9	Cloudy	James Stewart.
Fredericton, N. B																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.06	763.5	30.19	766.8	42	5.6	10	S	3	1.3			Fg			0.055	1.4	Foggy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.62	752.3	29.95	760.7	55	12.8	97	SW	5	2.2		2c	0	SW		0.03	0.8	Clear	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	29.71	754.6	29.91	759.7	64	17.8	89	SW	22	9.8		2ck	5ks	N	W	0.17	4.3	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.24	742.7	29.91	759.7	61	16.1	96	NW	5	2.2			10n		SW	0.34	8.6	Cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.36	745.7	30.05	763.3	58	14.4	94	S	11	4.9		0	0			0	0	Clear	H. Morgan.
Port Stanley, Ontario	29.40	746.7	30.03	762.7	59	15.0	93	W	12	5.4		2k	Hz	W	W	0	0	Hazy	M. Payne.
Quebec, Quebec*	29.60	751.8	29.92	760.0	51	10.6	93	NE			1		Fg		Calm	0.15	3.8	Heavy rain	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.41	747.0	29.86	758.4	56	13.3	97	Calm	0	0			Fg			0.45	11.4	Foggy	W. H. McIntyre.
Saugeen, Ontario*	29.23	742.4	29.91	759.7	70	21.1	84	SW	19	8.5			10ks		SW	Inap.	Inap.	Cloudy	K. Stewart.
St. Andrews, N. B	30.01	762.2	30.06	763.5	45	7.2	94	SE	3	1.3			Fg			0.02	0.5	Foggy	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.16	766.1	30.20	767.1	43	6.1	88	S	3	1.3		10c	0	W		0	0	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.62	752.3	29.99	761.7	65	18.3	84	SW	5	2.2		5ck	2ks	W	W	0	0	Cloudy	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.03	762.7	30.10	764.5	49	9.4	90	E	5	2.2		8k	0	W		0.02	0.5	Cloudy	Lt. F. E. Wilmot, R.N
Sub-Series.																			
St. Johns, Newfoundland	29.94	760.5	30.19	766.8	50	10.0	79	W	2	0.9		0	0			0	0	Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd'r.
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	30.23	767.8			60.5	15.8	94	W	9.6	4.3			7k			0.300	7.6	Cloudy	John Duthie.
Cape Town, C. G. H. Obs'y	30.12	765.0	30.15	765.8	71.8	22.1		SSE	17.3	7.7		1cs	0			0	0		The Staff, for D. Gill.
Worcester*†	29.09	738.9			65.9	18.8	49	SE			1	1	2			0	0	Fine	C. Stokes.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.17	766.3	30.19	766.9	58.1	14.5	93	ESE	2.2	1.0		0	4ks		W	0	0	Cloudy	M. Marc Dechevrens, S.J.

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

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.17	664.7	29.89	759.2	68.4	20.2	92	NE			3		7d		NE	0	0	Cloudy	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.39	771.8	30.43	773.0	44.8	7.1	70	NNW	7	3			3						Oversergent Fischer.
Fanöe	30.35	771.1	30.38	771.6	58.3	14.6	57	ENE			4		8						Overloerer Lauridsen.
Godthaab, Greenland	29.74	755.3	29.78	756.4	32.0	0.0	81	NW			2		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.56	750.9	29.51	752.0	42.4	5.8		SW			8		8					Raining	A. O. Thorlacius.
Thorshavn	30.13	755.4	30.17	766.3	50.9	10.5	90	SW	25	11			10					Raining	Overloerer Bergh.
Vestervig	30.35	770.8	30.44	773.2	51.6	10.9	69	NNE			4		1						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.64	752.8	30.29	769.4	56.5	13.6	68	NNE			3		1		SSW	0	0	Clear	M. Labroue, Director.
Alençon Normal School	30.01	702.3	30.56	776.3	49.3	9.6	58	NE			3		8km		SE	0	0	Very cloudy	M. Nicot, Director.
Arras, Engineer School	30.28	769.2	30.55	775.9	48.6	9.2	56	NE			2		km		NE	0	0		M. Klein, Commandant.
Avignon, Normal School	30.00	762.1	30.08	764.1	57.7	14.3	37	N			6		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.84	758.0	30.41	772.5	51.6	10.9	54	N			3		8km		NE	0	0	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	30.28	769.2	30.56	776.1	52.7	11.5	36	NE			3		8		NE	0	0	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.45	748.1	30.34	770.5	48.2	9	61	NE			1		cn		NE	0.374	9.5		M. Gobin, Director.
Bordeaux, Observatory	30.07	763.8	30.34	770.6	55.6	13.1	35	E			4		2			0	0	Almost clear	M. Rayet, Director.
Bourges, Normal School	29.81	757.1	30.37	771.4	53.1	11.7	39	NNE			4		km		NNE	0	0		M. Postel, Director.
Brest, Naval Observatory	30.34	770.7	30.59	776.9	52.2	11.2	54	NE			2		2		NE	0	0		M. de Kermaree, Dir.
Caen, Normal School	30.47	773.9	30.55	775.9	51.1	10.6	68	NE			3		2		NE	0	0	Slightly cl'dy	M. Bletrix, Director.
Châlons-sur-Marne, N.Sch'l	30.14	765.5	30.47	773.8	57.0	13.9	59	NE			1		2		ENE	0	0	Slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.98	761.5	30.50	774.6	54.7	12.6	54	SW			2		2			0	0	¼ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.92	734.5	30.30	769.6	50.0	10.0	43	NNE			2		8			0.106	2.7	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.46	748.3	30.26	768.6	52.7	11.5	52	NE			3		4		N	0.138	3.5		M. de Villemontée, Dir.
Commercy, Normal School	29.54	750.2	30.42	772.7	53.8	12.1	57	N			3		5ck			0.008	0.2	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.50	698.6	30.05	763.3	51.8	11	70	N			3		0		E	0	0	½ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	28.94	735.0	30.08	764.0	59.2	15.1	44	NW			2		5km		NW	0.177	4.5	½ covered	M. Kina, Director.
Grenoble, Normal School	29.38	746.2	30.16	766.1	48.2	9	34	N			3		5		NW	0	0		M. Ablard, Director.
Guéret, Normal School	28.74	730.1	30.35	771.0	48.2	9	33	NE			3		km		NE	0	0		M. Rivoire, Director.
Lamballe, Normal School	30.21	767.3	30.49	774.4	51.8	11	45	NNE			2		k		NE	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.75	755.7	30.43	773.0	54.7	12.6	60	NE			2		Fg		NNE	0	0	Light fog	M. Chauvin, Director.
Lorient, Naval Observatory	30.42	772.6	30.52	775.2	55.4	13.0	25	NE			1	cs	0	E		0	0		M. Chauvin, Director.
Lyon Obs'y, Park Station	30.42	772.6	30.52	775.2	55.4	13.0	25	NE			4		2		Calm	0	0	¼ covered	Lt. T. Carré, Director.
Mans, Normal School	29.15	740.4	30.22	767.7	50.4	10.2	35	N			3		2		NNE	0	0	Slightly cl'dy	M. André, Director.
Marseille, Observatory	30.19	766.8	30.51	774.9	49.8	9.9	40	NNE			4		5		E	0	0	Cloudy	M. Piboen, Director.
Montlouis l'instituteur	29.78	756.3	30.05	763.2	59.9	15.5	51	WNW			3		3		NE	0.197	5.0		M. Stephan, Director.
Montpellier, Normal School	24.85	631.3	30.09	764.3	38.3	3.5	42	NW	18.6	8.3			4		N	0.012	0.3		M. Cave, for Dr. Fines.
Nancy, Normal School	29.98	761.6	30.09	764.3	60.1	15.6	40	N			4		0			0	0	Clear	M. P. Galzin, Director.
Nantes, Observatory	29.61	752.0	30.38	771.7	52.5	11.4	36	NNE			2		2k		NE	0	0	Slightly cl'dy	M. Hasse.
Nice	30.36	771.1	30.52	775.2	53.2	11.8	46	N			2-3		6k		N	0	0		M. Larocque, Director.
Perpignan, Observatory	29.96	761.0	30.00	761.9	59.4	15.2	50	S			3		10	S	S	0.449	11.4	Light rain	Capt. Boissière, Director.
Pic-du-Midi, Plantade	30.03	762.7	30.13	765.4	57.2	14.0	31	NW	24.2	10.8			2		NNW	0	0		Dr. Fines.
Privas, Normal School	22.54	572.4			21.2	—6.0							10		NNE	0.307	7.8	Snowy	Gen'l de Nansouty, Dir.
Puy de Dôme Obs'y, Summit	29.11	739.5	30.20	767.0	50.4	10.2	58	N			8		5k	N	N	0	0	Cloudy	M. Tallieu.
Rochefort, Naval Obs'y	25.24	641.1			26.4	—3.1	95	NE			6		5		NE	0.232	5.9	½ covered	M. Alluard, Director
Roche-sur-Yon, N. School	30.40	772.1	30.43	772.9	59.0	15.0	39	NE			2		0			0	0	Clear	Lt. E. Decante, Director.
Rodez, Normal School	30.24	768.1	30.46	773.7	56.1	13.4	45	NE			1		2		NNE	0	0	Slightly cl'dy	M. Mouillot, Director.
Rouen, Normal School	28.06	712.7	30.24	768.2	47.5	8.6	42	NW			4		1		E	0	0	Clear	M. Richard, Director.
Saint Lô, Normal School	30.47	773.9	30.56	776.1	54.0	12.2	43	NE			3		8		NE	0	0	Very cloudy	M. Platrier, Director.
Saint Maur, Observatory	30.43	773.0	30.59	777.0	51.4	10.8	73	NE			1		5		N	0	0	Cloudy	M. Delaplanche, Dir.
Toulouse, Observatory	30.32	770.1	30.48	774.3	54.5	12.5	33	NE			3		5		NE	0	0		M. Renou, Director.
Tours	29.56	750.9	30.29	769.4	54.7	12.6	43	NW			3					0	0		M. Bailland, Director.
Versailles, Observatory	30.24	768.1	30.67	779.1	54.7	12.6	40	ENE			4		2		ENE	0	0	¼ covered	M. de Tastes.
Sub-Series.	29.98	761.6	30.48	774.1	52.5	11.4	36	NE			3					0	0		Dr. A. Bérigny, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.48	748.8	30.35	770.9	49.8	9.9	40	NE			6		3k	NE		0	0		Prof. Dr. Hoh.
Berlin	30.19	766.9	30.37	771.3	55.6	13.1	32	E			2		7			0	0		Prof. Dr. Arndt.
Breslau	29.76	755.8	30.29	769.4	47.5	8.6	58	NE			4		9			0	0		Royal University Obs'y.
Carlsruhe	29.91	759.7	30.35	770.8	53.2	11.8	53	NNW			2		5	NE		0	0		Albert Senz.
Cassel	29.64	752.9	30.36	771.2	51.4	10.8	39	NW			2		6	N		0	0		Dr. H. Möhl.
Frankfort on the Main	30.05	763.3	30.42	772.7	55.2	12.9	27	NNE			2		4			0	0		Physical Society.
Friedrichshafen	28.85	732.8	30.33	770.3	45.3	7.4	67	E			3		10	NE		0.031	2.3		Wilhelm, Chief Tel.
Hamburg	30.40	772.2	30.47	774.0	48.2	9.0	67	NW			3		9			c	0		Dr. R. Kleeman.
Kiel	30.41	772.5	30.43	772.9	43.0	6.1	56	NW			2		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.95	760.7	30.38	771.6	49.6	9.8	47	NNE			4		6	NNE		0.004	0.1		Prof. Dr. Bruhns.
Magdeburg	30.10	764.6	30.40	772.1	52.9	11.6	42	NE			3	c	8ks	NNE		0.004	0.1		Dr. Assmann.
Memel	30.37	771.4	30.42	772.6	42.1	5.6	74	N			4	9c	0						Reinbrecht & Issermann.
Munich	28.41	721.5	30.28	769.2	39.7	4.3	65	NW			3		10			0.063	1.6		Central Station.
Neufahrwasser	30.43	773.0	30.45	773.4	40.6	4.8	59	NNE			2		3			0	0		A. Lothes.
Neustadt, Palatinate	29.80	756.9	30.33	770.4	52.3	11.3	40	NE			5		5			0	0		Dicknether.
Stuttgart	29.36	745.8	30.27	768.9	50.9	10.5	34	N			4		5	N		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28 76	730.4	30.25	768.3	49.6	9.8	40	N			8		8	NE		0	0		Prof. Kemleln.
Wustrow	30.42	772.6	30.44	773.2	46.6	8.1	77	N			2		10s			0	0		Prof. J. Reimer.

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

GREEK SERIES.

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

Athens	29.56	750.7	29.94	760.4	70.5	21.4		SW			2.0		0					Clear.	A. Wourlisch

INDIAN SERIES.

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

Kurrachee	29.66	753.3	29.71	754.6	88.6	31.4	81	SW	32.0	14.3			0			0	0	Misty	
Deesa	29.20	741.6	29.64	753.0	106.5	41.4	12	W	15.2	6.8			1	SSW		0	0	Misty	
Bombay	29.80	756.9	29.84	757.9	87.5	30.8	73	WSW	16.0	7.2			2	WSW		0	0	D. clouds	
Poona, Yarrowda	27.94	709.8	29.75	755.6	91.8	33.2	41	WSW	24.0	10.7			0			0	0	Blue sky	
Belgaum	27.30	693.4	29.80	756.8	84.0	28.9	62	WSW	11.0	4.9			8	NE	W	0	0	Threatening	
Lahore	28.81	731.7	29.50	749.4	107.3	41.8	18	NW	2.6	1.2			10			0	0	Gloomy	
Roorkee	28.79	731.4	29.67	753.5	91.8	33.2	35	E	1.2	0.5			0			0	0	Misty	
Agra	29.06	738.1	29.60	751.8	101.1	38.4	29	E	11.9	5.3			0			0	0		
Nagpur	28.62	727.0	29.62	752.3	100.7	38.2	32	NW	6.8	3.0			8		NW	0	0	Gloomy	
Jubbulpore	28.33	719.5	29.64	752.8	95.3	35.2	34	S	6.2	2.8			4		E	0	0	D. clouds	
Lucknow	29.36	745.8	29.74	755.3	88.1	31.2	45	ESE	7.6	3.4			9			0.02	0.5	Blue sky	
Allahabad	29.40	746.8	29.71	754.6	87.7	30.9	47	E	8.4	3.7			0			0	0	Blue sky	
Patna	29.60	751.7	29.78	756.3	80.1	26.7	76	N	4.5	2.0			8	NE	E	0.96	24.4	D. clouds	
Hazaribagh	27.75	704.9	29.75	755.6	81.3	27.4	50	Calm	12.7	5.7			4		N	0.01	0.3	Th'd'r storm	
Cuttack	29.67	753.7	29.75	755.7	90.3	32.4	56	SW	4.0	1.8			3			0.58	14.7	D. clouds	
Calcutta, Alipore	29.78	756.3	29.80	756.9	78.9	26.1	84	ESE	5.0	2.2			8	N		2.85	72.4	D. clouds	
Dhubri	29.70	754.3	29.82	757.4	74.4	23.6	94	ESE	6.8	3.0			9	W		0.10	2.5	D. clouds	
Chittagong	29.78	756.3	29.87	758.7	82.7	28.2	83	Calm	4.2	1.9			8			0	0	D. clouds	
Sibsagar	29.48	748.8	29.81	757.3	84.2	29.0	70	S	3.2	1.4			4			0	0	D. clouds	
Zanzibar, Africa			29.94	760.5	84.6	29.2	71	SSW	4	1.8			4		S	0	0	D. clouds	

ITALIAN SERIES.

By authority of the MINISTER OF AGRICULTURE, INDUSTRY AND COMMERCE.

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

Udine	29.55	750.6	29.96	760.9	55.6	13.1	27	N	5.6	2.5			10			0	0		Prof. Giovanni Clodig.
Milan	29.43	747.5	29.93	760.3	61.3	16.3	17	NW	9.4	4.2			5			0	0		Prof. Schiaparelli.
Padua	29.81	757.1	29.92	759.9	61.2	16.2	33	WSW	5.6	2.5			10			0.008	0.2		Prof. Dott. Lorenzoni.
Moncalieri	29.11	739.4	30.00	761.9	59.0	15.0	49	NNE	0.7	0.3			1	S		0	0		Prof. P. F. Denza.
Genoa	29.77	756.1	29.96	761.0	61.7	16.5	16	NW	6.9	3.1			1	NW		0.008	0.2		Prof. G. M. Garibaldi.
Mondovi	28.09	713.4	29.97	761.1	52.9	11.6	21	WNW			6		2	N		0.008	0.2		Prof. D. C. Bruno.
Pesaro	29.87	758.8	29.92	760.0	55.0	12.8	49	NE	9.8	4.4			10	N		0	0		Prof. Luigi Guidi.
Florence	29.69	754.0	29.94	760.4	59.7	15.4	28	E			2		7	N		0	0		Prof. Costantino Pitter.
Leghorn	29.87	758.7	29.96	760.9	58.3	14.6	43	NW	5.6	2.5			10			0	0		Prof. P. Monte.
Rome	29.73	755.1	29.90	759.4	54.3	12.4	55	E	8.7	3.9			9			0	0		Prof. P. S. Ferrari.
Lecce	29.68	753.8	29.93	760.1	58.3	14.6	87	NE	11.2	5.0			5			0.126	3.2		Prof. O. de Giorgi.
Cosenza	29.02	737.2	29.91	759.6	62.6	17.0	73	SSW	3.1	1.4			4	SW		0.264	6.7		Prof. D. Conti.
Cagliari	29.71	754.7	29.91	759.6	64.0	17.8	37	S			2		8	NW		0	0		Prof. A. Pacinotti.
Palermo	29.70	754.4	29.95	760.7	62.2	16.8	59	E	6.3	2.8			9	W		0	0		Prof. G. Olaccatore.
Syracuse	29.87	758.7	29.91	759.8	69.1	20.6	64	SE	3.8	1.7			5	WSW		0	0		Prof. Vincenzo Guiliano.
SUB-SERIES.																			
Naples, S. R	29.38	746.3	29.90	759.5	59.5	15.3	59	WNW	3.8	1.7			10	WNW		0.256	6.5		Prof. F. Brioschi.
Stelvio	22.08	560.9			17.8	— 7.9	66	NE			6		rocks	NE		0	0	Overcast	Prof. P. F. Denza.
Valdobbia	22.10	561.2			35.8	2.1	59	E			2		5k	NNE		0	0	Cloudy	Prof. P. F. Denza.

JAPANESE SERIES.

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

Hiroshima, I. M. Obs'y	30.15	765.8	30.17	766.3	62.6	17.0	79	SSW	11.8	5.3		0	0			0	0	Clear	K. Sasaki.
Kioto	30.00	762.0	30.17	766.3	56.6	13.7	68	NW	0.8	0.4		5c;cs	0	W		0	0	Fair	M. Tojima.
Nagasaki, I. M. Obs'y	30.02	762.5	30.22	767.6	57.1	13.9	81	WSW	0.9	0.4			0			0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	30.06	763.5	30.13	765.3	61.1	16.2	81	S	12.1	5.4		2c	0			0	0	Fair	The Staff.
Wakayama	30.14	765.5	30.19	766.8	64.0	17.8	61	S	5.2	2.3		0	0			0	0	Clear	Y. Kuwamuca.

MAURITIUS SERIES.

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

Mauritius Obs'y, Mauritius	29.87	758.7	30.06	763.6	78.9	26.1	70	NE	8.0	3.6		0	2		NE	0.01	0.3	Fine	A. N. Figon.

MEXICAN SERIES.

By authority of the SECRETARY of PUBLIC WORKS.

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

Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.67	753.7	29.93	760.3	72.0	22.2	85	E	0.9	0.4			10n		SSE	0	0	Covered	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Chazaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.

NETHERLANDS SERIES.

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

Flushing	30.59	777.0	30.59	777.0	50.0	10.0		N			5					0	0		
Groningen	30.47	773.9	30.52	775.3	45.9	7.7		N			3					0	0		
Helder	30.55	776.0	30.55	776.0	44.1	6.7		NNW			2					0	0		
Hellevoetsluis	30.58	776.6	30.58	776.6	50.5	10.3	73	N			2					0	0		
Utrecht	30.51	775.0	30.56	776.2	48.6	9.2	58	N			2		8			0	0	Very cloudy?	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.41	772.3	30.47	773.9	51.1	10.6	70	SSE	9.8	4.4			8			0.232	5.9	Raining	
Christiania	30.28	769.0	30.42	772.7	57.2	14.0	59	SSW	11	5			4			0.004	0.1		
Gjæsvær	30.07	763.8	30.10	746.4	30.2	— 1.0		SSE			4		10						
Lodingen	30.06	763.5	30.11	764.7	39.0	3.9	88	SW			7		10			0.945	24.0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.09	764.2	30.24	768.2	63.3	17.4	78	E	12.5	5.6			4			0	0		Dr. J. A. Sampaio.
Ocmpo Major	28.95	735.4	29.93	760.1	70.3	21.4	37	ENE	15.0	6.7			9			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.80	756.8	29.88	759.0	71.[illegible]	21.7	67	SW	1.8	0.8			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.58	751.4	29.94	760.4	61.5	16.4	75	NE	15.4	6.9			9			0.004	0.1		The Staff.
Ponta Delgada, Azores	30.11	764.9	30.19	765.7	65.2	19.0	64	NE	21.7	9.7			4	SE		0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski																			Capt. Lasarew.
Archangel	30.17	766.3	30.19	766.8	26.6	— 3.0	74	NW	18	8			9ks						Capt. Sselliwerstow.
Astrakhan	30.07	763.7	29.98	761.6	78.1	25.6	37	SSE	11	5			1s					Light clouds	Capt. Wisganow.
Barnaul	29.41	746.9	29.89	759.1	64.8	18.2	21	NW	9	4			5					Light clouds	Meteorological Obs'y.
Dorpat	30.17	766.2	30.42	772.6	43.7	6.5	36	ENE	7	3		4ck	0						Observatory.
Ekaterinburg	28.76	730.6	29.69	754.1	66.2	19.0	35	W	22	10			7kn						Meteorological Obs'y.
Kasan	29.71	754.6	29.98	761.5	53.4	11.9	64	W	4	2			10						Observatory.
Kertch	29.84	758.0	29.86	758.5	67.3	19.6	70	NW	4	2			3						Lagorio & Sastyrez.
Kieff	29.34	745.2	29.98	761.5	51.3	10.7	91	NE	9	4			10ks;n					Raining	Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.55	750.5	29.74	755.5	75.4	24.1	42	SW	13	6			8					Light clouds	Meteorological Obs'y.
Moscow	29.58	751.3	30.14	765.5	45.7	7.6	53	NW	10.1	4.5			8ks						Meteorological Obs'y.
Nertchinsk	27.40	695.9	29.60	751.9	56.5	13.6	35	SW	2	1			10					Hazy	Meteorological Obs'y.
Nikolaiev	29.76	756.0	29.84	757.8	62.1	16.7	92	N	4	2			8n						Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	29.95	760.8	30.10	764.4	71.4	21.9	37	SW	4	2			0						Physical Observatory.
St. Petersburg	30.33	770.3	30.34	770.7	41.4	5.2	61	W	9	4			6ks;n						Central Physical Obs'y.
Tashkend, Laboratory	28.41	721.6	29.91	759.8	74.8	23.8	67	Calm	0	0			3						Teich, A. M.
Tiflis	28.56	725.3	29.92	759.9	73.4	23.0	49	Calm	0	0			10s						Physical Observatory.
Warsaw	29.82	757.4	30.25	768.4	50.0	10.0	43	NNE	16	7		4c	0						Astronomical Obs'y.
Wilna	29.90	759.5	30.33	770.4	47.1	8.4	52	NNE	4	2			5						Berg, Assistant.
Yeniseisk	29.67	753.7	29.97	761.2	36.0	2.2	50	N	18	8			3						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.56	776.2	61.8	16.6	48	W			2		0			0	0	Hazy	Andrew Gibb.
Monach Lt. House, Hebrides			30.48	774.2	54	12.2	93	SW			4	5	5	SW		0	0	Cloudy	J. Youngclause.
North Unst, Shetland Isl'ds			30.32	770.1				SW			4		10			0	0		Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.99	761.8	30.10	764.5	62.6	17	45	SE	4.9	2.2			0			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.34	770.5	30.39	771.9	60.8	16.0	88	E	2.7	1.2		4	2	E		0	0	Cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.27	692.6			51.1	10.6	63	NE	13.4	6.0		0	0			0	0	Clear	Domingo Martin.
Madrid, Royal Obs'y	27.87	707.8	30.08	764.1	60.8	16.0	23	NE	25.9	11.6		2	0	W		0	0	Light clouds	The Staff.
Murcia, Met. Obs'y	29.96	760.9	30.11	764.7	63.9	17.7	63	E	6.5	2.9		5	5	WSW		0	0	Covered	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.19	741.4	30.07	763.8	63.5	17.5	40	NE	28.6	12.8			0			0	0	Clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.97	751.2	30.04	762.9	74.3	23.5	83	ENE	4.9	2.2		4ck	5k;ks	ENE	E	0.024	0.6	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.92	759.9	29.97	761.2	86.2	30.1	64	E	0.4	0.2		0	0			0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.85	758.1	29.95	760.6	64.2	17.9	70	E	29.5	13.2			10		E	0.010	0.3		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.85	758.1	29.94	760.4	78.4	25.8	83	E	15.7	7.0		6kn	6kn	E	E	0	0	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.87	758.7	30.02	762.4	81.6	27.6	68	NNW	3.5	1.8		3ck	0	NW		0	0	Lt'ly cloudy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.22	767.5	30.25	768.5	38.1	3.4	63	S			2		8			0	0		
Umea	30.25	768.4	30.30	769.7	52.5	11.4	48	N			2		9			0	0		
Hernosand	30.35	770.8	30.40	772.1	46.2	7.9	60	SSE			4		7			0	0		
Stockholm	30.27	768.9	30.45	773.4	44.6	7.0	61	Calm			0		10			0	0		
Wisby	30.31	769.8	30.37	771.3	40.6	4.8	78	N			4		5			0	0		
Sub-Series.																			
Upsala	30.33	770.3	30.41	772.5	44.6	7.0	66	SSW	2.5	1.1			10			0	0		Nils Ekholm
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.74	730.0	30.19	766.8	46.8	8.2	43	NNE			4		3			0	0		The Observatory.
Zurich	28.66	727.9	30.33	770.4	43.7	6.5	63	N			2		10			0.008	0.2	Raining	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.92	760.0	65.5	18.6	62	ESE	8	3.5			4	SW		0	0		The Observatory.
Valona			30.01	762.2	58.6	14.8		SW			1		10			0	0	Covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.92	759.9	71.1	21.7	72	NE			2		0			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum't'al error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
Albany, New York	29.98	761.5	30.06	763.5	75	23.9	64	S	5	2.2		0	8ks		NW	Inap.	Inap.	Fair	
Alpena, Michigan	29.25	742.9	29.86	758.4	68	20.0	84	SW	8	3.6		5c	2s	W		0.12	3.0	Fair	
Atlanta, Georgia	29.10	739.1	30.23	767.8	68.0	20.0	74	E	5	2.2		0	0			0	0	Clear	
Atlantic City, New Jersey	30.18	766.6	30.19	766.8	60	15.6	88	SW	10	4.5		5k	Fg	W	Calm	0	0	Fair	
Atton Id., Alaska	29.40	746.7			37	2.8	90	S	22	9.8			10s		W	0	0	Cloudy	
Augusta, Georgia	30.12	765.0	30.31	769.9	69.0	20.6	80	SE	6	2.7		0	0			0	0	Clear	
Baltimore, Maryland	30.15	765.8	30.20	767.1	69	20.6	70	S	5	2.2		8cs;ck	0	NW		0	0	Fair	
Barnegat, New Jersey	30.13	765.3	30.15	765.8	63	17.2	78	SW	11	4.9		8ck	Hz	W	Calm	0	0	Fair	
Bismarck. Dakota	28.00	711.2	29.85	758.2	52	11.1	72	NW	18	8.0		2c	0	Calm		0	0	Clear	
Boise City, Idaho	27.22	691.4	30.18	766.6	36	2.2	71	W	10	4.5		0	0			0	0	Clear	
Boston, Massachusetts	29.94	760.5	30.09	764.3	53.0	11.7	90	SW	1	0.4			Fg			0.09	2.3	Dense fog	
Brackettville, Texas	28.70	729.0	29.71	754.6	72	22.2	95	E	16	7.2			10ks		E	0	0	Cloudy	
Brownsville, Texas	29.88	758.9	29.93	760.2	78	25.6	86	SE	6	2.7		0	0			0	0	Clear	
Buffalo, New York	29.35	745.5	30.05	763.3	54.5	12.5	93	SW	10	4.5			10s		W	Inap.	Inap.	Cloudy	
Burlington, Vermont	29.69	754.1	29.97	761.2	65.5	18.6	92	S	5	2.2			10s		W	0.07	1.8	Cloudy	
Cairo, Illinois	29.76	755.9	30.13	765.3	75	23.9	77	S	6	2.7		0	0			0	0	Clear	
Campo, California	27.35	694.7	29.92	760.0	48	8.9	78	W	2	0.9			10ks		W	0.03	0.8	Cloudy	
Camp Thomas, Arizona	27.12	688.8			54	12.2	43	Calm			0	2ck	0			0	0	Clear	
Cape Henry, Virginia	30.25	768.3	30.27	768.8	68	20.0	70	SW	17	7.6		0	0			0	0	Clear	
Cape May, New Jersey																			
Castroville, Texas	29.12	739.6	29.80	756.9	75	23.9	81	S	8	3.6			10s		S	0	0	Cloudy	
Cedar Keys, Florida	30.17	766.3	30.19	766.8	70	21.1	80	NE	6	2.7		0	0			0	0	Clear	
Champaign, Illinois	29.25	742.9	30.01	762.2	68	20.0	95	S	10	4.5		8c	0	S		0	0	Fair	
Charleston, S. Carolina	30.22	767.6	30.28	769.1	71	21.7	75	E	12	5.4		0	0			0.01	0.3	Clear	
Charlotte, N. Carolina	29.43	747.5	30.24	768.1	67.5	19.7	84	SW	3	1.3		0	Hz			0	0	Clear	
Chattanooga, Tennessee	29.47	748.5	30.26	768.6	63	17.2	94	E	2	0.9			Fg		Calm	1.23	31.2	Dense fog	
Cheyenne, Wyoming	23.87	606.3	29.81	757.2	43	6.1	92	NE	8	3.6			10n		S	0.04	1.0	Light rain	
Chicago, Illinois	29.29	744.0	29.95	760.7	71.4	21.9	85	SW	11	4.9		8ck	0	W		0.20	5.1	Fair	
Chincoteague, Virginia	30.22	767.6	30.24	768.1	58	14.4	94	SW	21	9.4		2k	0	SW		0	0	Fair	
Cincinnati, Ohio	29.54	750.3	30.17	766.3	72	22.2	76	S	5	2.2		1c;hz	Hz	W		0	0	Light haze	
Cleveland, Ohio	29.38	746.2	30.07	763.8	72.8	22.7	76	SW	15	6.7		1cs	0			0.06	1.5	Clear	
Coleman City, Texas	28.10	713.7	29.70	754.4	70	21.1	85	S	6	2.7			10s		S	0	0	Cloudy	
Columbus, Ohio	29.33	745.0	30.14	765.5	69	20.6	80	S	4	1.8		0	Hz			0.01	0.3	Clear	
Concho, Texas	27.95	709.9	29.55	750.6	70	21.1	90	S	8	3.6			10s		S	0	0	Cloudy	
Corsicana, Texas	29.52	749.8	29.98	761.5	74	23.3	81	S	8	3.6		0	8ks			0	0	Cloudy	
Davenport, Iowa	29.30	744.2	29.91	759.7	72	22.2	80	S	14	6.3			10s		SW	0.03	0.8	Cloudy	
Dayton, Washington T'y	28.37	720.6	30.06	763.5	46	7.8	47	S	5	2.2		0	0			0	0	Clear	
Deadwood, Dakota	25.23	640.8			46	7.8	92	Calm	0	0			10n			0.54	13.7	Light rain	
Decatur, Texas																			
Delaware Breakwater, Del.	30.17	766.3	30.19	766.8	65	18.3	78	SW	24	10.7		9ck	0	W		0	0	Cloudy	
Denison, Texas	29.16	740.7	29.92	760.0	74	23.3	76	SE	8	3.6			10s		SE	0	0	Cloudy	
Denver, Colorado	24.65	626.1	29.87	758.7	50.1	10.1	79	W	5	2.2		2k	2s	E	Calm	0	0	Fair	
Des Moines, Iowa	28.94	735.1	29.77	756.1	72	22.2	80	SW	16	7.2			10ks		SW	0	0	Cloudy	
Detroit, Michigan	29.34	745.2	30.01	762.2	70.0	21.1	80	SW	12	5.4		6c;cs	0	W;C		0.01	0.3	Fair	
Dodge City, Kansas	27.22	691.4	29.38	746.2	69	20.6	85	S	17	7.6		0	0			0	0	Clear	
Dubuque, Iowa	29.20	741.7	29.86	758.4	71.2	21.8	80	S	7	3.1			10s		Calm	0	0	Cloudy	
Duluth, Minnesota	29.15	740.4	29.83	757.7	41	5.0	100	NE	4	1.8			Fg			0.32	8.1	Dense fog	
Eagle Pass, Texas	29.07	738.4	29.77	756.1	75	23.9	86	SE	11	4.9			10s		SE	0.01	0.3	Cloudy	
Eagle Rock, Idaho	24.98	634.5	29.63	752.6	36	2.2	90	N	20	8.9			10n			0.44	11.2	Light rain	
Eastport, Maine	30.00	762.0	30.07	763.8	44.5	6.9	94	SE	9	4.0			Fg			Inap.	Inap.	Dense fog	
El Paso, Texas	26.69	662.7			65	18.3	35	S	2	0.9		0	1s			0	0	Clear	
Erie, Pennsylvania	29.36	745.7	30.05	763.3	73	22.8	76	W	13	5.8		0	0			0.15	3.8	Clear	
Escanaba, Michigan	29.24	742.7	29.89	759.2	50	10.0	93	N	1	0.4			Fg		Calm	0.19	4.8	Dense fog	
Florence, Arizona	28.35	720.1	29.95	760.7	55	12.8	39	Calm	0	0		0	0			0	0	Clear	
Fort Apache, Arizona	24.94	633.5	30.39	771.9	35	1.7	53	E	4	1.8		0	2s		Calm	Inap.	Inap.	Fair	
Fort Assinnaboine, Montana	27.31	693.7			36	2.2	71	Calm	0	0		0	5ks		Calm	0	0	Fair	
Fort Bennett, Dakota	28.13	714.5			58	14.4	88	N	8	3.6		10cs	0	NW		0.57	14.5	Cloudy	
Fort Benton, Montana																			
Fort Buford, Dakota	28.05	712.5	29.90	759.4	45	7.2	61	NW	16	7.2		10cs	0	W		0	0	Cloudy	
Fort Custer, Montana	26.99	685.5			35	1.7	90	NW	22	9.8			10n		Calm	0.20	5.1	Light rain	
Fort Davis, Texas	25.08	637.0	30.04	763.0	65	18.3	78	W	8	3.6		5ck	0	W		0	0	Fair	
Fort Elliott, Texas	27.13	689.1	29.33	745.0	67	19.4	69	SE	20	8.9			10s		SE	0	0	Cloudy	
Fort Gibson, Indian T'y	29.42	747.3	29.94	760.5	73	22.8	81	SE	8	3.6		0	0			0	0	Clear	
Fort Grant, Arizona	25.13	638.3	29.93	760.2	55	12.8	45	NE	4	1.8		2k	0	SW		Inap.	Inap.	Clear	
Fort Griffin, Texas	28.51	724.1	29.72	754.9	72.2	22.3	76	SE	24	10.7			10s		SE	0	0	Cloudy	
Fort Keogh, Montana	27.49	698.2			39	3.9	81	N	21	9.4		10cs	0			0.02	0.5	Cloudy	
Fort Macon, North Carolina	30.30	769.6	30.31	769.9	67	19.4	89	S	12	5.4		5k	Hz	SE	Calm	0	0	Fair	
Fort McKavett, Texas	27.65	702.3	29.48	748.8	70.1	21.2	90	S	7	3.1			10ks		S	Inap.	Inap.	Cloudy	
Fort Missoula, Montana	26.78	680.2			49	9.4	71	SW	1	0.4		8k	0			0	0	Cloudy	
Fort St. Michaels																			
Fort Shaw, Montana	26.46	672.1			39	3.9	55	NE	5	2.2		10sc	0	W		0	0	Cloudy	
Fort Sill, Indian Territory	28.68	728.5	29.74	755.4	68	20.0	90	S	14	6.3			10s		S	0	0	Cloudy	
Fort Stevenson, Dakota	28.02	711.7			44	6.7	68	N	36	16.1			10s		N	0	0	Cloudy	
Fort Verde, Arizona					51	10.6	46	W			1	0	0			0.01	0.3	Clear	
Fredericksburg, Texas	28.18	715.8	29.68	753.9	71	21.7	95	SW	20	8.9			10ks		SW	0	0	Cloudy	
Galveston, Texas	30.01	762.2	30.05	763.3	76	24.4	86	S	16	7.2			10ks		S	0	0	Cloudy	
Grand Haven, Michigan	29.32	744.7	29.95	760.7	63	17.2	89	SW	24	10.7		8k	0	SW		0.05	1.3	Fair	
Hatteras, North Carolina	30.28	769.1	30.31	769.9	69	20.6	80	NW	3	1.3		1k	0	Calm		0	0	Clear	
Helena, Montana	25.84	656.3			41	5.0	57	N	2	0.9		5k	0	Calm		0	0	Fair	
Henrietta, Texas	28.87	733.3	29.75	755.6	72	22.2	80	SE	12	5.4			10s		SE	0	0	Cloudy	
Indianapolis, Indiana	29.32	744.7	30.07	763.8	73	22.8	76	S	6	2.7		5c	0	W		0	0	Fair	
Indianola, Texas	29.99	761.7	30.01	762.2	76.6	24.8	86	SE	12	5.4		2c	Hz	W		0	0	Fair	
Jacksboro, Texas	28.72	729.5	29.80	756.9	71	21.7	90	SE	14	6.3		5ck	2ks	SW	SE	0	0	Cloudy	
Jacksonville, Florida	30.18	766.6	30.22	767.6	73	22.8	72	NE	5	2.2		2k	0	NE		0	0	Clear	
Keokuk, Iowa	29.30	744.2	29.91	759.7	72.8	22.7	83	S	17	7.6		10cs;k	0	SW		0.04	1.0	Cloudy	
Key West, Florida	30.04	763.0	30.08	764.0	76.6	24.8	77	E	15	6.7		1k	0	E		0	0	Clear	
Kittyhawk, North Carolina	30.30	769.6	30.33	770.4	68	20.0	79	SW	14	6.3		2c	Hz	NE		0	0	Clear	
Knoxville, Tennessee																			
La Crosse, Wisconsin	29.08	738.6	29.78	756.4	70.8	21.6	80	S	4	1.8			10s			0	0	Cloudy	
La Mesilla, New Mexico	25.97	659.6	30.12	765.0	60	15.6	49	Calm	0	0			10s		S	0	0	Cloudy	
Laredo, Texas	29.42	747.3	29.74	755.4	76	24.4	91	SE	6	2.7		0	5ks		SE	0	0	Fair	
Leavenworth, Kansas	29.01	736.8	29.81	757.2	71	21.7	80	S	14	6.3		4k	0	S		0.04	1.0	Fair	
Lewiston, Idaho	29.25	742.9	29.90	759.4	46	7.8	54	NE	2	0.9			10s		NE	0	0	Cloudy	
Little Rock, Arkansas	29.76	755.9	30.06	763.5	71	21.7	95	S	8	3.6		0	0			0	0	Clear	
Los Angeles, California	29.58	751.3	29.95	760.7	51.3	10.7	86	NE	4	1.8		0	4s		Calm	0	0	Fair	
Louisville, Kentucky	29.60	751.8	30.13	765.3	73.0	22.8	76	S	6	2.7		0	0			0.25	6.3	Clear	
Lynchburg, Virginia	29.56	750.8	30.22	767.6	70	21.1	61	Calm	0	0		0	0			0	0	Clear	
Madison, Wisconsin	28.91	734.3	29.84	757.9	70	21.1	90	S	10	4.5			10s		W	0	0	Cloudy	
Marquette, Michigan	29.18	741.2	29.89	759.2	47	8.3	92	Calm	0	0			Fg			0.11	2.8	Dense fog	
Mason, Texas	28.28	718.3	29.96	761.0	73.4	23.0	81	S	9	4.0		0	4s		S	0	0	Fair	
Memphis, Tennessee	29.80	756.9	30.14	765.5	75	23.9	86	S	2	0.9		0	0			0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.20	741.7	29.88	758.9	72	22.2	80	S	9	4.0		2c	5ks	NW		0	0	Fair	
Mobile, Alabama	30.10	764.5	30.18	766.6	71	21.7	90	NE	4	1.8		0	0			0	0	Clear	
Montgomery, Alabama	30.00	762.0	30.24	768.1	68	20.0	90	SE	2	0.9		0	0			0.50	12.7	Clear	
Moorhead, Minnesota	28.76	730.5	29.68	753.9	58	14.4	88	N	12	5.4			1cn		N	0.38	9.7	Light rain	
Morgantown, W. Virginia	29.12	739.6	30.08	764.0	69	20.6	80	S	1	0.4		0	Hz			0	0	Clear	
Mt. Washington, N. H.	23.87	606.3	30.23	767.8	48	8.9	100	NW	50	22.3			Fg		NW	0.89	22.6	Dense fog	
Nashville, Tennessee	29.68	753.9	30.20	767.1	73.7	23.2	66	S	3	1.3		0	Sk			0	0	Clear	
New Haven, Connecticut	29.99	761.7	30.10	764.5	67	19.4	79	SW	4	1.8		0	Hz			0	0	Clear	
New London, Connecticut	30.05	763.3	29.10	764.5	68	20.0	74	W	6	2.7		0	0			0	0	Clear	
New Orleans, Louisiana	30.09	764.3	30.15	765.8	70.2	21.2	92	SE	1	0.4		0	Fg			0	0	Clear	
Newport, Rhode Island	30.05	763.3	30.10	764.5	56.0	13.3	84	SW	2	0.9		1c	Hz	W		0	0	Dense haze	
New River, N. Carolina																			
New Shoreham, Rhode I'd	30.08	764.0	30.11	764.8	57.0	13.9	87	SW	4	1.8		0	0			0	0	Clear	
New York, New York	29.96	761.0	30.13	765.3	65	18.3	84	W	7	3.1		0	Fg			0	0	Clear	
Norfolk, Virginia	30.23	767.8	30.29	769.4	71	21.7	71	SW	13	5.8		2cs	0			0	0	Clear	
North Platte, Nebraska	26.85	682.0	29.32	744.7	56	13.3	87	NW	10	4.5			10s		NW	0	0	Cloudy	
Olympia, Washington T'y	30.14	765.5	30.18	766.6	45.5	7.5	80	SW	2	0.9		10k	0	N		0	0	Cloudy	
Omaha, Nebraska	28.62	726.9	29.64	752.8	73.8	23.2	82	S	19	8.5			10s		SW	0	0	Cloudy	
Oswego, New York	29.68	753.9	29.99	761.7	70.0	21.1	80	S	7	3.1		1c	0	W		0.37	9.4	Clear	
Pensacola, Florida	30.16	766.1	30.20	767.1	73	22.8	90	E	7	3.1		0	0			0	0	Clear	
Philadelphia, Pa	30.10	764.5	30.16	766.1	67	19.4	79	W	14	6.3		2ck	Hz	W		0	0	Fair	
Phœnix, Arizona	28.77	730.7	30.58	776.7	50	10.0	72	E	1	0.4		0	0			0	0	Clear	
Pike's Peak, Colorado	17.66	448.6	29.87	758.7	13	—10.6	44	SW	48	21.5		0	0			0.09	2.3	Clear	
Ploche, Nevada	23.90	607.0	29.68	753.9	37	2.8	81	Calm	0	0		0	1s		Calm	0.01	0.3	Clear	
Pittsburg, Pennsylvania	29.36	745.7	30.15	765.8	69	20.6	80	S	6	2.7		0	0			0.03	0.8	Clear	
Port Eads, Louisiana	30.14	765.5	30.15	765.8	73.3	22.9	81	SE	9	4.0		0	0			0	0	Clear	
Port Huron, Michigan	29.35	745.5	29.99	761.7	66.4	19.1	89	S	13	5.8		8cs	Fg	N		0.43	10.9	Fair	
Portland, Maine	30.01	762.2	30.06	763.5	53	11.7	86	S	4	1.8			Fg			0.44	11.2	Dense fog	
Portland, Oregon	30.14	765.5	30.21	767.3	42.5	5.8	87	S	3	1.3		0	1s			0	0	Clear	
Portsmouth, N. Carolina					69	20.6	80	NW	4	1.8		5k	0	W		0	0	Fair	
Prescott, Arizona	24.66	626.4	30.02	762.5	36	2.2	71	SW	1	0.4		0	0			0.07	1.8	Clear	
Punta Rassa, Florida	30.08	764.0	30.10	764.5	73	22.8	72	E	14	6.3		0	0			0	0	Clear	
Red Bluff, California	29.59	751.6	29.93	760.2	58.5	14.7	43	N	12	5.4		0	0			0	0	Clear	
Rio Grande City, Texas	29.74	755.4	29.95	760.7	75	23.9	86	SE			4	0	8s		SE	0	0	Fair	
Rochester, New York	29.39	746.5	29.98	761.5	73	22.8	76	W	11	4.9		1c	Fg	Calm		0.93	23.6	Clear	
Roseburg, Oregon	29.62	752.3	30.20	767.1	39.1	3.9	91	Calm	0	0		0	0			0	0	Clear	
Sacramento, California	29.84	757.9	29.92	760.0	51.8	11.0	79	NE	4	1.8		0	0			0	0	Clear	
St. Louis, Missouri	29.48	748.8	30.04	763.0	69.5	20.8	90	S	9	4.0		5c	0			0	0	Fair	
St. Paul, Minnesota	28.85	732.8	29.63	752.0	67	19.4	95	SE	12	5.4			10s		SE	0.08	2.0	Threatening	
Salt Lake City, Utah	25.50	647.7	29.83	757.7	43	6.1	83	Calm	0	0			1on		Calm	0.57	14.5	Heavy rain	
San Antonio, Texas	29.23	742.4	29.90	759.4	75.0	23.9	86	SE	8	3.6			10ks		SE	Inap.	Inap.	Cloudy	
San Diego, California	29.85	758.2	29.93	760.2	51.2	10.7	86	NE	5	2.2		0	8s			0	0	Fair	
Sandusky, Ohio	29.43	747.5	30.07	763.8	73	22.8	76	SW	16	7.2		0	0			Inap.	Inap.	Clear	
Sandy Hook, New Jersey	30.10	764.5	30.13	765.3	67.2	19.6	79	W	11	4.9		0	Hz			0	0	Clear	
San Francisco, California	29.88	758.9	29.94	760.5	52	11.1	82	SW	1	0.4		0	0			0	0	Clear	
Santa Fé, New Mexico	23.19	589.0	29.73	755.1	44	6.7	84	N	3	1.3			Hz			0.01	0.3	Dense haze	
Savannah, Georgia	30.18	766.6	30.28	769.1	72	22.2	83	E	2	0.9		1k	Fg	E		0	0	Clear	
Shreveport, Louisiana	29.85	758.2	30.08	764.0	71.6	22.0	85	SE	3	1.3		2k	0			0	0	Fair	
Silver City, New Mexico	24.17	613.9	30.37	771.4	43	6.1	51	Calm	0	0		0	2s		Calm	0	0	Clear	
Sitka, Alaska																0.14	3.6		
Smithville, North Carolina	30.30	769.6	30.33	770.4	67	19.4	89	NW	4	1.8		8k	1s	E		0	0	Cloudy	
Socorro, New Mexico	25.24	641.1	29.30	744.2	59	15.0	23	SE	12	5.4		0	0			0	0	Clear	
Spokane Falls, Wash. Ter.	28.06	712.7	29.95	760.7	36	2.2	70	SW	8	3.6		5ck	0	Calm		0	0	Fair	
Springfield, Illinois	29.38	746.2	30.03	762.7	69	20.6	92	S	8	3.6		2c	2s	W	SW	0.04	1.0	Fair	
Springfield, Massachusetts	29.96	761.0	30.09	764.3	62	16.7	77	N	2	0.9		10cs	Hz	N		Inap.	Inap.	Cloudy	
Stockton, Texas	29.82	681.2	29.82	757.4	69.8	21.0	85	SW	1	0.4		0	1s		Calm	0	0	Clear	
St. Vincent, Minnesota	28.93	734.8	29.71	754.6	49	9.4	100	SE	1	0.4			Fg		Calm	0.68	17.3	Dense fog	
Thatcher's Island, Mass	30.05	763.3	30.10	764.5	49	9.4	100	N	1	0.4			Fg			1.12	28.4	Dense fog	
Toledo, Ohio	29.38	746.2	30.03	762.7	74	23.3	78	S	9	4.0		2c;hz	Sk	W		Inap.	Inap.	Dense haze	
Tucson, Arizona	27.41	696.2	29.96	761.0	53	11.7	48	SE	3	1.3		0	0			0	0	Clear	
Umatilla, Oregon	29.83	757.7	30.34	770.6	37.5	3.1	81	S	5	2.2		0	0			0	0	Clear	
Uvalde, Texas	28.94	735.1	29.73	755.1	74	23.3	86	SE	4	1.8			10s		S	0	0	Cloudy	
Vicksburg, Mississippi	29.91	759.7	30.16	766.1	71	21.7	90	SE	5	2.2			10s		S	0	0	Cloudy	
Visalia, California	29.55	750.6	29.92	760.0	53	11.7	80	E	3	1.3		0	0			0.05	1.3	Clear	
Washington, D. C.	30.10	764.5	30.21	767.3	70	21.1	75	S	5	2.2		2cs	0			0	0	Clear	
Wickenburg, Arizona					48	8.9	49	Calm			0	0	0			0	0	Clear	
Wilmington, N. Carolina	30.25	768.3	30.30	769.6	67	19.4	84	Calm	0	0		1ck	0	Calm		0	0	Clear	
Winnemucca, Nevada	25.60	650.2	29.96	761.0	37	2.8	53	NE	8	3.6		0	0			0	0	Clear	
Wood's Holl, Mass	30.06	763.5	30.10	764.5	53	11.7	86	W	10	4.5		0	Hz			0	0	Dense haze	
Yankton, Dakota	28.38	720.8	29.59	751.0	70	21.1	75	W	12	5.4		0	0			1.00	25.4	Clear	
Yuma, Arizona	29.70	754.4	29.85	758.2	57.8	14.3	82	N	3	1.3		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.03	559.6			55.0	12.8	83	Calm	0	0		8c;cs	0			0.42	10.7	Fair	Thomas Herman
Buff Bay Town, Jamaica	29.72	754.9	30.03	762.7	70	21.1	90	E				8k	8k						
Havana, Cuba, W. I.	30.03	762.7	30.08	764.0	78	25.6	78	Calm	0	0			8ks		SE	0.06	1.5	Cloudy	A. Van Caneghem, Ass't.
Jakobshavn, Greenland	29.57	751.1	29.62	752.4	18.7	— 7.4		SE			2		6			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	29.90	759.4	29.91	759.7	79.8	26.6	79	Calm	0	0		0	2s			0.38	9.7	Fair	Robert Johnstone
Navassa, W. I.	29.84	757.9	29.92	760.0	78	25.6	82	NE				5cs	5	N	SE	3.85	97.8	Threatening	F. M. Everett.
Paramaribo, S. A.	29.94	760.5	29.94	760.5	82	27.8	79	E			2	5ck	6k	E		0.900	22.9		Dr. O. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.32	744.7	29.87	758.7	78	25.6	89	S			2	2c	8ks	Calm	S	0.36	9.1	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					77.0	25		SE			3	60k	0	NE		0	0		Earl Flint.
Santiago de Cuba, W. I.	29.83	757.7	29.85	758.2	78	25.6	61	N	4.8	2.1		2ks	4ks			0	0	Fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.77	756.1	29.82	757.4	30.0	— 1.1	95	NW	9	4.0		2k	1s	NW	NW	0	0	Fair	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper.	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
H. M. S. Albatross, N. 33° 43′, E. 132° 00′	30.20	767.1	60	15.6		SSW			2-3		1							Blue sky	Comm A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, N. 38° 15′, E. 15° 40′	29.96	761.0	65	18.3	?	E			3		5							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 25° 30′, E. 56° 29′	29.75	755.6	85	29.4	68	WSW			3-4		0							Blue sky	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			64	17.8		SSE			2		6	SSE				1	SSE	D. clouds	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	29.91	759.7	79	26.1	82	NE			1		9							Showery	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 33° 57′, E. 25° 37′	30.25	768.3	65	18.3	63	SSW			1-2		4	SW				6	E	D. clouds	Com. F. W. Richards.
H. M. S. Champion, S. 6° 31′, W. 9° 10′	29.88	758.9	81	27.2	74	ESE			4		4	ESE				3	SSE	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 27° 40′, E. 121° 35′	30.16	766.1	62	16.7	88	NNE			1									Misty	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer, N. 39° 53′, E. 19° 50′	29.88	758.9	64	17.8		ESE			4		8	SSW				2	SSW	Showery	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, James Bay, St. Helena	30.06	763.5				Calm			0									D. clouds	Capt. J. C. Parvis.
H. M. S. Daring, N. 8° 42′, E. 70° 09′	29.86	758.4	87	30.6		NW			2		3	S				1	SSE	D. clouds	Capt. F. J. Eliott.
H. M. S. Dido, S. 33° 58′, E. 25° 38′	30.31	769.9	62	16.7		SSE			1		2	ESE				3	ESE	D. clouds	Capt C. Domville.
H. M. Dock-Yard																			Capt. J. Barnardisten.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 08′, W. 53° 28′	30.17	766.3	40	4.4	91	SW			1-2		10							Misty	Capt. W. R. Kennedy.
H. M. S. Dryad, N. 21° 24′, E. 59° 32′	29.84	757.9	86	30.0		S			3		5	SW				4	SW	D. clouds	Capt. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 10° 40′, E. 109° 00′	29.88	758.9	83	28.3		ENE			6		7	NE				3	NE	Misty	Comm. C. Johnstone.
H. M. S. Emerald, S. 9° 20′, W. 179° 50′	29.85	758.2	83	28.3		SSF			3		7	SE				2	SE	D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Trincomalee, Ceylon, India.	29.77	756.1	86	30.0	72	SSW			1		9							D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 33° 14′. W. 64° 16′	30.24	768.1	68	20.0		N			3		7	N				4	NNW	D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo, N. 17° 47′, W. 76° 10′	29.94	760.5	80	26.7	91	ENE			3-4		6	NE				3	E	Showery	Comm. R. N. Custance.
H. M. S. Flying Fish, Hong-Kong, China	30.04	763.0	77	25.0	100	E			1		6	SW				1	E	Misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 31° 40′, W. 136° 00′	30.26	768.6	61	16.1	71	Calm			0		3	NW				2	NNE	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 43° 40′, W. 61° 23	29.81	757.2	56	13.3	94	WNW			4		6					3	W	D. clouds	Capt. L. F. Jones.
H. M. S. Griffon, N. 19° 39′, W. 82° 55′	29.95	760.7	80	26.7	87	NE			4		1	NE				2	NE	Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant, S. 40° 00′, E. 113° 20′	29.30	744.2	58	14.4	88	N			7-8		10	N				7	NNW	Drizzling	Capt. C. O.P. Fitzgerald.
H. M. S. Iris, Naples, Italy	29.92	760.0	62	16.7	66	SSE			3		6	SSE				3	SSE	D. clouds	Capt. E. H. Seymour.
H. M. S. IronDuke, N. 25° 09′, E. 119° 31′	30.10	764.5	64	17.8	78	N			2-3		9	SW				2-3	SE	Raining	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.99	761.7	65	18.3		Calm			0		8	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	30.20	767.1	64	17.8		Calm			0		0							Blue sky	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Stone Cutter's Id., China	30.08	764.0	74.7	23.7	85	E			1		8	ENE						D. clouds	Capt. A. Carpenter.
H. M. S. Midge, Swatow, China *	30.07	763.8				NE			2			NE						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 36° 07′, W. 5° 21	29.91	759.7	65	18.3	78	ENE			6-8		10	ENE						Showery	Capt. H. H. Rawson.
H. M. S. Modeste, N. 1° 48′, E. 105° 33′	29.87	758.7	85	29.4	87	NE			3		1							Blue sky	Capt. J. G. Mead.
H. M. S. Monarch, Goletta, Tunis, N. Africa	30.00	762.0	62	16.7	88	NNE			1		10	NNE						Overcast	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	Up'er 0—10	Lo'er 0—10	Upper. From.	Lower. From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda Islands, W. I.	30.25	768.3	66	18.9	88	NNE			3		7	NNE						D. clouds	Capt. E. B. Drummond.
H. M. S. Orontes, S. 22° 32′, E. 53° 00′ †	29.96	761.0	74.5	23.6	93	Var.			1		10					2	SW; NNW	Raining	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 80° 38′, W. 79° 03′	29.79	756.7	81.5	27.5		N			2		10					2	N	Overcast	Capt. F. R. Dicken.
H. M. S. Penguin, S. 44° 15′, W. 75° 30′	29.77	756.1	50	10.0		SW			2		10					2	SW	Overcast	Capt. A. C. Paget.
H. M. S. Phœnix, N. 17° 38′, W. 77° 49′	29.89	759.2	81	27.2	83	N			1		1	NE				1	ESE	Blue sky	Capt. H. H. Grenfel.
H. M. S. Rambler, N. 3° 42′, E. 8° 18′	29.89	759.2	84	28.9		Calm			0		8							D. clouds	Capt. Hon. A.C. Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	30.16	766.1	41	5.0		N			1		4							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.87	758.7	82.4	28.0	89	ESE			2		3							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis, N. 35° 24′, E. 16° 22′	30.04	763.0	66	18.9	79	WNW			4		4					1	WNW	D. clouds	Capt. G. O. Twiss.
H. M. S. Shannon, S. 14° 12′, W. 29° 03′	30.01	762.2	77	25.0	86	E			4		7	E				4	ESE	Showery	Capt. J. D'Arcy.
H. M. S. Superb, N. 38° 06′, E. 13° 21′ *	29.99	761.7	68	20.0	74	NNE			2–3									Misty	Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer, N. 38° 28′, E. 13° 26′	29.96	761.0	68	20.0	56	Calm			0		5					4	NNW	D. clouds	Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A.	29.88	758.9	60	15.6	71	WNW			3		10	W						Squally	Capt. A. H. Markham.
H. M. S. Turquoise, S. 15° 30′, W. 75° 49′	29.94	760.5	65	18.3	97	SE			1		5					3	S	D. clouds	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 15° 30′, E. 41° 40′	29.73	755.1	88	31.1	80	SSE			1										Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.			80	26.7		Calm			0		2							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, S. 40° 28′, E. 174° 13′	29.90	759.4	60	15.6	88	WNW			4–5		7	ESE				4	WNW	Squally	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Task, West Bay, Persia	29.72	754.9	93.5	34.2	69	SW			1		0					Sm'h		Blue sky	Capt. T. P. Nesham.
H. M. S. Zephyr, N. 30° 10′, E. 122° 14′	30.21	767.3	61	16.1	100	E			1		8	NE				1	NE	D. clouds	Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Santiago, Cape Verd I'ds.	29.97	761.2	77.9	25.5	86	N			3		0					1	SE	Blue sky	S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't.
Tamega																			P. I. R. de Carvoattilo, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡ N. 49° 37′, W. 6° 23′	30.62	777.8	50.2	10.1	59	ENE			3		2							D. clouds	Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.23	767.8	74	23.3	81	SE	9	4.0			5		SE	0	0			Fair	
N. Yard, Portsmouth, N. H	30.07	763.8	52	11.1	93	ENE	2	0.9		10c	0	ENE		0	0			Foggy	
Naval Hospital, Yokahama, Japan	30.01	762.2	66.5	19.2	57	SSW			4		0			0	0			Clear.	
Adams, Callao, Peru	29.88	758.9	66	18.9	94	SSE			1		8					Long	SW	Cloudy	
Alaska, Callao, Peru	29.88	758.9	65	18.3	89	SSE			1		10					Sm'h		Overcast	
Alert, N. 22° 03′, E. 142° 31′	29.97	761.2	79	26.1	78	E			5		5		E			Mod.	E	Fair	
Alliance, Norfolk, Va	30.27	758.8	66	18.9	84	S			1		2			0	0	Sm'h		Clear.	
Ashuelot, Nagasaki, Japan	30.22	767.6	62	16.7	77	W			1		2		Calm					Foggy	
Colorado, New York, N. Y	30.16	766.1	70	21.1	75	SW			5		0			0	0			Clear	
Constitution, N. 36° 58′, W. 76° 20′	30.23	767.8	74	23.3	68	SW	9	4.0			0							Clear	
Franklin, Norfolk, Va	30.22	767.6	67	19.4	79	WNW	11	4.9			0			0	0			Clear.	
Galena, Castellamare, Italy	29.96	761.0	64	17.8	53														
Independence, N. Yard, Mare I'd, Cal	29.92	760.0	54	12.2	80	SW	1.2	0.5			2		SW	0	0			Clear	
Jamestown, Sitka, Alaska	29.65	753.1	48	8.9	85	SE			5		10		SE	0.39	9.9			Squally	
Kearsarge, Port Royal, S. C	30.31	769.9	69	20.6	95	ENE			2		8		E			Sm'h		Fair	
Lackawanna, S. 25° 30′, W. 89° 17′	30.10	764.5	69	20.6	85	S			1-5		5		SSE			Mod.	SW	Fair	
Marion, Montevideo, Uruguay	30.11	754.8	62	16.7	88	E			3		10		Calm	0	0	Sm'h		Cloudy.	
Michigan, Erie, Pennsylvania	29.96	761.0	73	22.8		SW	6	2.7			0							Clear	
Minnesota, Newport, R. I	30.12	765.0	57	13.9	94	Calm			0		2					Sm'h		Hazy	
Monocacy, N. 31° 51′, E. 129° 32′	30.24	768.1	69	20.6	75	WSW			1		2		Calm			Sm'h		Hazy	
New Hampshire, Port Royal, S. C	30.23	767.8	72	22.2	85	NE	8	3.6			8		SSE	0	0			Fair	
Nipsic, N. 36° 24′, W. 2° 44′	30.02	762.5	65	18.3	63	E			7		10					R'gh		Hazy	
Onward, Callao, Peru †	29.94	760.5	65	18.3	94	SSE			1		8		S			Long	W	Cloudy	
Palos, Yokohama, Japan	30.16	766.1	63	17.2	83	S			2		2							Fair	
Passaic, Washington, D. C	30.18	766.6	68	20.0	100	SW			1		0							Clear	
Pensacola, N. 30° 27′, W. 148° 19′	30.23	767.8	69	20.6	90	E			2		8			0	0	Sm'h		Fair	
Portsmouth, Sewels Point, Va	30.18	766.6	65	18.3	94	SW			5		0							Clear	
Powhatan, New York, N. Y	30.12	765.0	70	21.1	75	SSW			2		2		NW					Hazy	
Quinnebaug, N. 30° 50′, W. 17° 15′	29.92	760.0	70	21.1	75	NE			2		8		NE			Long	ENE	Hazy	
Ranger, Sequepa, Mexico *	29.78	756.4	79	26.1	74	NNW			2		5		NW	0	0	Sm'h		Fair	
Richmond, N. 31° 45′, E. 132° 38′	30.20	767.1	69	20.6	61	NE			2		2		E	0	0	Sm'h	E	Hazy	
Saratoga, Hampton Roads, Va	30.24	768.1	65	18.3	84	SSW			3		2		SSW	0	0			Fair	
Shenandoah, Montevideo, Uruguay *	30.03	762.7	62	16.7	88	ENE			3		10					Sm'h		Cloudy	
St. Louis, League Island, Pa	29.70	754.4	68	20.0	84	SW	10	4.5			8		SW	0	0			Cloudy	
Swatara, Shanghai, China †*	30.14	765.5	69	20.6	75	ESE			2		2		W					D. clouds	
Tennessee, Hampton Roads, Va	30.29	769.4	68	20.0	90	SW	14	6.3			0			0	0	Sm'h		Clear.	
Ticonderoga, S. 42° 55′, W. 116° 00′	30.11	764.8	54	12.2	93	S			4		10		S	0.15	3.8	Light	SW	Cloudy	
Trenton, Castellamare, Italy *	29.89	759.2	65	18.3	44	W			2		2			1 h'r	light	Sm'h		Fair	
Vandalia, Woods Holl, Miss	30.09	764.3	51	10.6	93	WSW			2		0							Clear	
Wabash, Boston, Massachusetts	30.13	765.3	54	12.2	87	WSW	5	2.2			10		W	0.04	1.0			Overcast	
Wachusetts, N. 38° 28′, W. 135° 23′	30.11	764.8	59	15.0	100	S			4-6		10		Calm	Rain		Mod.	S	Raining	
Wyoming, N. 21° 15′, W. 54° 40′	29.92	760.0	76	24.4	82	N			1		10		NW			Long H'vy	NW	Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 38° 00′, W. 123° 18′	29.99	761.7	52	11.1	90	N			4		5							Misty	Capt. E. J. Molony.
Chin Yang																			Capt. N. Youlden.
S. S. Cipero, Trinidad, W. I.	29.89	759.2	79	26.1	91	Calm			0		5							D. clouds	Capt. W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne, N. 16° 46′, W. 40° 17′	30.05	763.3	76.5	24.7	80	E			4		8							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 34° 11′, W. 41° 05′	30.31	769.9	65.5	18.6	79	E			4		6							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow ‡																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ N. 4° 11′, W. 26° 52′	29.91	759.7	80.5	26.9	91	SE			3		8							Showery	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 49° 54′, W. 13° 12′	30.61	777.5	54.1	12.3	77	E			4		7					3-4	SE	D. clouds	Capt. H. W. Dyke.
Barque Mertola, N. 49° 15′, W. 14° 46′	30.59	777.0	51.6	10.9	93	ESE			3		10							Overcast	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria, ‡ S. 14° 18′, W. 60° 44′	30.03	762.7	77	25.0	82	ESE			3		7							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 16° 45′, E. 96° 14′	29.84	757.9	84.0	28.9	87	SSE			3		5							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton, ‡ N. 32° 55′, E. 29° 04′	29.95	760.7	69.5	20.8	72	W			3		2							Blue sky	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean																			Capt. W. H. Smith.
S. S. Circassian																			Capt. F. Archer.
S. S. Hibernian																			Capt. Wm. Richardson.
S. S. Nova Scotian																			
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Gallia, N. 50° 48′, W. 17° 19′ *	30.58	776.7	56	13.3		SSE			4		8		SE	0	0	Sm'h		Misty	Capt. W. H. P. Haines.
S. S. Scythia, N. 40° 28′, W. 72° 50′	29.94	760.5	56	13.3	100	WSW			3		0			0	0	Sm'h		Clear	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic, N. 44° 15′, W. 46° 16′ †	30.26	768.6	55	12.8		N			3		8		NW			Sm'h	W	D. clouds	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England †	30.70	779.8	57	13.9		WNW			4		6?		N	0	0			Clear?	Capt. Ch. W. Kennedy.
S. S. Republic, N. 48° 34′, W. 31° 49′ †	30.29	769.4	57	13.9	94	S			4		10			24hrs	light	Mod.	SW	Cloudy	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann, N. 39° 16′, W. 69° 13′	30.19	766.8	68	20.0		WSW			4		1		W	0	0	Mod.	W	Hazy	Capt. H. Baur.
S. S. Köln, N. 48° 50′, W. 31° 49′	30.21	767.3	57.0	13.9	100	SSW			4		10		W	10h'rs	rain	Long	SSW	Cloudy	Capt. Th. Jüngst.
S. S. Leipzig, N. 41° 08′, W. 51° 40′	30.26	768.6	49.0	9.4		E			1		0			0	0	Mod.	ENE	Fair	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England	30.62	777.7	57	13.9	87	WSW			3		2		WSW					Clear	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio																			W. Shackford, Chief Off'r
S. S. Pennsylvania, N. 43° 00′, W. 46° 21′ *†	30.19	766.8	56	13.3	94	E			3		10		E			Sm'h	E	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 23° 53′, W. 111° 18′ †‡	29.91	759.7	65	18.3	84	WNW			2		5		NW	0	0	G'tl	WNW	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, Yokohama, Japan †	30.22	767.6	64	17.8	73	SW			3		8		SW	0	0	Sm'h		Cloudy	Capt. H. Davison.
S. S. Gaelic, Yokohama, Japan *†	30.40	772.1	66	18.9	84	SE			2		2		W			Sm'h	W	Fair	Capt. W. H. Kidley.
S. S. Oceanic, N. 45° 10′, W. 157° 45′	30.08	764.0	47	8.3	85	W			3		10		W	0.01	0.3	5	WNW	Overcast	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon																			Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota, N. 45° 20′, W. 124° 47′ †*	30.18	766.6	51	10.6	93	NW			2		2		NW	0	0	Sm'h		Fine	Capt. H. G. Morse.
S. S. Idaho, N. 38° 27′, W. 124° 40′ †	29.90	759.4	48	8.9	85	NW			3		0					Light	W	Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 32° 46′, W. 117° 20′ †	29.94	760.5	56	13.3	87	SE			1		5		ESE			Mod.	W	Fair	Geo. H. Harrison.
S. S. Senator																			Capt. Thos. Wallace.
S. S. State of California, Portland, Oregon †	30.17	766.3	42	5.6	100	N			2		2			0	0			Clear	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal. †	29.94	760.5	49	9.4	93	Calm			0		2							Clear	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, Sydney, N. S. W	30.08	764.0	68	20.0	56	NNW			2		2		NW					Clear	A. Bannerman, 2d Officer
S. S. City of New York, Sydney, N. S. W †	30.05	763.3	62	16.7	100	S			3		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China †	30.08	764.0	70	21.1	75	ESE			2		2		E			Sm'h		Clear	Capt. G. G. Berry.
S. S. City of Sidney, N. 22° 34′, W. 155° 43′ †	30.12	765.0	76	24.4	64	ENE			4		5		NE	0	0	H'vy	ENE	Fair	Capt. H. C. Dearborn.
S. S. City of Tokio																			A. L. Ritchie, 2d Officer
S. S. Colima, N. 20° 04′, W. 105° 40′ †	29.89	759.2	78	25.6	82	NW			3		5		NW	0	0	Mod.	NNW	Fair	
S. S. Granada, Panama, Panama †	29.84	757.9	80	26.7	87	W			2		5		W	Squalls				Fair	Capt. R. R. Searle.
S. S. Zealandia, N. 31° 43′, W. 136° 22′	30.29	769.4	58	14.4	88	Var.			2		5?		SW	0	0	Sm'h	W	Cloudy?	Capt. M. Connolly.
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland																			Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 31° 46′, W. 80° 35′	30.22	767.6	72	22.2	80	ENE	5	2.2			5k		NE	0.03	0.8	Sw'll	SE	Cloudy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, N. 22° 53′, W. 45° 00′ †‡	30.14	765.5	78	25.6		ESE			6		5		E	0	0	Mod.	ESE	Clearing	Capt B. F. Woodbury.
Brigantine George																			Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Md. †	30.27	768.8	70	21.1	85	SSW	2	0.9		4c;cs	0			0	0			Clear	
Bark Sunbeam, N. 39° 05′, W. 14° 14′ †	29.92	760.0	62	16.7	83	NE			6		5		NE	0	0	R'gh	ENE	Fair	Capt. Jos. Hand.

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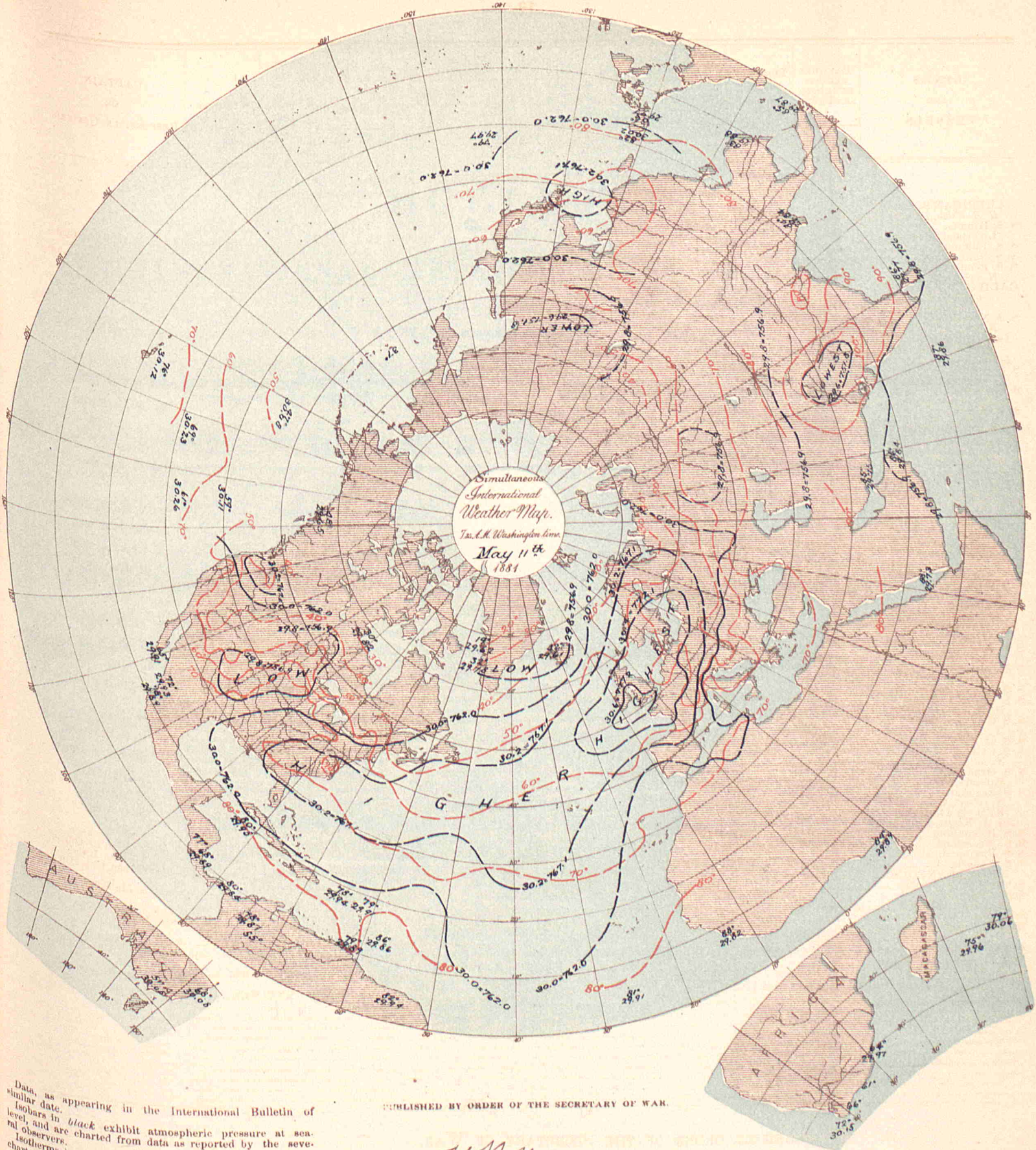
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

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W. B. Hazen

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

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 12, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco	‡		29.91	759.6	71.6	22.0	86	SW			2		4			0	0	Cloudy.	Dr. Ollive.
Nemours	‡		29.90	759.5	64.6	18.1	90	SW			4		5			0	0	Cloudy.	Raynard.
Algiers	‡		30.04	763.0	60.1	15.6	64	E			4		1			0.264	6.7	Very fair.	Nicolas.
La Calle	‡		30.04	763.0	51.8	11.0	87	WSW			3		6			0.650	16.5	Cloudy.	Fonfrède.
Tunis	‡		30.02	762.4															Jacques.
Sfax	‡		30.08	764.1															Gau.
Saida	‡		29.92	760.0	49.6	9.8	92	N			4		10			0.126	3.2	Covered.	Dumas.
Tebessa	‡		30.00	762.1	50.4	10.2	82	SE			2		10			0.244	6.2	Covered.	Watrin.
Geriville	‡																		Lonchamp.
Laghouat	‡		30.06	763.4	65.1	18.4	60	W			4		3			0.307	7.8	Pretty fair.	Herbin.
Biskra	‡		29.94	760.5															Baudassé.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.01	762.2	30.10	764.5	55.3	12.9	68	N	17	7.6			2			0	0	Very fine.	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.46	748.3	30.01	762.3	55.0	12.8	63	SE			3		10			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.31	744.4	30.07	763.8	57.6	14.2	57	E	24.2	10.8			10			0	0		Dr. Wierzbicki.
Eperies	29.15	740.3	30.03	762.7	51.8	11.0	91	Calm			0		10n			0.807	20.5		Julius Mikolik.
Gratz	‡ 28.79	731.2	30.05	763.2	49.8	9.9	70	S			3		8			0	0		Andreas Rospini.
Hermannstadt	28.50	723.8	29.91	759.8	56.5	13.6	78	SSE			1		10			0.575	14.6	Raining	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.76	730.6	30.15	765.8	39.0	3.9	87	WSW			1		10			1.398	35.5		The Staff.
Lemberg	29.09	738.9	30.08	763.9	56.5	13.6	48	SE			3		10			0	0		Dr. T. Stanecki.
Pola	29.87	758.8	29.99	761.7	54.9	12.7	48	WNW			4		6			0	0		I. R. Hydrographic Office.
Szathmar	29.49	749.1	29.96	760.9	54.5	12.5	69	N			1		10			0.213	5.4		Beicht Peter, S. J.
Szegedin	29.68	753.9	29.96	761.0	54.7	12.6	74	E			2		10			0.646	16.4		Karl Stancel.
Trieste	29.92	759.9	30.02	762.5	55.8	13.2	47	ENE			2		6			0	0	Slightly cl'dy	Secco.
Vienna	29.38	746.2	30.11	764.7	46.8	8.2	70	W			2		8			0.654	16.6		I. R. Central Met. Obs'y
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.18	766.6	30.28	769.1	55.3	12.9	66	E	7	3.1			5			0	0	Blue sky	W. Boswell.
Armagh, Observatory	30.22	767.6	30.45	773.4	60.0	15.6	55	SW	7	3.1			2					D. clouds	S. Call.
Bidston, Liverpool Obs'y			30.44	773.2	57.1	13.9	56	WNW	8	3.6			2					Blue sky	John Hartnup.
Bolton, Sharples	29.86	758.4	30.40	772.1	63.3	17.4	47	N	6	2.7			4					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.99	761.7	30.39	771.9	63.2	17.3	50	NW			1		1			0	0	Blue sky	J. McLandsbo ough, F.R.S
Bridgetown, Barbadoes	29.88	758.9	29.91	759.7	84.0	28.9	73	NE			1		8					Overcast	Corpl. J. Surgener, A.H.C.
Cardington			30.39	771.9	64.4	18.0	51	W			0.4		4					D. clouds	John McLaren.
Chatham, School M. E.	30.31	769.9	30.44	773.2	56.1	13.4	63	NE			2		6					D. clouds	Lance Cpl. R. Tear, R.E.
Falmouth, Observatory	30.22	767.6	30.45	773.4	59.1	15.1	57	SSE			1		0					Foggy	The Staff.
Fort Napier, Natal	27.78	705.6	30.00	762.0	64.1	17.8	69	NE			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.59	751.6	29.82	757.4	89	31.7	88	NW			1		3					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			30.42	772.7	56	13.3	87	SW			4		10			0	0	Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	29.80	756.9	29.85	758.2	62.6	17.0	86	E			6		10					Overcast	2nd Cpl. C. Baldwin.
Glasgow, Observatory	30.18	766.6	30.38	771.6	58.1	14.5	53	WSW			3	7c	0					D. clouds	D. G. MacLean.
Greenwich, Royal Obs'y	30.23	767.8	30.40	772.1	65.2	18.4	57	E			1		3					D. clouds	The Staff.
Guernsey	30.16	766.1	30.38	771.6	54.5	12.5	71	ENE			2		3					D. clouds	Dr. S. E. Hoskins, F.R.S.
Kew, Observatory	30.36	771.1	30.40	772.1	60.9	16.1	54	NNE	9	4.0			8					D. clouds	The Staff.
Leicester, Museum	30.13	765.3	30.38	771.6	64.8	18.2	49	SW			1		9					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.80	756.9	29.88	758.9	64.0	17.8	78	NE			2		9			0.06	1.5	Overcast	F. S. Vine, A. H. C.
Nassau, Bahamas	30.06	763.5	30.11	764.8	75.5	24.2	86	NE			1		8					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.87	758.7	30.39	771.9	64.6	18.1	49	Calm			0		5					D. clouds	Robert Pate.
Oxford, Radcliffe Obs'y	30.18	766.6	30.41	772.4	60.3	15.7	40	Calm			0		6					Misty	The Staff.
Plymouth	30.35	770.9	30.42	772.7	59.0	15.0	88	W			2		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			30.21	767.3	50.8	10.4	80	WSW	28	12.5			10					Misty	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.90	759.4	29.97	761.2	73.0	22.8	56	SW			1		6					D. clouds	Serg't W. H. Lyne.
Sheffield	30.12	765.0	30.40	772.1	64.4	18.0	57	Calm			0		7			0	0	D. clouds	W. F. Cooper.
Silloth Rectory	30.37	771.4	30.40	772.1	60.5	15.8	66	W			2		4			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.42	772.7	62.9	17.2	50	W	13	5.8			5					D. clouds	Rev. S. J. Perry.
Strathfield Turgiss	30.20	767.1	30.42	772.7	63.1	17.3	43	NE			0-1		5					D. clouds	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.40	772.1	30.41	772.4	65	18.3	53	NW			4		0					Blue sky	W. Newcombe.
Valencia, Observatory	30.46	773.7	30.49	774.4	55.5	13.1	56	WSW	8	3.6			3					Misty	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.94	760.5	29.98	761.5	42	5.6	97	E	4	1.8			10n			0.503	12.8	Light rain	H. J. Cundall, C. E.
Chatham, N. B.*	29.99	761.7	30.05	763.3	41	5.0	96	N	7	3.1			10n			1.00	25.4	Cloudy	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	30.06	763.5	30.08	764.0	39	3.9	88	NE	25	11.2			10n		Calm	0.15	3.8	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.28	743.7	30.12	765.0	39	3.9	86	W	10	4.5		0	0			0.050	1.3	Clear	James Stewart.
Fredericton, N. B																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.83	757.7	29.96	761.0	43	6.1	99	E	5	2.2			Fg			0.043	1.1	Foggy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.66	753.4	29.99	761.7	58	14.4	92	S	2	0.9		2k	8s	W	Calm	0	0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	29.83	757.7	30.03	762.7	52	11.1	93	NE	8	3.6			10s			0.50	12.7	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.31	744.5	29.99	761.7	65	18.3	92	S	5	2.2		0	0			0	0	Clear	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.39	746.5	30.05	763.3	71	21.7	75	SW	7	3.1		0	0			0	0	Clear	H. Morgan.
Port Stanley, Ontario	29.44	747.8	30.07	763.8	59	15.0	89	SW	1	0.4		Hz	0			0	0	Hazy	M. Payne.
Quebec, Quebec*	29.74	755.4	30.07	763.8	44	6.7	92	E			1		8n		E	0.72	18.3	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.50	749.3	29.95	760.7	55	12.8	93	Calm	0	0			10ks			0	0	Cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.27	743.4	29.95	760.7	69	20.6	84	SW	17	7.6		0	0			0	0	Clear	K. Stewart.
St. Andrews, N .B	29.90	759.4	29.95	760.7	48	8.9	90	Calm	0.	0			10n?			0.18	4.6	Clear ?	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.01	752.2	30.05	763.3	36	2.2	95	NE	5	2.2			10n°			0.11	2.8	Light rain	T. C. Hill, C. E.
Toronto, Ontario*	29.64	752.8	30.00	762.0	71	21.7	86	SW	4	1.8		2cs	Hz	W		0	0	Fair	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	29.87	758.7	29.94	760.5	49	9.4	93	Calm	0	0			10s		E	0.19	4.8	Light rain	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	30.07	763.8	30.33	770.4	35	1.7	100	E	1	0.4		Fg	Fg			0	0	Raining	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't.
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	30.15	765.8			63.0	17.2	88	E	8.9	4.0			3k			0.125	3.2		John Duthie.
Cape Town, C. G. H. Obs'y	29.97	761.2	30.00	762.0	69.7	20.9		SSE	15.3	6.8		5	5cs			0	0	Vapory	The Staff, for D. Gill.
Worcester *†	28.99	736.3			67	19.4	43	SE			1	5	5			0	0	Cloudy	C. Stokes.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.07	763.8	30.10	764.5	60.8	16.0	87	ESE	4.5	2.0		10ck	0	WSW		0.067	1.7	Covered	M. Marc Dechevrens, S.J.

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

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

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

San José	25.17	664.7	29.89	759.2	66.2	19.0	83	SE			1	10cs	0	NE		Inap.	Inap.	Cloudy	Amand Maison.

DANISH SERIES.

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

Copenhagen	30.34	770.5	30.38	771.7	48.4	9.1	66	NE	9	4			4						Oversergent Fischer.
Fanöe	30.39	771.8	30.41	772.3	48.9	9.4	66	W			4		3						Overloerer Lauridsen.
Godthaab, Greenland	29.84	757.8	29.88	758.9	34.9	1.6	71	Calm			0		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.76	756.0	29.81	757.1	43.5	6.4		SW			4		8					Raining	A. O. Thorlacius.
Thorshavn	29.96	761.0	30.00	761.9	50.7	10.4	72	W	20	9			5						Overloerer Bergh.
Vestervig	30.28	769.1	30.37	771.5	48.7	9.3	72	SW			4		3						Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.54	750.4	30.19	766.9	56.5	13.6	53	NNE			1	2ck	0			0	0	Clear	M. Labroue, Director.
Alençon Normal School	29.89	759.3	30.45	773.3	49.6	9.8	84	NE			3		8kn		NE	0	0	Very cloudy	M. Nicot, Director.
Arras, Engineer School	30.07	763.7	30.33	770.4	51.8	11.0	50	E			2		kn		E	0	0		M. Klein, Commandant.
Avignon, Normal School	29.93	760.3	30.01	762.3	63.3	17.4	70	N			3		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.68	753.8	30.24	768.0	55.2	12.9	44	E			2		5kn		ENE	0	0	Cloudy	M. Saillard, Director.
Beauvais, Normal School	30.09	764.3	30.36	771.2	53.1	11.7	49	NE			2		8		NE	0	0	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.30	744.2	30.19	766.8	52.7	11.5	49	ESE			1	c	0		NE	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.95	760.8	30.22	767.5	56.3	13.5	50	NE			2		8		NE	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.73	755.2	30.29	769.4	54.0	12.2	45	NNE			4		kn		NNE	0	0		M. Postel, Director.
Brest, Naval Observatory	30.16	766.0	30.40	772.2	59.7	15.4	47	NNE			2		6		NE	0	0		M. de Rermaree, Dir.
Caen, Normal School	30.27	768.8	30.34	770.7	52.9	11.6	69	NNE			1		2		N	0	0	Slightly cl'dy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.97	761.3	30.30	769.5	59.0	15.0	60	NE			1		5		NE	0	0	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.86	758.4	30.38	771.6	52.9	11.6	63	W			1		8			0	0	¾ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.79	731.3	30.16	766.1	51.8	11.0	43	N			2		8			0	0	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.34	745.2	30.16	766.1	53.2	11.8	48	NE			3		3		NE	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.38	746.3	30.26	768.7	53.2	11.8	52	N			2		5kn	N	N	0	0	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.46	697.5	29.98	761.6	55.4	13	40	NE			1		5kn		S	0	0	½ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	28.89	733.8	30.03	762.8	62.1	16.7	33	N			2		5		SW	0	0	½ covered	M. Kina, Director.
Grenoble, Normal School	29.29	743.9	30.06	763.4	55.4	13	38	N			2		6kn		NNW	0	0		M. Ablard, Director.
Guéret, Normal School	28.63	727.2	30.23	767.8	48.6	9.2	52	N			2		k		N	0	0		M. Rivoire, Director.
Lamballe, Normal School	30.10	764.6	30.38	771.6	58.3	14.6	58	N			2				N	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.70	754.3	30.37	771.5	55.4	13	48	NW			1	c	0		E	0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.31	769.8	30.41	772.4	62.6	17.0	43	NE			3		1	Calm	NE	0	0	Clear	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.05	737.9	30.12	765.0	53.2	11.8	31	N			1		2		N	0	0	Slightly cl'dy	M. André, Director.
Mans, Normal School	30.05	763.2	30.37	771.3	46.0	7.8	89	NE			4		8		E	0	0	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.72	754.8	29.98	761.6	64.2	17.9	32	W			2		8		NE	0	0		M. Stephan, Director.
Montlouis l'instituteur	24.82	630.5	30.06	763.5	41.0	5.0	28	NW	16.8	7.5			5		E	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.91	759.7	30.02	762.4	63.3	17.4	41	NNW			3		0			0	0	Clear	M. P. Galzin, Director.
Nancy, Normal School	29.45	748.0	30.22	767.5	55.4	13	32	NNE			2		5k		NE	0	0	Cloudy	M. Hasse.
Nantes, Observatory	30.20	767.1	30.36	771.2	54.7	12.6	56	NE			2–3		9k;n		NE	0	0		M. Larocque, Director.
Nice	29.92	759.9	29.95	760.7	63.7	17.6	55	W			2		5	W	W			Light rain	Capt. Boissière, Director.
Perpignan, Observatory	29.97	761.2	30.08	763.9	58.3	14.6	28	N	26.2	11.7			2		NNW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.50	571.4			21.2	—5.0							1		NNE	0.075	1.9	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.10	739.1	30.17	765.4	54.3	12.4	35	N			4		0			0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.20	640.0			30.6	—0.8	85	NNE			4		8		NNE	0	0	¾ covered	M. Alluard, Director
Rochefort, Naval Obs'y	30.31	769.9	30.34	770.7	57.9	14.4	50	NE			2		8		NE	0	0	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.13	765.4	30.35	770.9	55.0	12.8	57	NE			2		8		NE	0	0	Very cloudy	M. Mouillot, Director.
Rodez, Normal School	27.95	710.1	30.11	764.8	52.9	11.6	36	NW			3		0			0	0	Clear	M. Richard, Director.
Rouen, Normal School	30.27	768.8	30.35	771.0	55.8	13.2	53	NE			1		5		NE	0	0	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	30.24	768.2	30.40	772.2	51.8	11	77	E			1		5		E	0	0	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.16	766.0	30.32	770.2	51.1	10.6	55	NNE			3		10		NNE	0	0		M. Renou, Director.
Toulouse, Observatory	29.47	748.5	30.20	767.0	61.0	16.1	25	NW			3					0	0		M. Bailland, Director.
Tours	30.10	764.6	30.30	769.6	54.3	12.4	54	E			3		8		E	0	0	¾ cover. d	M. de Tastes.
Versailles, Observatory	29.82	757.5	30.32	770.0	49.6	9.8	52	NE			4					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			

GERMAN SERIES.

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

Bamberg	29.36	745.8	30.23	767.9	48.4	9.1	60	NE			4		8k	NE		0.008	0.2		Prof. Dr. Hoh.
Berlin	30.13	765.4	30.31	769.8	57.6	14.2	30	NE			2		0			0	0		Prof. Dr. Arndt.
Breslau	29.65	753.2	30.19	766.8	58.8	14.9	45	ENE			4		7			0	0		Royal University Obs'y.
Carlsruhe	29.84	758.0	30.28	769.1	53.2	11.8	57	NE			2		10	NE		0	0		Albert Senz.
Cassel	29.54	750.2	30.26	768.5	54.7	12.6	29	N			3		0			0	0		Dr. H. Möhl.
Frankfort on the Main	29.90	759.5	30.27	768.8	59.2	15.1	25	NE			2		3			0	0		Physical Society.
Friedrichshafen	28.76	730.4	30.24	768.0	41.7	5.4	82	SSE			3		10	ENE		0.142	3.6	Light rain	Wilhelm, Chief Tel.
Hamburg	30.34	770.6	30.41	772.4	50.4	10.2	60	NNE			4		2			0	0		Dr. R. Kleeman.
Kiel	30.39	771.8	30.40	772.2	41.2	5.1	44	NNE			2		1			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.85	758.2	30.28	769.0	53.6	12.0	69	ENE			3		6	ESE		0	0		Prof. Dr. Bruhns.
Magdeburg	30.00	762.1	30.30	769.6	53.8	12.1	41	NE			3		0			0	0		Dr. Assmann.
Memel	30.35	770.9	30.40	772.1	44.4	6.9	57	NW			4		2k						Reinbrecht & Issermann.
Munich	28.32	719.3	30.19	766.9	37.9	3.3	80	NW			1		10			0.520	13.2	Light snow	Central Station.
Neufahrwasser	30.38	771.6	30.39	772.0	44.6	7.0	57	NNE			2		0			0	0		A. Lothes.
Neustadt, Palatinate	29.68	753.8	30.21	767.2	57.7	14.3	40	NE			4		10			0	0		Dicknether.
Stuttgart	29.25	743.0	30.17	766.4	42.8	6.0	78	E			1		10			0.035	0.9	Light rain	Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.66	727.9	30.14	765.6	41.4	5.2	86	N			4		10	N		0.043	1.1		Prof. Kemlein.
Wustrow	30.38	771.6	30.40	772.2	49.8	9.9	55	NNE			3		5s			0	0		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Barometer. Reduced to sea-level.		Tempera-ture of the Air.		Rel. Hum.	Wind. Direc-tion.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r.	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.62	752.4	30.00	762.1	74.1	23.4		SW			3.0		5					½ Clear.	A. Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.59	751.6	29.64	752.8	88.6	31.4	85	SW	28.0	12.5			0			0	0	Misty	
Deesa	29.14	740.2	29.59	751.6	104.3	40.2	14	W	17.2	7.7			1	W		0	0	Misty	
Bombay	29.73	755.0	29.76	756.0	87.8	31.0	73	W	12.0	5.4			2		WSW	0	0	D. clouds	
Poona, Yarrowda	27.88	708.2	29.68	753.9	93.0	33.9	36	W	9.0	4.0			3		S	0	0	D. clouds	
Belgaum	27.24	692.0	29.74	755.4	83.4	28.6	53	SW	11.0	4.9			5	SW	E	0.03	0.8	D. clouds	
Lahore	28.80	731.6	29.51	749.6	100.2	37.9	24	E	7.6	3.4			4			0	0	Misty	
Roorkee	28.73	729.6	29.59	751.7	94.8	34.9	36	SE	8.6	3.8			0			0	0	Thunder	
Agra	29.00	736.7	29.54	750.3	103.1	39.5	26	S	9.7	4.3			0			0	0		
Nagpur	28.60	726.6	29.61	752.1	96.7	35.9	20	SW	8.5	3.8			10		W	0.76	19.3	Overcast	
Jubbulpore	28.28	718.3	29.57	751.0	104.2	40.1	9	NW	8.7	3.9			2			0	0	D. clouds	
Lucknow	29.22	742.1	29.58	751.4	94.0	34.4	40	ESE	8.1	3.6			0			0	0	Blue sky	
Allahabad	29.29	743.9	29.59	751.6	94.7	34.8	44	E	6.4	2.9			0			0	0	Blue sky	
Patna	29.53	749.9	29.71	754.5	82.9	28.3	68	E	5.3	2.4			2	E	E	0.02	0.5		
Hazaribagh	27.69	703.3	29.66	753.3	86.8	30.4	46	ENE	5.3	2.4			1			0	0		
Cuttack	29.60	751.8	29.68	753.9	90.0	32.2	58	S	4.0	1.8			0			0	0	Blue sky	
Calcutta, Alipore	29.65	753.1	29.67	753.6	85.5	29.7	72	SSW	10.0	4.5			4			0	0	D. clouds	
Dhubri	29.62	752.5	29.75	755.6	77.1	25.1	90	E	4.1	1.8			10			0.23	5.8	Overcast	
Chittagong	29.68	753.9	29.77	756.2	82.2	27.9	82	SSW	3.4	1.5			8			0	0	D. clouds	
Sibsagar	29.46	748.2	29.80	756.8	77.1	25.1	94	SW	5.3	2.4			10	SW	SW	1.90	48.3	D. clouds	
Zanzibar, Africa			29.94	760.5	81.3	27.4	77	SSE	7	3.1			9		S	0.43	10.9	Gloomy	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.64	752.9	30.05	763.2	54.0	12.2	49	SE	0.7	0.3			7			0	0		Prof. Giovanni Clodig.
Milan	29.40	746.8	29.91	759.6	63.5	17.5	27	NE	6.3	2.8			6			0	0		Prof. Schiaparelli.
Padua	29.91	759.6	30.02	762.4	53.2	11.8	62	SSE	9.4	4.2			10	NE		0.008	0.2		Prof. Dott. Lorenzoni.
Moncalieri	29.00	736.6	29.89	759.1	62.6	17.0	29	SE	6.9	3.1			8	E		0.039	1.0		Prof. P. F. Denza.
Genoa	29.76	756.0	29.96	760.9	61.2	16.2	49	S	6.9	3.1			10	NE		0	0		Prof. G. M. Garibaldi.
Mondovi	28.02	711.6	29.89	759.3	57.9	14.4	18	NW			4		9			0	0		Prof. D. C. Bruno.
Pesaro	29.94	760.5	29.99	761.7	53.6	12.0	60	N	6.9	3.1			3	N		0	0		Prof. Luigi Guidi.
Florence	29.69	754.0	29.93	760.3	60.8	16.0	33	SE			2		10	N		0	0		Prof. Costantino Pitter.
Leghorn	29.85	758.1	29.93	760.3	58.6	14.8	38	NW	3.8	1.7			10			0	0		Prof. P. Monte.
Rome	29.75	755.6	29.92	759.9	64.0	17.8	33	W	3.1	1.4			7			0.028	0.7		Prof. P. S. Ferrari.
Lecce	29.72	754.8	29.97	761.1	57.2	14.0	66	NNE	4.9	2.2			10			0.224	5.7		Prof. C. de Giorgi.
Cosenza	29.07	738.3	29.95	760.7	57.6	14.2	72	SSE	2.5	1.1			10	SE		0.488	12.4		Prof. D. Conti.
Cagliari	29.74	755.3	29.93	760.2	63.0	17.2	40	SE			4		5	W		0	0		Prof. A. Pacinotti.
Palermo	29.74	755.3	29.98	761.6	57.7	14.3	67	Calm	0	0			10			0.303	7.7		Prof. G. Cilacciatore.
Syracuse	29.87	758.7	29.91	759.8	61.5	16.4	70	E	4.3	1.9			10	SW		0.059	1.5		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.39	746.5	29.91	759.7	61.5	16.4	65	SSW	1.8	0.8			10	SW		0.346	8.8		Prof. F. Brioschi.
Stelvio	22.02	559.3			25.5	— 3.6	63	NE			2	10cs	0	NE		0	0	Overcast	Prof. P. F. Denza.
Valdobbia	22.06	560.2			32.2	0.1	68	E			8		10ks;n	NNE		0	0	Covered	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y †	30.15	765.8	30.17	766.3	59.6	15.3	67	NNE	1.9	0.8		0	0			0	0	Clear	K. Sasaki.
Kioto	30.08	764.0	30.25	768.3	51.0	10.6	61	NW	2.8	1.2		0	0			0	0	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.97	761.2	30.17	766.3	62.6	17.0	82	SW	1.0	0.4		ck	10s			0.020	0.5	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	30.25	768.3	30.32	770.1	52.5	11.4	83	E	1.8	0.8		0	0			0	0	Clear	The Staff.
Wakayama	30.17	766.3	30.22	767.6	61.3	16.3	47	NE	4.3	1.9		7ck;cs	0			0	0	Cloudy	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.82	757.4	30.01	762.2	78.4	25.8	77	NE	8.5	3.8			8		WSW	0	0	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Barcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.67	753.6	29.93	760.2	71.0	21.7	90	NE	0.9	0.4		8cs	1s	WSW		0	0	Very cloudy	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.40	772.1	30.40	772.1	53.8	12.1		NNW			4					0	0		
Groningen	30.35	770.8	30.40	772.2	53.4	11.9		ENE			2					0	0		
Helder	30.41	772.3	30.41	772.3	49.8	9.9		NE			2					0	0		
Hellevoetsluis	30.39	771.8	30.39	771.8	56.1	13.4	67	N			2					0	0		
Utrecht	30.34	770.6	30.39	771.8	54.5	12.5	48	NNE			2		2			0	0	Lightly cl'dy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Barometer. Reduced to sea-level. Inch.	Mill	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.17	766.3	30.23	767.9	46.0	7.8	94	S	18.3	8.2			10			1.354	34.4	Raining	
Christiania	29.98	761.4	30.12	765.1	58.5	14.7	52	SW	7	3			10			0	0		
Gjesvær	29.52	749.8	29.54	750.4	36.1	2.3		SW			6		10					Raining	
Lodingen	29.63	752.5	29.67	753.7	40.1	4.5	93	WSW			7		9			0.004	0.1	Foggy	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.12	765.1	30.28	769.1	63.3	17.4	63	ENE	8.1	3.6			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.01	736.9	30.00	761.9	66.6	19.2	19	ESE	11.2	5.0			2			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.79	756.7	29.88	758.9	67.8	19.9	65	Calm	0	0			10			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.65	753.2	30.01	762.2	66.7	19.3	39	NE	19.9	8.9			3			0	0		The Staff.
Ponta Delgada, Azores	30.16	766.1	30.23	767.9	64.4	18.0	53	NE	12.5	5.6			4			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski																			Capt. Lasarew.
Archangel	29.99	761.8	30.01	762.3	35.1	1.7	62	E	9	4			9ks						Capt. Sseliwerstow.
Astrakhan	29.81	757.1	29.72	755.0	72.1	22.3	50	SE	2	1			10s						Capt. Wisganow.
Barnaul	29.19	741.3	29.66	753.3	73.2	22.9	36	WNW	2	1			10					Light clouds	Meteorological Obs'y.
Dorpat	30.10	764.4	30.34	770.7	48.6	9.2	46	W	9	4			0						Observatory.
Ekaterinburg	28.76	730.6	29.73	755.1	44.2	6.8	46	NNW	11	5			10						Meteorological Obs'y.
Kasan	29.77	756.2	30.05	763.2	41.2	5.1	41	NNW	13	6			10						Observatory.
Kertch	29.95	760.7	29.97	761.2	60.8	16.0	87	NNE	4	2			5						Lagorio & Sastyrez.
Kieff	29.54	750.2	30.18	766.6	52.5	11.4	43	NE	9	4		7cks	0						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.74	755.3	29.94	760.5	51.3	10.7	63	NNE	22	10			10						Meteorological Obs'y.
Moscow	29.74	755.3	30.30	769.6	45.1	7.3	36	NW	7.8	3.5			7ks						Meteorological Obs'y.
Nertchinsk	27.37	695.2	29.58	751.4	54.7	12.8	39	NE	16	7			10						Meteorological Obs'y.
Nikolaiev	29.98	761.5	30.05	763.3	54.7	12.6	85	NE	31	14			10n						Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	29.80	757.0	29.95	760.6	69.8	21.0	57	Calm	0	0			8n					Raining	Physical Observatory.
St. Petersburg	30.24	768.2	30.26	768.6	41.4	5.2	53	NW	20	9		ck;cs	2ks						Central Physical Obs'y.
Tashkend, Laboratory	28.33	719.6	29.82	757.4	78.8	26.	53	Calm	0	0			3			Blank			Teich, A. M.
Tiflis	28.45	722.7	29.84	758.0	62.4	16.9	59	NW	31	14			9ks						Physical Observatory.
Warsaw	29.80	756.9	30.22	767.6	58.8	14.9	39	E	11	5			6k						Astronomical Obs'y.
Wilna	29.92	759.9	30.35	770.8	52.9	11.6	41	SE	4	2			0						Berg, Assistant.
Yeniseisk	29.58	751.3	29.87	758.7	41.0	5.0	42	S	4	2			10						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.37	771.4	62.0	16.7	47	W			3		0			0	0	Hazy	Andrew Gibb.
Monach Lt. House, Hebrides			30.26	768.6	53	11.7	93	SW			4	5	5	SW		0	0	Cloudy	J. Youngclause.
North Unst, Shetland Isl'ds			30.07	763.8				W			4		10			Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.99	761.7	30.10	764.4	61.7	16.5	48	SE	4.5	2.0			0			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.23	767.8	30.28	769.2	63.5	17.5	47	N	1.3	0.6		4	5	N		0	0	Almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.19	690.6			49.6	9.8	63	N	11.9	5.3		0	3			0	0	Light clouds	Domingo Martin.
Madrid, Royal Obs'y	27.84	707.0	30.04	763.1	61.5	16.4	29	NE	15.4	6.9		0	0			0	0	Clear	The Staff.
Murcia, Met. Obs'y	29.92	760.0	30.07	763.8	66.2	19.0	43	ESE	4.7	2.1		5	5	W		0	0	Covered	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.23	742.4	30.12	765.0	62.4	16.9	40	NE	24.2	10.8			0			0	0	Clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.99	761.8	30.06	763.5	75.3	24.1	76	ESE	1.8	0.8		ck	0	NE		0	0	Clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.89	759.1	29.94	760.4	86.4	30.2	58	E	4.8	2.2		0	3ks		E	0	0	Cloudy	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.89	759.3	29.99	761.8	59.2	15.1	66	E	25.3	11.3			10		E	0.680	17.3		Capt. C. Pujsson, R. N., Dir.
San Juan de Porto Rico, W. I	29.87	758.8	29.97	761.1	76.3	24.6	87	E	14.8	6.6		6cs	6kn	E	E	0.012	0.3	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.83	757.7	29.98	761.4	82.6	28.1	76	NW	2.4	1.2			8ks		NW	0	0	Covered	José L. Fastovrá.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.74	755.4	29.76	756.0	42.1	5.6	75	S			2		5			0	0		
Umea	29.86	758.5	29.91	759.8	54.7	12.6	57	SW			4		9			0	0		
Hernosand	29.92	760.0	29.97	761.3	53.1	11.7	55	SW			4		8			0.024	0.6		
Stockholm	29.98	761.4	30.15	755.9	56.8	13.8	39	SW			4		6			0	0		
Wisby	30.22	767.6	30.28	769.1	48.2	9.0	48	WSW			4		0			0	0		
Sub-Series.																			
Upsala	30.02	762.5	30.11	764.7	56.5	13.6	44	SW	19.5	8.7			10			0	0		Nils Ekholm
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour. Director of the Observatory at Geneva.																			
Geneva																			The Observatory.
Zurich	28.55	725.1	30.23	767.8	41.0	5.0	80	E			2-4		10			0.028	0.7	Raining	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.01	762.2	75.2	24.0	42	SW	6	2.5			8		SW	0	0		The Observatory.
Valona			30.02	762.4	54.0	12.2		SW			1		10			0.98	25.	Covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.03	762.7	71.1	21.7	69	NW			1		2k		SW	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.
By authority of the SECRETARY OF WAR.
Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	BAROMETER. Corrected for instru-m'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
Albany, New York	29.93	760.2	30.01	762.2	79.2	26.2	66	NE	5	2.2		2k	Hz	NW		0	0	Fair.	
Alpena, Michigan	29.31	744.5	29.93	760.2	63	17.2	89	S	2	0.9		2k	0			0.13	3.3	Fair.	
Atlanta, Georgia	29.12	739.6	30.24	768.1	67.5	19.7	74	W	7	3.1		10k	0	E		0	0	Cloudy	
Atlantic City, New Jersey	30.04	763.0	30.06	763.5	76	24.4	73	NW	7	3.1		5c	Hz	Calm	Calm	0	0	Fair.	
Atton Id., Alaska†	29.70	754.4			37	2.8	80	S	8	3.6			10s		Calm	0	0	Cloudy.	
Augusta, Georgia	30.11	764.8	30.31	769.9	68.0	20.0	74	Calm	0	0		0	0			0	0	Clear.	
Baltimore, Maryland	30.06	763.5	30.10	764.5	78	25.6	61	W	6	2.7		5c; hz	Hz	W		0	0	Light haze.	
Barnegat, New Jersey	30.00	762.0	30.02	762.5	77	25.0	65	NW	11	4.9		5c	Hz	NW	Calm	0	0	Fair.	
Bismarck, Dakota	28.47	723.1	30.33	770.4	37	2.8	71	Calm	0	0		0	0			0	0	Clear.	
Boise City, Idaho	27.22	691.4	30.18	766.6	44.3	6.8	68	W	4	1.8		2cs	0	W		0	0	Fair.	
Boston, Massachusetts	29.81	757.2	29.96	761.0	66.0	18.9	68	E	5	2.2		0	0			Inap.	Inap.	Clear.	
Bracketville, Texas	28.88	733.5	29.91	759.7	71	21.7	90	E	7	3.1			10ks		E	0	0	Cloudy.	
Brownsville, Texas	29.99	761.7	30.04	763.0	79	26.1	91	SE	4	1.8		0	0			0	0	Clear	
Buffalo, New York	29.38	746.2	30.08	764.0	49	9.4	97	SW	10	4.5			Fg			Inap.	Inap.	Dense fog.	
Burlington, Vermont	29.74	755.4	30.02	762.5	57.7	14.3	96	N	5	2.2			Fg			0.25	6.3	Dense fog.	
Cairo, Illinois	29.87	758.7	30.25	768.3	74	23.3	81	Calm	0	0		1cs	Fg	Calm	Calm	0	0	Fair.	
Campo, California	27.39	695.7	29.96	761.0	39	3.9	73	S	3	1.3		0	0			0	0	Clear.	
Camp Thomas, Arizona	27.18	690.4			51	10.6	46	Calm			0	0	0			0	0	Clear.	
Cape Henry, Virginia	30.11	764.8	30.13	765.3	71	21.7	71	W	16	7.2		0	0			0	0	Clear.	
Cape May, New Jersey																			
Castroville, Texas	29.30	744.2	29.98	761.5	74	23.3	81	SE	5	2.2			10s		SE	0	0	Cloudy.	
Cedar Keys, Florida	30.18	766.6	30.20	767.1	68	20.0	79	NE	6	2.7		0	5ks		E	0	0	Fair.	
Champaign, Illinois	29.36	745.7	30.11	764.8	70	21.1	90	SW	10	4.5		0	0			0	0	Clear.	
Charleston, S. Carolina	30.21	767.3	30.26	768.6	68	20.0	90	NE	4	1.8		0	0			0	0	Clear.	
Charlotte, N. Carolina	29.39	746.5	30.18	766.6	71.2	21.8	66	SW	4	1.8		5c	0			0	0	Fair.	
Chattanooga, Tennessee	29.49	749.0	30.29	769.4	67	19.4	84	NW	4	1.8		2ck	Fg	N	Calm	0	0	Fair.	
Cheyenne, Wyoming	24.25	615.9	30.19	766.8	41	5.0	91	SW	6	2.7			10s			0.06	1.5	Cloudy	
Chicago, Illinois	29.40	746.7	30.06	763.5	74.0	23.3	76	SW	8	3.6		0	0			0	0	Clear.	
Chincoteague, Virginia	30.09	764.3	30.10	764.5	72	22.2	71	W	16	7.2		1c	Hz	Calm	Calm	0	0	Clear.	
Cincinnati, Ohio	29.59	751.6	30.22	767.6	72	22.2	76	S	3	1.3		0	Sk			0	0	Clear.	
Cleveland, Ohio	29.42	747.3	30.11	764.8	75	23.9	72	SW	10	4.5		4c	0			0	0	Fair	
Coleman City, Texas	28.30	718.8	29.92	760.0	67	19.4	84	SE	6	2.7			10s		S	0	0	Cloudy	
Columbus, Ohio	29.36	745.7	30.17	766.3	71	21.7	75	S	3	1.3		0	Sk			0	0	Clear	
Concho, Texas	28.16	715.3	29.80	756.9	66	18.9	84	E	10	4.5		5c	0	S		0	0	Fair.	
Corsicana, Texas	29.70	754.4	30.16	766.1	71	21.7	85	S	4	1.8		0	8ks		S	0	0	Cloudy	
Davenport, Iowa	29.51	749.5	30.12	765.0	72	22.2	76	W	10	4.5		3k	7ks	W	W	0	0	Cloudy	
Dayton, Washington T'y	28.28	718.3	29.96	761.0	45	7.2	60	NE	4	1.8		0	0			0	0	Clear	
Deadwood, Dakota	25.58	649.7			35	1.7	80	E	4	1.8		2cs	0			0.60	15.2	Clear.	
Decatur, Texas																			
Delaware Breakwater, Del.	30.05	763.3	30.07	763.8	67	19.4	79	W	13	5.8		5c	Hz	W		0	0	Fair.	
Denison, Texas	29.36	745.7	30.14	765.5	73	22.8	81	S	4	1.8		5cs	0	Calm		0	0	Fair	
Denver, Colorado	25.03	635.8	30.25	768.3	49.5	9.7	75	SE	4	1.8			10s		SE	0	0	Cloudy	
Des Moines, Iowa	29.26	743.2	30.12	765.0	64	17.8	94	NW	12	5.4			10s		NW	0.60	15.2	Cloudy	
Detroit, Michigan	29.39	746.5	30.05	763.3	72.5	22.5	71	SW	10	4.5		0	Sk			0	0	Clear.	
Dodge City, Kansas	27.57	700.3	29.82	757.4	61	16.1	88	W	9	4.0			10n		SW	0.04	1.0	Light rain	
Dubuque, Iowa	29.44	747.8	30.12	765.0	66.1	18.9	79	W	10	4.5			10s		W	0	0	Cloudy	
Duluth, Minnesota	29.45	748.0	30.13	765.3	50	10.0	79	N	3	1.3		5cs	0			0.16	4.1	Fair.	
Eagle Pass, Texas	29.25	742.9	29.96	761.0	75	23.9	77	SE	9	4.0			10s		SE	0	0	Cloudy	
Eagle Rock, Idaho	25.37	644.4	30.02	762.5	38	3.3	72	NW	8	3.6		0	0			0.16	4.1	Clear.	
Eastport, Maine	29.90	759.4	29.96	761.0	46	7.8	88	N	1	0.4			10s; fg			0.09	2.3	Cloudy.	
El Paso, Texas	26.19	665.2			56	13.3	29	NE	1	0.4		0	1s			0	0	Clear.	
Erie, Pennsylvania	29.39	746.5	30.07	763.8	75	23.9	72	SW	10	4.5		0	0			0	0	Clear.	
Escanaba, Michigan	29.29	744.0	29.94	760.5	51	10.6	93	SE	1	0.4			10s		N	0	0	Cloudy	
Florence, Arizona	28.42	721.9	30.02	762.5	56	13.3	46	Calm	0	0		0	0			0	0	Clear.	
Fort Apache, Arizona	25.03	635.8	30.48	774.2	37	2.8	53	NE	3	1.3		1c	0	Calm		0	0	Clear.	
Fort Assinnaboine, Montana	27.19	690.6			46	7.8	54	Calm	0	0		0	0			0	0	Clear.	
Fort Bennett, Dakota	28.71	729.2			45	7.2	84	Calm	0	0		10k	0	SW		0	0	Cloudy	
Fort Benton, Montana																			
Fort Buford, Dakota	28.23	717.0	30.14	765.5	35	1.7	80	Calm	0	0		0	0			0	0	Clear.	
Fort Custer, Montana	27.00	685.8			37	2.8	80	SE	5	2.2		0	0			0.04	1.0	Clear.	
Fort Davis, Texas	25.20	640.1	30.16	766.1	63	17.2	62	W	3	1.3		0	0			0	0	Clear.	
Fort Elliott, Texas	27.33	694.2	29.56	750.8	60	15.6	82	NW	4	1.8			10s		NW	0.23	5.8	Cloudy	
Fort Gibson, Indian T'y	29.62	752.3	30.14	765.5	75	23.9	81	S	6	2.7		0	0			0	0	Clear.	
Fort Grant, Arizona	25.21	640.3	30.01	762.2	54	12.2	38	N	2	0.9		0	0			0	0	Clear.	
Fort Griffin, Texas	28.76	730.5	29.98	761.5	71.0	21.7	80	SE	3	1.3		5ck	0			0	0	Fair.	
Fort Keogh, Montana	27.64	702.0			38	3.3	62	SE	2	0.9		0	0			0	0	Clear.	
Fort Macon, North Carolina	30.21	767.3	30.22	767.6	68	20.0	79	SW	8	3.6		2cs	0	Calm		0	0	Clear.	
Fort McKavett, Texas	27.82	706.6	29.79	756.7	67.2	19.6	84	E	8	3.6		7ck	0	SE		0	0	Fair.	
Fort Missoula, Montana	26.77	679.9			45	7.2	68	NE	2	0.9		0	0			0	0	Clear.	
Fort St. Michaels																			
Fort Shaw, Montana	26.41	670.8			32	0.0	69	W	1	0.4		2cs	0			0	0	Clear.	
Fort Sill, Indian Territory	28.90	734.0	29.98	761.5	65	18.3	94	S	3	1.3		2c	0			0	0	Fair.	
Fort Stevenson, Dakota																			
Fort Verde, Arizona																			
Fredericksburg, Texas	28.38	720.8	29.90	759.4	47.3	8.5	48	NW			1	0	0			0	0	Clear.	
Galveston, Texas	30.12	765.0	30.16	766.1	69	20.6	90	S	10	4.5		0	4s		S	0	0	Fair.	
Grand Haven, Michigan	29.40	746.7	30.04	763.0	74	23.3	90	SE	11	4.9		0	5ks		SE	0	0	Fair.	
Hatteras, North Carolina	30.18	766.6	30.20	767.1	63	17.2	83	SW	23	10.3		0	0			0	0	Clear	
Helena, Montana	25.84	656.3			69	20.6	80	W	16	7.2		0	0			0	0	Clear.	
Henrietta, Texas	29.10	739.1	30.01	762.2	41	5.0	82	Calm	0	0		0	0			0	0	Clear.	
Indianapolis, Indiana	29.39	746.5	30.14	765.5	68	20.0	90	SE	4	1.8			10s		S	0	0	Cloudy	
Indianola, Texas	30.09	764.3	30.12	765.0	75	23.9	72	S	4	1.8		0	Hz		Calm	0	0	Clear.	
Jacksboro, Texas	28.98	736.1	30.08	764.0	73.7	23.2	86	SE	7	3.1		0	2ks		S	0	0	Fair.	
Jacksonville, Florida	30.19	766.8	30.24	768.1	69	20.6	80	S	7	3.1			10ks		S	0	0	Cloudy	
Keokuk, Iowa	29.48	748.8	30.10	764.5	70	21.1	85	NE	6	2.7		0	8s		NE	0	0	Cloudy	
Key West, Florida	30.07	763.8	30.11	764.8	72.8	22.7	82	Calm	0	0			10s		W	0	0	Cloudy	
Kittyhawk, North Carolina	30.17	766.3	30.19	766.8	75.5	24.2	73	NE	12	5.4		5k	0	NE		Inap.	Inap.	Fair.	
Knoxville, Tennessee	29.29	744.0	30.28	769.1	68	20.0	65	W	24	10.7		2k	Hz			0	0	Clear.	
La Crosse, Wisconsin	29.37	746.0	30.09	764.3	67.5	19.7	89	S	2	0.9		2c	Hz	Calm	Calm	0	0	Fair.	
La Mesilla, New Mexico	26.07	662.2	30.22	767.6	63.7	17.6	83	SW	4	1.8			1cn			0.02	0.5	Light rain	
Laredo, Texas	29.57	751.1	29.90	759.4	59	15.0	38	Calm	0	0			10s			0	0	Cloudy	
Leavenworth, Kansas	29.25	742.9	30.07	763.8	77	25.0	82	SE	6	2.7		0	8s		SE	0	0	Fair.	
Lewiston, Idaho	29.23	742.4	29.88	758.9	67	19.4	74	E	5	2.2		5k	0	S		0	0	Fair.	
Little Rock, Arkansas	29.88	758.9	30.19	766.8	42	5.6	42	Calm	0	0		0	0			0	0	Clear.	
Los Angeles, California	29.62	752.3	29.98	761.5	70	21.1	95	Calm	0	0		5ck	0			0	0	Fair	
Louisville, Kentucky	29.65	753.1	30.19	766.8	50.3	10.2	72	NE	4	1.8		0	0			0	0	Clear.	
Lynchburg, Virginia	29.51	749.5	30.17	766.3	75.0	23.9	72	S	2	0.9		0	0			0	0	Clear.	
Madison, Wisconsin	29.67	738.4	30.02	762.5	74	23.3	68	Calm	0	0		0	0			0	0	Clear.	
Marquette, Michigan	29.25	742.9	29.94	760.5	71	21.7	80	W	8	3.6		8cs	0	W		0	0	Fair.	
Mason, Texas	28.48	723.4	30.20	767.1	59	15.0	88	NW	10	4.5			10s		NW	0.07	1.8	Cloudy	
Memphis, Tennessee	29.91	759.7	30.24	768.1	69.8	21.0	75	S	3	1.3		0	1s		S	0	0	Clear.	
					75	23.9	77	Calm	0	0		0	0			0	0	Clear.	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.30	744.2	29.99	761.7	74	23.3	72	SW	7	3.1		8ck	0	SW		0	0	Fair	
Mobile, Alabama	30.16	766.1	30.24	768.1	68	20.0	95	N	5	2.2		5cs	Fg	W		0.53	13.5	Fair	
Montgomery, Alabama	30.04	763.0	30.27	768.8	68	20.0	84	SE	1	0.4		1k	0	SE		0	0	Clear	
Moorhead, Minnesota	29.26	743.2	30.24	768.1	42	5.6	83	N	5	2.2		0	0			0.55	14.0	Clear	
Morgantown, W. Virginia	29.22	742.2	30.18	766.6	72	22.2	80	Calm	0	0		2cs	0			0	0	Fair	
Mt. Washington, N. H.	23.85	605.8	30.21	767.3	45	7.2	88	NW	38	17.0		0	8s		NW	0.94	23.9	Fair	
Nashville, Tennessee	29.73	755.1	30.26	768.6	74.0	23.3	76	S	1	0.4		0	Sk			0	0	Clear	
New Haven, Connecticut	29.87	758.7	29.98	761.5	79	26.1	62	NW	8	3.6		0	0			Inap.	Inap.	Clear	
New London, Connecticut	29.93	760.2	29.97	761.2	80	26.7	62	N	5	2.2		0	0			0	0	Clear	
New Orleans, Louisiana	30.15	765.8	30.21	767.3	72.8	22.7	77	E	3	1.3		0	Sk			0	0	Clear	
Newport, Rhode Island	29.90	759.4	29.94	760.5	74.2	23.4	74	NW	5	2.2		0	Hz			0	0	Clear	
New River, N. Carolina																			
New Shoreham, Rhode I'd	29.94	760.5	29.97	761.2	70.0	21.1	75	N	8	3.6		0	0			0	0	Clear	
New York, New York	29.85	758.2	30.02	762.5	79	26.1	62	N	2	0.9		2cs	0			Inap.	Inap.	Fair	
Norfolk, Virginia	30.11	764.8	30.16	766.1	72	22.2	67	W	7	3.1		0	2s			0	0	Clear	
North Platte, Nebraska	27.34	694.4	29.95	760.7	47	8.3	85	NE	7	3.1		5k	5s	NE	NE	0.16	4.1	Cloudy	
Olympia, Washington T'y	29.93	760.2	29.97	761.2	49.0	9.4	85	SW	1	0.4			10s		Calm	0	0	Cloudy	
Omaha, Nebraska	29.05	737.9	30.14	765.5	57	13.9	87	N	14	6.3			10s		N	0.38	9.7	Cloudy	
Oswego, New York	29.71	754.6	30.02	762.5	65.4	18.6	84	W	3	1.3		2k	5ks	W	W	Inap.	Inap.	Fair	
Pensacola, Florida	30.20	767.1	30.24	768.1	71	21.7	90	S	4	1.8		0	0			0	0	Clear	
Philadelphia, Pa	29.99	761.7	30.04	763.0	77	25.0	65	W	4	1.8		10cs	Hz			0	0	Cloudy	
Phœnix, Arizona	28.80	731.5	30.60	777.2	54	12.2	67	SW	1	0.4		0	0			0	0	Clear	
Pike's Peak, Colorado	17.90	454.7	30.11	764.8	15	— 9.4	48	S	16	7.2			10s		W	0	0	Cloudy	
Pioche, Nevada	24.07	611.4	29.84	757.9	44	6.7	68	S	3	1.3		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.37	746.0	30.15	765.8	72.8	22.7	72	W	4	1.8		0	0			0	0	Clear	
Port Eads, Louisiana	30.19	766.8	30.20	767.1	71.8	22.1	90	E	10	4.5		0	0			0	0	Clear	
Port Huron, Michigan	29.38	746.2	30.02	762.5	70.1	21.2	78	SW	8	3.6		Hz	0			0	0	Clear	
Portland, Maine	29.91	759.7	29.96	761.0	57	13.9	87	N	4	1.8		0	2s;fg		NW	0.06	1.5	Fair	
Portland, Oregon	29.93	760.2	30.01	762.2	51.0	10.6	85	SW	2	0.9		10cs	0	SW		0	0	Cloudy	
Portsmouth, N. Carolina					68	20.0	79	SW	19	8.5		5k	0	SW		0	0	Fair	
Prescott, Arizona	24.76	628.9	30.12	765.0	39	3.9	55	S	2	0.9		0	0			0	0	Clear	
Punta Rassa, Florida	30.12	765.0	30.14	765.5	74	23.3	65	NE	10	4.5		5ck	0	E		0	0	Fair	
Red Bluff, California	29.59	751.6	29.93	760.2	62.0	16.7	61	Calm	0	0			10s		Calm	0	0	Cloudy	
Rio Grande City, Texas	29.83	757.7	30.05	763.3	75	23.9	90	SE			4	0	5s		SE	0	0	Fair	
Rochester, New York	29.43	747.5	30.02	762.5	72	22.2	85	W	6	2.7		5k	4ks	W	W	1.30	33.0	Cloudy	
Roseburg, Oregon	29.49	749.0	30.06	763.5	44	6.7	92	Calm	0	0		10k	0			0	0	Clear	
Sacramento, California	29.90	759.4	29.98	761.5	56.2	13.4	75	S	8	3.6		5c	0			0	0	Fair	
St. Louis, Missouri	29.60	751.8	30.16	766.1	72.0	22.2	83	S	11	4.9		5ck	c	W		0	0	Fair	
St. Paul, Minnesota	29.30	744.2	30.12	765.0	56	13.3	69	NW	10	4.5		5ck	2cs	NW	NW	0.53	13.5	Cloudy	
Salt Lake City, Utah	25.72	653.3	30.05	763.3	44	6.7	45	Calm	0	0		0	0			0.17	4.3	Clear	
San Antonio, Texas	29.41	747.0	30.10	764.5	72.1	22.3	90	SE	4	1.8		0	7ks		SE	0	0	Fair	
San Diego, California	29.87	758.7	29.94	760.5	59.0	15.0	76	NE	4	1.8			10s			0	0	Cloudy	
Sandusky, Ohio	29.45	748.0	30.09	764.3	75	23.9	72	SW	12	5.4		0	0			0	0	Clear	
Sandy Hook, New Jersey	29.99	761.7	30.02	762.5	73.0	22.8	72	NW	12	5.4		5c	0			0	0	Fair	
San Francisco, California	29.95	760.7	30.01	762.2	53	11.7	80	S	6	2.7			9s		SW	0	0	Cloudy	
Santa Fé, New Mexico	23.32	592.3	29.86	758.4	55	12.8	17	SW	7	3.1			10s		S	0	0	Cloudy	
Savannah, Georgia	30.18	766.6	30.27	768.8	68.5	20.3	84	NE	4	1.8		0	Fg			0	0	Clear	
Shreveport, Louisiana	29.98	761.5	30.22	767.6	70.6	21.4	90	S	2	0.9		5c	0			0	0	Fair	
Silver City, New Mexico	24.26	616.2	30.39	771.9	50	10.0	32	Calm	0	0		8k	0	Calm		0	0	Fair	
Sitka, Alaska																0.50	12.7		
Smithville, North Carolina	30.24	768.1	30.27	768.8	67	19.4	89	W	4	1.8		0	Hz			0	0	Clear	
Socorro, New Mexico	25.39	644.9	29.45	748.0	59	15.0	28	SW	10	4.5		10ck	0	NE		0	0	Cloudy	
Spokane Falls, Wash. Ter.	28.02	711.7	29.90	759.4	36	2.2	52	N	1	0.4		5cs	0			0	0	Fair	
Springfield, Illinois	29.52	749.8	30.17	766.3	72	22.2	83	SW	6	2.7		0	5s		SW	0	0	Fair	
Springfield, Massachusetts	29.85	758.2	29.98	761.5	80	26.7	62	NW	3	1.3		5c	Hz			0	0	Fair	
Stockton, Texas	26.97	685.0	29.97	761.2	68.0	20.0	90	Calm	0	0		0	1s		Calm	0	0	Clear	
St. Vincent, Minnesota	29.38	746.2	30.19	766.8	43	6.1	75	NW	4	1.8		0	0			0.16	4.1	Clear	
Thatcher's Island, Mass	29.94	760.5	30.00	762.0	53	11.7	67	N	13	5.8		0	5s		N	0	0	Fair	
Toledo, Ohio	29.42	747.3	30.07	763.8	77	25.0	69	SW	10	4.5		2c;hz	0			0	0	Clear	
Tucson, Arizona	27.42	696.5	29.97	761.2	52	11.1	23	SE	6	2.7		0	0			0	0	Clear	
Umatilla, Oregon	29.67	753.6	30.17	766.3	42.5	5.8	79	SE	4	1.8		50s	0			0	0	Fair	
Uvalde, Texas	29.10	739.1	29.89	759.2	73	22.8	81	SE	7	3.1			10s		S	0	0	Cloudy	
Vicksburg, Mississippi	29.98	761.5	30.24	768.1	71	21.7	85	SE	5	2.2		8k	0	E		0	0	Fair	
Visalia, California	29.56	750.8	29.93	760.2	53	11.7	80	NW	1	0.4		0	0			0	0	Clear	
Washington, D. C.	30.02	762.5	30.13	765.3	73	22.8	76	SW	1	0.4		5c	Hz			0	0	Fair	
Wickenburg, Arizona					51	10.6	53	Calm			0	0	0			0	0	Clear	
Wilmington, N. Carolina	30.20	767.1	30.25	768.3	66	18.9	84	W	1	0.4		0	0			0	0	Clear	
Winnemucca, Nevada	25.64	651.2	30.00	762.0	41	5.0	65	NE	8	3.6		0	0			0	0	Clear	
Wood's Holl, Mass	29.89	759.2	29.93	760.2	69	20.6	75	N	8	3.6		0	Hz			0	0	Clear	
Yankton, Dakota	29.00	736.6	30.32	770.1	50	10.0	79	NE	12	5.4		10c	0			0	0	Cloudy	
Yuma, Arizona	29.76	755.9	29.91	759.7	60.5	15.8	71	SE	1	0.4		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.08	560.8			55.5	13.1	83	Calm	0	0			10n			1.17	29.7	Raining	Thomas Herman
Buff Bay Town, Jamaica	29.76	755.9	30.08	764.0	71	21.7	100					k	k			Bla	nk		
Havana, Cuba, W. I.	30.04	763.0	30.10	764.5	77	25.0	69	Calm	0	0		0	0			0	0	Clear	A. Van Caneghem, Ass't
Jakobshavn, Greenland	29.80	757.0	29.86	758.3	35.2	1.8		N			2		0			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	29.93	760.2	29.94	760.5	78.0	25.6	79	Calm	0	0		10cs	0			0	0	Cloudy	Robert Johnstone
Navassa, W. I.	29.87	758.7	29.95	760.7	79	26.1	74	NE			2	50s	5n;k	N	SE	0	0	Hazy	F. M. Everett.
Paramaribo, S. A.	29.98	761.5	29.98	761.5	79	26.1	91	E			2	5ck	8ks	E		0.110	2.8	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.44	747.8	30.00	762.0	76	24.4	100	Calm			0		10n		Calm	0.03	0.8	Raining	Francesco J. Cisneros.
Rivas, Nicaragua																			Earl Flint.
Santiago de Cuba, W. I.	29.98	761.5	30.01	762.2	77	25.0	65	N	12	5.4		2cs	2k		NE	0	0	Fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.86	758.4	29.91	759.7	31.0	— 0.6	95	N	10	4.5		2k	1s	N	N	0	0	Fair	J. Fortescue & W. Wood.

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

BRITISH NAVAL SERIES.

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

H. M. S. Albatross, N. 33° 42′, E. 131° 37′	30.15	765.8	60	15.6		SW			1		3							D. clouds	Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Syracuse, Sicily	29.93	760.2	65	18.3	71	N			2		10							Squally	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 25° 44′, E. 57° 47′	29.75	755.6	90	32.2	56	W			2–3		0							Blue sky	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			73	22.8		Calm			0		0							Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	29.93	760.2	79	26.1	86	ENE			1		7							D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 49′, E. 22° 13′	30.15	765.8	64	17.8	67	E			4		2	SE				2	E	D. clouds	Com. F. W. Richards.
H. M. S. Champion, S. 7° 40′, W. 10° 22′	29.89	759.2	80	26.7	82	ESE			5		9	ESE				4	ESE	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 28° 05′, E. 121° 55′	30.05	763.3	64	17.8	94	NE			3–4							2		Drizzling	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 39° 58′, E. 19° 30′	29.94	760.5	58	14.4		WSW			1		10					2	NNW	Raining	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, James Bay, St. Helena	30.04	763.0				ESE			2									D. clouds	Capt. J. C. Parvis.
H. M. S. Daring, N. 8° 17′, E. 71° 37′	29.83	757.7	86	30.0		NW			4		3	NW				1	SSE	D. clouds	Capt. F. J. Eliott.
H. M. S. Dido, S. 33° 58′, E. 25° 38′	30.22	767.6	63	17.2		ESE			1		1	ESE				2	ESE	Blue sky	Capt. C. Domville.
H. M. Dock-Yard																			Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 08′, W. 53° 28′	30.19	766.8	41.5	5.3	91	NNE			1–2		10							Raining	Capt. W. R. Kennedy.
H. M. S. Dryad, N. 22° 50′, E. 59° 41′	29.65	753.1	95	35.0		W			1		1	S				1	S	Blue sky	Capt. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 9° 00′, E. 107° 20′	29.81	757.2	85	29.4		E			4		3	E				2	E	Misty	Comm. C. Johnstone.
H. M. S. Emerald, S. 8° 33′, E. 179° 35′	29.87	758.7	85	29.4	79	ENE			1–2		9	ESE				4	SE	Showery	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Trincomalee, Ceylon, India	29.76	755.9	86	30.0	76	ENE			1		10	W						D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 34° 43′, W. 63° 21′	30.01	762.2	67	19.4		NNW			3–4		4	NNW				3	N	D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Comm. R. N. Custance.
H. M. S. Flying Fish, Hong-Kong, China	29.97	761.2	76	24.4	73	E			1		5	W				1	E	D. clouds	Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 33° 00′, W. 136° 00′	30.20	767.1	65	18.3	86	WNW			1		9					1	NE	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 45° 55′, W. 63° 05′	29.85	758.2	50	10.0	79	SSE			5		8					3	SE	D. clouds	Capt. L. F. Jones.
A. M. S. Griffon, N 21° 24′, W. 85° 06′	29.95	760.7	80	26.7	87	NE			4		1	NE				2	NE	Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant, S. 40° 25′, E. 118° 30′	29.38	746.2	50	10.0	79	NNW			7–9		7	WSW				9	wsw	Squally	Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Naples, Italy	29.92	760.0	62	16.7	77	SSW			2		8					2	SSW	D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 25° 09′, E. 119° 31′	30.04	763.0	64	17.8	84	NE			3		3	SW				1–2	wsw	D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.95	760.7	64	17.8		S			1		9	Calm				2		Misty	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	30.15	765.8	66	18.9		Calm			0		5							D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Stone Cutter's Id., China	29.99	761.7	76.5	24.7	86	SSE			1		0							Blue sky	Capt. A. Carpenter.
H. M. S. Midge, Swatow, China	29.99	761.7				ENE			3–4		4	ENE						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 36° 07′, W. 5° 21′	29.98	761.5	60.5	15.8	82	Var.			2–7		10	ENE						Raining	Capt. H. H. Rawson.
H. M. S. Modeste, N. 1° 20′ E. 105° 56′	29.89	759.2	86	30.0	92	Calm			0		1							Blue sky	Capt. J. G. Mead.
H. M. S. Monarch, Goletta, Tunis, N. Africa	29.99	761.7	57	13.9	75	NNW			1		8	NNW						D. clouds	Capt. G. Tryon, C. B

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Bermuda, W. I.	30.05	763.3	78	25.6	85	NNW			4		7	NNE						D. clouds	Capt. E. B Drummond.
H. M. S. Orontes, S. 20° 21′, E. 56° 45′ †.	29.94	760.5	79.5	26.4	76	Calm			0		3					1	SSW	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 38′, W. 79° 03′	29.86	758.4	81	27.2		NNW			1		7							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin, S. 46° 50′, W. 76° 04′	29.99	761.7	49	9.4		WNW			3-4		10					6	SSW	Overcast	Capt. A. C. Paget.
H. M. S. Phœnix, N. 17° 34′, W. 77° 04′	29.90	759.4	80	26.7	78	E			0-1		8					1	ESE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler, Fernando, Po I'd, Africa	29.85	758.2	82	27.8		NW			3		10							Overcast	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	29.93	760.2	49	9.4		Calm			0		8							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.82	757.4	83.4	28.6	85	ESE			2		3							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis.																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, S. 12° 11′, W. 28° 03′	30.03	762.7	79	26.1	82	SE			4		5	ESE				4	ESE	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S Thunderer, N. 40° 36′, E. 14° 07′	29.97	761.2	63.5	17.5	54	Calm			0		9					1		D. clouds	Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A.	29.89	759.2	60	15.6	82	SW			4		8	NE						Misty	Capt. A. H. Markham.
H. M. S. Turquoise, S. 17° 30′, W. 75° 00′	29.99	761.7	67	19.4	84	Calm			0		9					1	S	D. clouds	Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne, N. 19° 00′, E. 39° 15′	29.73	755.1	87	30.6	80	E			1										Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.			79	26.1		N			1		1							Blue sky	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, S. 40° 15′, E. 172° 08′	29.77	756.1	60	15.6	82	W			3-4		7	WNW				2	NW	D. clouds	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, Task, West Bay, Persia	29.72	754.9	90.5	32.5	65	W			3		0					4	W	Misty	Capt. T. P. Nesham.
H. M. S. Zephyr, N. 30° 36′, E. 122° 03′	30.11	764.8	62	16.7	100	ESE			3		8	E				1	NE	D. clouds	Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Santiago, Cape Verd Id's	30.03	762.7	76.1	24.5	92	NE			2		1					1	SE	Blue sky	S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't
Tamega																			P. I. R. de Carvealtio, Comd'
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla.....	30.29	769.4	70	21.1	90	SE	5	2.2	.....	.....	8	....	SE	0	0	.....	.....	Fair.....	
N. Yard. Portsmouth, N. H...	29.96	761.0	60	15.6	88	NE	4	1.8	.....	.....	0	.....	.....	0.3	8.	.....	.....	Clear.....	
Naval Hospital, Yokahama, Japan.....	30.13	765.3	58.5	14.7	73	ESE	.....	.....	1	.....	2	.....	W	Slight		.....	.....	Clear.....	
Adams, Callao, Peru.....	29.82	757.4	67	19.4	95	Calm	.....	.....	0	.....	8	.....	NW	.....	.....	Long	SW	Cloudy.....	
Alaska, Callao, Peru.....	29.87	758.7	64	17.8	89	Calm	.....	.....	0	.....	10	.....	.....	.....	.....	Sm'h	.....	Overcast.....	
Alert, N. 21° 50′, E. 141° 40′....*	29.96	761.0	79	26.1	78	E	.....	.....	4	.....	5	NNW	E	.....	.....	Mod.	E	Fair	
Alliance, Norfolk, Va.....	30.16	766.1	70	21.1	80	SW	.....	.....	2	.....	0	.....	.....	0	0	Sm'h	.....	Clear.....	
Ashuelot, N. 33° 20′, E. 129° 25′.....	30.13	765.3	63	17.2	72	NE	.....	.....	4	.....	10	.....	Calm	.....	.....	.....	.....	Hazy.....	
Colorado, New York, N. Y.....	30.00	762.0	80	26.7	62	WSW	4	1.8	.....	.....	2	.....	.....	0	0	.....	.....	Hazy.....	
Constitution, N. 36° 53′, W. 76° 20′.....	30.11	764.8	68	20.0	79	SW	3	1.3	.....	.....	0	.....	.....	.....	.....	.....	.....	Clear.....	
Franklin, Norfolk, Va.....	30.11	764.8	70	21.1	75	SW	8	3.6	.....	.....	2	.....	NW	0	0	.....	.....	Fair.....	
Galena, N. 40° 41′, E. 14° 09′.....	29.93	760.2	60	15.6	65	W	.....	.....	2	.....	8	.....	W	.....	.....	Sm'h	.....	Fair..	
Independence, N. Yard, Mare I'd, Cal...	30.01	762.2	53	11.7	80	SW	8.4	3.8	.....	.....	8	.....	SW	0	0	.....	.....	Cloudy.....	
Jamestown, Sitka, Alaska.....*	29.60	751.8	42	5.6	91	E	.....	.....	3	.....	10	.....	.....	0.78	19.8	.....	.....	Raining.....	
Kearsarge, Port Royal, S. C.....	30.28	769.1	71	21.7	85	NNE	.....	.....	2	.....	2	.....	.....	.....	.....	Sm'h	.....	Fair..	
Lackawanna, S. 24° 04′, W. 91° 50′.....†	30.20	767.1	70	21.1	100	SSE	.....	.....	2-3	.....	10	.....	SSE	.....	.....	Sm'h	NW	Cloudy.....	
Marion, Montevideo, Uruguay.....	29.95	760.7	64	17.8	94	NNE	.....	.....	2	.....	10	.....	Calm	Light		Sm'h	.....	Rainy	
Michigan, Erie, Pennsylvania.....	30.03	762.7	75	23.9	.....	W	3	1.3	.....	.....	0	.....	.....	.....	.....	.....	.....	Clear.....	
Minnesota, Newport, R. I.....	29.97	761.2	86	30.0	76	NNE	.....	.....	1	.....	0	.....	.....	.....	.....	Sm'h	.....	Clear.....	
Monocacy, N. 32° 04′, E. 133° 23′.....	30.22	767.6	70	21.1	61	ENE	.....	.....	2	.....	2	.....	Calm	.....	.....	Sm h	.....	Clear.....	
New Hampshire, Port Royal, S. C.....	30.27	768.8	73	22.8	81	NE	6	2.7	.....	.....	5	.....	Calm	0	0	.....	.....	Fair	
Nipsic, N. 36° 32′, W. 1° 51′.....	30.09	764.3	65	18.3	58	NNE	.....	.....	6	.....	8	.....	NE	.....	.....	R'gh	ENE	Squally.....	
Onward, Callao, Peru.....†.	29.95	760.7	66	18.9	94	SSE	.....	.....	1	.....	2	.....	.....	.....	.....	Long	W	Clear..	
Palos, Yokohama, Japan.....	30.33	770.4	58	14.4	88	ENE	.....	.....	2	.....	2	.....	.....	.....	.....	....	.....	Fair.....	
Passaic, Washington, D. C.....	30.13	765.3	71	21.7	90	S	.....	.....	1	.....	0	....	.....	.....	.....	.....	.....	Clear.....	
Pensacola, N. 31° 49′, W. 146° 50′.....	30.29	769.4	68	20.0	90	NE	.....	.....	1-2	.....	2	.....	.....	Slight		Sm'h	.....	Clear.....	
Portsmouth, Sewels Point, Va.....	30.16	766.1	68	20.0	84	WSW	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	Clear.....	
Powhatan, N. 39° 06′, W. 74° 18′.....	30.06	763.5	60	15.6	88	WSW	.....	.....	2	.....	2	.....	W	.....	.....	Long	S	Clear.....	
Quinnebaug, N. 30° 02′, W. 18° 00′.....	29.91	759.7	70	21.1	75	NW	.....	.....	3	.....	5	.....	NNW	.....	.....	Long	N	Fair.....	
Ranger, Acapulco, Mexico.....*	29.81	757.2	80	26.7	82	Calm	.....	.....	0	.....	10	.....	Calm	0	0	Sm'h	.....	Cloudy.....	
Richmond, N. 33° 40′, E. 136° 50′.....	30.23	767.8	69	20.6	70	ESE	.....	.....	2	.....	2	.....	.....	0	0	Sm'h	ENE	Clear.....	
Saratoga, Hampton Roads, Va.....	30.16	766.1	68	20.0	79	W	.....	.....	3	.....	2	.....	Calm	0	0	.....	.....	Fair.....	
Shenandoah, Montevideo, Uruguay..*	29.92	760.0	63	17.2	94	NE	.....	.....	2	.....	10	.....	.....	.....	.....	Sm'h	.....	Cloudy.....	
St. Louis, League Island, Pa.....	29.61	752.1	74	23.3	76	SW	5	2.2	.....	.....	8	.....	SW	0	0	.....	.....	Cloudy.....	
Swatara, Shanghai, China.....†*	30.06	763.5	66	18.9	79	SSE	.....	.....	1	.....	10	....	NW	.....	.....	.....	.....	Overcast.....	
Tennessee, Hampton Roads, Va.....	30.17	766.3	69	20.6	80	WSW	9	4.0	.....	.....	2	.....	.....	0	0	Sm'h	.....	Fair.....	
Ticonderoga, S. 44° 00′, W. 115° 52′.....	30.23	767.8	53	11.7	93	ENE	.....	.....	3	.....	8	.....	Calm	0	0	Long	SSW	Cloudy.....	
Trenton, Castellamare, Italy ....*	29.92	760.0	65	18.3	54	W	.....	.....	3	.....	10	.....	.....	4 h'rs	light	Sm'h	.....	Cloudy.....	
Vandalia, Boston Mass.....	29.92	760.0	66	18.9	84	E	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....	Clear.....	
Wabash, Boston, Massachusetts..	29.99	761.7	72	22.2	67	NE	1	0.4	.....	.....	2	.....	Calm	0	0	.....	.....	Fair.....	
Wachusetts, N. 38° 50′, W. 133° 24′.....	30.16	766.1	55	12.8	93	NNW	.....	.....	4-5	.....	10	.....	N	5 hours		Mod.	N	Cloudy.....	
Wyoming, N. 22° 22′, W. 56° 35′.....	29.98	761.5	73	22.8	76	NNE	.....	.....	2	.....	2	.....	.....	.....	.....	Long	NNW	Clear.....	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisie																			Capt. A. J. Brown.
British Merchant ‡																			Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Clpero, Trinidad, W. I.	29.91	759.7	77.8	25.4	95	SE			1		9							Overcast.	W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne, N. 14° 48′, W. 42° 11′	30.02	762 5	78	25.6	77	ENE			4		5							Misty	Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 37° 00′, W. 40° 52′	30.34	770.6	65.0	18.3	73	E			4		5							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee, ‡ N. 6° 00′, W. 27° 20′	29.90	759.4	80.5	26.9	91	ENE			3		7							Showery	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 50° 26′, W. 12° 12′	30.51	774.9	54.5	12.5	74	SSE			3		2		NNW			4	WNW; SE	Blue sky	Capt. H. W. Dyke.
Barque Mertola, N. 50° 02′, W. 13° 31′	30.51	774.9	53.5	11.9	79	SSE			3		5							D. clouds	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ S. 13° 14′, W. 7° 54′	30.02	762.5	80	26.7	74	ESE			3		5							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 16° 45′, E. 96° 14′	29.79	756.7	83.5	28.6	83	SSE			4		5							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, ‡ N. 34° 30′, E. 25° 06′	30.12	765.0	67	19.4	79	Calm			0		5							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean																			Capt. W. H. Smith.
S. S. Circassian																			Capt. F. Archer.
S. S. Hibernian																			Capt. Wm. Richardson.
S. S. Nova Scotian																			
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia, off Queenstown, Ireland*	30.45	773.4	58	14.4		Calm			0		5			0	0	Sm'h		Misty	Capt. W. H. P. Hains.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic, N. 50° 57′, W. 14° 59′	30.44	773.2	54	12.2	67	S			3		10					R'gh	SW; WNW	Overcast	Capt. H. Parsell.
S. S. Britannic, N. 42° 36′, W. 54° 13′ †	30.11	764.8	50	10.0		SE			2		5		W			Sm'h	W	Misty	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England †	30.55	776.0	58	14.4		NNW			3		8?		NW	0	0			Clear?	Capt. Ch. W. Kennedy
S. S. Republic, N. 50° 22′, W. 22° 44′ †	30.43	772.9	58	14.4	88	SSW			5		5		SSW	4h'rs	light	Sm'h		Fair	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Thol.
S. S. Hermann																			Capt. H. Baur.
S. S. Köln, N. 47° 54′, W. 37° 39′	30.29	769.4	63.5	17.5	67	N			3		8		NW	5 h'rs	rain	Mod.	N	Fair	Capt. Th. Jüngst.
S. S. Leipzig, N. 42° W. 45° 41′	30.28	769.1	61.5	16.4		E			3		8		E	8 hours		Sm'h	ENE	Clearing	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. N. 51° 48′, W. 8° 15′	30.48	774.2	59	15.0	88	SSW			2		2		SSW			Sm'h	SW	Clear	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio, N. 39° 01′, W. 70° 48′ †*	30.05	763.3	66	18.9	94	NW			3		2		NW	0	0	Sm'll	E	Fair	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, N. 45° 00′, W. 39° 12′ *†	30.25	768.3	65	18.3	84	NE			3		2		ENE			Sm'h	ENE	Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 23° 04′, W. 107° 40′ †	29.86	758.4	73	22.8	85	NE			2		8		NE	0	0	Sm'll	SW	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, Yokohama, Japan †	30.29	769.4	62	16.7	83	NE			2		2		SW	0	0	Sm'h		Clear	Capt. H. Davison.
S. S. Gaelic, N. 34° 28′, E. 138° 40′ *†	30.42	772.7	65	18.3	100	ESE			5		2		SE			Mod.	SE	Fair	Capt. W. H. Kidley.
S. S. Oceanic, N. 45° 08′, W. 163° 23′	30.13	765.3	45	7.2	84	W			3		8		W	0.01	0.3	4	W	D. clouds	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, N. 41° 31′, W. 124° 28′ †	30.13	765.3	57.5	14.2	93	NW			3		2		NW			Mod.	NW	Fair	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota, N. 40° 49′, W. 124° 45′ *†	30.02	762.5	54	12.2	80	S			4		10		SE	0	0	Sm'h		Fine	Capt. H. G. Morse.
S. S. Idaho, N. 42° 43′, W. 125° 14′ †	30.04	763.0	48	8.9	92	NE			2		0					Light	NW	Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, San Pedro, California †	29.96	761.0	56	13.3	94	N			1		8		NE			Sm'h		Misty	Capt. Thos. Wallace.
S. S. State of California, Portland, Oregon †	29.97	761.2	51	10.6	79	Calm			0		8							Overcast	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal †	30.01	762.2	50	10.0	86	S			2		8			0	0			Cloudy	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, Sydney, N. S. Wales	30.20	767.1	57	13.9	81	Calm			0		0							Clear	A. Bannerman, 2d Officer.
S. S. City of New York, Sydney, N. S. W. †	30.22	767.6	52	11.1	86	NW			1		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China †	30.01	762.2	75	23.9	81	ESE			1		5		NE	0	0	Sm'h		Fair	Capt. G. G. Berry.
S. S. City of Sidney, N. 25° 01′, W. 151° 24′ †	30.17	766.3	70	21.1	85	E			4		5		NE	0	0	Mod.	ENE	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio																			A. L. Ritchie, 2d Officer.
S. S. Colima, N. 17° 44′, W. 102° 13′ †	29.92	760.0	80	26.7	82	NE			3		10		NE	0	0	Sm'h	SW	Cloudy	Capt. R. R. Searle.
S. S. Granada, N. 7° 05′, W. 81° 25′ †	29.86	758.4	82	27.8	87	WSW			4		5		W	Squalls		Short	SW	Clear	Capt. M. Connolly.
S. S. Zealandia, N. 30° 13′, W. 140° 48′	30.30	769.6	70	21.1	70	Var.			3		8		S	0	0	Sm'h	SW	Cloudy	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland																			Capt. Wm. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, N. 31° 44′, W. 80° 04′	30.22	767.6	74	23.3	72	NE	3	1.3			2k			0	0	Swell	SE	Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 22° 58′, W. 47° 30′ *†	30.14	765.5	77	25.0		ESE			4		10		ESE	0	0		ESE	Threatening	Capt. B. F. Woodbury.
Brigantine George																			Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Chesapeake bay Md †	30.19	766.8	75	23.9	90	SSW	2	0.9		5cs?	2s?			0	0			Clear?	
Bark Sunbeam, N. 38° 54′, W. 13° 14′ †	30.02	762.5	62	16.7	77	ENE			6		0			0	0	R'gh	ENE	Clear	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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W. B. Hazen

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

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 13, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco ‡			29.95	760.6	71.2	21.8	77	SW			2		1			0	0	Very fair	Dr. Ollive.
Nemours ‡			29.90	759.4	68.0	20.0	94	NE			7		4			0	0	Cloudy	Raynard.
Algiers ‡			30.02	762.6	61.2	16.2	84	NE			5		5			0.122	3.1	Cloudy	Nicolas.
La Calle ‡			30.05	763.2	64.8	18.2	54	NNW			4		2			0.020	0.5	Fair	Fonfréde.
Tunis ‡			30.04	763.0															Jacques.
Sfax ‡			30.13	765.2															Gau.
Saida ‡			29.94	760.4	72.0	22.2	43	S			8		10			0.461	11.7	Covered	Dumas.
Tebessa ‡			30.00	762.1	55.4	13.0	64	Calm			0		8			Inap.	Inap.	Very cloudy	Watrin.
Geriville ‡																			Lonchamp.
Laghouat ‡			30.02	762.6	64.0	17.8	32	S			4		4			0.087	2.2	Cloudy	Herbin.
Biskra ‡			29.94	760.4															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.88	758.9	29.97	761.2	60.2	15.7	60	N	30	13.4			8			0	0	Fine	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.30	744.1	29.85	758.2	49.5	9.7	64	NW			4		10			0.031	0.8		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.15	740.4	29.92	760.0	49.6	9.8	87	NE	21.0	9.4			10			0.063	1.6		Dr. Wierzbicki.
Eperies	28.94	735.0	29.81	757.1	55.2	12.9	78	N			2		10ks		S	0.480	12.2		Julius Mikolik.
Gratz	28.62	727.0	29.87	758.8	49.3	9.6	68	W			2		10			0	0		Andreas Rospini.
Hermannstadt ‡	28.32	719.2	29.75	755.6	50.2	10.1	96	NW			3		10			1.252	31.8	Raining	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.65	727.8	30.04	763.1	37.0	2.8	94	WSW			3		10			1.276	32.4	Raining	The Staff.
Lemberg	28.95	735.3	29.95	760.6	48.4	9.1	88	SE			2		10			0.252	6.4		Dr. T. Stanecki.
Pola	29.77	756.1	29.88	758.9	57.0	13.9	58	NW			1		5			0.028	0.7		I. R. Hydrographic Office.
Szathmar	29.34	745.2	29.80	756.9	55.8	13.2	73	NE			1		10			0.598	15.2		Beicht Peter, S. J.
Szegedin	29.52	749.7	29.80	756.8	55.0	12.8	67	SW			1		10			0.673	17.1		Karl Stancel.
Trieste	29.82	757.3	29.92	759.9	56.5	13.6	53	Calm			0		10			0.035	0.9	Rainy	Secco.
Vienna	29.16	740.6	29.88	759.0	47.1	8.4	92	N			2		10			0.559	14.2		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maseyck																			M. Pierrot.

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

BRITISH SERIES.

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

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Aberdeen	29.80	756.9	29.90	759.4	54.0	12.2	58	SE	11	4.9	.....	.....	5	.....	.....	0.040	1.0	Blue sky	W. Boswell.
Armagh, Observatory	29.86	758.4	30.10	764.5	53.9	12.2	61	SW	14	6.3	.....	.....	9	.....	.....	.....	.....	Overcast	S. Call.
Bidston, Liverpool Obs'y	.....	.....	30.16	766.1	54.3	12.4	60	WNW	10	4.5	.....	.....	1	.....	.....	.....	.....	Blue sky	John Hartnup.
Bolton, Sharples	29.58	751.3	30.11	764.8	61.8	16.6	59	WNW	18	8.0	.....	.....	1	.....	.....	.....	.....	D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.65	753.1	30.05	763.3	64.8	18.2	48	SW	.....	.....	1	.....	1	.....	.....	0	0	Blue sky	J.McLandsbo ough, F.R.S
Bridgetown, Barbadoes	29.88	758.9	29.91	759.7	83.0	28.3	75	E	.....	.....	2	.....	6	.....	.....	.....	.....	Gloomy	Corpl. J. Surgener, A.H.C.
Cardington	.....	.....	30.12	765.0	72.0	22.2	72	NW	.....	.....	0.2	.....	1	.....	.....	.....	.....	Blue sky	John McLaren.
Chatham, School M. E.	30.04	763.0	30.17	766.3	67.7	19.8	52	W	.....	.....	1	.....	10	.....	.....	.....	.....	Overcast	Lance Cpl. R. Tear, R.E.
Falmouth, Observatory	30.00	762.0	30.23	767.8	62.0	16.7	46	NW	.....	.....	2	.....	0	.....	.....	.....	.....	Blue sky	The Staff.
Fort Napier, Natal	27.77	705.3	29.99	761.7	67.1	19.5	46	NE	.....	.....	1	.....	0	.....	.....	.....	.....	Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.60	751.8	29.83	757.7	87	30.6	88	SW	.....	.....	1	.....	5	.....	.....	.....	.....	D. clouds	Sgt. C. E. Keane.
Galway, Queen's College	.....	.....	30.07	763.8	54	12.2	67	SW	.....	.....	4	.....	10	.....	.....	0.16	4.1	Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	29.81	757.2	29.86	758.4	64.3	17.9	88	E	.....	.....	6	.....	10	.....	.....	.....	.....	Raining	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.81	757.2	30.01	762.2	54.9	12.7	57	SW	.....	.....	6	.....	8	.....	.....	.....	.....	D. clouds	D. G. MacLean.
Greenwich, Royal Obs'y	30.00	762.0	30.17	766.3	67.7	19.8	48	SW	.....	.....	1	.....	0	.....	.....	.....	.....	Blue sky	The Staff.
Guernsey	30.01	762.2	30.23	767.8	53	11.7	83	SSE	.....	.....	2	.....	3	.....	.....	.....	.....	Blue sky	Dr. S. E. Hoskins, F.R.S.
Kew, Observatory	30.14	765.5	30.18	766.6	63.7	17.6	48	SW	9	4.0	.....	.....	1	.....	.....	.....	.....	Blue sky	The Staff.
Leicester, Museum	29.85	758.2	30.09	764.3	68.8	20.4	42	SW	.....	.....	1	.....	10	.....	.....	.....	.....	Misty	J. E. Carryer.
Malta, Mediterranean	29.91	759.7	29.98	761.5	68.0	20.0	74	W	.....	.....	3	.....	0	.....	.....	0	0	Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	30.04	763.0	30.09	764.3	76.0	24.4	82	NE	.....	.....	3	.....	4	.....	.....	.....	.....	D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.60	751.8	30.11	764.8	68.4	20.2	47	SW	.....	.....	1	.....	0	.....	.....	.....	.....	Blue sky	Robert Pate.
Oxford, Radcliffe Obs'y	29.93	760.2	30.16	766.1	68.3	20.2	46	SW	.....	.....	2	.....	0	.....	.....	.....	.....	Misty	The Staff.
Plymouth	30.14	765.5	30.22	767.6	58.8	14.9	75	S	.....	.....	2	.....	0	.....	.....	.....	.....	Misty	John Merrifield.
Sandwick Manse, Orkneys	.....	.....	29.77	756.1	49.5	9.7	80	SW	19	8.5	.....	.....	10	.....	.....	.....	.....	Overcast	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.71	754.6	29.78	756.4	74.0	23.3	43	SE	.....	.....	1	.....	10	.....	.....	Blank		Overcast	Serg't W. H. Lyne.
Sheffield	29.84	757.9	30.11	764.8	70.4	21.3	86	SW	.....	.....	2	.....	1	.....	.....	0	0	Blue sky	W. F. Cooper.
Silloth Rectory	30.04	763.0	30.07	763.8	56.4	13.6	69	W	.....	.....	3	.....	5	.....	.....	0.057	1.4	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	30.13	765.3	59.2	15.1	58	W	16	7.2	.....	.....	5	.....	.....	.....	.....	D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	29.97	761.2	30.18	766.6	68.0	20.0	40	SW	.....	.....	1	.....	0	.....	.....	.....	.....	Blue sky	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.20	767.1	30.22	767.6	63	17.2	47	NW	.....	.....	6	.....	3	.....	.....	.....	.....	D. clouds	W. Newcombe.
Valencia, Observatory	30.17	766.3	30.20	767.1	54.6	12.6	66	SW	24	10.7	.....	.....	10	.....	.....	.....	.....	Gloomy	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.97	761.2	30.02	762.5	41	5.0	92	N	7	3.1	.....	.....	10s	.....	.....	0.015	0.4	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	29.98	761.5	30.04	763.0	43	6.1	96	NE	1	0.4	.....	.....	10s	.....	NE	0.01	0.3	Cloudy	G. A. Blair.
Chicontimi, Quebec	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Rev. V. A. Huart.
Cornwall, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	James Smith, M. A.
Dalhousie, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. A. Johnson.
Father Point, Quebec*	29.98	761.5	30.00	762.0	41	5.0	84	NW	5	2.2	.....	.....	10n	.....	Calm	0	0	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.34	745.2	30.17	766.3	50	10.0	72	S	10	4.5	.....	5k	5s	W	W	0	0	Cloudy	James Stewart.
Fredericton, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. Harrison
Granton, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	James Grant.
Halifax, N. S.*	29.88	758.9	30.02	762.5	42	5.6	92	NE	4	1.8	.....	.....	10n	.....	W	0	0	Cloudy	A. Allison.
Hamilton, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. Dickson, B. A.
Kingston, Ontario*	29.73	755.1	30.06	763.5	66	18.9	71	NW	12	5.4	.....	0	0	.....	.....	0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	O. H. Rigby.
Montreal, Quebec*	29.88	758.9	30.08	764.0	57	13.9	63	N	20	8.9	.....	2c	8ks	.....	.....	0.04	1.0	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. R. Nason.
Parry Sound, Ontario*	29.50	749.3	30.18	766.6	58	14.4	64	NE	7	3.1	.....	2cs	0	NW	.....	0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. F. Jeffers, M. A.
Port Dover, Ontario	29.48	748.8	30.16	766.1	59	15.0	82	NW	6	2.7	.....	2c	0	NW	.....	0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.52	749.8	30.16	766.1	54	12.2	63	W	10	4.5	.....	2ck	0	NW	.....	0	0	Clear	M. Payne.
Quebec, Quebec*	29.76	755.9	30.08	764.0	49	9.4	93	Calm	.....	.....	0	0	5s	.....	Calm	0.39	9.9	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.74	755.4	30.19	766.8	58	14.4	62	W	6	2.7	.....	5c	0	SW	.....	0.15	3.8	Fair	W. H. McIntyre.
Saugeen, Ontario*	29.49	749.0	30.21	767.3	48	8.9	84	S	4	1.8	.....	2cs	0	.....	.....	0	0	Clear	K. Stewart.
St. Andrews, N. B.	29.96	761.0	30.01	762.2	44	6.7	87	SE	7	3.1	.....	.....	10n	.....	.....	0	0	Cloudy	
St. John, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Murdock, C. E.
Stratford, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. J. Macgregor, M. A.
Sydney, C. B*	29.96	761.0	30.00	762.0	38	3.3	97	NE	8	3.6	.....	.....	10n	.....	.....	0.09	2.3	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.76	755.9	30.14	765.5	61	16.1	61	NW	12	5.4	.....	0	0	.....	.....	0	0	Clear	Magnetic Observatory.
Windsor, N. S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Woodstock, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. Wolverton.
Yarmouth, N. S.*	29.94	760.5	30.00	762.0	47	8.3	92	Calm	0	0	.....	.....	10s	.....	NW	0	0	Cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.92	760.0	30.18	766.6	34	1.1	100	E	1	0.4	.....	Fg	Fg	.....	.....	1.96	49.8	Raining	John Delany.
St. Pierre, N. F.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	N. F. Land, Comd't

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

CAPE COLONY SERIES.

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

Cape St. Francis Lt. House	30.08	764.0	.....	.....	64.0	17.8	88	E	16.5	7.4	.....	.....	3k	.....	.....	0	0	.....	John Duthie.
Cape Town, C. G. H. Obs'y	29.87	758.7	29.91	759.7	65.8	18.8	.....	S	7.9	3.5	.....	5	5	.....	.....	0	0	Vapory	The Staff, for D. Gill.
Worcester*†	28.91	734.3	.....	.....	64.8	18.2	49	SE	.....	.....	1	5	5	.....	.....	0	0	Cloudy	C. Stokes.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.06	763.5	30.09	764.2	62.1	16.7	90	ESE	3.4	1.5	.....	10ck	0	W	.....	0.008	0.2	.....	M. Marc Dechevrens, S.J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	25.17	664.7	29.89	759.2	64.4	18.0	92	NE			1	10s	0			0.63	16.	Clear	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.04	762.9	30.08	764.1	58.1	14.5	47	NW	20	9			8						Oversergent Fischer.
Fanöe	30.11	764.8	30.13	765.3	50.2	10.1	68	WSW			4		3						Overloerer Lauridsen.
Godthaab, Greenland	29.99	761.8	30.04	762.9	35.2	1.8	80	NE			4		7						S. Kleinschmidt.
Stykkisholm, Iceland	29.67	753.7	29.72	754.8	35.2	1.8		SE			7		8						A. O. Thorlacius.
Thorshavn	29.31	744.5	29.35	745.4	48.6	9.2	80	SW	38	17			7						Overloerer Bergh.
Vestervig	29.95	760.7	30.04	763.1	49.5	9.7	82	SW			6		3						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.45	748.0	30.10	764.5	61.5	16.4	37	N			1		0			0	0	Clear	M. Labroue, Director.
Alençon Normal School	29.73	755.1	30.28	769.1	54.7	12.6	81	N			1	2c	0			0	0	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	29.96	760.9	30.21	767.4	61.2	16.2	43	NW			1	c	0			0	0		M. Klein, Commandant.
Avignon, Normal School	29.95	760.6	30.02	762.6	64.0	17.8	30	N			3		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.60	751.7	30.15	765.7	60.3	15.7	55	ESE			1		5ku		ESE	0	0	Cloudy	M. Saillard, Director.
Beauvais, Normal School	29.96	761.0	30.23	767.7	59.0	15	33	E			2		0			0	0	Clear	M. Frère Eugene Marie.
Besançon, Normal School	29.26	743.2	30.14	765.6	57.7	14.3	54	NE			2	clc	0		NE	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.88	758.9	30.14	765.5	63.5	17.5	33	NE			1		2			0	0	Almost clear	M. Rayet, Director.
Bourges, Normal School	29.61	752.0	30.15	765.8	63.5	17.5	40	E			1					0	0		M. Postel, Director.
Brest, Naval Observatory	30.02	762.5	30.26	768.7	67.8	19.8	54	SW			1		0			0	0		M. de Rermaree, Dir.
Caen, Normal School	30.12	765.1	30.20	767.0	60.1	15.6	58	NW			1		0			0	0	Clear	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.88	759.0	30.20	767.0	65.3	18.5	34	W			1		5			0	0	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.63	752.6	30.14	765.5	65.8	18.8	31	W			1		2			0	0	¼ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.76	730.6	30.12	765.0	55.4	13.0	47	N			2		2k			0	0	Slightly cl'dy	M. Allnard, Director.
Cluny, Normal School	29.34	745.2	30.11	764.8	59.7	15.4	48	NE			2		3		NE	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.30	744.2	30.17	766.2	60.8	16	41	N			1	5clc	0			0	0	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.45	697.3	29.98	761.4	56.8	13.8	39	NE			2	2c	0		S	0	0	¼ covered	M. Jeangirard, Director.
Grenasque, du. Rhone	28.93	734.7	30.07	763.7	60.3	15.7	41	W			3		2		SW	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.30	744.2	30.06	763.6	56.5	13.6	48	ENE			1	clc	0			0	0		M. Ablard, Director.
Guéret, Normal School	28.58	725.8	30.14	765.6	57.2	14	37	NE			1	c	0		NE	0	0		M. Rivoire, Director.
Lamballe, Normal School	29.95	760.6	30.21	767.4	63.5	17.5	52	N			1				N	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.65	753.2	30.33	770.3	57.2	14	64	N			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.19	766.7	30.29	769.3	62.6	17.0	52	S			1		0			0	0	Clear	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.05	737.9	30.11	764.9	54.7	12.6	41	NE			1		2		NE	0	0	Slightly cl'dy	M. André, Director.
Mans, Normal School	29.91	759.8	30.22	767.7	58.5	14.7	43	NNE			1		0			0	0	Clear	M. Piboen, Director.
Marseille, Observatory	29.75	755.7	30.02	762.5	62.8	17.1	39	WNW			2		0			0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.82	630.5	30.06	763.5	50.0	10.0	40	ESE	11.2	5.0			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.91	759.8	30.02	762.5	63.7	17.6	57	S			2		0			0	0	Clear	M. P. Galzin, Director.
Nancy, Normal School	29.39	746.4	30.14	765.6	60.8	16	42	NNW			1		k			0	0		M. Hasse.
Nantes, Observatory	30.09	764.2	30.25	768.4	62.4	16.9	44	N			0-1		2k		NE	0	0		M. Larocque, Director.
Nice	29.93	760.3	29.97	761.1	61.9	16.6	63	W			4		5	W	W	0.406	10.3	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.92	759.9	30.02	762.6	64.8	18.2	21	N	9.4	4.2			0			0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.52	571.9			41.0	5.0							0			0	0	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.03	737.3	30.09	764.2	59.4	15.2	29	N			4		0			0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.21	640.2			36.0	2.2	64	NNE			3		2			0	0	¼ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	30.19	766.8	30.22	767.6	66.2	19.0	37	NE			1		0			0	0	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.05	763.3	30.27	768.8	62.2	16.8	46	NNE			1		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.97	710.3	30.09	764.3	59.7	15.4	42	NW			2		0			0	0	Clear	M. Richard, Director.
Rouen, Normal School	30.16	766.1	30.25	768.3	63.7	17.6	43	E			1		2		E	0	0	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	30.08	764.1	30.25	768.4	61.5	16.4	38	NW			1		0			0	0	Clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.04	762.9	30.20	767.1	62.8	17.1	32	N			2		1		N	0	0		M. Renou, Director.
Toulouse, Observatory	29.43	747.5	30.16	766.0	63.1	17.3	48	NW			1					0	0		M. Baillaud, Director.
Tours	29.98	761.6	30.18	766.6	62.6	17.0	41	E			2		0			0	0	Clear	M. de Tastes.
Versailles, Observatory	29.71	754.6	29.81	757.1	61.5	16.4	32	NE			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.19	741.4	30.06	763.4	59.0	15.0	30	E			5		3k	NNE		0.008	0.2		Prof. Dr. Hoh.
Berlin	29.95	760.8	30.12	765.1	61.2	16.2	51	N			1		3			0	0		Prof. Dr. Arndt.
Breslau	29.48	748.7	30.01	762.2	59.9	15.5	29	NE			4		5			0.008	0.2		Royal University Obs'y.
Carlsruhe	29.67	753.7	30.10	764.5	60.1	15.6	51	NW			1		1	NE		0	0		Albert Senz.
Cassel	29.40	746.8	30.12	765.0	60.1	15.6	31	NNE			3		0			0	0		Dr. H. Möhl.
Frankfort on the Main	29.80	756.8	30.16	766.0	60.6	15.9	21	N			1		0			0	0		Physical Society.
Friedrichshafen	28.71	729.1	30.17	766.3	46.0	7.8	79	SW			2		10	N		0	0		Wilhelm, Chief Tel.
Hamburg	30.10	764.6	30.17	766.4	57.2	14.0	50	W			2		2			0	0		Dr. R. Kleeman.
Kiel	30.13	765.2	30.14	765.6	47.1	8.4	44	W			1		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.69	754.2	30.11	764.9	54.5	12.5	41	N			1		2			0	0		Prof. Dr. Bruhns.
Magdeburg	29.84	757.9	30.13	765.3	58.6	14.8	45	N			1	10s	0	NNE		0	0		Dr. Assmann.
Memel	30.08	764.0	30.13	765.2	48.2	9.0	73	WSW			3-4	5c	0						Reinbrecht & Issermann.
Munich	28.24	717.4	30.11	764.8	49.3	9.6	72	W			2		9	W		0.232	5.9		Central Station.
Neufahrwasser	30.10	764.4	30.11	764.8	52.5	11.4	46	E			1		1			0	0		A. Lothes.
Neustadt, Palatinate	29.56	750.9	30.09	764.3	62.4	16.9	38	NE			1		0			0	0		Dickuether.
Stuttgart	29.15	740.5	30.04	763.1	59.0	15.0	41	N			2		4	N		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.55	725.1	30.03	762.8	57.0	13.9	38	N			6		3	SE		0.055	1.4		Prof. Kemlein.
Wustrow	30.16	766.0	30.18	766.6	51.4	10.8	69	W			2		8s			c	0		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours, Inch.	Rain-fall or melted snow in the past 24 hours, Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.42	747.2	29.80	756.9	71.6	22.0		S			6.0		0					Clear.	A. Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.62	752.4	29.67	753.7	88.0	31.1	70	SW	38.0	17.0			0			0	0	Misty	
Deesa	29.20	741.6	29.65	753.1	102.9	39.4	23	WSW	18.8	8.4			0			0	0	Blue sky	
Bombay	29.75	755.7	29.79	756.7	87.8	31.0	74	W	9.0	4.0			9	WSW	W	0	0	D. clouds	
Poona, Yarrowda	27.92	709.3	29.74	755.4	89.0	31.7	45	WSW	4.0	1.8			7	ESE		0	0	D. clouds	
Belgaum	27.27	692.7	29.82	757.3	73.7	23.2	76	NNW	10.0	4.5			9		E	0.19	4.8	Threatening	
Lahore	28.91	734.3	29.63	752.6	92.1	33.4	39	E	7.1	3.2			5			0.37	9.4	Misty	
Roorkee	28.79	731.2	29.67	753.7	84.8	29.3	62	S	5.1	2.3			0			0.75	19.0		
Agra	29.08	738.7	29.63	752.6	93.1	33.9	38	SE	9.2	4.1			0			0	0		
Nagpur	28.62	726.9	29.61	752.0	105.5	40.8	17	NW	5.8	2.6			8		W	0	0	D. clouds	
Jubbulpore	28.32	719.4	29.62	752.4	98.5	36.9	16	NW	4.2	1.9			5		N	0	0	D. clouds	
Lucknow	29.32	744.7	29.69	754.1	91.0	32.8	39	NW	7.8	3.5			0			0	0	Blue sky	
Allahabad	29.32	744.8	29.62	752.5	96.5	35.8	44	E	6.6	3.0			0			0	0	Blue sky	
Patna	29.48	748.8	29.66	753.3	86.8	30.4	58	E	8.0	3.6			0			0	0	Blue sky	
Hazaribagh	27.67	702.9	29.63	752.5	89.8	32.1	50	ESE	12.4	5.5			4			0	0	D. clouds	
Cuttack	29.61	752.2	29.69	754.2	88.1	31.2	68	S	8.0	3.6			5			0	0	D. clouds	
Calcutta, Alipore	29.71	754.6	29.73	755.1	76.5	24.7	82	E	13.0	5.8			10		S	0.26	6.6	Overcast	
Dhubri	29.62	752.2	29.74	755.3	80.7	27.1	74	E	8.2	3.7			9			0	0	Gloomy	
Chittagong	29.71	754.6	29.80	756.8	83.5	28.6	80	SSW	5.2	2.3			8			0	0	D. clouds	
Sibsagar	29.48	748.9	29.82	757.5	78.1	25.6	84	NE	2.5	1.1			10	SW	SW	0.09	2.3	D. clouds	
Zanzibar, Africa			29.92	760.0	83.4	28.6	71	SW	7	3.1			3		SW	0.03	0.8	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.50	749.4	29.91	759.7	55.6	13.1	49	S	0.7	0.3			10			0.028	0.7		Prof. Giovanni Clodig.
Milan	29.38	746.2	29.88	759.0	60.6	15.9	52	WNW	8.7	3.9			5			0	0		Prof. Schiaparelli.
Padua	29.80	756.8	29.91	759.6	59.9	15.5	48	SSE	7.4	3.3			10			0.012	0.3		Prof. Dott. Lorenzoni.
Moncalieri	28.99	736.4	29.88	758.9	62.1	16.7	38	S	4.3	1.9			7	ENE		0	0		Prof. P. F. Denza.
Genoa	29.76	755.8	29.95	760.7	59.7	15.4	49	SW	9.4	4.2			2			0.051	1.3		Prof. G. M. Garibaldi.
Mondovi	28.02	711.6	29.89	759.3	59.9	15.5	23	NW			4		8			0.098	2.5		Prof. D. C. Bruno.
Pesaro	29.86	758.4	29.91	759.6	55.4	13.0	33	NW	13.0	5.8			4	W		0	0		Prof. Luigi Guidi.
Florence	29.65	753.0	29.90	759.4	61.2	16.2	37	NW			2		7	N		0	0		Prof. Costantino Pitter.
Leghorn	29.87	758.7	29.96	760.9	60.4	15.8	47	W	6.9	3.1			5			0	0		Prof. P. Monte.
Rome	29.74	755.4	29.91	759.7	63.0	17.2	37	W	9.4	4.2			9			0	0		Prof. P. S. Ferrari.
Lecce	29.65	753.1	29.90	759.4	59.0	15.0	61	WNW	16.1	7.2			5	N		0.256	6.5		Prof. C. de Giorgi.
Cosenza	29.06	738.2	29.95	760.6	58.3	14.6	74	SSW	5.6	2.5			6	SW		0.433	11.0		Prof. D. Conti.
Cagliari	29.76	755.9	29.95	760.8	63.9	17.7	39	WNW			6		7	NW		0	0		Prof. A. Pacinotti.
Palermo	29.76	755.8	30.00	762.1	61.9	16.6	47	NW	9.4	4.2			5			0.343	8.7		Prof. G. Ciacciatore.
Syracuse	29.87	758.8	29.92	759.9	64.2	17.9	62	E	6.3	2.8			8	W		0.047	1.2		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.39	746.5	29.91	759.7	60.3	15.7	57	WSW	8.7	3.9			5	W		0	0		Prof. F. Brioschi.
Stelvio	22.06	560.3			26.2	— 3.2	57	NE			2		rocks	NE		0	0	Overcast	Prof. P. F. Denza.
Valdobbia	22.10	561.3			35.8	2.1	59	E			2	3ck	0	NNE		0	0	Misty	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	30.13	765.3	30.15	765.8	59.0	15.0	84	SSW	2.3	1.0		ck	10s		W	0	0	Overcast	K. Sasaki.
Kioto	30.02	762.5	30.19	766.8	56.1	13.4	84	NE	5.4	2.4			10n		E	0.505	12.8	Raining	M. Tojima.
Nagasaki, I. M. Obs'y	29.92	759.9	30.12	765.0	64.5	18.1	71	N	3.2	1.4			10s			0	0	Cloudy	S. Takehayashi.
Tokei Obs'y, Yeddo	30.18	766.6	30.25	768.3	57.1	13.9	83	S	2.5	1.1			10n		S	0.240	6.1	Raining	The Staff.
Wakayama	30.12	765.0	30.17	766.3	57.0	13.9	92	Calm	0	0		ck	10n			0.665	16.9	Raining	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.80	756.9	29.99	761.8	76.4	24.7	79	ENE	8.0	3.6		3	4	WNW		0.63	16.0	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.66	753.5	29.92	760.0	72.0	22.2	95	ESE	0.9	0.4		2cs	0			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.23	767.8	30.23	767.8	56.8	13.8		W			2					0	0		
Groningen	30.13	765.2	30.18	766.6	57.4	14.1		NW			1					0	0		
Helder	30.19	766.9	30.19	766.9	52.0	11.1		WSW			1					0	0		
Hellevoetsluis	30.21	767.3	30.21	767.3	61.0	16.1	61	W			1					0	0		
Utrecht	30.16	766.0	30.21	767.2	60.8	16.0	41	NNW			2		2			0	0	Slightly cld'y	H. van der Brink.

STATIONS.	BAROMETER. Corrected for instru'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.	WIND. Force	CLOUDS. Amount and kind Up'er	CLOUDS. Amount and kind Lo'er	CLOUDS. Direction, Upper.	CLOUDS. Direction, Lower.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																		
Bergen	29.83	757.7	29.89	759.3	45.4	8.0	98	S	13.4	6.0	.....	.....	10	.....	.....	.....	0.827	21.0	.....	.....
Christiania	29.66	753.4	29.80	757.0	61.9	16.6	45	SW	16	7	.....	.....	7	.....	.....	.....	0	0	.....	.....
Gjæsvær	29.28	743.6	29.30	744.2	40.1	4.5	.....	SW	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	.....
Lodingen	29.41	747.0	29.46	748.2	38.7	3.7	83	WSW	.....	.....	7	.....	10	.....	.....	.....	0.067	1.7	.....	.....
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																		
Angra, Azores	30.14	765.5	30.30	769.5	62.6	17.0	72	ENE	7.4	3.3	.....	.....	5	.....	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	28.91	734.2	29.88	759.0	69.1	20.6	20	ENE	14.3	6.4	.....	.....	4	.....	.....	.....	0	0	.....	Dr. A. M. R. dos Santos
Funchal, Madeira	29.82	757.3	29.90	759.5	67.3	19.6	68	SW	6.9	3.1	.....	.....	5	.....	.....	.....	0.512	13.0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.59	751.5	29.94	760.5	66.6	19.2	39	NE	21.0	9.4	.....	.....	1	.....	.....	.....	0.173	4.4	.....	The Staff.
Ponta Delgada, Azores	30.19	766.8	30.26	768.6	63.7	17.6	62	NE	19.2	8.6	.....	.....	4	.....	.....	.....	0	0	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																		
Akmolinski	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	29.52	749.8	29.54	750.3	38.7	3.7	95	SW	4	2	.....	.....	10	.....	.....	.....	.....	.....	Raining	Capt. Sseliwerstow.
Astrakhan	30.12	765.1	30.04	763.0	50.7	10.4	60	NNE	11	5	.....	.....	10s	.....	.....	.....	Blank	.....	.....	Capt. Wisganow.
Barnaul	28.95	735.4	29.42	747.2	80.1	26.7	21	WSW	13	6	.....	.....	9	.....	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat ‡	29.70	754.3	29.94	760.5	51.4	10.8	64	WSW	13	6	.....	.....	10n	.....	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	28.95	735.3	29.93	760.2	38.8	3.8	36	W	27	12	.....	.....	1k	.....	.....	.....	.....	.....	.....	Meteorological Obs'y.
Kasan	29.85	758.2	30.13	765.2	49.6	9.8	39	WSW	11	5	.....	.....	4k	.....	.....	.....	.....	.....	.....	Observatory.
Kertch	30.02	762.6	30.04	763.1	56.3	13.5	81	NE	7	3	.....	.....	6	.....	.....	.....	.....	.....	.....	Lagorio & Sastyrez.
Kieff	29.45	748.0	30.08	764.1	54.9	12.7	41	SE	13	6	.....	.....	0	.....	.....	.....	.....	.....	.....	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.91	759.6	30.11	764.7	59.5	15.3	27	ESE	13	6	.....	.....	0	.....	.....	.....	.....	.....	.....	Meteorological Obs'y.
Moscow	29.56	750.9	30.11	764.9	56.5	13.6	34	SSW	7.8	3.5	.....	.....	2ks	.....	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.37	695.2	29.65	753.0	42.1	5.6	61	Calm	0	0	.....	.....	9	.....	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaiev	29.97	761.3	30.04	763.1	61.7	16.5	61	ESE	13	6	.....	.....	10n	.....	.....	.....	.....	.....	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lieut. Iwanow.
Pekin, China	29.75	755.6	29.89	759.2	75.7	24.3	46	Calm	0	0	.....	.....	4k	.....	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	29.80	756.9	29.82	757.3	42.3	5.7	90	WSW	13	6	.....	.....	10n	.....	.....	.....	.....	.....	Light rain	Central Physical Obs'y.
Tashkend, Laboratory	28.35	720.1	29.84	758.0	78.4	25.8	48	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.52	724.5	29.90	759.5	68.5	20.3	41	NW	13	6	.....	.....	1k	.....	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	29.59	751.5	30.00	762.1	60.3	15.7	34	E	13	6	.....	.....	0	.....	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.66	753.3	30.07	763.8	61.3	16.3	39	SSW	2	1	.....	.....	2	.....	.....	.....	.....	.....	Light clouds	Berg, Assistant.
Yeniseisk	29.11	739.4	29.40	746.7	39.0	3.9	88	SE	11	5	.....	.....	10	.....	.....	.....	.....	.....	Raining	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																		
Leith, Restalrig Park	.....	.....	30.01	762.2	55.0	12.8	55	W	.....	.....	4	.....	8k	.....	.....	.....	0	0	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.81	757.2	50	10.0	93	SW	.....	.....	4	.....	10	.....	.....	.....	.....	.....	Raining	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	29.68	753.9	.....	.....	.....	W	.....	.....	6	.....	10	.....	.....	.....	Blank	.....	.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																		
Barcelona, Met. Obs'y	29.95	760.8	30.05	763.5	63.0	17.2	55	ESE	4.0	1.8	.....	.....	0	.....	.....	.....	0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.13	765.4	30.19	766.8	65.7	18.7	47	E	1.3	0.6	.....	2	7	E	.....	.....	0	0	Almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.14	689.3	.....	.....	50.0	10.0	76	NE	11.4	5.1	.....	0	4	.....	.....	.....	0	0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.78	705.6	29.98	761.4	62.8	17.1	39	NE	11.0	4.9	.....	0	3	.....	.....	.....	0	0	Clouds	The Staff.
Murcia, Met. Obs'y ‡	29.87	758.7	30.02	762.5	64.4	18.0	56	E	7.4	3.3	.....	5	5	W	.....	.....	0	0	Covered	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.11	739.5	30.00	762.0	62.8	17.1	43	NE	16.1	7.2	.....	.....	0	.....	.....	.....	0	0	Clear	R. Gil Vallanueva, Dir.
SUB-SERIES.																		
Havana, Cuba, W. I	30.00	762.0	30.07	763.7	77.7	25.4	73	ENE	4.0	1.8	.....	1ck	3k;ks	.....	NNE	.....	0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.87	758.8	29.93	760.1	87.5	30.8	53	ESE	7.3	3.3	.....	0	1ks	.....	.....	.....	0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.76	755.9	29.86	758.4	61.3	16.3	67	ESE	23.7	10.6	.....	.....	10	.....	E	.....	0.132	3.4	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.89	759.1	29.98	761.4	73.4	23.0	92	E	6.3	2.8	.....	6kn	7kn	E	E	.....	0.189	4.8	Raining	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.83	757.7	29.98	761.4	82.0	27.8	74	NNW	3.9	2.0	.....	.....	5ks	.....	NW	.....	0	0	Partly cov'd	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																		
Haparanda	29.45	748.1	29.49	749.1	44.6	7.0	66	SW	.....	.....	2	.....	8	.....	.....	.....	0	0	.....	.....
Umea	29.59	751.5	29.64	752.8	54.3	12.4	48	NW	.....	.....	6	.....	4	.....	.....	.....	0.016	0.4	.....	.....
Hernosand	29.69	754.0	29.74	755.3	54.9	12.7	33	WNW	.....	.....	6	.....	4	.....	.....	.....	0	0	.....	.....
Stockholm	29.66	753.4	29.84	757.9	59.4	15.2	45	W	.....	.....	2	.....	10	.....	.....	.....	0	0	.....	.....
Wisby	29.88	758.9	29.94	760.4	52.9	11.6	59	WSW	.....	.....	4	.....	5	.....	.....	.....	0	0	.....	.....
SUB-SERIES.																		
Upsala	29.70	754.3	29.78	756.5	60.6	15.9	47	W	4.9	2.2	.....	.....	6	.....	.....	.....	0	0	.....	Nils Ekholm
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																		
Geneva	28.67	728.2	30.10	764.6	51.1	10.6	55	N	.....	.....	2	.....	1	.....	.....	.....	0	0	Clear	The Observatory.
Zurich	28.50	724.0	30.16	766.1	48.6	9.2	75	NW	.....	.....	2	.....	6	.....	.....	.....	0	0	Cloudy	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																		
Constantinople	.....	.....	29.90	759.5	72.0	22.2	50	SE	15.	6.5	.....	.....	10	.....	SW	.....	0	0	.....	The Observatory.
Valona	.....	.....	29.92	759.9	64.9	18.3	.....	W	.....	.....	1	.....	5	.....	.....	.....	2.01	51.	Cloudy	A. Bertrand.
SUB-SERIES.																		
Beirut, Lee Obs'y, Syria	.....	.....	29.98	761.5	72.3	22.4	70	N	.....	.....	1	7c	0	.....	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
Albany, New York	29.91	759.7	29.99	761.7	76.5	24.7	60	S	3	1.3		0	Hz			0	0	Clear	
Alpena, Michigan	29.59	751.6	30.25	768.3	47	8.3	77	NW	8	3.6		2c	0			0	0	Fair	
Atlanta, Georgia	28.99	736.3	30.10	764.5	71.7	22.1	75	NW	8	3.6		1c	0	Calm		0	0	Clear	
Atlantic City, New Jersey	30.03	762.7	30.04	763.0	58	14.4	88	NE	10	4.5			10s;fg		Calm	0	0	Cloudy	
Attou Id., Alaska‡																			
Augusta, Georgia	29.95	760.7	30.14	765.5	72.0	22.2	76	SW	1	0.4		1cs	0			0	0	Clear	
Baltimore, Maryland	29.98	761.5	30.03	762.7	82	27.8	56	NW	6	2.7		0	0			0	0	Clear	
Barnegat, New Jersey	30.01	762.2	30.03	762.7	50	10.0	100	N	6	2.7			Fg		N	0.05	1.3	Dense fog	
Bismarck, Dakota	28.22	716.8	30.08	764.0	52	11.1	72	SE	8	3.6		5k	0	S		0	0	Fair	
Boise City, Idaho	27.32	693.9	30.28	769.1	49.2	9.6	82	SE	2	0.9		0	0			Inap.	Inap.	Clear	
Boston, Massachusetts	29.87	758.7	30.03	762.7	53.3	11.8	81.2	Calm	0	0			10s;fg			Inap.	Inap.	Cloudy	
Brackettville, Texas	28.96	735.6	30.00	762.0	69	20.6	95	E	6	2.7			10s			0	0	Cloudy	
Brownsville, Texas	30.05	763.3	30.09	764.3	73	22.8	85	Calm	0	0		2c	0			0	0	Clear	
Buffalo, New York	29.43	747.5	30.14	765.5	48	8.9	89	SW	2	0.9		0	Hz			0	0	Clear	
Burlington, Vermont	29.74	755.4	30.02	762.5	58.0	14.4	88	N	16	7.2			10s		N	0.03	0.8	Cloudy	
Cairo, Illinois	29.83	757.7	30.21	767.3	74	23.3	86	Calm	0	0		0	0			0	0	Clear	
Campo, California	27.38	695.4	29.95	760.7	45	7.2	?	S	3	1.3		5c	0			0	0	Fair	
Camp Thomas, Arizona	27.21	691.1			50	10.0	45	Calm			0	2c	0			0	0	Clear	
Cape Henry, Virginia	29.98	761.5	30.00	762.0	75	23.9	68	W	7	3.1		2c	0			0	0	Clear	
Cape May, New Jersey	29.96	761.0	29.99	761.7	64	17.8	89	NE	7	3.1		0	0			0.06	1.5	Clear	
Castroville, Texas	29.37	746.0	30.00	763.5	73	22.8	81	E	4	1.8			10s		E	0	0	Cloudy	
Cedar Keys, Florida	30.15	765.8	30.18	766.6	73	22.8	76	E	2	0.9		0	0			0	0	Clear	
Champaign, Illinois	29.38	746.2	30.14	765.5	69.5	20.8	87	N	5	2.2		8k	2ks	N		0.23	5.8	Cloudy	
Charleston, S. Carolina	30.03	762.7	30.08	764.0	67	19.4	84	W	12	5.4		0	8s		W	0.02	0.5	Cloudy	
Charlotte, N. Carolina	29.26	743.2	30.04	763.0	77.8	25.4	61	N	5	2.2		0	Hz			0	0	Clear	
Chattanooga, Tennessee	29.38	746.2	30.16	766.1	70.5	21.4	82	Calm	0	0		1cs	Fg	Calm	Calm	0	0	Clear	
Cheyenne, Wyoming	24.16	613.7	30.10	764.5	41	5.0	65	NW	2	0.9		0	0			0	0	Clear	
Chicago, Illinois	29.51	749.5	30.20	767.1	55.3	12.9	87	N	6	2.7		5ck	0	SW		0	0	Fair	
Chincoteague, Virginia	29.98	761.5	30.00	762.0	70	21.1	85	NE	13	5.8		1k	Hz	W	Calm	0.44	11.2	Clear	
Cincinnati, Ohio	29.54	750.3	30.17	766.3	71	21.7	75	S	1	0.4		Hz	Hz			0	0	Dense haze	
Cleveland, Ohio	29.48	748.8	30.20	767.1	56.2	13.4	74	N	8	3.6		0	0			0.04	1.0	Clear	
Coleman City, Texas	28.41	721.6	30.06	763.5	64	17.8	94	Calm	0	0		5c	0	W		0	0	Fair	
Columbus, Ohio	29.31	744.5	30.11	764.8	75	23.9	77	W	2	0.9		8cs	Hz	W		0	0	Fair	
Concho, Texas	28.27	718.0	29.92	760.0	64	17.8	94	SE	6	2.7		10k	0	S		0	0	Cloudy	
Corsicana, Texas	29.79	756.7	30.25	768.3	70	21.1	75	Calm	0	0		0	1s			0	0	Clear	
Davenport, Iowa	29.54	750.3	30.10	766.1	67	19.4	79	NW	2	0.9		8k	2s	SW	Calm	0.11	2.8	Cloudy	
Dayton, Washington T'y	28.38	720.8	30.04	763.0	52	11.1	66	S	8	3.6			10ks		SW	0	0	Cloudy	
Deadwood, Dakota	25.39	644.9			48	8.9	78	SW	1	0.4		0	0			0	0	Clear	
Decatur, Texas	29.05	737.9	30.20	767.1	70	21.1	85	SE	10	4.5			10s		SE	0	0	Cloudy	
Delaware Breakwater, Del.	29.99	761.7	30.41	762.2	59	15.0	82	NE	9	4.0		2c	Fg	W		0	0	Fair	
Denison, Texas	29.43	747.5	30.20	767.1	73	22.8	81	S	5	2.2			10ks		S	0	0	Cloudy	
Denver, Colorado	24.91	632.7	30.13	765.3	47.0	8.3	62	S	4	1.8		0	0			0.12	3.0	Clear	
Des Moines, Iowa	29.29	744.0	30.15	765.8	63	17.2	94	NE	1	0.4			10ks			0.01	0.3	Cloudy	
Detroit, Michigan	29.52	749.8	30.22	767.6	56.0	13.3	75	NE	1	0.4			10s		Calm	0	0	Cloudy	
Dodge City, Kansas	27.57	700.3	29.84	757.9	57	13.9	94	NW	4	1.8		5cs	0			1.28	32.5	Fair	
Dubuque, Iowa	29.52	749.8	30.21	767.3	63	17.2	72	NW	4	1.8			10ks		NW	0	0	Cloudy	
Duluth, Minnesota	29.59	751.6	30.29	769.4	45	7.2	76	Calm	0	0		2cs	0			0	0	Clear	
Eagle Pass, Texas	29.34	745.2	30.00	763.5	71	21.7	85	SE	7	3.1		0	2s		S	0	0	Fair	
Eagle Rock, Idaho	25.36	644.1	30.01	762.2	45	7.2	68	SW	10	4.5		0	0			0	0	Clear	
Eastport, Maine	29.95	760.7	30.02	762.5	42	5.6	84	E	5	2.2			10s		E	0	0	Cloudy	
El Paso, Texas	20.28	667.5			66	18.9	74	NE	7	3.1		0	2s		E	0	0	Clear	
Erie, Pennsylvania	29.44	747.8	30.14	765.5	61	16.1	77	NW	5	2.2		2c	0			0	0	Fair	
Escanaba, Michigan	29.63	752.6	30.30	769.0	47	8.3	77	N	6	2.7		0	0			0.02	0.5	Clear	
Florence, Arizona	28.39	721.1	29.99	761.7	60	15.6	44	NE	1	0.4		0	0			0	0	Clear	
Fort Apache, Arizona	25.08	637.0	30.53	775.4	48	8.9	70	E	3	1.3		0	0			0	0	Clear	
Fort Assinnaboine, Montana	27.06	687.0			55	12.8	39	W	12	5.4		0	0			0	0	Clear	
Fort Bennett, Dakota	28.44	722.4			56	13.3	87	SE	9	4.0		5cs	0	SE		0	0	Fair	
Fort Benton, Montana																			
Fort Buford, Dakota	27.91	708.9	29.73	755.1	47	8.3	77	SE	8	3.6		0	0			0	0	Clear	
Fort Custer, Montana	26.82	681.2			44	6.7	75	NW	10	4.5		0	5s		NW	0	0	Fair	
Fort Davis, Texas	25.33	643.4	30.29	769.4	62	16.7	83	SE	5	2.2			10s			0	0	Threatening	
Fort Elliott, Texas	27.43	696.7	29.60	753.4	65	18.3	84	SE	16	7.2		5c	0	SE		0.43	10.9	Fair	
Fort Gibson, Indian T'y	29.64	752.8	30.10	700.1	69	20.6	90	Calm	0	0		5c	0	W		0	0	Fair	
Fort Grant, Arizona	25.23	640.8	30.03	762.7	59	15.0	18	N	3	1.3		0	0			0	0	Clear	
Fort Griffin, Texas	28.85	732.8	30.00	764.0	73.2	22.9	63	Calm	0	0			10s			0	0	Cloudy	
Fort Keogh, Montana	27.42	696.5			40	7.8	84	Calm	0	0		0	0			0	0	Clear	
Fort Macon, North Carolina	29.98	761.5	29.99	761.7	73	22.8	81	N	4	1.8		2cs	0	Calm		0	0	Clear	
Fort McKavett, Texas	27.93	709.4	29.82	757.4	63.8	17.7	89	E	4	1.8		2cs	0			0	0	Clear	
Fort Missoula, Montana	20.82	681.2			55	12.8	74	SW	5	2.2		10k	0			0	0	Cloudy	
Fort St. Michaels																			
Fort Shaw, Montana	26.34	669.0			52	11.1	54	W	28	8.0			10s		W	0	0	Cloudy	
Fort Sill, Indian Territory	28.98	736.1	30.08	764.0	62	16.7	88	Calm	0	0		5c	2s			0	0	Fair	
Fort Stevenson, Dakota																			
Fort Verde, Arizona											2	0	0			0	0	Clear	
Fredericksburg, Texas	28.45	722.6	30.00	762.0	46.9	8.3	21	SW				8cs	0			0	0	Fair	
Galveston, Texas	30.10	766.1	30.20	767.1	66	18.9	89	Calm	0	0		0	Fg			0	0	Clear	
Grand Haven, Michigan	29.56	750.8	30.20	767.1	72	22.2	85	S	4	1.8		2k	5s	SW	SW	0	0	Fair	
Hatteras, North Carolina	29.96	761.0	29.98	761.5	64	17.8	68	NE	8	3.6		0	Hz		Calm	0	0	Clear	
Helena, Montana	25.83	656.1			75	23.9	86	W	8	3.6		5k	0	Calm		0	0	Fair	
Henrietta, Texas	29.20	741.7	30.12	765.0	53	11.7	44	S	8	3.6			10s		E	0	0	Cloudy	
Indianapolis, Indiana	29.38	746.2	30.14	765.5	70	21.1	85	NE	4	1.8		1c	0	Calm		0	0	Clear	
Indianola, Texas	30.16	766.1	30.18	766.6	71	21.7	75	N	3	1.3		2cs	2ks	W	Calm	0	0	Fair	
Jacksboro, Texas	29.06	738.1	30.17	766.3	73.3	22.9	85	SE	8	3.6		2cs	10ks		S	0	0	Cloudy	
Jacksonville, Florida	29.96	738.1	30.17	766.3	66	20.0	90	S	3	1.3						0	0	Clear	
Keokuk, Iowa	30.11	764.8	30.10	766.1	71	21.7	75	E	4	1.8		0	0			0	0	Clear	
Key West, Florida	29.52	749.8	30.15	765.8	69.0	20.6	85	NE	4	1.8		5cs	0	SW		0.35	8.9	Fair	
Kittyhawk, North Carolina	30.07	763.8	30.10	764.5	76.2	24.6	76	NE	12	5.4		0	0			0	0	Clear	
Knoxville, Tennessee	29.97	761.2	29.99	761.7	77	25.0	77	N	22	9.8		2k	Hz	N		0	0	Fair	
La Crosse, Wisconsin	29.22	742.2	30.19	766.8	71	21.7	71	Calm	0	0		8cs	0	Calm		0	0	Fair	
La Mesilla, New Mexico	29.44	747.8	30.21	767.3	57	13.9	63	N	8	3.6		0	2s			0.01	0.3	Fair	
Laredo, Texas	26.14	663.9	30.28	769.1	68	20.0	56	SE	4	1.8		1c	0			0	0	Clear	
Leavenworth, Kansas	29.68	753.9	30.02	762.5	72	22.2	90	SE	1	0.4		1c	0	Calm		0	0	Clear	
Lewiston, Idaho	29.27	743.4	30.09	764.3	67	19.4	89	SE	5	2.2		10cs	0	SW		0.03	0.8	Cloudy	
Little Rock, Arkansas	29.26	743.2	29.91	759.7	48	8.9	48	W	1	0.4			10s		W	0.02	0.5	Cloudy	
Los Angeles, California	29.90	759.4	30.21	767.3	70	21.1	95	Calm	0	0		0	Sk			0.35	8.9	Clear	
Louisville, Kentucky	29.55	750.6	29.92	760.0	51.2	10.7	72	NE	4	1.8		0	0			0	0	Clear	
Lynchburg, Virginia	29.60	751.8	30.13	765.3	74.2	23.4	76	SW	1	0.4		0	0			0	0	Clear	
Madison, Wisconsin	29.41	747.0	30.00	763.5	78	25.6	69	Calm	0	0		0	0			0	0	Clear	
Marquette, Michigan	29.21	741.9	30.18	766.6	61	16.1	82	NE	5	2.2				Calm		0	0	Cloudy	
Mason, Texas	29.58	751.3	30.30	769.6	49	9.4	64	Calm	0	0		2c	0	NW		0	0	Clear	
Memphis, Tennessee	28.56	725.4	30.30	769.6	63	17.2	94	Calm	0	0		9cs	0	NW		0	0	Cloudy	
	29.88	758.9	30.22	767.6	75	23.9	77	Calm	0	0		0	0			Inap.	Inap.	Clear	

STATIONS.	BAROMETER.				TEMPERATURE OF THE AIR.		REL. HUM.	WIND.			CLOUD.				RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Corrected for instrum'tal error and temperature.		Reduced to sea-level.					Direction.	Velocity.	Force	Amount and kind.		Direction,					
											Up'er	Lo'er	Upper.	Lower.				
	Inch	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—CONTINUED.																		
Milwaukee, Wisconsin	29.49	749.0	30.23	767.8	49	9.4	78	N	9	4.0		2ck	5ks	NW	SW	Inap.	Inap.	Fair
Mobile, Alabama	30.13	765.3	30.20	767.1	68.2	20.1	84	N	4	1.8		5ck	0			0	0	Fair
Montgomery, Alabama	29.96	761.0	30.19	766.8	69	20.6	79	W	4	1.8		2k	0	E		0	0	Clear
Moorhead, Minnesota	29.19	741.4	30.16	766.1	47	8.3	70	SE	12	5.4			10s		SE	0	0	Cloudy
Morgantown, W. Virginia	29.13	739.9	30.09	764.3	71	21.7	85	Calm	0	0		2k	Hz			0	0	Fair
Mt. Washington, N. H.	23.83	605.3	30.19	766.8	49	9.4	100	NW	36	16.1			10n;fg		NW	0.50	12.7	Light rain
Nashville, Tennessee	29.67	753.6	30.19	766.8	75.3	24.1	75	W	2	0.9		0	Sk			0	0	Dense smoke
New Haven, Connecticut	29.91	759.7	30.03	762.7	54	12.2	87	SE	3	1.3			10s		SE	0	0	Cloudy
New London, Connecticut	29.99	761.7	30.04	763.0	57	13.9	81	S	6	2.7		5k	4s	S	S	0.01	0.3	Clearing
New Orleans, Louisiana	30.15	765.8	30.21	767.3	72.3	22.4	85	SE	4	1.8		0	8ks		SE	0	0	Fair
Newport, Rhode Island	29.98	761.5	30.03	762.7	57.0	13.9	75	E	3	1.3			10s		NW	0	0	Cloudy
New River, N. Carolina																		
New Shoreham, Rhode I'd	30.00	762.0	30.04	763.0	54.0	12.2	87	NE	4	1.8		0	0			0	0	Clear
New York, New York	29.86	758.4	30.04	763.0	57	13.9	94	SE	3	1.3			Fg			Inap.	Inap.	Dense fog
Norfolk, Virginia	29.96	761.0	30.01	762.2	78	25.6	65	NW	8	3.6		5cs	0	NW		0	0	Fair
North Platte, Nebraska	27.20	690.9	29.74	755.4	56	13.3	87	S	8	3.6		10k	0	S		0	0	Cloudy
Olympia, Washington T'y	30.10	764.5	30.14	765.5	52.0	11.1	79	S	5	2.2			10s		Calm	Inap.	Inap.	Cloudy
Omaha, Nebraska	29.00	736.6	30.07	763.8	62.2	16.8	93	SE	5	2.2			10s			0.06	1.5	Cloudy
Oswego, New York	29.77	756.1	30.09	764.3	53.8	12.1	79	W	6	2.7			10ks		N	0	0	Cloudy
Pensacola, Florida	30.17	766.3	30.20	767.1	70	21.1	85	NW	6	2.7		0	0			0	0	Clear
Philadelphia, Pa	29.98	761.5	30.03	762.7	63	17.2	89	E	9	4.0		0	Fg			0.10	2.5	Clear
Phœnix, Arizona	28.79	731.3	30.58	776.7	58	14.4	70	N	1	0.4		0	0			0	0	Clear
Pike's Peak, Colorado	17.93	455.4	30.14	765.5	17	8.3	51	SW	30	13.4		1cs	0			0.18	4.6	Clear
Pioche, Nevada	24.14	613.1	29.90	759.4	45	7.2	46	S	2	0.9		0	0			0	0	Clear
Pittsburg, Pennsylvania	29.31	744.5	30.08	764.0	72.7	22.6	78	NW	2	0.9		0	0			0	0	Clear
Port Eads, Louisiana	30.21	767.3	30.22	767.6	71.2	21.8	90	N	7	3.1		0	0			0	0	Clear
Port Huron, Michigan	29.55	750.6	30.22	767.6	46.8	8.2	77	NE	4	1.8		5cs	0	NW		0	0	Fair
Portland, Maine	29.96	761.0	30.01	762.2	55	12.8	74	SE	5	2.2			10s		Calm	0.08	2.0	Cloudy
Portland, Oregon	30.13	765.3	30.20	767.1	50.1	10.1	82	SE	4	1.8		0	2s		S	Inap.	Inap.	Fair
Portsmouth, N. Carolina					71	21.7	80	N	8	3.6		5k	Hz	W	Calm	0	0	Fair
Prescott, Arizona	24.81	630.2	30.17	766.3	41	5.0	49	S	2	0.9		0	0			0	0	Clear
Punta Rassa, Florida	30.12	765.0	30.14	765.5	71	21.7	80	NE	9	4.0		0	0			0	0	Clear
Red Bluff, California	29.66	753.4	30.00	762.0	56.0	13.3	75	NW	5	2.2		0	0			0	0	Clear
Rio Grande City, Texas	29.92	760.0	30.14	765.5	72	22.2	90	E			1		10s		SE	Inap.	Inap.	Cloudy
Rochester, New York	29.50	749.3	30.11	764.8	61	16.1	66	NW	9	4.0		5k	0	W		0	0	Fair
Roseburg, Oregon	29.63	752.6	30.20	767.1	52	11.1	79	NW	4	1.8			10ks			0	0	Cloudy
Sacramento, California	29.93	760.2	30.01	762.2	54.4	12.4	87	Calm	0	0		0	0			0	0	Clear
St. Louis, Missouri	29.61	752.1	30.18	766.6	68.0	20.0	90	NW	6	2.7		2c	0	W		0.20	5.1	Fair
St. Paul, Minnesota	29.36	745.7	30.19	766.8	54	12.2	74	N	1	0.4		0	0			0	0	Clear
Salt Lake City, Utah	25.71	653.0	30.04	763.0	53	11.7	54	Calm	0	0		8k	0	W		0	0	Cloudy
San Antonio, Texas	29.48	748.8	30.17	766.3	69.8	21.0	90	Calm	0	0			10s		SE	0	0	Cloudy
San Diego, California	29.84	757.9	29.91	759.7	59.0	15.0	82	NE	3	1.3			10s			0	0	Cloudy
Sandusky, Ohio	29.54	750.3	30.20	767.1	61	16.1	77	NW	9	4.0		5c	0			0.02	0.5	Fair
Sandy Hook, New Jersey	30.01	762.2	30.04	763.0	55.0	12.8	100	SE	6	2.7			Fg			0	0	Dense fog
San Francisco, California	29.96	761.0	30.03	762.7	51	10.6	89	Calm	0	0			Fg		SW	0	0	Dense fog
Santa Fé, New Mexico	23.45	595.6	29.99	761.7	51	10.6	72	SE	6	2.7		0	2s			0.36	9.1	Fair
Savannah, Georgia	30.05	763.3	30.14	765.5	72	22.2	71	W	7	3.1		8k	0	W		0	0	Fair
Shreveport, Louisiana	30.00	762.0	30.25	768.3	71	21.7	85	SW	2	0.9		5c	0			0	0	Fair
Silver City, New Mexico	24.32	617.7	30.53	775.4	44	6.7	45	Calm	0	0		0	0			0	0	Clear
Sitka Alaska																		
Smithville, North Carolina	30.00	762.0	30.04	763.0	73	22.8	76	W	4	1.8		5k	Hz			0.35	8.9	
Socorro, New Mexico	25.49	647.4	29.55	750.6	55	12.8	39	Calm	0	0		0	0			0	0	Fair
Spokane Falls, Wash. Ter.	28.00	711.2	29.83	757.7	50	10.0	64	S	12	5.4		0	8ks			0	0	Clear
Springfield, Illinois	29.53	750.0	30.18	766.6	69.5	20.8	85	W	1	0.4		0	2ks		W	Inap	Inap.	Fair
Springfield, Massachusetts	29.88	758.9	30.00	762.0	58	14.4	88	S	4	1.8			10s;fg		S	0.01	0.3	Fair
Stockton, Texas	27.09	688.1	30.09	764.3	67.2	19.6	95	Calm	0	0			10s		SE	0.25	6.3	Cloudy
St. Vincent, Minnesota	29.32	744.7	30.12	765.0	49	9.4	71	S	12	5.4		2cs	0	W		0	0	Cloudy
Thatcher's Island, Mass	30.00	762.0	30.05	763.3	55	12.8	87	NE	1	0.4		5k	5s	S	NW	0	0	Fair
Toledo, Ohio	29.51	749.5	30.19	766.8	60	15.6	65	N	16	7.2		5ck	5s	W	W	0.08	2.0	Cloudy
Tucson, Arizona	27.51	698.7	30.06	763.5	58	14.4	22	S	5	2.2		0	0			0	0	Threatening
Umatilla, Oregon	29.76	755.9	30.25	768.3	56.3	13.5	60	SW	12	5.4		10cs	0			0	0	Clear
Uvalde, Texas	29.18	741.2	30.00	762.0	71	21.7	90	SE	2	0.9			10s		SE	0	0	Cloudy
Vicksburg, Mississippi	29.98	761.5	30.23	767.8	72	22.2	90	N	1	0.4		8k	Fg			0	0	Cloudy
Visalia, California	29.58	751.3	29.95	760.7	56.2	13.4	74	NW	4	1.8		0	0			0	0	Fair
Washington, D. C.	29.92	760.0	30.03	762.7	79	26.1	66	W	6	2.7		2c	Hz			0	0	Clear
Wickenburg, Arizona					54	12.2	38	Calm			0	0	1s			0	0	Clear
Wilmington, N. Carolina	29.96	761.0	30.01	762.2	73	22.8	76	NW	4	1.8		5c	Hz	Calm	Calm	0.12	3.0	Fair
Winnemucca, Nevada	25.71	653.0	30.07	763.8	41	5.0	74	NE	1	0.4		0	0			0	0	Clear
Wood's Holl, Mass	29.98	761.5	30.02	762.5	63	17.2	89	NE	2	0.9			10s		Calm	0	0	Cloudy
Yankton, Dakota	28.72	729.5	29.99	761.7	60	15.6	94	SE	6	2.7			10n			0.50	12.7	Heavy rain
Yuma, Arizona	29.73	755.1	29.88	758.9	63.8	17.7	73	Calm	0	0		1ck	0			0	0	Clear
SUB-SERIES.																		
Bogota, U. S. Columbia	22.08	560.8			51.5	10.8	91	Calm	0	0			10s			0.03	0.8	Foggy
Buff Bay Town, Jamaica	29.76	755.9	30.08	764.0	70	21.1	95	E				k	k					
Havana, Cuba, W. I.	30.05	763.3	30.10	764.5	79	26.1	69	Calm	0	0		4cs	0	E		0	0	Fair
Jakobshavn, Greenland	29.99	761.7	30.04	763.0	35.2	1.8		Calm			0		0			0	0	
Kingston, Jamaica, W. I.	29.93	760.2	29.94	760.5	76.0	24.4	79	N	4	1.8		0	2s		E	0.02	0.5	
Navassa, W. I.	29.86	758.4	29.94	760.5	75	23.9	90	E					10			0.04	1.0	Cloudy
Paramaribo, S. A.	29.96	761.0	29.97	761.2	79	26.1	91	SE			2	5k	8ks	SE		0.560	14.2	Cloudy
Puerto Berrio, U. S. Col'mbia	29.39	746.5	29.95	760.7	76	24.4	94	Calm			0					0.04	1.0	Foggy
Rivas, Nicaragua																		
Santiago de Cuba, W. I.	29.95	760.7	29.97	761.2	75	23.9	72	N	4.8	2.1		2cs	0			0	0	Fair
St. Thomas, W. I.																		
York Factory, B. A.	29.84	757.9	29.89	759.2	31.0	— 0.6	95	S	8	3.6		3k	1s	SW	SW	0	0	Fair

Thomas Herman
A. Van Caneghem, Ass't
K. V. Möller.
Robert Johnstone
F. M. Everett.
Dr. C. J. Hering.
Francesco J. Cisneros.
Earl Flint.
Robert Mason.
G. O. Gyllich.
J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross, N. 34° 06′, E. 130° 40′	30.16	766.1	61	16.1		SE			4-5		1					2	S	Blue sky	Comm A. J.Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Syracuse, Sicily	29.97	761.2	64	17.8	65	E			1		2	ESE						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab,																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 23° 50′, E. 58° 14′	29.67	753.6	90	32.2	70	SE			2		1	NW						Blue sky	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			70	21.1		SSE			1-2		10					2	SSE	Overcast	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	29.94	760.5	77	25.0	95	E			1		9							D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 11′, E. 18° 25′	29.89	759.2	67	19.4	55	E			2		1	SE						Blue sky	Com. F. W. Richards.
H. M. S. Champion, S. 7° 55′, W. 14° 25′	29.89	759.2	82	27.8	71	SSE			5		7	ENE				2	SSE	D. clouds	Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 28° 18′, E. 122° 20′	30.05	763.3	65	18.3	94	NE			1		10					3	E	Overcast	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S.Cruizer, N. 38° 42′, E. 17° 40′	29.88	758.9	59	15.0		NNW			2		4	NNW				3	NW	D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, James Bay, St. Helena	30.00	762.0				SSW			1									D. clouds	Capt. J. C. Parvis.
H. M. S. Daring, N. 8° 02′, E. 73° 04′	29.82	757.4	89	31.7		WNW			2		2	WNW				1	SSE	D. clouds	Capt. F. J. Elliott.
H. M. S. Dido, S. 34° 47′, E. 22° 06′	30.08	764.0	63	17.2		ENE			6		2	WNW				2	ENE	D. clouds	Capt C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.80	756.9	72	22.2		WNW			2		2	WNW						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 08′, W. 53° 28′	30.00	762.0	42	5.6	91	NNE			1		10							Drizzling	Capt. W. R. Kennedy.
H. M. S. Dryad, N. 23° 35′, E. 58° 35′	29.65	753.1	93	33.9		SE			1		1	S				1	SE	Blue sky	Capt. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 7° 30′, E. 106° 15′	29.80	756.9	85	29.4		E			4		6	E				2	NE	Misty	Comm. C. Johnstone.
H. M. S. Emerald, S. 8° 30′, W. 179° 15′	29.93	760.2	80	26.7		S			2-4		10	NW						Showery	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Trincomalee, Ceylon, India.	29.78	755.4	85	29.4	79	W			1		10	W						D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 36° 37′. W. 61° 53′	29.83	757.7	67	19.4		ENE			3		8	ENE				2	ENE	Showery	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S Flamingo																			Comm. R. N. Custance.
H. M. S. Flying Fish, Hong-Kong, China	29.97	761.2	77	25.0	77	Calm			0		4							D. clouds	Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 34° 10′, W. 136° 40′	30.29	769.4	59.5	15.3	62	NNE			3		10					2	NW	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 48° 23′, W. 64° 08	30.02	762.5	47	8.3	92	NNE			4		10					2		Overcast	Capt. L. F. Jones.
H. M. S. Griffon, N. 23° 36′, W. 85° 36′	29.96	761.0	80	26.7	85	ENE			2							2	ENE	Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant, S. 40° 40′, E. 123° 10′	29.63	752.6	51	10.6	86	WSW			6		10	W				7	W	Drizzling	Capt. C. C.P. Fitzgerald.
H. M. S. Iris, Naples, Italy	29.92	760.0	62	16.7	77	SSW			2		5					1	SSW	D. clouds	Capt. E. H. Seymour.
H. M. S. IronDuke, N. 25° 58′, E. 119° 58′	30.02	762.5	68	20.0	84	ENE			1-2		4	W				1-2	SW	D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.97	761.2	65	18.3		S			1		5	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	30.10	764.5	69	20.6		Calm			0		3							D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 21° 47′, E. 113° 30′	29.89	759.2	80.8	27.1	86	SSE			2		4	SE				1	ESE	D. clouds	Capt. A. Carpenter.
H. M. S. Midge, N. 22° 31′, E. 116° 40′	29.97	761.2				NE			2		3	NE				2	NE	D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 36° 07′, W. 5° 21	29.86	758.4	60.5	15.9	79	Var.			3-8		10	ENE						Squally	Capt. H. H. Rawson.
H. M. S. Modeste, N. 1° 20′, E. 105° 56′	29.84	757.9	84	28.9	91	Calm			0		1							Blue sky	Capt. J. G. Mead.
H. M. S. Monarch Goletta, Tunis, N. Africa	30.07	763.8	61	16.1	94	WNW			3		4	NNW						D. clouds	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, N. 34° 33′, W. 64° 18′	29.79	756.7	68	20.0	92	NW			2		5	WNW				2	NW	D. clouds	Capt. E. B. Drummond.
H. M. S. Orontes, Mauritius; Mauritius, †	29.95	760.7	79.5	26.4	85	N			1		5	WSW				Var.		D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 38′, W. 79° 03′	29.82	757.4	81	27.2		NNW			1		4							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin, S. 47° 08′, W. 75° 04′	30.12	765.0	48	8.9		S			1							5	WSW	Blue sky	Capt. A. C. Paget.
H. M. S. Phœnix, N. 17° 47′, W. 76° 48′	29.91	759.7	78	25.6	82	NW			2		5	NE				1	SE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler, Bonny River, Africa	29.93	760.2	84	28.9		S			2		3					2	SSW	D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	30.03	762.7	51	10.6		Calm			0		8							Raining	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.87	758.7	83.4	28.6	85	SE			1		2							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, S. 90° 41′, W. 27° 08′	30.00	762.0	78.5	25.8	91	ESE			3		8	E				4	ESE	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 17° 00′, W. 148° 22′	29.77	756.1	81	27.2	91	NNW			5		5	S				3	SE	D. clouds	Capt. P. W. Stephens.
H. M. S. Thunderer, N. 40° 40′, E. 14° 11′	29.95	760.7	65	18.3	63	WNW			3		4					3		D. clouds	Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A	30.02	762.5				Calm			0		3	Calm						D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise, S. 19° 50′, W. 74° 06′	29.98	761.5	66	18.9	89	S			1		5					2	S	D. clouds	Capt. M. B. Medlycott.
H. M. S. Tyne, N. 22° 00′, E. 37° 40′	29.73	755.1	87	30.6	88	NNW			4										Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.			77	25.0		N			1		2							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, S. 38° 29′, E. 171° 17′	30.17	766.3	60	15.6	76	S			5		4	S				5	W	D. clouds	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, N. 26° 20′, E. 56° 20′	29.69	754.1	89.5	31.9	68	WSW			2-3		0					Sm'h		Misty	Capt. T. P. Nesham.
H. M. S. Zephyr, N. 30° 36′, E. 122° 03′	30.09	764.3	64	17.8	94	E			2		10							Overcast	Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
RioLima, Santiago, Cape Verd I'ds.	29.98	761.6	76.6	24.8	88	N			3		2					1	SE	Blue sky	S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't.
Tamega																			P. I. R. de Carvealho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.	Force	Amount and kind.		Direction.							
									Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. hr.	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.			
N. Yard, Pensacola, Fla	30.23	767.8	75	23.9	60	NW	8	3.6			0			0	0			Clear
N. Yard, Portsmouth, N. H.	30.02	762.5	55	12.8	80	Calm	0	0		10c	0			0	0			Cloudy
Naval Hospital, Yokahama, Japan	30.11	764.8	57.5	14.2	84	Calm			0		10		SE					Raining
Adams, Callao, Peru	29.80	756.9	66	18.9	94	SSE			1		8					Long	SW	Cloudy
Alaska, Callao, Peru	29.90	759.4	64	17.8	83	SE			1		2					Sm'h		Fair
Alert, N. 21° 48′, E. 140° 57′ *	29.92	760.0	78	25.6	91	NE			3		10		Calm			Mod.	E	Raining
Alliance, Norfolk, Va	30.02	762.5	79	26.1	78	NW			1		8		NW	0	0	Sm'h		Cloudy
Ashuelot, N. 34° 11′, E. 133° 17′	30.16	766.1	61	16.1	82	NE			2		10		Calm					Overcast
Colorado, New York, N. Y.	30.02	762.5	59	15.0	94	Calm	0	0			10			0	0			Dense fog
Constitution, Norfolk, Va	29.95	760.7	77	25.0	69	NNW	2	0.9			5?		S					Clear?
Franklin, Norfolk, Va	29.97	761.2	78	25.6	65	NNW	7	3.1			2		N	0	0			Clear
Galena, N. 41° 57′, E. 10° 23′	29.97	761.2	59	15.0	65	NW			3		8		NW			Sm'h		Fair
Independence, N. Yard, Mare I'd, Cal	30.03	762.7	55	12.8	87	SW	1.2	0.5			8		SW	0	0			Cloudy
Jamestown, Sitka, Alaska *	29.90	759.4	38	3.3	90	ESE			1		10		SE	0.71	18.0			Cloudy
Kearsarge, Port Royal, S. C	30.16	766.1	70	21.1	80	W			3		5		NE			Sm'h		Fair
Lackawanna, S. 23° 22′, W. 93° 54′ †	30.23	767.8	71	21.7	100	SSE			1-3		8		E			Sm'h	SE	Fair
Marion, Montevideo, Uruguay	30.09	764.3	59	15.0	82	SE			4		8		Calm	Heavy		Sm'h		Cloudy
Michigan, Erie, Pennsylvania	30.14	765.5	58	14.4		NW	1	0.4			0							Clear
Minnesota, Newport, R. I	30.08	764.0	54	12.2	100	N			0-1		8		NW			Sm'h		Fair
Monocacy, N. 33° 52′, E. 136° 54′	30.23	767.8	60	15.6	76	ENE			5		10		ENE			Mod.	NE	Cloudy
New Hampshire, Port Royal, S. C	30.12	765.0	70	21.1	80	WNW	8	3.6			8		NE	0	0			Fair
Nipsic, N. 38° 25′, E. 0° 16′	30.08	764.0	64	17.8	58	ENE			3		8					Sm'h		D. clouds
Onward, Callao, Peru †	29.95	760.7	64	17.8	94	SSE			1		8		NNW			Long	W	Cloudy
Palos, Yokohama, Japan	30.24	768.1	60	15.6	76	SW			1		10							Rainy
Passaic, Washington, D. C	30.06	763.5	78	25.6	91	SW			1		0							Clear
Pensacola, N. 33° 24′, W. 145° 26′	30.31	769.9	66	18.9	94	Calm			0		8		NNW	Slight		Sm'h		Fair
Portsmouth, Norfolk, Va	30.06	763.5	74	23.3	95	Calm			0		5							Fair
Powhatan, N. 37° 16′, W. 76° 10′	30.00	762.0				N			3		2		N					Clear
Quinnebaug, N. 27° 55′, W. 19° 49′	30.02	762.5	70	21.1	70	NNW			4		5		NNW			Long	NW	Fair
Ranger, Acapulco, Mexico *	29.79	756.7	80	26.7	74	Calm			0		0			0	0	Sm'h		Clear
Richmond, N. 34° 55′, E. 139° 23′	30.23	767.8	62	16.7	72	NNE			3		10			0.12	3.0	Sm'h		Rainy
Saratoga, Norfolk, Va	30.01	762.2	76	24.4	68	WNW			0-1		5		Calm	0	0			Fair
Shenandoah, Montevideo, Uruguay *	30.05	763.3	59	15.0	82	SE			3		8					Mod.	SE	Fair
St. Louis, League Island, Pa	29.62	752.3	64	17.8	89	NE	2	0.9			2			0.05	1.3			Clear
Swatara, Shanghai, China † *	30.03	762.7	65	18.3	84	WSW			3		8		Calm					D. clouds
Tennessee, Hampton Roads, Va	30.01	762.2	76	24.4	77	NNW	2	0.9			5		Calm	0	0	Sm'h		Fair
Ticonderoga, S. 44° 45′, W. 115° 27′	30.02	762.5	50	10.0	100	S			3		10		SSW	Inap.	Inap.	Long	SSW	Cloudy
Trenton, Castellamare, Italy *	29.91	759.7	68	20.0	51	W			3-4		2			0	0	Sm'h		Fair
Vandalia, Boston Mass	30.03	762.7	53	11.7	86	Calm			0		Fg							Foggy
Wabash, Boston, Massachusetts	30.08	764.0	56	13.3	81	SW	1	0.4			10		Calm	0.03	0.8			Misty
Wachusetts, N. 38° 29′, W. 130° 23′	30.25	768.3	55	12.8	93	NNW			3		8		N	0	0	Mod.	N	Cloudy
Wyoming, N. 24° 00′, W. 58° 40′	29.96	761.0	72	22.2	62	W			1		2					Long	N	Clear

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant. ‡																			Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, Trinidad, W. I.	29.99	761.7	78	25.6	95	Calm			0		5							D. clouds	Capt. W. N. Lalley.
City of Agra																			Capt. T. Young.
Barque Commewyne, N. 12° 58′, W. 44° 17′	30.01	762.2	79	26.1	76	NE			4		6							Misty	Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 38° 54′, W. 39° 47′	30.37	771.4	62.5	16.9	78	E			3		8							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han-Kow, ‡ N. 8° 00′, E. 97° 40′	29.88	758.9	85.5	29.7	74	NNW			2		7							D. clouds	Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ N. 7° 45′, W. 29° 04′	29.94	760.5	79.1	26.2	86	N			4		8							D. clouds	Capt. J. Raeburn, R. N. R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, N. 50° 19′, W. 10° 38′ ‡	30.29	769.4	54.3	12.4	83	WSW			4	c	3k	WNW				3	WNW	D. clouds	Capt. H. W. Dyke.
Barque Mertola, N. 50° 14′, W. 11° 50′	30.26	768.6	55.7	13.2	86	W			4		3							D. clouds	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ S. 12° 04′, W. 9° 07′	29.98	761.5	78	25.6	82	ESE			4		4							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 16° 08′, E. 96° 42′	29.77	756.1	82.0	27.8	91	SSE			3		10							Overcast	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton, ‡ N. 36° 14′, E. 20° 47′	29.94	760.5	67	19.4	79	NW			6		10							Overcast	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean																			Capt. W. H. Smith.
S. S. Circassian																			Capt. F. Archer.
S. S. Hibernian																			Capt. Wm. Richardson.
S. S. Nova Scotian																			
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Algeria																			Capt. W. Watson.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			
S. S. Baltic																			Capt. J. W. Jennings.
S. S. Britannic, N. 50° 08′, W. 23° 03′	30.13	765.3	54	12.2	80	W			2		10					Con.	sw; nw	Misty	Capt. H. Parsell.
S. S. Celtic, N. 41° 34′, W. 62° 21′ †	29.91	759.7	51	10.6		NNE			3		2		SW			Sm'h	W	Misty	Capt. H. Perry.
S. S. Germanic, N. 40° 31′, W. 69° 44′ †	29.92	760.0	46	7.8		ENE			4		2		E	0	0	Sm'h		Fair	Capt. Benj. Gleadell.
S. S. Republic, Liverpool, England †	30.47	773.9	56	13.3		NNW			3		8?		NW	0	0			Clear?	Capt. Ch. W. Kennedy.
N. 51° 13′, W. 13° 04′ †	30.32	770.1	57	13.9	81	SSW			4		8		SSW	0	0	Sm'h		Fair	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			
S. S. Hohenzollern, ‡ N. 37° 08′, W. 75° 05′	29.97	761.2	56.8	13.8		Calm			0		2		N	0	0	Sm'h	NE	Fair	Capt. H. Baur.
S. S. Köln, N. 46° 22′, W. 43° 18′	30.12	765.0	58.5	14.7	97	SSW			4		10		SSW	6 hours Rain	& fog	Mod.	SSW	Cloudy	Capt. Th. Jüngst
S. S. Leipzig, N. 43° 53′, W. 40° 04′	30.29	769.4	61.0	16.1		S			2–3		10		S	7 hours		Sm'h	SE	Fair	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

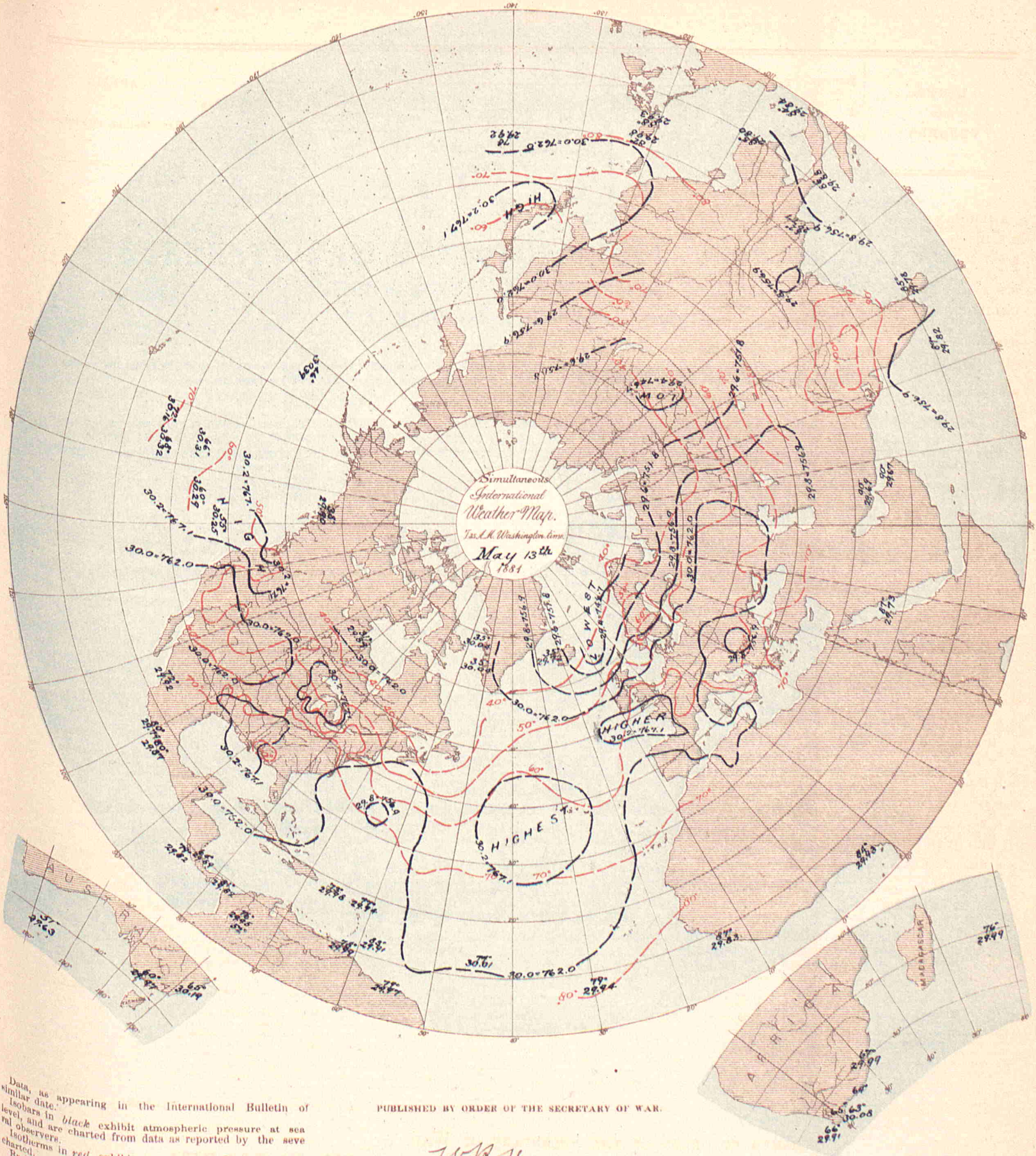
UNITED STATES MERCHANT-MARINE SERIES.

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

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, N. 50° 57′, W. 15° 02′	30.15	765.8	57	13.9	94	SSW			4		5		SSW			Sm'h	SSW	Fair	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio, N. 39° 18′, W. 64° 02′ *†	29.95	760.7	56	13.3	100	NE			2		Fog		NE	0	0	Sm'll	E	Foggy	W. Shackford, Chief Off'r
S. S. Pennsylvania, N. 46° 52′, W. 32° 13′ *†	30.26	768.6	60	15.6	94	W			2		8		W			Sm'h	SE	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, Mazatlan, Mexico †	29.82	757.4	74	23.3	95	Calm			0		5		NE	0	0	Sm'll	SW	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, Yokohama, Japan †	30.31	769.9	60	15.6	100	WSW			2		10			Ra	in	Sm'h		Overcast	Capt. H. Davison.
S. S. Gaelic, N. 32° 40′, E. 134° 21′ *†	30.44	773.2	66	18.9	95	ESE			6		10		ESE			R'gh	ESE	Raining	Capt. W. H. Kidley.
S. S. Oceanic, N. 44° 53′, W. 168° 36′	30.39	771.9	46	7.8	77	WSW			4		8		W	0.03	0.8	5	W	D. clouds	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			Capt. Fred. Bolles.
S. S. Columbia																			
S. S. Oregon, N. 44° 55′, W. 124° 15′ †	30.21	767.3	50.5	10.3	93	WNW			3		8		WNW			H'vy	WNW	Clearing	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			Capt. J. N. Ingalls.
S. S. Ancon																			
S. S. Dakota, N. 39° 00′, W. 123° 45′ †*	29.99	761.7	51	10.6	93	NW			4		8		N	0	0	Sm'h		Foggy	Capt. H. G. Morse.
S. S. Idaho, N. 46° 51′, W. 125° 29′ †	30.20	767.1	49	9.4	85	NW			2		10		NW			Mod.	NW	Showers	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, N. 34° 27′, W. 120° 32′ †	29.94	760.5	52	11.1	93	W			2		0					Mod.	W	Clear	Capt. Thos. Wallace.
S. S. State of California, Portland, Oregon †	30.15	765.8	51	10.6	86	Calm			0		5?							Overcast?	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal. †	30.02	762.5	51	10.6	86	Calm			0		10							Foggy	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, Sydney, N. S. W.	30.19	766.8	65	18.3	89	N			1		2		N					Clear	A. Bannerman, 2d Officer
S. S. City of New York, Sydney, N. S. W. †	30.23	767.8	63	17.2	83	N			1		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China †	30.12	765.0	80	26.7	66	E			2		5		S			Sm'h		Fair	Capt. G. G. Berry.
S. S. City of Sidney, N. 27° 32′, W. 147° 16′ †	30.16	766.1	72	22.2	67	ENE			5		5		NE	0	0	H'vy	ENE	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio																			A. L. Ritchie, 2d Officer
S. S. Colima, N. 16° 36′, W. 99° 35′ †	29.87	758.7	80	26.7	70	ENE			3		8		Calm	0	0	Sm'h	E	Cloudy	Capt. R. R. Searle.
S. S. Granada, N. 9° 10′, W. 85° 00′ †	29.82	757.4	79	26.1	82	Calm			0		10		Calm	Sho	wers	Mod.	SSW	Raining	Capt. M. Connolly.
S. S. Zealandia, N. 27° 51′, W. 145° 36°	30.32	770.1	68	20.0	74	E			1		5?		SE	0	0	Sm'h	SE	Cloudy?	
RED STAR LINE. *Jas. A. Wright, President.*																			Capt. Sam'l Jackson.
S. S. Belgenland																			A. Feddersen, 2d Officer.
S. S. Nederland																			Capt. W. Geo. Randle.
S. S. Rhynland																			T. H. Tobson, Chief Off'r.
S. S. Vaderland																			
MISCELLANEOUS.																			Capt. A. Mehaffey.
Sch'r Abby K. Bentley																			
Sch'r Addie Fuller, N. 32° 15′, W. 78° 41′	30.06	763.5	75	23.9	77	W	9	4.0		5ck	0			0	0	Mod.	W	Cloudy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 22° 17′, W. 50° 05′ *†	30.08	764.0	78	25.6		WSW			4		8		SSW				SSW	Rainy	Capt B. F. Woodbury.
Brigantine George																			Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Md. †	30.16	766.1	82	27.8	83	NW	2	0.9		0	28			0	0			Clear	
Bark Sunbeam, N. 39° 05′, W. 12° 05′ †	29.92	760.0	64	17.8	73	NE			6		0			0	0	R'gh	ENE	Clear	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 14, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instru-m'tal error and tem-perature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco	‡		30.02	762.5	68.4	20.2	74	SW			1		1			0	0	Very fair	Dr. Ollive.
Nemours	‡		29.95	760.7	69.3	20.7	83	N			3		2			0	0	Fair	Raynard.
Algiers	‡		29.99	761.8	63.0	17.2	84	NE			2		5			0.146	3.7	Cloudy	Nicolas.
La Calle	‡		30.04	763.0	65.5	18.6	83	ESE			4		4			0	0	Cloudy	Fonfrède.
Tunis	‡		30.05	763.2															Jacques.
Sfax	‡		30.11	764.8															Gau.
Saida	‡		29.97	761.3	54.9	12.7	90	N			2		10			0	0	Covered	Dumas.
Tebessa	‡		30.03	762.8	63.7	17.6	80	Calm			0		9			1.260	32.0	Covered	Watrin.
Geriville	‡																		Lonchamp.
Laghouat	‡		30.02	762.4	69.1	20.6	53	N			2		2			0	0	Fair	Herbin.
Biskra	‡		30.04	763.0															Baudassé.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.96	761.0	30.05	763.3	60.1	15.6	71	N	5	2.2			9			0	0	Dull	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.24	742.6	29.79	756.7	48.6	9.2	88	NW			4		10			0.126	3.2	Raining	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.10	739.1	29.85	758.3	60.4	15.8	61	ENE	15.4	6.9			9			0.031	0.8		Dr. Wierzbicki.
Eperies	28.89	733.9	29.76	756.0	54.0	12.2	85	N			2		10ks		S	0.087	2.2		Julius Mikolik.
Gratz	28.62	727.0	29.87	758.7	51.1	10.6	66	NE			3		10			0	0		Andreas Rospini.
Hermannstadt	28.26	717.9	29.66	753.4	58.8	14.9	59	NW			4		10			0.354	9.0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.67	728.2	30.05	763.2	41.2	5.1	94	SW			3		10			0.374	9.5	Raining	The Staff.
Lemberg	28.84	732.4	29.82	757.4	50.7	10.4	93	NE			2		10			0.134	3.4		Dr. T. Stanecki.
Pola	29.77	756.1	29.88	758.9	61.7	16.5	43	WNW			3		10			0	0		I. R. Hydrographic Office.
Szathmar	29.26	743.2	29.72	754.8	57.7	14.3	72	NW			2		10			0.669	17.0		Beicht Peter, S. J.
Szegedin	29.40	746.8	29.68	753.9	52.5	11.4	83	SW			3		10			0.118	3.0		Karl Stancel.
Trieste	29.79	756.6	29.89	759.2	63.3	17.4	57	Calm			0		10			0	0	Covered	Secco.
Vienna	29.16	740.7	29.88	758.9	52.2	11.2	78	NW			3		10			0.193	4.9		I. R. Central Met. Obs'y
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maesoyck																			M. Pierrot.

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

BRITISH SERIES.

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

Aberdeen	29.68	753.9	29.78	756.4	53.0	11.7	56	SE	10	4.5			7			0.280	7.1	D. clouds	W. Boswell.
Armagh, Observatory	29.68	753.9	29.90	759.4	55.7	13.2	62	WSW	4	1.8			10					Overcast	S. Call.
Bidston, Liverpool Obs'y			29.95	760.7	50.8	10.4	79	W	2	0.9			10					Raining	John Hartnup.
Bolton, Sharples	29.40	746.7	29.93	760.2	52.5	11.4	78	WNW	6	2.7			10					Gloomy	Thomas Mackereth.
Bradford, Yorkshire	29.50	749.3	29.89	759.2	55.1	12.8	61	W			1		9			0.18	4.6	Overcast	J.McLandsbo ough,F.R.S
Bridgetown, Barbadoes	29.90	759.4	29.92	760.0	84.0	28.9	69	SE			1		3					D. clouds	Corpl. J. Surgener,A.H.C.
Cardington			29.95	760.7	68.4	20.2	56	NW			0.4		9					Overcast	John McLaren.
Chatham, School M. E.	29.86	758.4	29.99	761.7	61.8	16.6	49	W			1		10					Overcast	Lance Cpl. R. Tear, R.E.
Falmouth, Observatory	29.85	758.2	30.08	764.0	58.8	14.9	65	SW			3		7?					Overcast?	The Staff.
Fort Napier, Natal	27.73	704.3	29.95	760.7	67.1	19.5	38	E			1		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.60	751.8	29.84	757.9	87	30.6	88	NE			1		5					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			29.89	759.2	54	12.2	74	SW			2		10			0.63	16.0	Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	29.97	761.2	30.03	762.7	62.0	16.7	90	E			5		9					Gloomy	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.65	753.1	29.85	758.2	52.9	11.6	73	SW			2		10k					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.82	757.4	29.99	761.7	62.4	16.9	58	WSW			1		10					Overcast	The Staff.
Guernsey	29.87	758.7	30.09	764.3	58	14.4	66	NNW			2		3					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.96	761.0	30.00	762.0	61.3	16.3	49	WSW	10	4.5			9					D. clouds	The Staff.
Leicester, Museum	29.79	756.7	30.04	763.0	61.2	16.2	87	SW			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.93	760.2	30.00	762.0	62.4	16.9	77	SW			1		9			Inap.	Inap.	Overcast	F. S. Vine, A. H. C.
Nassau, Bahamas	29.97	761.2	30.01	762.2	76.5	24.7	79	NE			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.46	748.3	29.98	761.5	54.0	12.2	81	SSW			2		10					Overcast	Robert Pate.
Oxford, Radcliffe Obs'y	29.76	755.9	29.99	761.7	61.4	16.3	65	SW			3		10					Threatening	The Staff.
Plymouth	30.00	762.0	30.07	763.8	60.7	15.9	66	SW			2		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.75	755.6	48.4	9.1	84	W	14	6.3			1					Blue sky	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.65	753.1	29.72	754.9	56.6	13.7	86	NE			1		9			Blank		Misty	Serg't W. H. Lyne.
Sheffield	29.67	753.6	29.95	760.7	59.9	15.5	73	SW			1		8			0.05	1.3	Overcast	W. F. Cooper.
Silloth Rectory	29.86	758.4	29.89	759.2	57.5	14.2	68	W			3		7			0.374	9.5	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.95	760.7	53.2	11.8	69	WSW	9	4.0			10					Overcast	Rev. S. J. Perry.
Strathfield Turgiss	29.80	756.9	30.02	762.5	62.6	17.0	58	SW			1		6					D. clouds	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	30.06	763.5	30.08	764.0	64	17.8	78	SW			6		6					D. clouds	W. Newcombe.
Valencia, Observatory	29.94	760.5	29.96	761.0	54.4	12.4	79	W	15	6.7			7					D. clouds	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.85	758.2	29.89	759.2	44	6.7	98	SW	6	2.7		0	5s			0.025	0.6	Fair	H. J. Cundall, C. E.
Chatham, N. B.*	29.86	758.4	29.92	760.0	51	10.6	42	W	10	4.5		0	0			0.02	0.5	Clear	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	29.96	761.0	29.98	761.5	42	5.6	84	NW	5	2.2		0	0			0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	28.96	735.6	29.77	756.1	51	10.6	96	W	10	4.5		0	5ks		W	0.030	0.8	Clearing	James Stewart.
Fredericton, N. B																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.81	757.2	29.94	760.5	46	7.8	92	NW	5	2.2			10n			0.023	0.6	Cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.71	754.6	30.04	763.0	55	12.8	63	NE	6	2.7			10s		Calm	0	0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	29.89	759.2	30.09	764.3	57	13.9	41	N	5	2.2		8k	2s	N		0	0	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.30	744.2	29.99	761.7	55	12.8	62	E	18	8.0		2k	8n	SE	SE	Inap.	Inap.	Cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.31	744.5	30.00	762.0	55	12.8	100	NE	5	2.2			10n		W	0.05	1.3	Threatening	H. Morgan.
Port Stanley, Ontario	29.33	745.0	29.97	761.2	58	14.4	90	E	5	2.2		5ck	0	SW		0.02	0.5	Fair	M. Payne.
Quebec, Quebec*	29.76	755.9	30.18	766.6	47	8.3	70	NW			1	0	2s		NW	0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.64	752.8	30.10	764.5	45	7.2	80	Calm	0	0		8cs	0	SW		0	0	Cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.22	742.2	29.92	760.0	57	13.9	62	SE	16	7.2			10ks		S	0	0	Cloudy	K. Stewart.
St. Andrews, N. B	29.92	760.0	29.97	761.2	48	8.9	63	NW	3	1.3		0	0			0	0	Clear	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	29.84	757.9	29.88	758.9	44	6.7	93	NW	1	0.4			10s		NW	0.16	4.1	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.64	752.8	30.03	762.7	54	12.2	79	NE	4	1.8			10ks		W	Inap.	Inap	Cloudy	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	29.91	759.7	29.98	761.5	46	7.8	92	NW	2	0.9		0	0			0	0	Clear	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.62	752.3	29.88	758.9	40	4.4	100	S				Sk	Sk			0.59	15.0	Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Cape St. Francis Lt. House	30.00	762.0			66.0	18.9	94	E	23.0	10.3			0			0	0	Light haze	John Duthie.
Cape Town, C. G. H. Obs'y	29.93	760.2	29.97	761.2	67.0	19.4		NW	4.5	2.0		2cs	2			0	0		The Staff, for D. Gill.
Worcester*†	28.84	732.5			74.2	23.4	40	N			1	2	3			0	0	Cloudy	C. Stokes.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.97	761.2	29.99	761.8	61.7	16.5	96	ESE	5.4	2.4			10n			0.287	7.3	Raining	M. Marc Dechevrens, S.J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	25.17	664.7	29.89	759.2	68.0	20.0	95					10s	0			Inap.	Inap.	Cloudy	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.82	757.5	29.87	758.7	61.9	16.6	44	SSW	20	9			2						Oversergent Fischer.
Fande	29.87	758.6	29.89	759.1	53.2	11.8	78	WSW			4		7						Overloerer Lauridsen.
Godthaab, Greenland	29.87	758.8	29.92	759.9	33.8	1.0	96	NNE			4		0						S. Kleinschmidt.
Stykkisholm, Iceland	29.72	755.0	29.77	756.1	35.6	2.0		E			6		8						A. O. Thorlacius.
Thorshavn	29.69	754.0	29.72	754.9	43.5	6.4	55	E	9	4			7						Overloerer Bergh.
Vestervig	29.72	755.0	29.82	757.4	47.3	8.5	92	SW			4		9						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.43	747.5	30.07	763.7	68.0	20	31	NNW			1	2c	0	SW		0	0	Slightly cl'dy	M. Labroue, Director.
Alençon Normal School	29.57	751.1	30.12	765.1	59.4	15.2	76	W			1	2c	0			0	0	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	29.81	757.1	30.05	763.3	63.9	17.7	48	W			2	1c	c			0	0	Clear	M. Klein, Commandaut.
Avignon, Normal School	29.87	758.6	29.95	760.6	70.3	21.3	27	N			3		0			0	0	Clear.	M. Giraud, Director.
Bar-sur-Seine	29.51	749.6	30.07	763.8	55.6	13.1	76	ESE			1	5c	0	NE		0	0	Cloudy	M. Saillard, Director.
Beauvais, Normal School	29.79	756.7	30.06	763.4	63.7	17.6	44	W			1		2			0	0	Slightly cl'dy	M. Frère Eugene Marie.
Besançon, Normal School	29.16	740.7	30.03	762.8	62.6	17	43	ENE			2				NE	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.82	757.4	30.08	763.9	67.1	19.5	39	E			1		2			0	0	Slightly cld'y	M. Rayet, Director.
Bourges, Normal School	29.54	750.3	30.08	763.9	68.9	20.5	32	N			1	c	0	N		0	0		M. Postel, Director.
Brest, Naval Observatory	29.90	759.5	30.15	765.7	67.3	19.6	68	SSW			1		0			0	0		M. de Kermaree, Dir.
Caen, Normal School	29.99	761.7	30.07	763.6	61.9	16.6	73	NW			1		2		NE	0	0	Slightly cl'dy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.77	756.1	30.09	764.2	67.1	19.5	37	NW			1		2			0	0	Slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.51	749.6	30.02	762.5	71.6	22	48	NNW			1		0			0	0	Clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.72	729.4	30.05	763.2	63.7	17.6	30	N			1		2k		NE	0	0	Slightly cl'dy	M. Allnard, Director.
Cluny, Normal School	29.42	747.2	30.18	766.5	68.7	20.4	36	NE			2		1		NE	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.19	741.5	30.05	763.3	66.9	19.4	34	NW			2	5ck	0			0	0	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.40	695.0	29.86	758.5	66.2	19	30	NE			1					0	0		M. Jeangirard, Director.
Greasque, du. Rhone	28.85	732.8	29.99	761.8	68.2	20.1	32	W			1		2		SW	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.21	742.0	29.97	761.1	65.5	18.6	37	NNE			1	ck	0			0	0		M. Ablard, Director.
Guéret, Normal School	28.50	724.0	30.07	763.8	61.7	16.5	26	NE			1		0			0	0	Clear	M. Rivoire, Director.
Lamballe, Normal School	29.85	758.3	30.12	765.1	64.4	18	47	N			1				N	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.58	751.2	30.24	768.0	61.9	16.6	64	N			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.14	[illegible]	30.24	768.1	65.5	18.6	41	WSW			3		0			0	0	Clear	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.98	736.2	30.03	762.7	63.3	17.4	39	NNE			1		0			0	0	Clear	M. André, Director.
Mans, Normal School	29.80	756.9	30.11	764.7	61.3	16.3	51	W			1		2		NW	0	0	Slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	29.67	753.7	29.94	760.4	69.1	20.6	44	W			1-2		1		NE	0	0		M. Stephan, Director.
Montlouis l'instituteur	24.82	630.5	30.06	763.5	52.7	11.5	32	W	9.4	4.2			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.84	758.0	29.95	760.7	71.6	22	42	NW			2		0			0	0	Clear	M. P. Galzin, Director.
Nancy, Normal School	29.28	743.6	30.02	762.6	66.9	19.4	23	N			1		2k			0	0	Slightly cl'dy	M. Hasse.
Nantes, Observatory	29.97	761.2	30.13	765.3	66.9	19.4	40	NW			1		0			0	0	Hazy	M. Larocque, Director.
Nice	29.88	759.0	29.91	759.8	64.4	18.0	67	E			2		1	E	E	0	0	Clear.	Capt. Boissière, Director.
Perpignan, Observatory	29.87	758.6	29.97	761.3	70.9	21.6	20	NE	24.2	10.8			0			0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.54	572.6			39.6	4.2							1	SW	NE	0	0	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	28.98	736.1	30.02	762.6	66.2	19	28	N			4		0			0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.19	639.7			40.8	4.9	61	NE			3		2			0	0	¼ covered	M. Allnard, Director
Rochefort, Naval Obs'y	30.10	764.5	30.13	765.3	72.7	22.6	41	E			1		2		NE	0	0	¼ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.91	759.6	30.12	765.9	70.0	21.1	45	NE			1		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.92	709.2	30.03	762.8	63.0	17.2	27	NE			2		0			0	0	Clear	M. Richard, Director.
Rouen, Normal School	29.98	761.5	30.07	763.7	66.9	19.4	54	W			1		5		W	0	0	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.95	760.7	30.11	764.7	62.2	16.8	70	NW			1		0			0	0	Clear	M. Delaplanche, Dir.
Saint Maur, Observatory	29.90	759.4	30.07	763.6	69.1	20.6	30	N			1		1	N		0	0		M. Renou, Director.
Toulouse, Observatory	29.38	746.2	30.10	764.6	70.3	21.3	45	NW			1					0	0		M. Baillaud, Director.
Tours	29.80	756.8	29.99	761.8	66.9	19.4	42	E			1		0			0	0	Clear.	M. de Tastes.
Versailles, Observatory	29.58	751.2	30.07	763.7	64.4	18.0	34	NW			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.17	741.0	30.04	763.0	63.5	17.5	33	E			1		1s			0	0		Prof. Dr. Hoh.
Berlin	29.82	757.4	29.99	761.7	68.0	20.0	30	SW			1		2			0	0		Prof. Dr. Arndt.
Breslau	29.44	747.8	29.97	761.3	64.2	17.9	30	N			2		2			0	0		Royal University Obs'y.
Carlsruhe	29.61	752.1	30.03	762.8	63.3	17.4	50	E			1		0			0	0		Albert Senz.
Cassel	29.28	743.6	29.99	761.7	67.6	19.8	31	S			4		2	NE		0	0		Dr. H. Mähl.
Frankfort on the Main	29.70	754.4	30.06	763.4	67.6	19.8	25	W			2		1			0	0		Physical Society.
Friedrichshafen	28.62	727.0	30.06	763.5	54.0	12.2	66	SSW			3		2	SW		0	0		Wilhelm, Chief Tel.
Hamburg	29.87	758.8	29.95	760.6	65.5	18.6	48	WSW			3		0			0	0		Dr. R. Kleeman.
Kiel	29.88	758.9	29.89	759.3	50.9	10.5	39	SW			2		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.61	752.1	30.02	762.6	62.1	16.7	39	ENE			1		2			0	0		Prof. Dr. Bruhns.
Magdeburg	29.71	754.5	29.98	761.6	68.4	20.2	35	Calm			0	2cs	0			0	0		Dr. Assmann.
Memel	29.97	761.1	30.01	762.3	50.2	10.1	65	W			3-4	1c	0						Reinbrecht & Issermann.
Munich	28.24	717.3	30.11	764.7	57.4	14.1	36	Calm			0		7	NW		0.012	0.3		Central Station.
Neufahrwasser	29.97	761.3	29.99	761.7	60.1	15.6	57	ENE			1		1			0	0		A. Lothes.
Neustadt, Palatinate	29.48	748.9	30.01	762.3	66.9	19.4	37	E			1		0			0	0		Dicknether.
Stuttgart	29.08	738.5	29.95	760.8	62.6	17.0	36	N			1		0			0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Ounerth.
Weissenburg, Bavaria	28.53	724.7	30.02	762.4	60.4	15.8	42	Calm			0		1			0	0		Prof. Kemlein.
Wustrow	29.94	760.4	29.96	761.0	60.1	15.6	56	W			2		3s			0	0		Prof. J. Reimer.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.47	748.4	29.85	758.2	68.7	20.4		W			1.5		0					Clear.	A. Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.70	754.2	29.74	755.5	88.0	31.1	76	WSW	7.0	3.1			0			0	0	Misty	
Deesa	29.21	742.0	29.66	753.4	104.3	40.2	20	W	15.4	6.9			0			0	0	Blue sky	
Bombay	29.76	756.0	29.80	756.9	87.7	30.9	74	NW	16.0	7.3			4		WNW	0	0	D. clouds	
Poona, Yarrowda	27.92	709.1	29.70	754.3	98.8	37.1	12	WSW	1.0	0.4			7		SSW	0	0	D. clouds	
Belgaum	27.28	692.9	29.79	756.6	80.5	26.9	59	SW	6.0	2.7			6	SW	NE	0	0	Threatening	
Lahore	28.94	735.2	29.68	753.9	82.0	27.8	58	N	4.1	1.8			6			0.02	0.5	Blue sky	
Roorkee	28.78	731.0	29.65	753.2	91.2	32.9	48	W	1.2	0.5			7			0	0	Thund'r st'm	
Agra	29.05	737.8	29.58	751.4	102.6	39.2	26	SE	4.0	1.8			0			0	0		
Nagpur	28.60	726.6	29.59	751.7	105.5	40.8	18	W	3.7	1.6			5		W	0	0	D. clouds	
Jubbulpore	28.33	719.6	29.64	752.8	97.7	36.5	33	S	4.3	1.9			10			0.04	1.0	Overcast	
Lucknow	29.31	744.6	29.68	753.9	92.1	33.4	42	ENE	2.3	1.0			0			0.11	2.8	Blue sky	
Allahabad	29.37	746.0	29.67	753.6	97.7	36.5	31	Calm	4.7	2.1			7			0	0	D. clouds	
Patna	29.50	749.3	29.68	753.8	92.1	33.4	53	N	4.3	1.9			8	N	N	0	0	D. clouds	
Hazaribagh	27.76	705.1	29.76	755.9	98.8	37.1	54	SW	11.4	5.1			10		SW	1.39	35.3	Thund'r st'm	
Cuttack	29.62	752.3	29.70	754.3	92.4	33.6	56	S	7.0	3.1			1			0	0	Blue sky	
Calcutta, Alipore	29.68	753.8	29.70	754.3	87.0	30.6	76	S	12.0	5.4			0			0.20	5.1	Blue sky	
Dhubri	29.63	752.6	29.75	755.6	81.5	27.5	80	NE	9.2	4.1			7			0.15	3.8	Gloomy	
Chittagong	29.70	754.5	29.79	756.7	84.4	29.1	79	SW	5.9	2.6			0			0	0	Blue sky	
Sibsagar	29.50	749.2	29.83	757.8	79.7	26.5	79	SSW	3.3	1.5			10	W	W	0.13	3.3	D. clouds	
Zanzibar, Africa			29.95	760.7	82.3	27.9	77	SSW	11	4.9			7		S	0.18	4.6	Threatening	
ITALIAN SERIES. By authority of the MINISTER OF AGRICULTURE, INDUSTRY AND COMMERCE. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.48	748.8	29.89	759.1	62.1	16.7	52	SE	0.7	0.3			7			0	0		Prof. Giovanni Clodig.
Milan	29.31	744.4	29.81	757.2	68.9	20.5	23	NW	6.9	3.1			2			0	0		Prof. Schiaparelli.
Padua	29.74	755.3	29.85	758.1	67.8	19.9	38	SSW	4.3	1.9			10			0.004	1.0		Prof. Dott. Lorenzoni.
Moncalieri	28.98	736.1	29.87	758.6	66.4	19.1	31	S	4.3	1.9			2			0	0		Prof. P. F. Denza.
Genoa	29.77	756.1	29.96	761.0	62.6	17.0	57	SW	4.9	2.2			2	NE		0	0		Prof. G. M. Garibaldi.
Mondovi	28.00	711.1	29.88	758.9	62.4	16.9	32	W			4		1	E		0	0		Prof. D. C. Bruno.
Pesaro	29.83	757.6	29.87	758.8	62.1	16.7	61	NW	11.2	5.0			7	N		0	0		Prof. Luigi Guidi.
Florence	29.65	753.1	29.90	759.5	66.2	19.0	52				2		7	NW		0	0		Prof. Costantino Pitter.
Leghorn	29.88	759.0	29.97	761.2	64.0	17.8	63	WSW	6.9	3.1			7			0	0		Prof. P. Monte.
Rome	29.78	756.4	29.95	760.7	65.1	18.4	50	SW	16.1	7.2			2			0	0		Prof. P. S. Ferrari.
Lecce	29.65	753.1	29.90	759.4	59.5	15.3	51	S	3.8	1.7			8			0.484	12.3		Prof. C. de Giorgi.
Cosenza	29.06	738.1	29.94	760.5	59.0	15.0	70	SSW	1.8	0.8			8	SW		0	0		Prof. D. Conti.
Cagliari	29.79	756.6	29.98	761.5	64.0	17.8	61	SE			2		1			0	0		Prof. A. Pacinotti.
Palermo	29.78	756.4	30.03	762.7	62.4	16.9	53	ENE	3.8	1.7			3			0	0		Prof. G. Cicciatore.
Syracuse	29.89	759.3	29.94	760.4	65.5	18.6	54	ESE	3.8	1.7			10	SW		0	0		Prof. Vincenzo Guiliano.
SUB-SERIES.																			
Naples, S. R	29.41	747.0	29.93	760.1	61.3	16.3	53	SW	3.1	1.4			0			0	0		Prof. F. Brioschi.
Stelvio	22.12	561.8			33.4	0.8	84	NE			1	6ck	0	NE		0	0	Cloudy	Prof. P. F. Denza.
Valdobbia	22.14	562.4			42.8	6.0	60	SE			2	5ck	0	N		0	0	Cloudy	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y †	30.04	763.0	30.05	763.3	61.7	16.5	84	WSW	0.8	0.4			10S			0	0	Covered	K. Sasaki.
Kioto	29.88	758.9	30.05	763.3	61.5	16.4	90	S	1.5	0.7		cs	10S			0	0	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.87	758.7	30.07	763.8	63.5	17.5	80	SW	0.8	0.4			10S			0	0	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	29.94	760.5	30.01	762.2	59.9	15.5	86	SSW	4.9	2.2		10cs;ck	0			0.005	0.1	Covered	The Staff.
Wakayama	30.00	762.0	30.05	763.3	62.5	16.9	84	Calm	0	0		10ck;cs	0			0	0	Cloudy	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.84	757.9	30.03	762.8	78.9	26.1	71	N	8.0	3.6		0	6		N	0.01	0.3	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the SECRETARY of PUBLIC WORKS. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.69	754.0	29.95	760.6	71.5	21.9	92	ENE	0	0		4cs	0			0	0	Misty	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. Y. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.02	762.6	30.02	762.6	57.9	14.4		WNW			4					0	0		
Groningen	29.90	759.4	29.95	760.8	60.1	15.6		NW			3					0	0		
Helder	29.96	761.0	29.96	761.0	53.4	11.9		SW			2					0	0		
Hellevoetsluis	30.00	762.0	30.00	762.0	59.0	15.0	68	WSW			4					0	0		
Utrecht	29.94	760.5	29.99	761.7	67.5	19.7	50	WSW			2		2			0	0	Slightly cl'dy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.63	752.5	29.69	754.1	47.5	8.6	60	W	8.5	3.8	.....	.....	7	.....	.....	0	0	.....	.....
Christiania	29.33	744.9	29.47	748.5	58.8	14.9	40	SW	13	6	.....	.....	5	.....	.....	0	0	.....	.....
Gjæsvær	29.21	742.0	29.24	742.6	25.2	— 3.8	.....	W	.....	.....	7	.....	10	.....	.....	.....	.....	.....	.....
Lodingen	29.34	745.2	29.39	746.4	35.4	1.9	63	NNE	.....	.....	6	.....	8	.....	.....	0	0	.....	.....
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.15	765.8	30.31	769.8	60.8	16.0	71	E	8.1	3.6	.....	.....	5	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	28.95	735.4	29.94	760.4	64.8	18.2	57	ENE	6.9	3.1	.....	.....	8	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	29.95	760.8	30.04	763.0	66.6	19.2	84	Calm	0	0	.....	.....	7	.....	.....	0.220	5.6	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.61	752.0	29.97	761.1	58.5	14.7	84	ENE	22.4	10.0	.....	.....	10	.....	.....	0.031	0.8	.....	The Staff.
Ponta Delgada, Azores	30.22	767.7	30.30	769.5	62.6	17.0	57	NE	5.6	2.5	.....	.....	3	.....	.....	0	0	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	29.61	752.2	29.63	752.7	47.7	8.7	74	W	4	2	.....	.....	7ks	.....	.....	.....	.....	.....	Capt. Sseliwerstow.
Astrakhan	30.17	766.4	30.09	764.3	61.9	16.6	32	E	7	3	.....	.....	0	.....	.....	.....	.....	.....	Capt. Wisganow.
Barnaul ‡	29.54	750.3	30.04	763.0	47.3	8.5	38	NW	7	3	.....	.....	1	.....	.....	.....	.....	Light clouds	Meteorological Obs'y.
Dorpat	29.59	751.5	29.82	757.5	63.7	17.6	45	WSW	9	4	.....	3ck	0	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	28.98	736.0	29.94	760.5	48.2	9.0	35	SW	22	10	.....	.....	10	.....	.....	.....	.....	.....	Meteorological Obs'y.
Kasan	29.66	753.4	29.93	760.1	59.9	15.5	89	WSW	18	8	.....	.....	9	.....	.....	.....	.....	.....	Observatory.
Kertch	29.75	755.6	29.77	756.1	59.5	15.3	89	SSE	9	4	.....	.....	8	.....	.....	.....	.....	.....	Lagorio & Sastyrez.
Kieff	29.27	743.5	29.90	759.4	59.7	15.4	35	ESE	16	7	.....	9c;cs	0	.....	.....	.....	.....	Light clouds	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.83	757.7	30.03	762.8	64.8	18.2	25	ESE	34	15	.....	.....	4	.....	.....	.....	.....	Light clouds	Meteorological Obs'y.
Moscow	29.45	747.9	29.98	761.5	64.2	17.9	30	SW	10.1	4.5	.....	.....	2ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.37	695.1	29.57	751.1	56.5	13.6	39	SW	2	1	.....	.....	4	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaiev	29.77	756.1	29.84	757.9	56.3	13.5	81	ENE	18	8	.....	.....	10n	.....	.....	.....	.....	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lieut. Iwanow.
Pekin, China	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	29.75	755.7	29.89	759.3	78.3	25.7	37	SW	4	2	.....	.....	0	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tashkend, Laboratory	29.76	755.9	29.78	756.3	61.3	16.3	45	SW	11	5	.....	.....	3ks	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.33	719.5	29.80	756.9	84.6	29.2	48	Calm	0	0	.....	.....	2	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	28.56	725.4	29.92	760.0	73.2	22.9	47	SE	4	2	.....	.....	7k	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.50	749.3	29.91	759.7	64.6	18.1	29	ENE	11	5	.....	.....	0	.....	.....	.....	.....	.....	Berg, Assistant.
Yeniseisk	29.54	750.2	29.94	760.5	65.3	18.5	32	WSW	2	1	.....	.....	2	.....	.....	.....	.....	Light clouds	M. O. Marks.
	29.47	748.4	29.76	755.9	33.3	0.7	57	WNW	25	11	.....	.....	10	.....	.....	.....	.....	Snow & sleet	
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	29.87	758.7	57.0	13.9	57	W	.....	.....	3	.....	10ks	.....	.....	0.13	3.3	Overcast	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.78	756.4	54	12.2	93	W	.....	.....	3.	3	0	W	.....	0.4	10.2	D. clouds	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	29.71	754.6	.....	.....	.....	WNW	.....	.....	3	0	4	.....	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.91	759.7	30.01	762.3	70.7	21.5	39	WSW	5.4	2.4	.....	0	0	.....	.....	0	0	Vapory	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.12	765.0	30.17	766.4	69.4	20.8	54	N	1.6	0.7	.....	4	3	E	.....	0	0	Cloudy	Prof. Manuel de Naverac.
Burgos, Met. Obs'y	27.11	688.6	.....	.....	62.2	16.8	64	NE	7.8	3.5	.....	0	0	.....	.....	0	0	Clear	Domingo Martin.
Madrid, Royal Obs'y	27.82	706.5	30.00	761.9	66.7	19.3	35	E	6.0	2.7	.....	0	0	.....	.....	0	0	Clear	The Staff.
Murcia, Met. Obs'y ‡	29.89	759.2	30.04	763.0	71.1	21.7	52	SE	3.8	1.7	.....	6	4	W	.....	0	0	Covered	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.08	738.6	29.94	760.5	74.3	23.5	39	N	0	0	.....	.....	0	.....	.....	0	0	Clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.96	761.0	30.03	762.7	74.4	23.6	78	ENE	2.9	1.3	.....	0	3k	.....	NE	0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.87	758.6	29.92	759.9	86.9	30.5	60	SE	6.6	3.0	.....	0	1s	.....	.....	0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.86	758.5	29.96	761.0	66.4	19.1	71	ESE	22.5	10.1	.....	10	.....	.....	ESE	0.416	10.6	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.87	758.6	29.96	760.9	74.8	23.8	94	SE	6.7	3.0	.....	.....	10kn	.....	SE	0.386	9.8	Raining	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.81	757.1	29.95	760.8	82.4	28.0	67	NNW	2.1	1.1	.....	.....	7ks	.....	NW	0	0	Covered	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.39	746.6	29.43	747.6	37.0	2.8	93	S	.....	.....	2	.....	10	.....	.....	0.638	16.2	.....	
Umea	29.30	744.2	29.35	745.5	40.6	4.8	81	SW	.....	.....	4	.....	10	.....	.....	0	0	.....	
Hernosand	29.29	743.9	29.34	745.2	56.3	13.5	51	W	.....	.....	4	.....	10	.....	.....	0	0	.....	
Stockholm	29.44	747.8	29.62	752.3	62.2	16.8	29	WSW	.....	.....	7	.....	8	.....	.....	0	0	.....	
Wisby	29.74	755.4	29.80	756.9	57.6	14.2	53	WSW	.....	.....	4	.....	5	.....	.....	0	0	.....	
Sub-Series.																			
Upsala	29.47	748.5	29.56	750.7	58.8	14.9	48	SW	25.5	11.4	.....	.....	10	.....	.....	0	0	.....	Nils Ekholm
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.58	726.0	29.99	761.7	61.3	16.3	26	N	.....	.....	4	.....	0	.....	.....	0	0	Clear	The Observatory.
Zurich ‡	28.42	721.9	30.03	762.8	62.4	16.9	36	NE	.....	.....	2	.....	1	.....	.....	0	0	Clear	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.78	756.3	55.6	13.1	80	NE	13	6.0	.....	.....	10	.....	N	0.417	10.6	.....	The Observatory.
Valona	.....	.....	29.95	760.3	68.2	20.1	.....	SW	.....	.....	1	.....	5	.....	.....	0.43	11.	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.93	760.6	75.0	23.9	66	WNW	.....	.....	1	20	0	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.

64708

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.01	762.2	30.09	764.3	64.5	18.1	58	NE	4	1.8	.....	1c	Hz	.....	.....	0	0	Dense haze.	
Alpena, Michigan	29.29	744.0	29.93	760.2	49	9.4	64	E	6	2.7	.....	10cs	0	S	.....	0.05	1.3	Cloudy	
Atlanta, Georgia	28.88	733.5	29.98	761.5	71.2	21.8	71	NW	10	4.5	.....	5c	0	Calm	.....	0	0	Fair	
Atlantic City, New Jersey	30.04	763.0	30.05	763.3	55	12.8	100	E	11	4.9	.....	.....	Fg	.....	Calm	0	0	Dense fog	
Attou Id., Alaska ‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Augusta, Georgia	29.81	757.2	30.00	762.0	73.8	23.2	68	NW	4	1.8	.....	0	Hz	.....	.....	0	0	Clear	
Baltimore, Maryland	29.98	761.5	30.03	762.7	72	22.2	58	N	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Barnegat, New Jersey	30.03	762.7	30.05	763.3	56	13.3	94	E	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
Bismarck, Dakota	28.21	716.5	30.06	763.5	50	10.0	32	NW	16	7.2	.....	0	0	.....	.....	0.02	0.5	Clear	
Boise City, Idaho	27.16	689.9	30.12	765.0	57.2	14.0	75	N	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Boston, Massachusetts	29.92	760.0	30.08	764.0	56.0	13.3	72	NW	1	0.4	.....	0	Hz	.....	.....	0	0	Clear	
Brackettville, Texas	28.94	735.1	29.99	761.7	65	18.3	94	E	7	3.1	.....	.....	8ks	.....	.....	0	0	Fair	
Brownsville, Texas	30.02	762.5	30.17	766.3	68	20.0	95	NE	1	0.4	.....	2c	0	.....	.....	0	0	Clear	
Buffalo, New York	29.28	743.7	29.96	761.0	58	14.4	82	SW	7	3.1	.....	2ck	5s	W	W	0	0	Fair	
Burlington, Vermont	29.80	756.9	30.09	764.3	52.7	11.5	69	N	1	0.4	.....	5ck	0	NW	.....	0	0	Fair	
Cairo, Illinois	29.70	754.4	30.07	763.8	75	23.9	81	Calm	0	0	.....	5c	0	Calm	.....	0	0	Fair	
Campo, California	27.36	694.9	29.93	760.2	42	5.6	50	S	4	1.8	.....	1c	0	.....	.....	0	0	Clear	
Camp Thomas, Arizona	27.23	691.6	.....	.....	75	23.9	48	SE	.....	.....	4	.....	10s	.....	E	0	0	Cloudy	
Cape Henry, Virginia	29.96	761.0	29.98	761.5	68	20.0	84	SE	11	4.9	.....	5c	0	.....	.....	0	0	Fair	
Cape May, New Jersey	30.00	762.0	30.03	762.7	58	14.4	88	SE	12	5.4	.....	.....	Fg	.....	.....	0	0	Dense fog	
Castroville, Texas	29.33	745.0	30.04	763.0	62	16.7	94	NW	2	0.9	.....	2c	0	.....	.....	0	0	Fair	
Cedar Keys, Florida	30.01	762.2	30.03	762.7	77	25.0	73	W	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Champaign, Illinois	29.16	740.7	29.92	760.0	68	20.0	84	SW	8	3.6	.....	0	0	.....	.....	0.24	6.1	Clear	
Charleston, S. Carolina	29.91	759.7	29.96	761.0	79	26.1	74	SW	4	1.8	.....	2c	0	Calm	.....	Inap	Inap.	Clear	
Charlotte, N. Carolina	29.15	740.4	29.92	760.0	75.2	24.0	60	N	4	1.8	.....	0	Hz	.....	.....	0	0	Clear	
Chattanooga, Tennessee	29.27	743.4	30.04	763.0	72	22.2	76	Calm	0	0	.....	1cs	Sk	Calm	Calm	0	0	Clear	
Cheyenne, Wyoming	24.24	615.7	30.18	766.6	42	5.6	59	NW	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Chicago, Illinois	29.22	742.2	29.88	758.9	66.7	19.3	79	SW	6	2.7	.....	0	Sk	.....	.....	0.26	6.6	Clear	
Chincoteague, Virginia	30.00	762.0	30.02	762.5	56	13.3	100	SE	15	6.7	.....	.....	Fg	.....	Calm	0	0	Dense fog	
Cincinnati, Ohio	29.38	746.2	30.00	762.0	73	22.8	72	SE	2	0.9	.....	4c	Sk	SW	.....	0	0	Fair	
Cleveland, Ohio	29.23	742.4	29.93	760.2	61	16.1	80	SE	7	3.1	.....	2ck	0	W	.....	0.13	3.3	Clear	
Coleman City, Texas	28 33	719.6	29.98	761.5	61	16.1	88	Calm	0	0	.....	5c	0	SW	.....	0	0	Fair	
Columbus, Ohio	29.14	740.1	29.94	760.5	69	20.6	85	W	2	0.9	.....	0	Fg	.....	.....	0.26	6.6	Clear	
Concho, Texas	28.23	717.0	29.89	759.2	63	17.2	89	Calm	0	0	.....	10ck	0	SE	.....	0	0	Cloudy	
Corsicana, Texas	29.72	754.9	30.18	766.6	68	20.0	74	SW	4	1.8	.....	5cs	0	.....	.....	0	0	Fair	
Davenport, Iowa	29.26	743.2	29.88	758.9	68	20.0	84	SW	4	1.8	.....	8cs	0	SW	.....	0.20	5.1	Fair	
Dayton, Washington T'y	28.26	717.8	29.91	759.7	49.8	9.9	44	N	4	1.8	.....	2c	8ks	Calm	SW	0	0	Cloudy	
Deadwood, Dakota	25.54	648.7	.....	.....	45	7.2	76	SW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Decatur, Texas	28.95	735.3	30.08	764.0	70	21.1	70	SE	6	2.7	.....	5ck	0	.....	.....	0	0	Fair	
Delaware Breakwater, Del.	30.01	762.2	30.03	762.7	55	12.8	100	SE	13	5.8	.....	.....	Fg	.....	SE	0	0	Dense fog	
Denison, Texas	29.33	745.0	30.10	764.5	72	22.2	71	S	3	1.3	.....	8cs	0	Calm	.....	0	0	Fair	
Denver, Colorado	24.97	634.2	30.19	766.8	48.1	8.9	49	SE	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Des Moines, Iowa	29.03	737.3	29.87	758.7	68	20.0	84	W	11	4.9	.....	8k	0	W	.....	1.04	26.4	Fair	
Detroit, Michigan	29.20	743.2	29.93	760.2	59.8	15.4	77	E	5	2.2	.....	2c	Sk	W	.....	0.03	0.8	Clear	
Dodge City, Kansas	27.46	697.5	29.68	753.9	64	17.8	83	SW	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Dubuque, Iowa	29.14	740.1	29.81	757.2	66.1	18.9	84	S	6	2.7	.....	.....	10ks;8	.....	C;S	0.32	8.1	Cloudy	
Duluth, Minnesota	29.16	740.7	29.83	757.7	43	6.1	92	NE	3	1.3	.....	.....	10s	.....	.....	0.13	3.3	Cloudy	
Eagle Pass, Texas	29.34	745.2	30.05	763.3	70	21.1	85	SE	3	1.3	.....	0	5s	.....	Calm	0	0	Fair	
Eagle Rock, Idaho	25.38	644.6	30.03	762.7	44	6.7	52	S	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Eastport, Maine	29.92	760.0	29.98	761.5	49.5	9.7	54	NW	12	5.4	.....	0	0	.....	.....	0.02	0.5	Clear	
El Paso, Texas	26.24	666.5	.....	.....	70	21.1	53	NW	4	1.8	.....	.....	10s	.....	NW	0.19	4.8	Cloudy	
Erie, Pennsylvania	29.23	742.4	29.93	760.2	60	15.6	88	SE	5	2.2	.....	.....	10ks	.....	SE	0.01	0.3	Cloudy	
Escanaba, Michigan	29.20	741.7	29.85	758.2	48	8.9	93	NE	3	1.3	.....	.....	Fg	.....	Calm	0.26	6.6	Dense fog	
Florence, Arizona	28.44	722.4	30.04	763.0	60	15.6	60	W	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Apache, Arizona	25.09	637.3	30.54	775.7	54	12.2	49	E	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Assinnaboine, Montana	27.19	690.0	.....	.....	49	9.4	51	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Bennett, Dakota	28.45	722.6	.....	.....	55	12.8	68	NE	1	0.4	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Fort Benton, Montana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Buford, Dakota	28.10	713.7	29.93	760.2	50	10.0	65	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Custer, Montana	26.96	684.8	.....	.....	44	6.7	67	SE	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Fort Davis, Texas	25.27	641.8	30.23	767.8	58	14.4	82	Calm	0	0	.....	.....	10s	.....	.....	0	0	Cloudy	
Fort Elliott, Texas	27.34	694.4	29.58	751.3	60	15.6	71	SE	4	1.8	.....	5c	0	SE	.....	0	0	Fair	
Fort Gibson, Indian T'y	29.56	750.8	30.08	764.0	70	21.1	85	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Grant, Arizona	25.29	642.4	30.09	764.3	65	18.3	58	E	22	9.8	.....	.....	10s	.....	S	0	0	Cloudy	
Fort Griffin, Texas	28.76	730.5	29.99	761.7	69.1	20.6	75	Calm	0	0	.....	10cs	0	.....	.....	0	0	Cloudy	
Fort Keogh, Montana	27.56	700.0	.....	.....	43	6.1	75	W	4	1.8	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Fort Macon, North Carolina	29.95	760.7	29.96	761.0	74	23.3	86	NE	5	2.2	.....	Hz	Hz	Calm	Calm	0	0	Light haze	
Fort McKavett, Texas	27.88	708.1	29.77	756.1	62.3	10.8	77	S	2	0.9	.....	7ck	0	.....	.....	0	0	Fair	
Fort Missoula, Montana	26.71	678.4	.....	.....	48	8.9	63	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Fort St. Michaels	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Shaw, Montana	26.45	671.8	.....	.....	33	0.6	61	W	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Sill, Indian Territory	28.88	733.5	29.97	761.2	65	18.3	89	Calm	0	0	.....	2c	0	W	.....	0	0	Fair	
Fort Stevenson, Dakota	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Verde, Arizona	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fredericksburg, Texas	.....	.....	.....	.....	58	14.4	70	S	.....	.....	1	10s	.....	.....	S	0	0	Cloudy	
Galveston, Texas	28.40	721.3	29.95	760.7	61	16.1	82	Calm	0	0	.....	2c	0	.....	.....	0	0	Fair	
Grand Haven, Michigan	30.10	764.5	30.14	765.5	75	23.9	81	SW	4	1.8	.....	Hz	0	.....	.....	0	0	Clear	
Hatteras, North Carolina	29.26	743.2	29.90	759.4	55	12.8	93	Calm	0	0	.....	.....	10s	.....	Calm	0.10	2.5	Cloudy	
Helena, Montana	29.94	760.5	29.96	761.0	73	22.8	85	NE	10	4.5	.....	2c	0	Calm	.....	0	0	Fair	
Henrietta, Texas	25.90	657.8	.....	.....	49	9.4	64	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Indianapolis, Indiana	29.10	739.1	30.01	762.2	65	18.3	84	SE	3	1.3	.....	0	5s	.....	.....	0	0	Fair	
Indianola, Texas	29.19	741.4	29.94	760.5	74	23.3	68	S	4	1.8	.....	4ck	Hz	W	Calm	0	0	Fair	
Jacksboro, Texas	30.10	764.5	30.13	765.3	72.1	22.3	90	Calm	0	0	.....	2cs	1ks	Calm	Calm	Inap.	Inap.	Fair	
Jacksonville, Florida	28.96	735.0	30.08	764.0	63	17.2	84	SW	4	1.8	.....	8cs	0	W	.....	0	0	Cloudy	
Keokuk, Iowa	29.95	760.7	29.99	761.7	77	25.0	69	W	4	1.8	.....	2cs	0	.....	.....	0	0	Clear	
Key West, Florida	29.28	743.7	29.90	759.4	72.8	22.7	76	SW	7	3.1	.....	5cs	2s	SW	.....	0	0	Fair	
Kittyhawk, North Carolina	30.02	762.5	30.05	763.3	77.0	25.0	68	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Knoxville, Tennessee	29.99	761.7	30.01	762.2	65	18.3	89	NE	7	3.1	.....	2k	2ks	NE	NE	0	0	Fair	
La Crosse, Wisconsin	29.07	738.4	30.04	763.0	70	21.1	80	S	1	0.4	.....	0	Sk	.....	Calm	0	0	Clear	
La Mesilla, New Mexico	29.04	737.6	29.76	755.9	66.2	19.0	74	W	16	7.2	.....	.....	10n	.....	.....	0.78	19.8	Heavy rain	
Laredo, Texas	26.18	665.0	30.32	770.1	61	16.1	82	Calm	0	0	.....	.....	10s	.....	.....	0.58	14.7	Cloudy	
Leavenworth, Kansas	29.66	753.4	30.00	762.0	70	21.1	95	SE	1	0.4	.....	.....	10s	.....	SE	0.01	0.3	Cloudy	
Lewiston, Idaho	29.15	740.4	29.96	761.0	69	20.6	61	NW	20	8.9	.....	.....	10s	.....	NW	0	0	Cloudy	
Little Rock, Arkansas	29.17	740.9	29.79	756.7	50	10.0	32	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Los Angeles, California	29.81	757.2	30.12	765.0	70	21.1	95	Calm	0	0	.....	2cs	Sk	.....	.....	0	0	Fair	
Louisville, Kentucky	29.56	750.8	29.92	760.0	58.3	14.6	94	E	3	1.3	.....	.....	Fg	.....	Calm	0	0	Light fog	
Lynchburg, Virginia	29.43	747.5	29.96	761.0	73.0	22.8	81	N	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Madison, Wisconsin	29.31	744.5	29.96	761.0	75	23.9	72	Calm	0	0	.....	0	Fg	.....	.....	0.10	2.5	Clear	
Marquette, Michigan	28.87	733.3	29.82	757.4	64	17.8	94	S	8	3.6	.....	.....	Fg	.....	Calm	0.26	6.6	Dense fog	
Mason, Texas	29.14	740.1	29.85	758.2	43	6.1	92	NW	1	0.4	.....	.....	10s	.....	Calm	0.07	1.8	Cloudy	
Memphis, Tennessee	29.50	723.9	30.25	768.3	61.1	16.2	94	Calm	0	0	.....	1c	0	W	.....	0	0	Clear	
	29.78	756.4	30.11	764.8	75	23.9	77	Calm	0	0	.....	0	1ks	.....	.....	0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0–10	Clouds. Amount and kind. Up'er 0–10	Lo'er 0–10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Milwaukee, Wisconsin	29.14	740.1	29.84	757.9	60	15.6	94	SW	4	1.8			10s			0.23	5.8	Threatening	
Mobile, Alabama	29.98	761.5	30.06	763.5	73	22.8	67	NW	7	3.1		1c	0			0	0	Clear	
Montgomery, Alabama	29.82	757.4	30.05	763.3	75	23.9	76	NE	6	2.7		5c	0			0	0	Fair	
Moorhead, Minnesota	28.86	733.0	29.80	756.9	51	10.6	93	NW	4	1.8			10s		NW	0.13	3.3	Cloudy	
Morgantown, W. Virginia	29.00	736.6	29.95	760.7	68	20.0	79	Calm	0	0		5cs	Hz			0	0	Fair	
Mt. Washington, N. H.	23.82	605.0	30.18	766.6	30	— 1.1	59	N	17	7.6		2c	0	NW		0.19	4.8	Clear	
Nashville, Tennessee	29.54	750.3	30.06	763.5	74.0	23.3	76	W	1	0.4		0	Sk			0	0	Clear	
New Haven, Connecticut	29.96	761.0	30.07	763.8	60	15.6	60	NE	6	2.7		0	0			0	0	Clear	
New London, Connecticut	30.04	763.0	30.09	764.3	63	17.2	72	NW	3	1.3		0	1s		Calm	0	0	Clear	
New Orleans, Louisiana	30.05	763.3	30.11	764.8	72.5	22.5	78	W	7	3.1		0	0			0	0	Clear	
Newport, Rhode Island	30.02	762.5	30.07	763.8	57.8	14.3	74	NE	3	1.3		1c	1s	Calm	Calm	0	0	Fair	
New River, N. Carolina																			
New Shoreham, Rhode I'd	30.05	763.3	30.08	764.0	53.9	12.2	86	NE	7	3.1		8k	Fg	S	Calm	0	0	Fair	
New York, New York	29.90	759.4	30.08	764.0	59.5	15.3	88	E	7	3.1			10s;fg			0	0	Cloudy	
Norfolk, Virginia	29.92	760.0	29.97	761.2	73	22.8	76	E	8	3.6		0	5s			0	0	Fair	
North Platte, Nebraska	27.22	691.4	29.80	756.9	49	9.4	85	NW	7	3.1		0	0			0	0	Clear	
Olympia, Washington T'y	30.07	763.8	30.11	764.8	45.0	7.2	84	SW	2	0.9			10s		Calm	0	0	Cloudy	
Omaha, Nebraska	28.86	733.0	29.92	760.0	67	19.4	69	W	6	2.7		2k	1s	W	W	1.45	36.8	Fair	
Oswego, New York	29.71	754.6	30.03	762.7	58.2	14.6	67	SE	3	1.3		2c	5s	W		0	0	Fair	
Pensacola, Florida	30.02	762.5	30.05	763.3	75	23.9	72	NW	5	2.2		1k	0	Calm		0	0	Clear	
Philadelphia, Pa	29.99	761.7	30.04	763.0	59	15.0	88	E	13	5.8			10s			0	0	Cloudy	
Phœnix, Arizona	28.84	732.5	30.60	777.2	66	18.9	89	E	5	2.2			10s			0	0	Cloudy	
Pike's Peak, Colorado	18.02	457.7	30.23	767.8	23	— 5.0	47	Calm	0	0		0	0			0	0	Clear	
Pioche, Nevada	24.10	612.1	29.87	758.7	52	11.1	29	W	2	0.9		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.19	741.4	29.97	761.2	65.3	18.5	83	W	1	0.4		7k	Sk	W	Calm	0	0	Fair	
Port Eads, Louisiana	30.10	764.5	30.11	764.8	73.1	22.8	85	NW	12	5.4		0	Hz		Calm	0	0	Clear	
Port Huron, Michigan	29.27	743.4	29.91	759.7	58.3	14.6	77	SE	4	1.8		5c	0	NW		0	0	Fair	
Portland, Maine	30.00	762.0	30.05	763.3	57	13.9	58	N	1	0.4		0	0			0	0	Clear	
Portland, Oregon	30.05	763.3	30.13	765.3	51.4	10.8	89	NW	2	0.9			10s		NW	0	0	Cloudy	
Portsmouth, N. Carolina					73	22.8	81	NE	10	4.5		5k	Hz	W	Calm	0	0	Fair	
Prescott, Arizona	24.79	629.7	30.15	765.8	49	9.4	44	S	2	0.9		5k	0	S		0	0	Fair	
Punta Rassa, Florida	30.01	762.2	30.02	762.5	75	23.9	74	Calm	0	0		0	0			0	0	Clear	
Red Bluff, California	29.54	750.3	29.88	758.9	58.0	14.4	76	NW	5	2.2		0	0			0	0	Clear	
Rio Grande City, Texas	29.91	759.7	30.13	765.3	70	21.1	85	E			1	0	5s		Calm	0	0	Fair	
Rochester, New York	29.40	746.7	30.00	762.0	62	16.7	67	SE	5	2.2		10k	0	W		0	0	Cloudy	
Roseburg, Oregon	29.57	751.1	30.15	765.8	46.5	8.1	92	Calm	0	0		5k	0	N		0	0	Fair	
Sacramento, California	29.82	757.4	29.90	759.4	59.8	15.4	77	SE	5	2.2		0	0			0	0	Clear	
St. Louis, Missouri	29.45	748.0	30.00	762.0	72.0	22.2	78	SW	10	4.5		8c	0	SW		0	0	Fair	
St. Paul, Minnesota	28.92	734.6	29.72	754.9	54	12.2	87	SW	6	2.7		2ck	5ks	W	SW	0.64	16.3	Clearing	
Salt Lake City, Utah	25.71	653.0	30.04	763.0	55	12.8	39	Calm	0	0		0	0			0	0	Clear	
San Antonio, Texas	29.45	748.0	30.14	765.5	64.3	17.9	89	Calm	0	0		4cs	0	Calm		0	0	Fair	
San Diego, California	29.82	757.4	29.89	759.2	60.8	16.0	82	S	4	1.8			10s			0	0	Cloudy	
Sandusky, Ohio	29.27	743.4	29.92	760.0	64	17.8	83	S	9	4.0		5c	0			0.06	1.5	Fair	
Sandy Hook, New Jersey	30.03	762.7	30.06	763.5	56.0	13.3	84	E	3	1.3			10s			0	0	Cloudy	
San Francisco, California	29.86	758.4	29.92	760.0	53	11.7	83	Calm	0	0		0	0			0	0	Clear	
Santa Fé, New Mexico	23.41	594.6	29.95	760.7	51	10.6	59	N	3	1.3		10c	0			0	0	Cloudy	
Savannah, Georgia	29.89	759.2	29.98	761.5	77	25.0	71	NE	3	1.3		1cs	0			0.18	4.6	Clear	
Shreveport, Louisiana	29.92	760.0	30.16	766.1	72	22.2	85	Calm	0	0		0	5s			0	0	Fair	
Silver City, New Mexico	24.37	619.0	30.42	772.7	57	13.9	58	Calm	0	0		0	8s		Calm	0	0	Fair	
Sitka, Alaska																			
Smithville, North Carolina	29.94	760.5	29.97	761.2	74	23.3	81	Calm	0	0		0	Hz			0.13	3.3	Clear	
Socorro, New Mexico	25.50	647.7	29.56	750.8	58	14.4	32	SE	7	3.1		0	0			Inap.	Inap	Clear	
Spokane Falls, Wash. Ter.	27.99	710.9	29.84	757.9	43	6.1	75	Calm	0	0		0	0			0	0	Clear	
Springfield, Illinois	29.31	744.5	29.96	761.0	71	21.7	85	SW	6	2.7		1c	0	W		0.07	1.8	Clear	
Springfield, Massachusetts	29.96	761.0	30.08	764.0	63	17.2	52	N	4	1.8		2c	0	N		0	0	Clear	
Stockton, Texas	27.05	687.3	30.06	763.5	64.2	17.9	89	S	12	5.4		2c	5s	Calm	Calm	0	0	Fair	
St. Vincent, Minnesota	28.94	735.1	29.71	754.0	52	11.1	86	W	8	3.6		0	2s		Calm	0.05	1.3	Clear	
Thatcher's Island, Mass	30.03	762.7	30.08	764.0	52	11.1	79	NW	7	3.1		0	0			0	0	Clear	
Toledo, Ohio	29.26	743.2	29.92	760.0	66	18.9	64	S	5	2.2		5c	Sk	SW		0.05	1.3	Fair	
Tucson, Arizona	27.56	700.0	30.11	764.8	73	22.8	43	SE	12	5.4			10s			0	0	Cloudy	
Umatilla, Oregon	29.65	753.1	30.14	765.5	47.3	8.5	75	SE	6	2.7		0	0			0	0	Clear	
Uvalde, Texas	29.17	740.9	29.98	761.5	67	19.4	79	SE	1	0.4		8cs	0	Calm		0	0	Cloudy	
Vicksburg, Mississippi	29.88	758.9	30.14	765.5	72	22.2	76	N	3	1.3		0	0			0	0	Clear	
Visalia, California	29.48	748.8	29.84	757.9	57	13.9	75	NW	1	0.4		0	0			0	0	Clear	
Washington, D. C.	29.89	759.2	30.00	762.0	71	21.7	66	NE	7	3.1		5c	Hz	W		Inap.	Inap.	Fair	
Wickenburg, Arizona					60	15.6	44	SW			1	10cs	0			0	0	Cloudy	
Wilmington, N. Carolina	29.90	759.4	29.95	760.7	74	23.3	76	Calm	0	0		Hz	Hz	Calm	Calm	0.06	1.5	Dense haze	
Winnemucca, Nevada	25.64	651.2	30.00	762.0	47	8.3	55	NE	10	4.5		0	0			0	0	Clear	
Wood's Holl, Mass	30.03	762.7	30.07	763.8	57	13.9	81	Calm	0	0		1k	0	Calm		0	0	Clear	
Yankton, Dakota	28.73	729.7	29.99	761.7	64	17.8	78	NW	9	4.0		0	0			0.10	2.5	Clear	
Yuma, Arizona	29.71	754.6	29.85	758.2	63.1	17.3	72	NE	1	0.4		2c	0	SE		0	0	Fair	
Sub-Series.																			
Bogota, U. S. Columbia																0	0		Thomas Herran
Buff Bay Town, Jamaica	29.71	554.6	30.02	762.5	75	23.9	81	E				2k	5k						
Havana, Cuba, W. I.	30.02	762.5	30.08	764.0	77	25.0	69	Calm	0	0		0	8ks		Calm	0	0	Cloudy	A. Van Caneghem, Ass't.
Jakobshavn, Greenland	30.02	762.6	30.08	763.9	30.9	— 0.6		Calm			0		8			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	29.91	759.7	29.92	760.0	77.5	25.3	73	N	1	0.4		0	2s			0	0	Fair	Robert Johnstone
Navassa, W. I.	29.83	757.7	29.91	759.7	76	24.4	86	N	1	0.4		8cs	8k	N	SE	0	0	Cloudy	F. M. Everett.
Paramaribo, S. A.	30.00	762.0	30.00	762.0	78	25.6	91	E			1	3c	5k	E		0.010	0.3	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.39	746.5	29.95	760.7	76	24.4	100	Calm			0		10n		Calm	0.46	11.7	Raining	Francesco J. Cisneros.
Rivas, Nicaragua																			Earl Flint.
Santiago de Cuba, W. I.	29.92	760.0	29.95	760.7	74	23.3	76	N	3.6	1.6		2cs	2ks			1.77	45.0	Fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.66	753.4	29.70	754.4	39.0	3.9	95	NW	7	3.1		4k	2s	NW	NW	0	0	Cloudy	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross, N. 34° 05′, E. 130° 00′	30.07	763.8	64	17.8	...	Calm			0		10							D. clouds	Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.05	763.3	66	18.9	84	WNW			3		6	WNW						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 23° 38′, E. 58° 36′	29.75	755.6	90	32.2	63	NW			1		1	W						Blue sky	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			56	13.3		NNW			2		10					1	NNW	Raining	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	29.94	760.5	78	25.6	95	ESE			1		9							D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 11′, E 18° 26′	29.94	760.5	61	16.1	61	Calm			0		10							Misty	Com. F. W. Richards.
H. M. S. Champion, Ascension I'ds, Africa	29.94	760.5	81	27.2	70	SE			2		5	SSE						D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 28° 13′, E. 122° 19′	29.95	760.7	65	18.3	100	ENE			1		10					3	E	Misty	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 37° 39′, E. 17° 04′	29.92	760.0	65	18.3		SW			2		10	Calm				4	WNW	D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, James Bay, St. Helena	30.03	762.7				ESE			1–2									D. clouds	Capt. J. C. Parvis.
H. M. S. Daring, N. 7° 44′, E. 74° 03′	29.83	757.7	88	31.1		W			2		2	WSW				1	SSE	D. clouds	Capt. F. J. Eliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.78	756.4	72	22.2		WNW			1		1	WNW						Blue sky	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 46° 59′, W. 53° 40′	29.76	755.9	40	4.4	91	SE			1		10					1	S	Misty	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse																			Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 6° 05′, E. 105° 15′	29.80	756.9	84	28.9		SE			2		2	SE				1	SE	Misty	Comm. C. Johnstone.
H. M. S. Emerald, S. 8° 30′, E. 179° 15′	29.87	758.7	82	27.8	100	NNW			1–2		9	N						D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Trincomalee, Ceylon, India,	29.82	757.4	85	29.4	68	SSW			1		10							D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 39° 18′, W. 60° 20′	29.82	757.4	73	22.8		Calm			0		8	NNE				1	NNE	D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo																			Comm. R. N. Custance.
H. M. S. Flying Fish, Hong-Kong, China	29.88	758.9	79	26.1	78	Calm			0		5							Misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 35° 50′, W. 138° 00′	30.40	772.1	59	15.0	70	NE			3–5		10					2	NNW	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 50° 33′, W. 66° 16′	29.88	758.9	47	8.3	85	NW			5		1					4	WNW	Blue sky	Capt. L. F. Jones.
A. M. S. Griffon, N 23° 49′, W. 84° 54′	29.97	761.2	78	25.6	86	NE			3		1	NE				1	NE	Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant, S. 40° 40′, E. 125° 35′	29.85	758.2	52	11.1	76	W			2–3		9	WNW				3	WNW	D. clouds	Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Off Paestum, Italy	29.95	760.7	65	18.9	68	WSW			2		1					1	SSW	Blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 26° 10′, E. 119° 55′	29.92	760.0	68	20.0	84	N			1		10	SW				1	ESE	Overcast	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.97	761.2	64	17.8		SSE			1		2	WNW				1		D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	30.24	768.1	67	19.4		SW			1		6							D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 21° 06′, E. 110° 55′	29.80	756.9	80.8	27.1	86	SE			1–2		7					1	ESE	D. clouds	Capt. A. Carpenter.
H. M. S. Midge, N. 21° 54′, E. 117° 49′	29.92	760.0				NE			2		7	NE				2	NE	D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 36° 07′, W. 5° 21′	29.97	761.2	64	17.8	81	ESE			4–6		5	ENE						Squally	Capt. H. H. Rawson.
H. M. S. Modeste, N. 1° 20′ E. 105° 56′	29.88	758.9	85	29.4	87	Calm			0		1							Blue sky	Capt. J. G. Mead.
H. M. S. Monarch, Goletta, Tunis, N. Africa	30.02	762.5	65	18.3	84	Calm			0		5	NNW						D. clouds	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, N. 38° 30′, W. 64° 09′	29.84	757.9	66	18.9	84	N			3		10	NNW				3	NNE	Overcast	Capt. E. B Drummond.
H. M. S. Orontes, Mauritius, Mauritius †	30.00	762.0	80.5	26.9	76	NNW			2		6						NNE	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 38′, W. 79° 03′	29.83	757.7	80	26.7		NNE			1		9							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin, S. 48° 04′, W. 74° 36′	30.15	765.8	38	3.3		Calm			0									Foggy	Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, Bonny River, Africa	29.81	757.2	82	27.8		S			1		10							Overcast	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id	30.08	764.0	50	10.0		WSW			2		8							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.87	758.7	81.4	27.4	89	ESE			4		2							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis, N. 37° 33′, E. 9° 39′	30.04	763.0	60	15.6	88	WNW			3		6	NNW				5	WNW	D. clouds	Capt. G. O. Twiss.
H. M. S. Shannon, S. 7° 34′, W. 26° 32′	29.98	761.5	82	27.8	87	ESE			3		5	ESE				3	ESE	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 16° 20′, W. 147° 22′	29.77	756.1	82	27.8	91	NW			4		10					3	SE	D. clouds	Capt. P. W. Stephens.
H. M. S. Thunderer, Naples, Italy	29.97	761.2	62.5	16.9	64	SW			3		2					2		Blue sky	Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A	30.01	762.2	57	13.9	87	Calm			0		0							Misty	Capt. A. H. Markham.
H. M. S. Turquoise, S. 22° 00,′ W. 73° 07′	29.99	761.7	66	18.9	89	SE			2		5					2	S	D. clouds	Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne, N. 24° 30′, E. 36° 00′	29.77	756.1	80	26.7	82	NNW			4							2			Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.			79	26.1		Calm			0		2							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, S. 37° 42′, E. 169° 03′	30.38	771.6	60	15.6	65	S			1-2		3	SE				4	S	D. clouds	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, N. 26° 22′, E. 53° 47′	29.79	756.7	84.5	29.2	81	W			4-5		3	NW				5	NW	Misty	Capt. T. P. Nesham.
H. M. S. Zephyr, N. 30° 36′, E. 122° 03′	29.98	761.5	64	17.8	89	E			3		10							Raining	Lt. Comm. G. W. Pollar
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Rio Lima, Santiago, Cape Verd Id's	30.05	763.2	77.0	25.0	86	NE			2		1					1	SE	Blue sky	S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't
Tamega																			P. I. R. de Carvealtie, Comd'
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.						
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.	
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.			
N. Yard, Pensacola, Fla	30.13	765.3	73	22.8	85	NW	4	1.8			8		NW	0	0			Fair
N. Yard. Portsmouth, N. H.	30.06	763.5	54	12.2	80	WSW	3	1.3			0			0	0			Clear
Naval Hospital, Yokahama, Japan	29.86	758.4	62	16.7	88	SSW			2		10		W	0.27	6.9			Covered
Adams, Callao, Peru	29.70	754.4	65	18.3	94	SE			1		10					Long	SW	Cloudy
Alaska, Callao, Peru	29.82	757.4	63	17.2	94	SSE			1		10					Sm'h		Foggy
Alert, N. 23° 23′, E. 140° 31′	29.93	760.2	78	25.6	82	E			4		10		NNE			Long	E	Cloudy
Alliance, Norfolk, Va	29.99	761.7	72	22.2	90	E			1		5		NE	0	0	Sm'h		Fair
Ashuelot, Kobe, Japan	30.05	763.3	65	18.3	68	W			1		10		SW					Misty
Colorado, New York, N. Y	30.03	762.7	59	15.0	88	NE	0	0			10		SE	0	0			Foggy
Constitution, Norfolk, Va	29.93	760.2	71	21.7	85	SE	4	1.8			5							Fair
Franklin, Norfolk, Va	29.95	760.7	75	23.9	72	SE	6	2.7			2		SE	0	0			Fair
Galena, Bastia Corsica, Med	30.00	762.0	64	17.8	68	Calm			0		0							Clear
Independence, N. Yard, Mare I'd, Cal	29.89	759.2	59	15.0	94	SW	1.2	0.5			2		SW	0	0			Clear
Jamestown, Sitka, Alaska	29.76	755.9	44	6.7	92	Calm			0		5			0.21	5.3			Fair
Kearsarge, Port Royal, S. C	30.00	762.0	78	25.6	78	WNW			1		5					Sm'h		Hazy
Lackawanna, S. 22° 24′, W. 95° 49′	30.24	768.1	71	21.7	100	E			3-4		5		SE			Sm'h	SE	Fair
Marion, Montevideo, Uruguay	30.12	765.0	57	13.9	81	SSE			3		5		SSE	0	0	Sm'h		Fair
Michigan, Erie, Pennsylvania	29.95	760.7	56	13.3		S	3	1.3			0							Clear
Minnesota, Newport, R. I	30.08	764.0	64	17.8	83	N			1		1		NW			Sm'h		Hazy
Monocacy, Yokohama, Japan	30.00	762.0	64	17.8	94	SSW			1		8		Calm					Cloudy
New Hampshire, Port Royal, S. C	29.96	761.0	77	25.0	82	W	3	1.3			5		Calm	0	0			Fair
Nipsic. N. 41° 19′, E. 2° 14′	29.99	761.7	61	16.1	82	SSW			3		2		SSW			Sm h		Hazy
Onward, Callao, Peru †	29.91	759.2	63	17.2	100	SSE			2		10		NW			Long	W	Foggy
Palos, Yokohama, Japan	30.02	762.5	64	17.8	89	SSW			1		8							Hazy
Passaic, Washington, D. C	30.07	763.8	70	21.1	90	E			2		0			0	0			Clear
Pensacola, N. 34° 56′, W. 144° 28′	30.41	772.4	61	16.1	100	N			1-2		5?			0	0	Sm'h		Cloudy?
Portsmouth. Norfolk, Va	29.98	761.5	70	21.1	95	SE			2		2		SE					Clear
Powhatan, Off Annapolis, Md	30.00	762.0	72	22.2	80	S			1		8							Cloudy
Quinnebaug, N. 25° 00′, W. 21° 25′	30.09	764.3	70	21.1	61	NNE			3		2					Long	NW	Clear
Ranger, Acapulco, Mexico	29.82	757.4	80	26.7	82	Calm			0		5		Calm	0	0	Sm'h		Fair
Richmond, Yokohama, Japan	30.00	762.0	64	17.8	83	SW			1		5		SW	0.27	6.9			Cloudy
Saratoga, Norfolk, Va	29.94	760.5	72	22.2	100	ESE			2-5		5		Calm	0	0			Fair
Shenandoah, Montevideo, Uruguay	30.10	764.5	58	14.4	82	ESE			3		5		SE			Sm'h		Fair
St. Louis, League Island, Pa	29.61	752.1	59	15.0	94	ENE	10	4.5			10		ENE	0	0			Cloudy
Swatara, Shangbai, China †	29.96	761.0	65	18.3	94	SW			1		10		Calm					Overcast
Tennessee, Hampton Roads, Va	30.00	762.0	69	20.6	90	ESE	15	6.7			5		Calm	0	0	Sm'h		Hazy
Ticonderoga, S. 45° 02′, W. 113° 02′	30.26	768.6	47	8.3	77	SE			6		2		SE	Inap.	Inap.	Long	SSW	Cloudy
Trenton, N. 41° 46′, E. 11° 32′	29.97	761.2	60	15.6	71	NW			3-4		0			2 h'rs	light	Sm'h		Clear
Vandalia. Boston Mass	30.01	762.2	57	13.9	94	WSW			2		0							Clear
Wabash, Boston, Massachusetts	30.10	764.5	60	15.6	76	W	1	0.4			2		Calm	0	0			Hazy
Wachusetts, N. 38° 09′, W. 126° 32′	30.07	763.8	55	12.8	87	NNW			6		5		NNW	0	0	Cross	N	Fair
Wyoming, N. 26° 20′, W. 59° 55′	29.95	760.7	72	22.2	71	W			2		8		NW			Sm'h		Cloudy

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire,																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant ‡																			Capt. E. J. Molony.
Chin Yang																			Capt. N. Youlden.
S. S. Cipero, Trinidad, W. I.	29.99	761.7	79.4	26.3	95	SE			1		9							Overcast	Capt. W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne, N. 11° 21′, W. 46° 01′	30.02	762.5	79.5	26.4	74	ENE			4		8							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 40° 04′, W. 38° 20′	30.32	770.1	62.5	16.9	72	SW			3		4							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow, ‡ N. 11° 15′, E. 95° 36′	29.88	758.9	79.5	26.4	89	WNW			1		10					Sm'h		Overcast	Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randell.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ N. 9° 45′, W. 31° 02′	30.00	762.0	79.0	26.1	86	NE			3		7ks							D. clouds	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 51° 35′, W. 7° 55′	30.00	762.0	52.5	11.4	100	SW			5		10							Overcast	Capt. H. W. Dyke.
Barque Mertola, N. 50° 57′, W. 8° 54′	30.02	762.5	54.8	12.7	93	SW			4		10							Overcast	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria, ‡ S. 11° 02′, W. 10° 02′	30.01	762.2	77.2	25.1	82	SE			4		3							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 13° 03′, E. 94° 09′	29.82	757.4	81.0	27.2	81	SSW			3		10							Overcast	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton, ‡ N. 37° 31′, E. 16° 56′	29.98	761.5	64.5	18.1	65	WSW			3		4							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean																			Capt. W. H. Smith.
S. S. Circassian																			Capt. F. Archer.
S. S. Hibernian																			Capt. Wm. Richardson.
S. S. Nova Scotian																			
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic, N. 48° 57′, W. 30° 43′	29.95	760.7	53	11.7	86	NW			4		5		W			R'gh	NW	Showery	Capt. H. Parsell.
S. S. Britannic, N. 40° 26′, W. 70° 32′ †	30.02	762.5	44	6.7		NW			2		2		NW			Sm'h	W	Misty	Capt. H. Perry.
S. S. Celtic, N. 41° 00′, W. 62° 30′ †	29.80	756.9	48	8.9		N			5		8		NE	0	0	Mod.	NE	Fair	Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England †	29.98	761.5	56	13.3		W			2		8?		W	0	0			Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—OF BREMEN. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, N. 37° 54′, W. 69° 58′ ‡	30.01	762.2	60.1	15.6		NNE			5		8		NE	0	0	Mod.	NE	Fair	
S. S. Köln, N. 44° 50′, W. 48° 33′	29.99	761.7	50.0	10.0	93	SSW			4		10		SSW	24h'rs	rain	Mod.	SSW	Cloudy	Capt. Th. Jüngst.
S. S. Leipzig, N. 45° 15′, W. 33° 53′	30.18	766.6	60.0	15.6		WSW			4		5		W	0	0	Mod.	ENE; SW	Fair	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Helmbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. N. 49° 40′, W. 22° 13′	29.79	756.7	56	13.3	94	WNW			6		10		WNW			R'gh	W	Raining	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio, N. 39° 35′, W. 57° 09′ †*	29.91	759.7	67	19.4	95	SSE			2		5		SSE	0	0	L'ge	E	Fair	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, N. 48° 38′, W. 25° 22′ *†	29.86	758.4	65	18.3	73	W			5		10		W			Mod.	W	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 23° 54′, W. 109° 25′ †	29.81	757.2	77	25.0	91	WSW			3		8		SW	0	0	Sm'll	W	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, Yokohama, Japan †	30.06	763.5	63	17.2	94	SW			2		5		S	0	0	Sm'h		Fair	Capt. H. Davison.
S. S. Gaelic, N. 30° 59′, E. 131° 01′ *†	30.21	767.3	72	22.2	80	E			2		2		E			Sm'h	ESE	Fair	Capt. W. H. Kidley.
S. S. Oceanic, N. 44° 53′, W. 173° 30′	30.01	762.2	45	7.2	68	W			5		5		W	0.02	0.5	6	W	D. clouds	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon †	30.05	763.3	54.0	12.2	93	Calm			0		10		NNW					Misty	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, Victoria, VancouversId †	30.10	764.5	46	7.8	92	SE			2		10							Showers	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 35° 53′, W. 121° 33′ †	29.92	760.0	54	12.2	87	SW			4		Fog		WSW	0	0	Mod.	SW	Foggy	Geo. H. Harrison.
S. S. Senator, N. 36° 10′, W. 121° 50′ †	29.92	760.0	51	10.6	58	NW			3		10					Long	W	Foggy	Capt. Thos. Wallace.
S. S. State of California, Astoria, Oregon †	30.13	765.3	50	10.0	100	W			2		8?							Overcast?	Capt. G. Debney
S. S. Victoria, N. 38° 50′, W. 124° 10′ †	29.96	761.0	50	10.0	93	NW			4		5					H'vy	NW	Fair	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, Sydney, N. S. Wales	30.21	767.3	68	20.0	95	N			1		2		N					Clear	A. Bannerman, 2d Officer.
S. S. City of New York, Sydney, N. S. W. †	30.21	767.3	61	16.1	94	N			1		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China †	29.97	761.2	75	23.9	72	SSE			1		5		S			Sm'h		Fair	Capt. G. G. Berry.
S. S. City of Sidney, N. 29° 46′, W. 142° 34′ †	30.35	770.9	67	19.4	69	NE			4		8		NE	0	0	H'vy	ENE	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio																			A. L. Ritchie, 2d Officer.
S. S. Colima, N. 15° 09′, W. 95° 50′ †	29.91	759.7	83	28.3	75	N			4		5?		NE	0	0	Mod.	N	Clear?	Capt. R. R. Searle.
S. S. Granada, N. 12° 35′, W. 88° 00′ †	29.82	757.4	82	27.8	87	NNW			3		5?		NNW	Squalls		Long	SSW	Clear?	Capt. M. Connolly.
S. S. Zealandia, N. 25° 29′, W. 150° 17′	30.28	769.1	67	19.4	64	ESE			2		2?		E	0	0	Mod.	ESE	Cloudy?	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland																			Capt. Wm. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, N. 33° 00′, W. 76° 43′	29.95	760.7	78	25.6	78	Calm	0	0		2c	0			0	0	Sm'h		Clear	Capt J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 22° 24′, W. 51° 10′ *†	30.10	764.5	79	26.1		W			1		10		W	0	0		W	Fair	Capt. B. F. Woodbury.
Brigantine George																			Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Chesapeake bay Md	30.10	764.5	66	18.9	94	E	2	0.9			10k			0	0			Cloudy	
Bark Sunbeam, N. 38° 47′, W. 9° 20′ †	29.92	760.0	64	17.8	83	NE			6		10		NE	Light		Sm'h		Raining	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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W. B. Hazen

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

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 15, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco																			
‡Nemours			30.11	764.8	70.9	21.6	75	NE			1	0				0	0	Clear	Dr. Ollive.
Algiers			29.97	761.2	68.0	20.0	93	W			1	4				0	0	Cloudy	Raynard.
La Calle			30.04	762.9	65.8	18.8	65	NE			3	5				0	0	Cloudy	Nicolas.
Tunis			30.02	762.6	64.4	18.0	73	ENE			4	2				0	0	Fair	Fonfrède.
Sfax			30.04	762.9															Jacques.
Saida			30.12	765.0															Gau.
Tebessa			30.01	762.3	61.3	16.3	49	S			3	5				0	0	Cloudy	Dumas.
Geriville			30.05	763.3	69.4	20.8	54	Calm			0	5				0.299	7.6	Very cloudy	Watrin.
Laghouat																			Lonchamp.
Biskra			30.04	763.0	81.0	27.2	29	S			1	1				0	0	Very fair	Herbin.
			30.07	763.7															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.05	763.3	30.14	765.5	57.8	14.3	71	N	6	2.7		2				0	0	Very fine	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.34	745.2	29.87	758.6	71.2	21.8	31	NE			2	3				0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.13	740.0	29.88	759.0	65.5	18 6	56	E	3.1	1.4		4				0	0		Dr. Wierzbicki.
Eperies	28.97	735.8	29.83	757.7	60.8	16.0	60	N			1	9krs		S		0	0		Julius Mikolik.
Gratz	28.65	727.6	29.85	758.3	70.3	21.3	37	E			2	2				0	0		Andreas Rospini.
‡Hermannstadt	28.27	718.0	29.68	753.9	54.7	12.6	85	NE			2	10				0.213	5.4	Raining	Prof. A Gottschling.
Kremsmunster, Obs'y	28.63	727.2	29.95	760.7	61.0	16.1	60	SW			1	3				0	0		The Staff.
Lemberg	28.83	732.3	29.79	756.7	62.6	17.0	46	E			1	5				0	0		Dr. T. Stanecki.
Pola	29.84	758.0	29.95	760.8	68.4	20.2	48	ENE			1	0				0	0		I. R. Hydrographic Office.
Szathmar	29.25	743.2	29.71	754.7	65.1	18.4	50	NW			3	4				0.051	1.3		Beicht Peter, S. J.
Szegedin	29.51	749.5	29.82	757.4	62.2	16.8	66	N			3	8				0	0		Karl Stancel.
Trieste	29.89	759.2	29.99	761.8	65.8	18.8	51	Calm			0	0				0	0	Clear	Secco.
Vienna	29.21	742.0	29.91	759.6	68.0	20.0	49	WNW			2	1				0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maseyck																			M. Pierrot.

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

BRITISH SERIES.

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

Aberdeen	29.43	747.5	29.52	749.8	45.3	7.4	92	SSE	15	6.7			10			0.640	16.3	Raining	W. Boswell.
Armagh, Observatory	29.00	736.6	29.22	742.2	56.4	13.6	61	S	20	8.9									S. Call.
Bidston, Liverpool Obs'y			29.47	748.5	55.8	13.2	63	S	26	11.6			10					Overcast	John Hartnup.
Bolton, Sharples	28.97	735.8	29.50	749.3	52.7	11.5	76	S	18	8.0			10					Raining	Thomas Mackereth.
Bradford, Yorkshire																0.22	5.6		J.McLandsbo ough, F.R.S
Bridgetown, Barbadoes	29.89	759.2	29.92	760.0	85.0	29.4	72	NE			3		2					D. clouds	Corpl. J. Surgener, AH.C.
Cardington			29.64	752.8	64.0	17.8	38	SW			3.0		10					Overcast	John McLaren.
Chatham, School M. E	29.65	753.1	29.78	756.4	57.4	14.1	67	SW			2		10					Gloomy	Lance Cpl. R. Tear, R.E.
Falmouth, Observatory	29.46	748.3	29.69	754.1	53.0	11.7	93	SW			5		10					Raining	The Staff.
Fort Napier, Natal	27.74	704.6	29.95	760.7	71.2	21.8	52	NE			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.60	751.8	29.84	757.9	88	31.1	84	E			1		4					Raining	Sgt. C. E. Keane.
Galway, Queen's College			29.03	737.3	54	12.2	74	N			7		10			0.07	1.8	Showery	J. O'Donaghue.
Gibraltar, Mediterranean	30.01	762.2	30.07	763.8	63.0	17.2	83	ENE			2		8					Gloomy	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.66	753.4	29.86	758.4	49.0	9.4	93	E			4		10					Overcast	D. G. MacLean.
Greenwich, Royal Obs'y	29.59	751.6	29.75	755.6	62.4	16.9	55	SSW			2		10					Overcast	The Staff.
Guernsey	29.60	751.8	29.81	757.2	58	14.4	61	SSW			3		8					Gloomy	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.71	754.6	29.75	755.6	60.9	16.1	37	SSW	26	11.6			10					Threatening	The Staff.
Leicester, Museum	29.34	745.2	29.58	751.3	58.2	14.6	63	SW			3		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.95	760.7	30.02	762.5	69.8	21.0	63	NE			1		0			0	0	Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.89	759.2	29.93	760.2	78.2	25.7	83	N			2		5					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.08	738.6	29.59	751.6	56.6	13.7	64	S			5		10					Threatening	Robert Pute.
Oxford, Radcliffe Obs'y	29.46	748.3	29.69	754.1	58.3	14.6	56	S			9		10					Squally	The Staff.
Plymouth	29.64	752.8	29.71	754.6	53.6	12.0	83	SSW			4		10					Raining	John Merrifield.
Sandwick Manse, Orkneys			29.56	750.8	52	11.1	73	SE	26	11.6			10					Overcast	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.62	752.3	29.69	754.1	62.0	16.7	77	S			1		5			Blank		D. clouds	Serg't W. H. Lyne.
Sheffield	29.29	744.0	29.56	750.8	59.1	15.1	75	SW			4		10			0 11	2.8	Overcast	W. F. Cooper.
Silloth Rectory	29.28	743.7	29.31	744.5	52.5	11.4	88	SW			6		10			0.480	12.2	Overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.50	749.3	52.3	11.3	84	S	29	13.0			10					Raining	Rev. S. J. Perry.
Stratfield Turgiss	29.54	750.3	29.75	755.6	57.0	13.9	56	SW			3		10					D. clouds	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	29.69	754.1	29.71	754.6	58	14.4	70	W			7		5					D. clouds	W. Newcombe.
Valencia, Observatory	29.34	745.2	29.36	745.7	49.6	9.8	84	WSW	50	22.3			6			Blank		D. clouds	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.85	758.2	29.89	759.2	49	9.4	57	NE	3	1.3		0	8s			0	0	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	29.84	757.9	29.91	759.7	47	8.3	62	Calm	0	0		5c	0	Calm		0	0	Fair	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			*James Smith*, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	29.88	758.9	29.90	759.4	40	4.4	97	NE	2	0.9		2s	0	Calm		0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.22	742.2	30.05	763.3	43	6.1	96	Calm	0	0		0	0			0	0	Clear	James Stewart.
Fredericton, N. B																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.75	755.6	29.88	758.9	48	8.9	88	E	4	1.8		8ck	0			0	0	Cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.18	741.2	29.51	749.5	51	10.6	94	S	10	4.5			Fg			0.47	11.9	Foggy	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.38	746.2	29.57	751.1	48	8.9	84	NE	11	4.9			10n			0.14	3.6	Light rain	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	28.87	733.3	29.56	750.8	45	7.2	10	SW	10	4.5			10n		SW	0.37	9.4	Cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	28.93	734.8	29.60	751.8	60	15.6	94	SW	9	4.0		5c	0	W		0.43	10.9	Fair	H. Morgan.
Port Stanley, Ontario	29.00	736.6	29.63	752.6	58	14.4	90	W	10	4.5		2k	0	W		0.44	11.2	Clear	M. Payne.
Quebec, Quebec*	29.43	747.5	29.75	755.6	47	8.3	77	NE			6		8n		NE	0	0	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.12	739.6	29.57	751.1	47	8.3	89	SE	3	1.3			10s		SE	0.32	8.1	Cloudy	W. H. McIntyre.
Sangeen, Ontario*	28.88	733.5	29.59	751.6	46	7.8	91	SW	4	1.8			10ks			0.21	5.3	Cloudy	K. Stewart.
St. Andrews, N. B	29.77	756.1	29.83	757.7	45	7.2	76	Calm	0	0			10n			0	0	Cloudy	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	29.88	758.9	29.92	760.0	48	8.9	62	Calm	0	0		8ck	0	W		0	0	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.19	741.4	29.56	750.8	55	12.8	95	SW	6	2.7		2ck	2n	W	W	0.30	7.6	Fair	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario																			*Prof.* Wolverton.
Yarmouth, N. S.*	29.80	756.9	29.86	758.4	50	10.0	86	SW	4	1.8		8ck	0	W		0	0	Fair	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.62	752.3	29.87	758.7	48	8.9	100	NE	1	0.4		Sk	Sk			0.06	1.5	Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't

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

CAPE COLONY SERIES.

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

Cape St. Francis Lt. House	29.86	758.4			65.0	18.3	94	E	20.1	9.0			10s			0	0	Hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.90	759.4	29.94	760.5	62.8	17.1		NW	7.8	3.5		5	5ks;s			0.215	5.5		The Staff, for D. Gill.
Worcester*†	28.79	731.3			63.2	17.3	62	NW			2	4	4			0	0	Cloudy	C. Stokes.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.92	759.9	29.95	760.6	63.3	17.4	96	NE	3.4	1.5			10			0.075	1.9	Covered	M. Marc Dechevrens, S.J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

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

San José	26.17	664.7	29.89	759.2	68.0	20.0	91	SE			2	98	0			0	0	Cloudy	Amand Maison.

DANISH SERIES.

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

Copenhagen	29.80	757.0	29.85	758.2	58.3	14.6	53	W	11	5		8							Oversergent Fischer.
Fande	29.78	756.5	29.80	757.0	52.5	11.4	69	SW			4	10							Overloerer Lauridsen.
Godthaab, Greenland	29.97	761.3	30.02	762.4	34.5	1.4	83	Calm			0	10							S. Kleinschmidt.
Stykkisholm, Iceland	29.93	760.2	29.97	761.3	34.2	1.2		E			7	0							A. O. Thorlacius.
Thorshavn	29.72	755.0	29.76	755.9	39.9	4.4	80	E	13	6		10							Overloerer Bergh.
Vestervig	29.69	754.0	29.78	756.4	48.7	9.3	88	S			2	10						Raining	Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.39	746.4	30.02	762.6	72.3	22.4	24	SE			1	2c	0			0	0	Slightly cl'dy	M. Labroue, Director.
Alençon Normal School	29.45	748.0	30.00	762.0	63.3	17.4	74	S			1		5ks	NW	S	0	0	Cloudy	M. Nicot, Director.
Arras, Engineer School	29.64	752.9	29.89	759.2	68.4	20.2	52	SW			3		10			0	0	Covered	M. Klein, Commandant.
Avignon, Normal School	29.91	759.7	29.99	761.7	75.7	24.3	41	S			1		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.40	746.7	29.94	760.4	68.7	20.4	37	SSE			1		0			0	0	Clear	M. Sailliard, Director.
Beauvais, Normal School	29.64	752.9	29.90	759.4	68.5	20.3	39	S			1		5			0	0	Cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.11	739.4	29.97	761.3	66.2	19	39	ENE			1				NE	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.69	754.2	29.95	760.6	71.8	22.1	36	SE			1		0			0	0	Clear	M. Rayet, Director.
Bourges, Normal School	29.36	745.8	29.89	759.2	73.9	22.8	25	SW			1					0	0		M. Postel, Director.
Brest, Naval Observatory	29.64	752.9	29.89	759.1	61.5	16.4	66	SW			2		10		SW	0	0		M. de Kermaree, Dir.
Caen, Normal School	29.75	755.6	29.82	757.5	70.9	21.6	55	SE			2		5		S	0	0	Cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.65	753.1	29.96	761.0	72.0	22.2	25	N			1		2		W	0	0	Slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.41	747.1	29.91	759.8	71.6	22	34	SSW			1		0			0	0	Clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.61	726.6	29.91	759.8	71.6	22.0	22	SE			1		0			0	0	Clear	M. Alluard, Director.
Cluny, Normal School	29.13	740.0	29.97	761.1	73.4	23	36	NNE			1		0			0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.10	739.0	29.95	760.8	71.6	22	36	NW			1	2c	0			0	0	Clear	Dr. Coulet, Director.
Gap, Normal School	27.47	697.6	29.92	759.9	69.4	20.8	24	S			2					0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.93	734.7	30.07	763.7	72.1	22.3	37	S			2		2		S	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.19	741.4	29.93	760.2	72.3	22.4	32	NW			1		28			0	0	Slightly cl'dy	M. Ablard, Director.
Guéret, Normal School	28.39	721.0	29.92	760.0	68.9	20.5	25	SW			1		0			0.791	20.1	Clear	M. Rivoire, Director.
Lamballe, Normal School	29.60	751.7	29.86	758.5	64.4	18	44	NNW			6		Fg		NNW	0	0	Light fog	M. Ollitrault, Director.
Lescar, Normal School	29.72	754.9	30.39	772.0	59.0	15	64	N			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	29.88	759.0	29.98	761.6	59.7	15.4	68	SW			4		8		SW	0.004	0.1	¾ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.93	734.9	29.96	761.0	70.9	21.6	23	E			1		0			0	0	Clear	M. André, Director.
Mans, Normal School	29.62	752.4	29.92	760.0	68.5	20.3	44	WSW			3		5		SW	0	0	Cloudy	M. Piboen, Director.
Marseille, Observatory	29.76	755.8	30.02	762.6	64.6	18.1	72	WNW			2		1		NE	0	0		M. Stephan, Director.
Montlouis l'instituteur	24.84	631.0	30.08	764.0	57.6	14.2	40	S	11.2	5.0			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.88	758.9	29.98	761.6	71.2	21.8	45	S			2		0			0	0	Clear	M. P. Galzin, Director.
Nancy, Normal School	29.19	741.4	29.93	760.2	71.2	21.8	30	NNE			1	2ck	0			0	0	Slightly cl'dy	M. Hasse.
Nantes, Observatory	29.78	756.5	29.95	760.6	68.7	20.4	49	WSW			1-2	c	6k		SSW	0	0		M. Larocque, Director.
Nice	29.98	761.5	30.02	762.4	64.4	18.0	68	E			2		1	E	E	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.88	759.0	29.99	761.7	70.0	21.1	30	SE	11.2	5.0			1	NW		0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.56	573.0			45.5	7.5							1		W	0	0	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	28.94	735.0	29.96	761.0	75.2	24	60	N			1		0			0	0	Clear	M. Taillieu.
Puy de Dôme Obs'y, Summit	25.15	638.8			50.2	10.1	54	S			2		0			0	0	Clear	M. Alluard, Director
Rochefort, Naval Obs'y	29.97	761.2	30.00	762.0	73.8	23.2	48	SW			1		0			0	0	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.76	756.0	29.97	761.3	71.2	21.8	43	ENE			1		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.88	708.1	29.97	761.1	68.7	20.4	40	SE			2		0			0	0	Clear	M. Richard, Director.
Rouen, Normal School	29.78	756.5	29.87	758.7	73.4	23	42	SE			2		5		S	0	0	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.71	754.7	29.87	758.7	68.7	20.4	45	W			2		2		S	0	0	Slightly cl'dy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.76	755.8	29.92	760.0	73.0	22.8	25	SSW			1		1		SW	0	0	Clear	M. Renou, Director.
Toulouse, Observatory	29.30	744.1	30.02	762.5	77.0	25.0	23	NW			1					0	0		M. Bailland, Director.
Tours	29.72	755.0	29.92	760.0	72.7	22.6	32	SW			2		5		W	0	0	½ covered	M. de Tastes.
Versailles, Observatory	29.43	747.4	29.92	759.9	71.6	22.0	28	SW			3					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			

GERMAN SERIES.

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

Bamberg	29.10	739.2	29.97	761.1	69.4	20.8	36	SE			2		2k			0	0		Prof. Dr. Hoh.
Berlin	29.70	754.4	29.87	758.6	73.9	23.3	30	Calm			0		4			0	0		Prof. Dr. Arndt.
Breslau	29.41	746.9	29.93	760.3	68.9	20.5	24	W			1		0			0	0		Royal University Obs'y.
Carlsruhe	29.50	749.4	29.93	760.2	57.2	14.0	45	SW			1		0			0	0		Albert Senz.
Cassel	29.15	740.3	29.86	758.4	71.2	21.8	36	SSW			6		5	S		0	0		Dr. H. Möhl.
Frankfort on the Main	29.58	751.3	29.93	760.3	72.3	22.4	31	SW			1		7			0	0		Physical Society.
Friedrichshafen	28.55	725.1	29.96	761.0	66.8	16.0	57	SW			2		3	WSW		0	0		Wilhelm, Chief Tel.
Hamburg	29.78	756.4	29.85	758.2	66.2	19.0	57	WSW			2		7			0	0		Dr. R. Kleeman.
Kiel	29.82	757.3	29.83	757.7	54.3	12.4	56	SSW			2		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.49	749.0	29.89	759.3	71.4	21.9	37	SW			1		5			0	0		Prof. Dr. Bruhns.
Magdeburg	29.58	751.2	29.85	758.3	71.4	21.9	42	E			3		10ks			0	0	Heavy mist	Dr. Assmann.
Memel	29.87	758.6	29.91	759.8	54.5	12.5	58	WNW			4	5c	0						Reinbrecht & Issermann.
Munich	28.16	715.3	30.02	762.6	65.1	18.4	39	E			2		2	E		0	0		Central Station.
Neufahrwasser	29.87	758.8	29.89	759.2	55.0	12.8	64	NNE			2		10			0	0		A. Lothes.
Neustadt, Palatinate																			Dicknether.
Stuttgart	28.99	736.3	29.85	758.2	70.3	21.3	29	W			1		1	W		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Ounerth.
Weissenburg, Bavaria	28.45	722.6	29.89	759.3	66.0	18.9	40	NW			2		5	W		0	0		Prof. Kemlein.
Wustrow	29.86	758.4	29.88	759.0	58.8	14.9	60	N			1		5s			0	0		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.45	747.9	29.84	757.8	63.9	17.7		NW			3.0		10					Sprinkling..	A. Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.69	754.1	29.74	755.3	88.6	31.4	98	WSW	32.0	14.3			0			0	0	Blue sky..	
Deesa	29.19	741.5	29.64	752.8	107.5	41.9	8	W	14.4	6.4			0			0	0	Blue sky....	
Bombay	29.81	757.1	29.84	758.0	88.0	31.1	69	WSW	14.1	6.3			1		W	0	0	D. clouds....	
Poona, Yarrowda.	27.96	710.2	29.76	755.8	93.5	34.2	38	WSW	18.0	8.0			0			0	0	Blue sky....	
Belgaum	27.30	693.4	29.81	757.2	87.4	30.8	49	W	10.0	4.5			3		N	0	0	Misty.....	
Lahore	28.91	734.2	29.62	752.5	95.2	35.1	30	W	2.0	0.9			0			0	0	Blue sky.....	
Roorkee	28.76	730.4	29.63	752.5	92.8	33.8	24	W	3.4	1.5			1			0	0		
Agra	29.06	738.2	29.61	752.0	98.1	36.7	31	SE	6.1	2.7			0			0	0		
Nagpur	28.62	726.8	29.61	752.0	104.7	40.4	17	NNW	5.6	2.5			2	W		0	0	D. clouds....	
Jubbulpore	28.34	719.7	29.63	752.7	101.2	38.4	17	NW	4.0	1.8			9			0	0	Overcast....	
Lucknow	29.27	743.5	29.64	752.8	93.0	33.9	38	NNW	3.9	1.7			0			0.05	1.3	Blue sky.....	
Allahabad	29.32	744.6	29.62	752.3	98.0	36.7	35	Calm	2.9	1.3			0			0	0	Misty.....	
Patna	29.49	749.0	29.66	753.4	93.1	33.9	46	N	4.1	1.8			10	N	N	0	0	Overcast....	
Hazaribagh	27.70	703.5	29.65	753.1	90.8	32.7	34	NNW	6.9	3.1			2			0	0		
Cuttack	29.64	752.7	29.72	754.8	90.1	32.3	58	S	6.0	2.7			8			0	0	D. clouds....	
Calcutta, Alipore	29.70	754.3	29.72	754.8	85.6	29.8	79	SSW	5.0	2.2			7			0.99	25.2	D. clouds....	
Dhubri	29.63	752.6	29.75	755.6	81.7	27.6	81	ENE	7.6	3.4			0			0.77	19.6	Blue sky....	
Chittagong	29.72	754.8	29.81	757.1	84.2	29.0	78	S	5.6	2.5			6			0	0	Blue sky....	
Sibsagar	29.51	749.5	29.85	758.1	75.5	24.2	88	E	2.9	1.3			10	W	W	0.88	22.4	D. clouds....	
Zanzibar, Africa																			
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.55	750.6	29.96	760.9	68.9	20.5	31	S	1.8	0.8			1			0	0		Prof. Giovanni Clodig.
Milan	29.43	747.6	29.94	760.4	71.8	22.1	75	S	5.6	2.5			4			0	0		Prof. Schiaparelli.
Padua	29.85	758.2	29.96	761.0	69.3	20.7	47	SSW	4.9	2.2			2			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.04	737.7	29.93	760.2	69.8	21.0	42	SSE	3.8	1.7			0			0	0		Prof. P. F. Denza.
Genoa	29.85	758.3	30.05	763.2	63.1	17.3	66	SW	4.9	2.2			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.05	712.5	29.93	760.2	67.3	19.6	48	WNW			4		0			0	0		Prof. D. C. Bruno.
Pesaro	29.94	760.4	29.98	761.6	68.4	20.2	46	N	4.3	1.9			0			0	0		Prof. Luigi Guidi.
Florence	29.73	755.2	29.98	761.6	66.2	19.0	45	SW			2		0			0	0		Prof. Costantino Pitter.
Leghorn	29.95	760.8	30.04	763.0	64.6	18.1	60	WNW	0.7	0.3			1			0	0		Prof. P. Monte.
Rome	29.81	757.2	29.98	761.5	71.1	21.7	56	W	5.6	2.5			2			0	0		Prof. P. S. Ferrari.
Lecce	29.65	753.2	29.90	759.5	64.4	18.0	64	WNW	22.4	10.0			3	NW		0.059	1.5		Prof. C. de Giorgi.
Cosenza	29.11	739.4	29.99	761.8	64.4	18.0	71	WSW	2.5	1.1			6	SW		0.039	1.0		Prof. D. Conti.
Cagliari	29.83	757.7	30.02	762.6	68.7	20.4	53	S			4		0			0	0		Prof. A. Pacinotti.
Palermo	29.83	757.7	30.08	764.0	63.5	17.5	56	NE	6.9	3.1			1			0	0		Prof. G. Ciacciatore.
Syracuse	29.95	760.7	29.99	761.8	69.1	20.6	56	E	3.8	1.7			1	SW		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R.	29.48	748.9	30.00	761.9	66.9	19.4	56	WSW	2.5	1.1			2	W		0	0		
Stelvio	22.19	563.6			40.5	4.7	34	ESE			1	1ck	0	N		0	0	Clear	Prof. F. Brioschi.
Valdobbia	22.22	564.4			45.9	7.7	66	N			2		7k	N		0	0	Cloudy	Prof. P. F. Denza.
																		Cloudy	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.98	761.5	30.00	762.0	62.2	16.8	80	SSW	9.2	4.1		ck	9s		W	0	0	Cloudy	K. Sasaki.
Kioto	29.84	757.9	30.01	762.2	60.1	15.6	90	SSW	1.1	0.5		8s	10s			0	0	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.78	756.4	29.98	761.5	63.4	17.4	87	SW	1.2	0.5		8cs	0			0.080	2.0	Cloudy	S. Takehayashi.
Tokei Obs'y, Yeddo	29.92	759.9	29.98	761.5	60.3	15.7	95	SSW	5.4	2.4			10s			0	0	Covered	The Staff.
Wakayama	29.96	761.0	30.01	762.2	60.6	15.9	87	Calm	0	0		ck	10s			0	0	Cloudy	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.93	760.2	30.12	765.0	74.5	23.6	81	SE	9.5	4.2			10		Var.	0	0	Overcast	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.67	753.6	29.93	760.1	72.0	22.2	80	ESE	0.9	0.4		1cs	0			0	0	Misty	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascallentes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.87	758.6	29.87	758.6	64.4	18.0		SW			4					0	0		
Groningen	29.77	756.1	29.82	757.5	63.0	17.2		SW			4					0	0		
Helder	29.81	757.2	29.81	757.2	52.7	11.5		SSW			4					0.079	2.0		
Hellevoetsluis	29.86	758.4	29.86	758.4	63.0	17.2	62	SW			4					0	0		
Utrecht	29.82	757.4	29.87	758.6	67.1	19.5	45	SW			3		5			0	0	Cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES.																			
Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.65	753.2	29.72	754.8	50.7	10.4	53	Calm	0	0	.....	.....	8	.....	.....	0.039	1.0	.....	.....
Christiania	29.55	750.5	29.69	754.1	59.2	15.1	25	SSW	4	2	.....	.....	2	.....	.....	0	0	.....	.....
Gjæsvær	29.51	749.6	29.54	750.2	23.9	— 4.5	.....	WNW	.....	.....	7	.....	10	.....	.....	.....	.....	.....	.....
Lodingen	29.61	752.1	29.66	753.3	35.1	1.7	53	Calm	.....	.....	0	.....	9	.....	.....	0	0	.....	.....
PORTUGUESE SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.20	767.1	30.36	771.1	61.3	16.3	87	ENE	5.6	2.5	.....	.....	5	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.00	736.6	29.98	761.4	70.5	21.4	55	E	0.7	0.3	.....	.....	9	.....	.....	0.228	5.8	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.08	763.9	30.16	766.1	66.0	18.9	51	SW	1.8	0.8	.....	.....	1	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.70	754.3	30.05	763.3	65.8	18.8	63	NE	5.6	2.5	.....	.....	6	ENE	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.29	769.3	30.36	771.1	64.0	17.8	53	NNE	6.3	2.8	.....	.....	4	.....	.....	0	0	.....	
RUSSIAN SERIES.																			
Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinsk	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	29.44	747.7	29.46	748.2	42.6	5.9	78	SSW	13	6	.....	.....	10	.....	.....	.....	.....	Light clouds	Capt. Sseliwerstow.
Astrakhan	30.12	765.0	30.04	762.9	65.5	18.6	46	SE	13	6	.....	cs	4k	.....	.....	.....	.....	.....	Capt. Wisganow.
Barnaul	29.27	743.5	29.76	755.9	55.6	13.1	25	E	4	2	.....	.....	10	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	29.53	750.1	29.77	756.1	62.1	16.7	50	W	9	4	.....	.....	10ks	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	28.91	734.4	29.84	758.0	59.4	15.2	29	WNW	18	8	.....	ck	8ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Kasan	29.69	754.1	29.95	760.8	69.4	20.8	32	W	4	2	.....	.....	1k	.....	.....	.....	.....	.....	Observatory.
Kertch	29.67	753.6	29.69	754.1	59.0	15.0	84	SE	7	3	.....	.....	4	.....	.....	.....	.....	Light clouds	Lagorio & Sastyrez.
Kieff	29.17	740.8	29.79	756.6	62.1	16.7	30	ENE	16	7	.....	c;cs	7ks	.....	.....	.....	.....	Light clouds	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.68	753.9	29.88	759.0	62.6	17.0	43	ESE	34	15	.....	.....	10	.....	.....	Bla	nk	.....	Meteorological Obs'y.
Moscow	29.44	747.7	29.93	760.3	68.5	20.3	27	S	7.8	3.5	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.30	693.3	29.54	750.3	48.6	9.2	48	NW	4	2	.....	.....	8	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaiev	29.67	753.6	29.74	755.4	62.1	16.7	69	S	31	14	.....	cs	3k	.....	.....	.....	.....	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lieut. Iwanow.
Pekin, China	29.63	752.5	29.77	756.1	76.3	24.6	50	SW	4	2	.....	.....	5ks	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	29.70	754.4	29.72	754.8	54.1	12.3	64	NW	4	2	.....	.....	9kjkaju	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.33	719.5	29.82	757.3	79.3	26.3	16	WNW	4	2	.....	.....	10	.....	.....	Bla	nk	.....	Teich, A. M.
Tiflis	28.54	724.9	29.93	760.2	65.1	18.4	62	E	2	1	.....	.....	10n	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	29.46	748.2	29.87	758.6	68.2	20.1	30	N	4	2	.....	.....	1k	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.45	747.9	29.85	758.1	69.8	21.0	31	SW	4	2	.....	.....	3	.....	.....	.....	.....	.....	Berg, Assistant.
Yeniseisk	29.70	754.4	30.00	761.9	34.9	1.6	42	N	4	2	.....	.....	2	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH SERIES.																			
Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	29.41	747.0	52.0	11.1	90	SE	.....	.....	2	.....	10n	.....	.....	0.13	3.3	Raining	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.32	744.7	49	9.4	93	E	.....	.....	4	10	5	NE	.....	0.2	5.	Cloudy	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	29.65	753.1	.....	.....	.....	NE	.....	.....	4	.....	10	.....	.....	Bla	nk	.....	Robert Burnet.
SPANISH SERIES.																			
Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.92	760.0	30.02	762.6	73.0	22.8	38	S	5.8	2.6	.....	.....	0	.....	.....	0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.94	760.4	29.99	761.8	79.0	26.1	47	NW	2.7	1.2	.....	2	0	W	.....	0	0	Almost clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.09	688.0	.....	.....	67.6	19.8	63	N	3.8	1.7	.....	0	0	.....	.....	0	0	Clear	Domingo Martin.
Madrid, Royal Obs'y	27.80	706.2	29.95	760.6	74.3	23.5	30	SW	6.5	2.9	.....	0	7	.....	.....	0	0	Cloudy	The Staff.
Murcia, Met. Obs'y	29.86	758.5	30.01	762.3	74.1	22.3	44	ESE	5.6	2.5	.....	0	3	.....	.....	0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.06	738.2	29.93	760.3	73.2	22.9	53	SW	0	0	.....	.....	1	.....	.....	0	0	Almost clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.90	759.6	29.97	761.2	73.8	23.2	76	E	1.1	0.5	.....	0	3k	.....	NNE	0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.84	757.9	29.89	759.2	80.8	30.4	71	SSE	9.9	4.5	.....	0	1k	.....	.....	0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.95	760.7	30.05	763.2	63.3	17.4	72	ESE	13.8	6.2	.....	10	.....	.....	ESE	0	0	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.84	757.8	29.93	760.1	72.0	22.2	98	SE	0	0	.....	.....	10kn	.....	SE	1.713	43.5	Raining	Enrique Gaztea, Chief Engineer.
Tuguegarao, Philippine Ids	29.77	756.1	29.91	759.8	83.2	28.4	69	N	2.9	1.5	.....	.....	2ks	.....	NW	0	0	Clear	José L. Fastovra.
SWEDISH SERIES.																			
Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.54	750.3	29.58	751.3	39.2	4.0	73	NE	.....	.....	4	.....	10	.....	.....	0	0	.....	.....
Umea	29.50	749.4	29.56	750.7	50.0	10.0	82	NW	.....	.....	6	.....	9	.....	.....	0	0	.....	.....
Hernosand	29.62	752.3	29.67	753.6	48.4	9.1	33	W	.....	.....	6	.....	3	.....	.....	0.012	0.3	.....	.....
Stockholm	29.55	750.6	29.73	755.1	55.4	13.0	31	W	.....	.....	4	.....	1	.....	.....	0	0	.....	.....
Wisby	29.74	755.3	29.80	756.8	51.4	10.8	63	W	.....	.....	4	.....	0	.....	.....	0	0	.....	.....
Sub-Series.																			
Upsala	29.59	751.6	29.68	753.8	59.2	15.1	31	WNW	6.3	2.8	.....	.....	3	.....	WSW	0.071	1.8	.....	Nils Ekholm
SWISS SERIES.																			
Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.58	725.8	29.97	761.3	63.7	17.6	34	N	.....	.....	1	.....	0	.....	.....	0	0	Clear	The Observatory.
Zurich	28.35	720.0	29.93	760.3	69.8	21.0	45	W	.....	.....	2	.....	0	.....	.....	0	0	Clear	The Observatory.
TURKISH SERIES.																			
Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.73	755.2	64.0	17.8	57	SW	9	4.0	.....	.....	4	.....	SW	0.181	4.6	.....	The Observatory.
Valona	.....	.....	29.95	760.6	68.4	20.2	.....	SW	.....	.....	1	.....	5	.....	.....	0.39	10.	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.90	759.5	77.5	25.3	63	SW	.....	.....	3	70k	0	SW	.....	0	0	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.58	751.3	29.65	753.1	62	16.7	77	SW	10	4.5			10s		SW	0.45	11.4	Cloudy	
Alpena, Michigan	28.93	734.8	29.55	750.6	48	8.9	85	W	16	7.2			10n		W	0.19	4.8	Light rain	
Atlanta, Georgia	28.76	730.5	29.85	758.2	72.0	22.2	73	W	10	4.5		10c	0	Calm		0	0	Cloudy	
Atlantic City, New Jersey	29.71	754.6	29.72	754.9	58	14.4	100	SW	9	4.0			Fg		Calm	0	0	Dense fog	
Augusta, Georgia	29.68	753.9	29.87	758.7	76.8	24.9	61	W	2	0.9		5cs	5s	SW	SW	0	0	Cloudy	
Baltimore, Maryland	29.68	753.9	29.72	754.9	71	21.7	75	S	2	0.9		0	0			0.02	0.5	Clear	
Barnegat, New Jersey	29.68	753.9	29.70	754.4	59	15.0	100	SW	11	4.9			Fg		SW	0.24	6.1	Dense fog	
Bismarck, Dakota	28.12	714.2	29.98	761.5	49	9.4	50	E	3	1.3		0	0			0	0	Clear	
Boise City, Idaho	27.19	690.6	30.15	765.8	51.2	10.7	65	W	3	1.3		0	0			0	0	Clear	
Boston, Massachusetts	29.58	751.3	29.74	755.4	52.2	11.2	97	SE	11	4.9			10n		SE	0.27	6.9	Light rain	
Bracketville, Texas	28.86	733.0	29.90	759.4	64	17.8	89	E	6	2.7		0	5ks		E	0	0	Fair	
Brownsville, Texas	29.88	758.9	29.92	760.0	70	21.1	90	SE	1	0.4		5c	0			0	0	Fair	
Buffalo, New York	28.92	734.6	29.61	752.1	43.5	6.4	96	SW	9	4.0			Fg			0.32	8.1	Dense fog	
Burlington, Vermont	29.29	744.0	29.57	751.1	53.0	11.7	93	SE	3	1.3			10n		S	0.55	14.0	Heavy rain	
Cairo, Illinois	29.60	751.8	29.98	761.5	68	20.0	84	N	8	3.6		0	0			0.06	1.5	Clear	
Campo, California	27.35	694.7	29.92	760.0	51	10.6	93	SW	6	2.7			Fg			0	0	Dense fog	
Camp Thomas, Arizona	27.18	690.4			59	15.0	82	Calm			0	8ck	0			0.07	1.8	Fair	
Cape Henry, Virginia	29.76	755.9	29.78	756.4	69	20.6	85	SW	8	3.6		0	0			0.10	2.5	Clear	
Cape May, New Jersey	29.69	754.1	29.72	754.9	60	15.6	88	S	11	4.9			Fg			0.02	0.5	Dense fog	
Castroville, Texas	29.24	742.7	29.94	760.5	60	15.6	94	W	2	0.9		5c	0			0	0	Fair	
Cedar Keys, Florida	29.91	759.7	29.94	760.5	77	25.0	82	NW	6	2.7		2c	0			0	0	Clear	
Champaign, Illinois	29.09	738.9	29.86	758.4	57.5	14.2	53	W	17	7.6		0	0			0.30	7.6	Clear	
Charleston, S. Carolina	29.82	757.4	29.87	758.7	78	25.6	78	SE	3	1.3		2cs	0	SW		0	0	Clear	
Charlotte, N. Carolina	28.99	736.3	29.76	755.9	72.4	22.4	67	N	1	0.4		5cs	Hz			0	0	Fair	
Chattanooga, Tennessee	29.12	739.6	29.88	758.9	74	23.3	68	W	3	1.3		2ck	0	W		0	0	Fair	
Cheyenne, Wyoming	24.06	611.1	30.00	762.0	44	6.7	68	W	4	1.8		0	0			0	0	Clear	
Chicago, Illinois	29.11	739.4	29.78	756.4	57.6	13.9	63	NW	6	2.7		0	0			0.68	2.0	Clear	
Chincoteague, Virginia	29.74	755.4	29.75	755.6	61	16.1	100	SW	18	8.0		1k	Fg	SW	Calm	0	0	Clear	
Cincinnati, Ohio	29.21	741.9	29.83	757.7	67	19.4	69	NW	6	2.7		0	0			1.21	30.7	Clear	
Cleveland, Ohio	28.98	736.1	29.68	753.9	61	16.1	78	SW	8	3.6		5k	0	W		0.03	0.8	Fair	
Coleman City, Texas	28.24	717.3	29.88	758.9	62	16.7	83	Calm	0	0		5c	0	SW		0	0	Fair	
Columbus, Ohio	28.93	734.8	29.73	755.1	63	17.2	83	SW	3	1.3		5k	0	SW		0.15	3.8	Fair	
Concho, Texas	28.12	714.2	29.78	756.4	60	15.6	82	Calm	0	0		5c	0	S		0	0	Fair	
Corsicana, Texas	29.60	751.8	30.00	762.5	70	21.1	70	Calm	0	0		5cs	0			0	0	Fair	
Davenport, Iowa	29.31	744.5	29.93	760.2	57	13.9	58	NW	8	3.6		0	0			0	0	Clear	
Dayton, Washington T'y	28.52	724.4	30.23	767.8	42.7	5.9	35	SW	8	3.6		0	0			0	0	Clear	
Deadwood, Dakota	25.33	643.4			48	8.9	78	SW	5	2.2		0	0			0	0	Clear	
Decatur, Texas	28.80	733.0	29.96	761.5	74	23.3	56	S	6	2.7		5c	0	S		0	0	Fair	
Delaware Breakwater, Del.	29.70	754.4	29.72	754.9	65	18.3	94	SW	14	6.3		2ck	2ks	W	SW	0	0	Fair	
Denison, Texas	29.24	742.7	30.00	762.0	74	23.3	68	SW	3	1.3		5cs	0	Calm		0	0	Fair	
Denver, Colorado	24.79	629.7	30.01	762.2	54.6	12.0	55	S	1	0.4		0	0			0	0	Clear	
Des Moines, Iowa	29.14	740.1	30.00	762.0	55	12.8	87	N	1	0.4		0	0			0	0	Clear	
Detroit, Michigan	29.00	736.6	29.67	753.6	58.5	14.7	82	W	6	2.7		10c;ck	0	W		1.06	26.9	Cloudy	
Dodge City, Kansas	27.42	696.5	29.65	753.1	62	16.7	88	SE	4	1.8		2cs	0			2.65	67.3	Clear	
Dubuque, Iowa	29.22	742.2	29.91	759.7	56.5	13.6	51	NW	9	4.0		0	0			0.07	1.8	Clear	
Duluth, Minnesota	29.26	743.2	29.93	760.2	52	11.1	66	N	3	1.3		0	0			0.03	0.8	Clear	
Eagle Pass, Texas	29.25	742.9	29.67	753.6	68	20.0	74	SE	2	0.9		2ck	0	Calm		0	0	Fair	
Eagle Rock, Idaho	25.21	640.3	29.80	758.4	46	7.8	62	SW	3	1.3		8cs	0	S		0	0	Fair	
Eastport, Maine	29.77	756.1	29.84	757.9	42.2	5.7	82	NE	10	4.5		10cs	0	W		0	0	Cloudy	
El Paso, Texas	26.20	667.0			58	14.4	81	Calm	0	0		0	5s			0	0	Fair	
Erie, Pennsylvania	28.95	735.3	29.63	752.6	59	15.0	88	W	16	7.2		0	5ks		SW	0.39	9.9	Fair	
Escanaba, Michigan	28.98	736.1	29.62	752.3	47	8.3	92	NW	14	6.3			10s		NW	0.14	3.6	Cloudy	
Florence, Arizona	28.33	719.6	29.93	760.2	60	15.6	60	Calm	0	0		2k	2s	W		0.13	3.3	Fair	
Fort Apache, Arizona	25.01	635.2	30.40	773.7	50	10.0	86	E	3	1.3		0	5ks		W	0.13	3.3	Fair	
Fort Assinnaboine, Montana	27.66	687.3			56	13.3	63	W	8	3.6		0	0			0	0	Clear	
Fort Bennett, Dakota	28.38	720.8			56	13.3	63	SE	12	5.4		1k	0	NW		0	0	Clear	
Fort Benton, Montana																			
Fort Buford, Dakota	27.97	710.4	29.80	756.9	50	10.0	65	E	6	2.7		0	0			0	0	Clear	
Fort Custer, Montana	26.68	677.7			53	11.7	73	NW	2	0.9		0	0			0	0	Clear	
Fort Davis, Texas	25.08	637.0	30.04	763.0	57	13.9	81	S	2	0.9		0	5s		S	0.67	17.0	Fair	
Fort Elliott, Texas	27.28	692.9	29.51	749.5	60	15.6	55	SE	2	0.9		5c	0	SE		0	0	Fair	
Fort Gibson, Indian T'y	29.45	748.0	29.98	761.5	65	18.3	89	Calm	0	0		2c	0	S		0	0	Fair	
Fort Grant, Arizona	25.22	640.6	30.02	762.5	61	16.1	17	S	2	0.9			10s		SW	0.22	5.6	Cloudy	
Fort Griffin, Texas	28.68	728.5	29.92	760.0	64.4	18.0	78	SE	4	1.8		5cs	0			0	0	Fair	
Fort Keogh, Montana	27.38	695.4			54	12.2	61	E	2	0.9		0	0			0	0	Clear	
Fort Macon, North Carolina	29.81	757.2	29.82	757.4	70	21.1	95	S	11	4.9		5k	2s	Calm	Calm	0.26	6.6	Cloudy	
Fort McKavett, Texas	27.79	705.8	29.68	753.9	60.3	15.7	82	S	3	1.3		2cs	0			0	0	Clear	
Fort Missoula, Montana	26.78	680.2			54	12.2	80	NW	25	11.2			10ks			0	0	Cloudy	
Fort St. Michaels																			
Fort Shaw, Montana	26.29	667.8			50	10.0	58	W	13	5.8		2cs	0			0	0	Clear	
Fort Sill, Indian Territory	28.80	731.5	29.87	758.7	66	18.9	89	Calm	0	0		1c	0	W		0	0	Clear	
Fort Stevenson, Dakota																			
Fort Verde, Arizona																			
Fredericksburg, Texas					55.9	13.3	69	S			1		10s		S	0	0	Cloudy	
Galveston, Texas	28.32	719.3	29.85	758.2	62	10.7	77	W	3	1.3		5cs	0			0	0	Fair	
Grand Haven, Michigan	30.00	762.0	30.04	763.0	73	22.8	81	NW	6	2.7		10cs	0			0	0	Cloudy	
Hatteras, North Carolina	29.09	738.9	29.72	754.9	52	11.1	73	NW	14	6.3		0	0			0.36	9.1	Clear	
Helena, Montana	29.77	756.1	29.79	756.7	71	21.7	95	S	13	5.8		2c	0			0.06	1.5	Fair	
Henrietta, Texas	25.75	654.0			58	14.4	53	N	11	4.9		5k	0	N		0	0	Fair	
Indianapolis, Indiana	29.01	736.8	29.90	759.4	70	21.1	75	SW	5	2.2		5cs	0			0	0	Fair	
Indianola, Texas	29.05	737.9	29.80	756.9	63	17.2	57	W	6	2.7		0	0			0.64	16.3	Clear	
Jacksboro, Texas	30.02	762.5	30.05	763.3	72.5	22.5	85	SE	5	2.2		5cs	Hz	NW		0	0	Fair	
Jacksonville, Florida	28.86	733.0	29.96	761.0	67	19.4	74	SW	2	0.9		2c	0	W		0	0	Fair	
Keokuk, Iowa	29.85	758.2	29.89	759.2	78	25.6	61	NW	2	0.9		2cs	0			0	0	Clear	
Key West, Florida	29.34	745.2	29.97	761.2	63.1	17.3	60.1	NW	6	2.7		0	0			0	0	Clear	
Kittyhawk, North Carolina	29.94	760.5	29.98	761.5	77.9	25.5	72	N	10	4.5		0	0			0	0	Clear	
Knoxville, Tennessee	29.82	757.4	29.84	757.9	70	21.1	90	SW	10	4.5		2c	2ks		W	0.17	4.3	Fair	
La Crosse, Wisconsin	28.92	734.6	29.88	758.9	68	20.0	79	Calm	0	0		10s	2s	W	Calm	0	0	Fair	
La Mesilla, New Mexico	29.14	740.1	29.90	759.4	58.2	14.6	64	W	12	5.4		0	0			0.02	0.5	Clear	
Laredo, Texas	26.13	663.7	30.28	769.1	55	12.8	87	Calm	0	0		5c	5s			0.06	1.5	Cloudy	
Leavenworth, Kansas	29.50	750.8	29.90	759.4	71	21.7	90	SE	1	0.4		2k	0	SE		0	0	Fair	
Lewiston, Idaho	29.15	740.4	29.97	761.2	64	17.8	63	N	1	0.4		0	0			0	0	Clear	
Little Rock, Arkansas	29.32	744.7	29.96	761.0	53	11.7	48	W	15	6.7			10s		W	0	0	Cloudy	
Los Angeles, California	29.08	753.9	29.99	761.7	70	21.1	80	NW	2	0.9		0	0			0	0	Clear	
Louisville, Kentucky	29.55	750.6	29.91	759.7	57.8	14.3	82	E	1	0.4			10s		Calm	0	0	Cloudy	
Lynchburg, Virginia	29.32	744.7	29.86	758.4	68.0	20.0	74	W	10	4.5		0	0			0.11	2.8	Clear	
Madison, Wisconsin	29.12	739.6	29.76	755.9	73	22.8	72	Calm	0	0		0	0			1.07	27.2	Clear	
Marquette, Michigan	28.83	732.3	29.79	756.7	54	12.2	55	W	14	6.3		0	0			0.23	5.8	Clear	
Mason, Texas	29.94	760.5	29.63	752.6	43	6.1	100	NW	25	11.2			10n		Calm	0.38	9.7	Heavy rain	
Memphis, Tennessee	28.42	721.9	30.16	766.1	61	16.1	88	E	2	0.9		1cs	0	W		0	0	Clear	
Milwaukee, Wisconsin	29.05	753.1	29.98	761.5	70	21.1	85	Calm	0	0		0	0			0.05	1.3	Clear	
	29.04	737.6	29.75	755.6	55	12.8	68	NW	16	7.2		1c	0			0	0	Clear	

MAY 15, 1881.

STATIONS.	BAROMETER.				TEMPERATURE OF THE AIR.		REL. HUM.	WIND.				CLOUDS.				RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Corrected for instrum'tal error and temperature.		Reduced to sea-level.					Direction.	Velocity.		Force	Amount and kind.		Direction,					
												Up'er	Lo'er	Upper.	Lower.				
	Inch	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—CONTINUED.																			
Mobile, Alabama	29.89	759.2	29.96	761.0	71	21.7	85	NW	5	2.2	.....	8cs	0	.....	.....	0.18	4.6	Fair	
Montgomery, Alabama	29.72	754.9	29.93	760.7	71	21.7	85	SE	2	0.9	.....	8cs	0	S	.....	0.01	0.3	Fair	
Moorhead, Minnesota	29.04	737.6	29.99	761.7	49	9.4	78	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Morgantown, W. Virginia	28.80	731.5	29.73	755.1	71	21.7	71	SW	6	2.7	.....	2cs	0	W	.....	0.16	4.1	Fair	
Mt. Washington, N. H.	23.54	597.9	29.90	759.4	40	4.4	100	S	53	23.7	.....	.....	1on;fg	.....	S	0.18	4.6	Light rain	
Nashville, Tennessee	29.39	746.5	29.90	759.4	73.0	22.8	76	W	7	3.1	.....	0	0	.....	.....	0	0	Clear	
New Haven, Connecticut	29.58	751.3	29.69	754.1	56	13.3	100	S	6	2.7	.....	.....	1on;fg	.....	.....	0.27	6.9	Light rain	
New London, Connecticut	29.70	754.4	29.74	755.4	54	12.2	100	SW	9	4.0	.....	.....	1on	.....	SW	0.50	12.7	Light rain	
New Orleans, Louisiana	29.93	760.2	29.99	761.7	76.5	24.7	80	W	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Newport, Rhode Island	29.70	754.4	29.75	755.6	53.0	11.7	93	SE	12	5.4	.....	.....	1on	.....	SW	0.24	6.1	Light rain	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	29.71	754.6	29.74	755.4	53.2	11.8	86	S	20	8.9	.....	.....	1on	.....	S	0.07	1.8	Light rain	
New York, New York	29.54	750.3	29.71	754.6	57	13.9	100	S	3	1.3	.....	.....	1on;fg	.....	.....	0.15	3.8	Light rain	
Norfolk, Virginia	29.74	755.4	29.79	756.7	73	22.8	76	W	5	2.2	.....	2k	0	W	.....	0.11	2.8	Clear	
North Platte, Nebraska	27.10	688.3	29.59	751.6	62	16.7	88	S	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Olympia, Washington T'y	30.30	769.6	30.34	770.6	36.0	2.2	90	SE	2	0.9	.....	0	1s	.....	Calm	0.01	0.3	Clear	
Omaha, Nebraska	28.89	733.8	29.95	760.7	62	16.7	72	Calm	0	0	.....	1ck	0	NW	.....	0	0	Clear	
Oswego, New York	29.27	743.4	29.58	751.3	56.6	13.7	90	W	7	3.1	.....	.....	10s	.....	W	0.53	13.5	Cloudy	
Pensacola, Florida	29.92	760.0	29.96	761.0	73	22.8	85	N	4	1.8	.....	8cs	0	Calm	.....	0.09	2.3	Fair	
Philadelphia, Pa	29.05	753.1	29.70	754.4	66	18.9	89	W	4	1.8	.....	5k	Fg	W	.....	Inap.	Inap.	Fair	
Phœnix, Arizona	28.72	729.5	30.49	774.4	59	15.0	88	E	5	2.2	.....	.....	10s	.....	.....	Inap.	Inap.	Threatening	
Pike's Peak, Colorado	17.94	455.7	30.15	765.8	27	— 2.8	64	SW	12	5.4	.....	5cs	0	.....	.....	0	0	Fair	
Ploche, Nevada	24.00	609.6	29.77	756.1	57	13.9	47	S	16	7.2	.....	.....	10ks	.....	Calm	0	0	Cloudy	
Pittsburg, Pennsylvania	28.93	734.8	29.70	754.4	65	18.3	73	W	9	4.0	.....	0	0	.....	.....	0.23	5.8	Clear	
Port Eads, Louisiana	29.97	761.2	29.98	761.5	76.1	24.5	95	N	7	3.1	.....	2cs	0	Calm	.....	0	0	Clear	
Port Huron, Michigan	28.98	736.1	29.62	752.3	54.4	12.4	90	SW	8	3.6	.....	.....	10ks	.....	W	0.63	16.0	Cloudy	
Portland, Maine	29.71	754.6	29.76	755.9	54	12.2	87	SW	9	4.0	.....	.....	1on	.....	Calm	0.10	2.5	Light rain	
Portland, Oregon	30.32	770.1	30.40	772.1	41.2	5.1	82	NW	2	0.9	.....	2k	0	NW	.....	0	0	Fair	
Portsmouth, N. Carolina	.....	.....	.....	.....	71	21.7	85	SW	14	6.3	.....	5k	0	W	.....	0.66	16.8	Fair	
Prescott, Arizona	24.74	628.4	30.10	764.5	44	6.7	84	S	1	0.4	.....	.....	10s	.....	S	Inap.	Inap.	Cloudy	
Punta Rassa, Florida	29.91	759.7	29.93	760.2	76	24.4	82	NW	10	4.5	.....	Hz	1ks	Calm	NW	0	0	Clear	
Red Bluff, California	29.49	749.0	29.82	757.4	69.0	20.6	35	N	15	6.7	.....	0	5s	.....	Calm	0	0	Fair	
Rio Grande City, Texas	29.84	757.9	30.05	763.3	69	20.6	80	Calm	0	0	.....	5cs	0	Calm	.....	0	0	Fair	
Rochester, New York	28 98	730.1	29.50	750.8	60	15.6	82	W	10	4.5	.....	5k	5s	W	W	0.26	5.8	Cloudy	
Roseburg, Oregon	29.74	755.4	30.32	770.1	44.3	6.8	70	N	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Sacramento, California	29.75	755 0	29.82	757.4	61.5	16.4	71	S	4	1.8	.....	0	5s	.....	.....	0	0	Fair	
St. Louis, Missouri	29.41	747.0	29.97	761.2	66.0	18.9	54	N	7	3.1	.....	0	0	.....	.....	0.03	0.8	Clear	
St. Paul, Minnesota	29.10	739.1	29.91	759.7	53	11.7	61	NW	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Salt Lake City, Utah	25.50	647.7	29.83	757.7	61	16.1	40	Calm	0	0	.....	10k	0	SW	.....	0	0	Cloudy	
San Antonio, Texas	29.35	745.5	30.04	763.0	63.0	17.2	89	E	1	0.4	.....	4ks	0	SW	.....	0	0	Fair	
San Diego, California	29.81	757.2	29.88	758.9	59.3	15.2	82	Calm	0	0	.....	.....	10s	.....	.....	0	0	Cloudy	
Sandusky, Ohio	29.03	737.3	29.67	753.6	62	16.7	72	SW	12	5.4	.....	5k	0	W	.....	0.18	4.6	Fair	
Sandy Hook, New Jersey	29.08	753.9	29.71	754.6	60.0	15.6	100	SW	11	4.9	.....	.....	1on;fg	.....	.....	0.15	3.8	Light rain	
San Francisco, California	29.81	757.2	29.88	758.9	52	11.1	86	SW	8	3.6	.....	5cs	2s	W	SW	0	0	Fair	
Santa Fé, New Mexico	23.34	592.8	29.88	758.9	52	11.1	73	Calm	0	0	.....	.....	10s	.....	S	0	0	Cloudy	
Savannah, Georgia	29.78	756.4	29.87	758.7	74.5	23.6	66	W	3	1.3	.....	2cs	0	.....	.....	0	0	Fair	
Shreveport, Louisiana	29.80	756.9	30.04	763.0	73	22.8	85	NW	2	0.9	.....	0	Hz	.....	.....	0	0	Clear	
Silver City, New Mexico	24.31	617.5	30.52	775.2	46	7.8	83	Calm	0	0	.....	0	0	.....	.....	0.06	1.5	Clear	
Sitka, Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	.....	
Smithville, North Carolina	29.82	757.4	29.86	758.4	73	22.8	95	S	8	3.6	.....	8k	1s	SW	.....	0.02	0.5	Cloudy	
Socorro, New Mexico	25.45	646.4	29.52	749.8	60	15.6	77	SE	5	2.2	.....	0	0	.....	.....	0.04	1.0	Clear	
Spokane Falls, Wash. Ter.	28.08	713.2	29.95	760.7	40	4.4	18	SW	13	5.8	.....	5k	0	SW	.....	0	0	Fair	
Springfield, Illinois	29.29	744.0	29.95	760.7	63	17.2	62	NW	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Springfield, Massachusetts	29.57	751.1	29.70	754.4	56	13.3	100	S	6	2.7	.....	.....	1on;fg	.....	S	0.25	6.3	Light rain	
Stockton, Texas	29.99	685.5	29.99	761.7	65.0	18.3	78	SE	8	3.6	.....	.....	10s	.....	Calm	0	0	Cloudy	
St. Vincent, Minnesota	29.10	740.7	29.95	760.7	46	7.8	77	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Thatcher's Island, Mass	29.69	754.1	29.74	755.4	50	10.0	100	S	10	4.5	.....	.....	1on	.....	S	0.32	8.1	Heavy rain	
Toledo, Ohio	29.02	737.1	29.00	753.4	63	17.2	72	W	4	1.8	.....	10ck	0	W	.....	0.15	3.8	Cloudy	
Tucson, Arizona	27.42	696.5	29.97	761.2	66	18.9	69	E	5	2.2	.....	5k	0	SW	.....	0.04	1.0	Fair	
Umatilla, Oregon	29.97	761.2	30.48	774.2	43.0	6.1	68	NW	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Uvalde, Texas	29.08	738.6	29.89	759.2	62	16.7	77	E	1	0.4	.....	5k	0	Calm	.....	0	0	Fair	
Vicksburg, Mississippi	29.75	755.6	30.00	762 0	73	22.8	81	Calm	0	0	.....	2c	0	Calm	.....	0	0	Fair	
Visalia, California	29.43	747.5	29.79	756.7	60	15.6	65	SE	3	1.3	.....	5s	0	.....	.....	0	0	Fair	
Washington, D. C.	29.61	752 1	29.72	754.9	71	21.7	75	W	1	0.4	.....	2cs	0	.....	.....	0.01	0.3	Clear	
Wickenburg, Arizona	.....	.....	.....	.....	56	13.3	94	N	.....	.....	1	10cs	0	.....	.....	0.07	1.8	Cloudy	
Wilmington, N. Carolina	29.78	756.4	29.84	757.9	73	22.8	90	SW	4	1.8	.....	2cs	5s	Calm	Calm	0.20	5.1	Fair	
Winnemucca, Nevada	25.55	649.0	29.91	759.7	51	10.6	59	S	6	2.7	.....	5ck	0	SW	.....	0	0	Fair	
Wood's Holl, Mass	29.74	755.4	29.78	756.4	52	11.1	86	S	24	10.7	.....	.....	1on	.....	S	0.04	1.0	Light rain	
Yankton, Dakota	28.74	730.0	30.01	762.2	59	15.0	76	N	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Yuma, Arizona	29.00	753.4	29.80	756.9	73.6	23.1	59	NE	4	1.8	.....	0	8ks	.....	SE	0	0	Cloudy	
SUB-SERIES.																			
Bogota, U. S. Columbia	22.09	561.1	.....	.....	54.5	12.5	80	Calm	0	0	.....	10cs;k	0	.....	.....	0.10	2.5	Cloudy	Thomas Herran.
Buff Bay Town, Jamaica	29.70	754.4	30.02	762.5	73	22.8	85	E	.....	.....	.....	0	2c	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.98	761.5	30.03	762.7	78	25.6	69	Calm	0	0	.....	0	8ks	.....	NE	0	0	Fair	A. Van Caneghem, Ass't.
Jakoosh-avn, Greenland	30.02	762.0	30.08	763.9	30.2	— 1.	.....	N	.....	.....	2	.....	1c	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I.	29.90	759.4	29.91	759.7	70.0	21.1	71	N	2	0.9	.....	1cs	0	.....	.....	0	0	Fine	Robert Johnstone.
Nuvassa, W. I.	29.81	757.2	29.89	759.2	79	26.1	82	NE	5	2.2	.....	8k	2n	NE	NE	0.14	3.6	Fair	F. M. Everett.
Paramarito, S. A.	30.02	762.5	30.02	762.5	78	25.6	86	E	.....	.....	2	.....	8ks	E	.....	0.070	1.8	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.46	748.3	30.02	762.5	80	26.7	76	Calm	.....	.....	0	.....	8ks	.....	Calm	0.01	0.3	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	77.0	25	.....	NE	.....	.....	2	5cs	0	NE	.....	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	29.89	759.2	29.92	760.0	73	22.8	81	Calm	0	0	.....	2k	2n	.....	.....	0.40	10.2	Fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.95	760.7	30.00	762.0	33.0	0.6	94	N	11	4.9	.....	4k	5s	NE	N	0	0	Cloudy	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.	Force	Amount and kind.		Direction.							
									Upper	Lower	Upper.	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross, N. 33° 58′, E. 129° 34′	29.98	761.5	66	18.9		NNW		2-3		1							Blue sky	Comm A. J. Errington.
H. M. S. Alert																		Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.05	763.3	67	19.4	69	N		1		0							Blue sky	Capt. Lord Walter Kerr.
H. M. S. Antelope																		Capt. Hon. W. H. Jolliffe.
H. M. S. Arab,																		Comm. R. W. Stopford.
H. M. S. Bacchante																		Capt. Lord C. Scott.
H. M. S. Beacon, N. 23° 38′, E. 58° 36′	29.82	757.4	90	32.2	63	SE		1		1	E						Blue sky	Comm. G. W. Hand.
H. M. S Bittern, Constantinople, Turkey			65	18.3		SSE		1		3	SSE				1	SSE	D. clouds	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	29.99	761.7	79	26.1	86	E		1		5							D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.88	758.9	66	18.9	64	W		2		8	W						D. clouds	Com. F. W. Richards.
H. M. S. Champion, Ascension I'ds, Africa	29.92	760.0	81	27.2	63	SE		3		5	Calm				1	ESE	D. clouds	Capt. G. R. Hope.
H. M. S Cockatrice																		Capt. H. T. Gerfell.
H. M. S. Comus, N. 28° 37′, E. 122° 15′	29.90	759.4	64	17.8	100	NNW		2		1					2		Foggy	Capt. J. W. East.
H. M. S. Condor																		Comm. F. W. Egerton.
H. M. S. Coquette																		Lt. Comm. J. L. Barr
H. M. S. Cruizer, N. 37° 02′, E. 16° 03′	29.99	761.7	65	18.9		WNW		1		1	WNW				3	NNW	Blue sky	Capt. F. A. Wetherall.
H. M. S. Curacoa																		Capt. S. Long.
H. M. S. Danae, S. 15° 55′, W. 5° 45′	30.08	764.0				ENE		3		3							D. clouds	Capt. J. C. Parvis.
H. M. S. Daring, N. 7° 18′, E. 76° 00′	29.85	758.2	84	28.9		WSW		2-4		9	WSW				1	SSE	Showery	Capt. F. J. Elliott.
H. M. S. Dido																		Capt C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.85	758.2	73	22.8		SE		1		1							Blue sky	Capt. J. Barnardiston.
H. M. S. Dragon																		Capt. Hulton.
H. M. S. Druid, N. 46° 54′, W 53° 38′	29.83	757.7	37.5	3.1	95	SW		2-3		10					1	SW	Foggy	Capt. W. R. Kennedy.
H. M. S. Dryad																		Capt. John Hext.
H. M. S. Eclipse																		Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 5° 10′, E. 105° 00′	29.78	756.4	84	28.9		SE		2									Misty	Comm. C. Johnstone.
H. M. S. Emerald, S. 8° 30′, E. 179° 15′	29.87	758.7	82	27.8	87	NNW		1		10							Showery	Capt. W. H. Maxwell.
H. M. S. Encounter																		Capt. L. Ching.
H. M. S. Euryalus, Trincomalee, Ceylon, India.	29.82	757.4	81	27.2	87	ESE		3-4		6							D. clouds	Capt. R. D. King,
H. M. S. Falcon																		Comm. W. H. C. Selby.
H. M. S. Fantome, N. 41° 17′. W. 59° 16′	29.93	760.2	56	13.3		NNE		2-3		9	NNE				2	NNE	Misty	Capt. W. C. Karslake.
H. M. S. Fawn																		Capt. P. Aldrich.
H. M. S Flamingo																		Comm. R. N. Custance.
H. M. S. Flying Fish, Hong-Kong, China	29.91	759.7	79	26.1	86	Calm		0		10							Raining	Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 37° 40′, W. 138° 30′	30.52	775.2	56	13.3	69	ENE		4		3	WSW				2	NNW	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet																		Capt. L. F. Jones.
H. M. S. Griffon, N. 23° 40′, W. 83° 20′	29.95	760.7	80	26.7	78	NNE		2		1	NNE				1	NE	Blue sky	Comm. J. Ingles.
H. M. S. Hecla																		Capt. T. L. H. Ward.
H. M. S. Humber, N. 19° 17′, W. 74° 32′	29.93	760.2	78	25.6		NNE		3		2	NNE				2	NNE	D. clouds	Capt. J. L. Way.
H. M. S. Inconstant, S. 40° 20′, E. 129° 20′	29.66	753.4	57	13.9	94	NNW		5		10					3	NW	Drizzling	Capt. C. C.P. Fitzgerald.
H. M. S. Iris, N. 38° 31′, E. 15° 31′	30.03	762.7	69	20.6	65	NNW		4-3		3					3	WNW	D. clouds	Capt. E. H. Seymour.
H. M. S. IronDuke, N. 26° 10′, E. 119° 55′	29.85	758.2	68	20.0	84	NE		1		4	S						Misty	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.93	760.2	62	16.7		Calm		0		9	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																		Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	30.11	764.8	68	20.0		SE		1		4							D. clouds	Capt. S. Grove.
H. M. S. London																		Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 59′, E. 110° 35′	29.80	756.9	80.0	26.7	89	SE		2-3		7	SE						Squally	Capt. A. Carpenter.
H. M. S. Midge, N. 22° 14′, E. 118° 40′	29.91	759.7				N		2		3	NE				2	NE	D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 36° 07′, W. 5° 21	30.01	762.2	60	15.6	88	ESE		2-5		10	ENE						Showery	Capt. H. H. Rawson.
H. M. S. Modeste, N. 1° 20′, E. 105° 56′	30.05	763.3	84	28.9	91	Calm		0		0							Blue sky	Capt. J. G. Mead.
H. M. S. Monarch Goletta, Tunis, N. Africa	30.09	764.3	63	17.2	89	NE		2		3	ENE						D. clouds	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.		Miles p. h'r	Mtrs p. sec	o—10	o—10	o—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, N. 41° 17′, W. 64° 17′	29.92	760.0	41	5.0	91	Calm			0							1	S	Foggy	Capt. E. B. Drummond.
H. M. S. Orontes, Mauritius; Mauritius.†	30.07	763.8	79.5	26.4	76	SSE			1		6	SSW					NNE	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 89° 38′, W. 79° 03′	29.84	757.9	78	25.6		Calm			0		10							Raining	Capt. F. R. Dicken.
H. M. S. Penguin, S. 49° 07′, W. 74° 25′	29.59	751.6	44	6.7		Calm			0		10							Raining	Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, Bonny River, Africa	29.86	758.4	83	28.3		SSW			3		10	SSW						D. clouds	Capt. Hon. A.C.Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	30.23	767.8	51	10.6		WSW			3									Blue sky	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.99	761.7	81.4	27.4	85	SE			1		10							Overcast	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis, N. 37° 05′, E. 3° 25′	30.06	763.5	63	17.2	78	ENE			4		4	ENE				3	ENE	D. clouds	Capt. G. O. Twiss.
H. M. S. Shannon, S. 5° 05′, W. 25° 59′	30.01	762.2	81	27.2	78	ESE			4		4	ESE				4	E	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Thetis, S. 15° 50′, W. 146° 56′	29.82	757.4	81	27.2	78	SW			2		3	SW				2	SE	D. clouds	Capt. C. G. Fane.
H. M. S. Thunderer																			Capt. P. W. Stephens.
H. M. S. Triumph, Coquimbo, Chili, S. A.	29.95	760.7	58	14.4	88	ESE			1		10	Calm						Overcast	Capt. P. H. Colomb.
H. M. S. Turquoise, S. 24° 05′, W. 72° 06′	30.01	762.2	64	17.8	89	S			3		3					2	S	D. clouds	Capt. A. H. Markham.
H. M. S. Tweed																			Capt. M. B. Medlycott.
H. M. S. Tyne, N. 27° 40′, E. 33° 53′	29.79	756.7	80	26.7	78	NNW			4							2			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.			78	25.6		NNE			1		3							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, N. 37° 19′, E. 168° 20′	30.36	771.1	60	15.6	71	Calm			0		2	Calm				1	S	D. clouds	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, N. 26° 53′, E. 52° 45′	29.82	757.4	82.5	28.1	85	NW			4-5		4	NW				6	NW	Misty	Capt. T. P. Nesham.
H. M. S. Zephyr, N. 30° 36′, E. 122° 03′	29.95	760.7	62	16.7	100	E			3		10							Misty	Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, Mossamedes, Benguela	29.96	761.0	68.9	20.5	70	W			4		0					1		Blue sky	Carlos Candido dos Reis, Comd't.
Quanza, N. 21° 03′, W. 18° 32′	30.28	769.1	71.1	21.7	66	ENE			3		1		NE			2	NE	Blue sky	Carlos M. da Silva Costa, Comd't.
Rio Lima, Santiago, Cape Verd I'ds.	30.10	764.4	77.2	25.1	87	N			4		7					1	SE	D. clouds	S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.89	759.1	74.3	23.5	93	N			1		10		NW					Thund'rst'm	P. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis.....‡																			Com. Th. Ulner.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.																			
N. N. Yard, Pensacola, Fla	30.03	762.7	72	22.2	85	NW	4	1.8			8		NW	0	0			Fair	
N. Yard, Portsmouth, N. H.	29.76	755.9	52	11.1	86	SE	8	3.6			10		SE					Raining	
Naval Hospital, Yokahama, Japan	29.86	758.4	64	17.8	92	SW			1		10		W	0	0			Cloudy	
Adams, Callao, Peru	29.74	755.4	66	18.9	94	SE			2		10					Long	SSW	Cloudy	
Alaska, Callao, Peru	29.81	757.2	65	18.3	89	SE			1		10					Sm'h		Overcast	
Alert, N. 25° 55′, E. 141° 31′ *	23.96	761.0	77	25.0	86	E			3		5		ENE			Long	E	Fair	
Alliance, Norfolk, Va	29.81	757.2	73	22.8	85	SW			1		5		W	Moderate		Sm'h		Fair	
Ashuelot, Kobe, Japan	30.03	762.7	63	17.2	72	WNW			1		8		SW					Cloudy	
Colorado, New York, N. Y.	29.71	754.6	59	15.0	94	S	3	1.3			10		S	0.02	0.5			Drizzling	
Constitution, Norfolk, Va	29.75	755.6	68	20.0	90	WSW	4	1.8			2		W					Fair	
Franklin, Norfolk, Va	29.76	755.9	70	21.1	85	W	10	4.5			2		SW	0.1	3.			Fair	
Galena, Villafranca, France	30.06	763.5	64	17.8	78	E			1		0							Clear	
Independence, N. Yard, Mare I'd, Cal	29.87	758.7	56	13.3	75	SW	6.0	2.7			2		SW	0	0			Clear	
Jamestown, Sitka, Alaska *	30.20	767.1	42	5.6	91	Calm			0		2			0	0			Clear	
Kearsarge, Port Royal, S. C	29.88	758.9	77	25.0	82	Calm			0		2		W			Sm'h		Fair	
Lackawanna, S. 21° 39′, W. 98° 01′ †	30.22	767.6	70	21.1	100	Var.			1		10		SE			Sm'h	SE	Cloudy	
Marion, Montevideo, Uruguay	30.12	765.0	55	12.8	87	W			0-1		2		Calm	0	0	Sm'h		Hazy	
Michigan, Erie, Pennsylvania	29.66	753.4	58	14.4		W	5	2.2			0							Clear	
Minnesota, Newport, R. I	29.77	756.1	56	13.3	94	S			3		10					Sm'h		Drizzling	
Monocacy, Yokohama, Japan	29.98	761.5	64	17.8	100	S			1		10		Calm					Cloudy	
New Hampshire, Port Royal, S. C	29.84	757.9	77	25.0	77	Calm	0	0			5		Calm	0	0			Fair	
Nipsic, N. 41° 38′, E. 3° 23′	30.01	762.2	65	18.3	68	SW			4		2					Sm'h		Hazy	
Onward, Callao, Peru †	29.92	760.0	65	18.9	89	SE			3		10		NW			Long	W	Cloudy	
Palos, Yokohama, Japan	30.04	763.0	78	25.6	65	SE			1		10							Overcast	
Passaic, Washington, D. C	29.76	755.9	69	20.6	90	SW			1		2							Fair	
Pensacola, N. 36° 27′, W. 143° 42′	30.50	774.7	61	16.1	82	E			3		5		E	0	0	Sm'h		Fair	
Portsmouth, Norfolk, Va	29.79	756.7	68	20.0	100	W			1		0							Clear	
Powhatan, N. 36° 52′, W. 75° 56′	29.83	757.7	68	20.0	90	S			1		2					Long	SE	Foggy	
Quinnebaug, N. 24° 56′, W. 22° 48′	30.15	765.8	71	21.7	66	NE			2		2		NE			Long	NE	Clear	
Ranger, N. 15° 48′, W. 97° 15′ *	29.80	756.9	83	28.3	75	E			3		2		Calm	0	0	Sm'h		Fair	
Richmond, Yokohama, Japan	29.96	761.0	65	18.3	89	ENE			1		8			0	0		ENE	Misty	
Saratoga, Norfolk, Va	29.80	756.9	69	20.6	75	WSW			1		8		WSW	Light				Cloudy	
Shenandoah, Montevideo, Uruguay *	30.11	764.8	53	11.7	86	NNW			3		2					Sm'h		Fair	
St. Louis, League Island, Pa	29.26	743.2	69	20.6	85	SW	6	2.7			8		SW	0	0			Cloudy	
Swatara, Shanghai, China † *	29.91	759.7	68	20.0	90	E			2		10		Calm					Overcast	
Tennessee, Hampton Roads, Va	29.80	756.9	69	20.6	95	WSW	12	5.4			2		Calm	0.10	2.5	Sm'h		Hazy	
Ticonderoga, S. 45° 04′, W. 112° 36′	30.11	764.8	47	8.3	77	ENE			1		10		Calm	0	0	Long	S	Cloudy	
Trenton, Villafranca, France *	29.99	761.7	69	20.6	70	Calm			0		0			0	0	Sm'h		Clear	
Vandalia, Boston, Mass	29.82	757.4	56	13.3	94	S			2		10		Calm					Cloudy	
Wabash, Boston, Massachusetts	29.78	756.4	53	11.7	100	S	7	3.1			10		S	0.23	5.8			Raining	
Wachusetts, N. 37° 30′, W. 125° 34′	29.96	761.0	55	12.8	87	NNW			8		2		NW	0	0	R'gh	NW	Squally	
Wyoming, N. 28° 55′, W. 61° 45′	29.92	760.0	70	21.1	90	WSW			2		5		WSW			Sm'h	NW	Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant. ‡																			Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Olpero, N. 12° 00′, W. 60° 32′	29.93	760.2	80.1	26.7	96	E			4		9					3	E	Overcast	Capt. W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne, N. 9° 35′, W. 47° 43′	30.01	762.2	81	27.2	75	NE			4		3							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 41° 16′, W. 35° 49′	30.33	770.4	62.5	16.9	78	S			4		8							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow, ‡ N. 14° 26′, E. 93° 28′	29.85	758.2	82.5	28.1	81	Calm			0		2							Blue sky	Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ N. 12° 40′, W. 32° 30′	30.03	762.7	77.3	25.2	91	NE			6		5							D. clouds	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡ N. 53° 35′, W. 5° 50′	29.32	744.7	49.5	9.7	93	S			7		10							Raining	Capt. H. W. Dyke.
Barque Meriola, N. 52° 22′, W. 5° 47′	29.44	747.8	50.9	10.5	93	SW			7		1							D. clouds	Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ S. 10° 00′, W. 11° 26′	30.05	763.3	78.5	25.8	69	SE			4		10							Overcast	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 10° 05′, E. 91° 47′	29.83	757.7	80.5	26.9	87	SW			4		10							Overcast	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton, ‡ N. 39° 34′, E. 13° 25′	30.09	764.3	04	17.8	78	WSW			2		3							D. clouds	Capt. R. J. Blacklir
S. S. Yorkshire																			Capt. H. Longley
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 46° 41′, W. 52° 15′	29.88	758.9				WSW			3		10		W			Sm'h		Foggy	
S. S. Circassian																			Capt. V
S. S. Hibernian																			Capt.
S. S. Nova Scotian																			Cap
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Gallia																			
S. S. Algeria																			
S. S. Scythia																			
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			
S. S. Baltic, N. 47° 07′, W. 38° 10′	29.89	759.2	59	15.0	100	SSW			5		10					R'gh	SW	P	
S. S. Britannic																		aining	
S. S. Celtic, N. 41° 50′, W. 55° 06′ †	29.80	756.9	49	9.4		NE			5		10		NE	4h'rs	drizz.	Mod.	NE		
S. S. Germanic, Liverpool, England †	29.71	754.6	52	11.1		S			5		8?		S	Showers				Overcast	
S. S. Republic																		Clear?	
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			
S. S. Hohenzollern, N. 38° 45′, W. 64° 38′	29.90	759.4	57.9	14.4		NE			2		5		NE						Capt. H. Baur.
S. S. Köln N. 43° 26′, W. 53° 22′	29.94	760.5	51.0	10.6	85	WNW			1		10		W	0	0	Mod.	NE	Fair	
S. S. Leipzig, N. 46° 33′, W. 27° 30′	30.18	766.6	66.0	18.9		WNW			2–3		10		NW	18 hours Rain	& fog	Sm'h	WNW	Cloudy	Capt. Th. Jüngst
S. S. Ohio													W	0	0	Sm'h	W	Fair	Capt. F. Pfeiffer.
S. S. Strassburg																			Capt. G. Meyer.
																			Capt. C. Helmbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, N. 48° 15′, W. 28° 23′	29.97	761.2	55	12.8	93	ESE			4		10		ESE			Sm'h	SSE	Raining	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio, N. 40° 02′, W. 50° 05′ *†	30.01	762.2	67	19.4	95	SSE			3		2		SSE	0	0	Mod.	E	Fair	W. Shackford, Chief Off'r
S. S. Pennsylvania, N. 49° 57′, W. 16° 34′ *†	29.88	758.9	61	16.1	61	NW			6		2		WNW			R'gh	WNW	Fair	Capt. Geo. H. Doige.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 26° 16′, W. 110° 46′ †	29.80	756.9	75	23.9	68	W			3		2		W	0	0	Sm'll	W	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, Yokohama, Japan †	30.06	763.5	63	17.2	100	S			2		8		S	0	0	Sm'h		Cloudy	Capt. H. Davison.
S. S. Gaelic, N. 29° 17′, E. 127° 12′ *†	29.99	761.7	74	23.3	95	SE			5		10		SE			Mod.	SE	Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 44° 57′, W. 178° 30′	30.52	775.2	43	6.1	59	W			1		5		W	0	0	3	NW	D. clouds	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Otevendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon †	30.13	765.3	42.0	5.6	91	Calm			0		2		NW					Fair	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, Seattle, Wash. Ter †	30.22	767.6	42	5.6	83	SW			3		0							Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 34° 23′, W. 121° 05′	29.92	760.0	56	13.3	81	SW			2		Fog		SW	0	0	Mod.	SW	Foggy	Geo. H. Harrison.
S. S. Senator, San Francisco, Cal			51	10.6	93	W			1		8							Hazy	Capt. Thos. Wallace.
S. S. State of California, N. 46° 30′, W. 124° 20′ †	30.25	768.3	51	10.6	72	N			6		2		N			H'vy	NW	Clear	Capt. G. Debney.
S. S. Victoria, N. 40° 01′, W. 124° 45′ †	30.02	762.5	49	9.4	100	NW			6		5					H'vy	NW	Fair	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, Sydney, N. S. W	30.20	767.1	69	20.6	90	Calm			0		0							Hazy	A. Bannerman, 2d Officer
S. S. City of New York, Sydney, N. S. W †	30.23	767.8	67	19.4	89	Calm			0		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, Hong Kong, China †	29.91	759.7	80	26.7	82	Calm			0		8		SE	Light		Sm'h		Rainy	Capt. G. G. Berry.
S. S. City of Sidney, N. 31° 41′, W. 138° 34′ †	30.43	772.9	64	17.8	68	NE			6		8		NE	0	0	H'vy	ENE	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio																			A. L. Ritchie, 2d Officer
S. S. Colima, N. 14° 28′, W. 92° 00′ †	29.85	758.2	82	27.8	71	E			3		8		ESE	0	0	Sm'h	SE	Cloudy	Capt. R. R. Searle.
S. S. Granada, San José, Guatemala †	29.80	756.9	80	26.7	87	SW			1		2		SW	0	0	Mod.	SW	Clear	Capt. M. Connolly.
S. S. Zealandia, N. 23° 02′, W. 154° 43°	30.18	766.6	69	20.6	85	ESE			2		2?		E	0	0	R'gh	ESE	Cloudy?	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, N. 40° 11′, W. 72° 32′ †	29.75	755.6	63	17.2	48	S			1		0			2 hours		Sm'h		Dense fog	A. Feddersen, 2d Officer.
S. S. Rhynland																			Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 34° 31′, W. 74° 50′	29.80	756.9	78	25.6	78	SSW	8	3.6			10k		S	0.21	5.3	Cross	SE; NE	Cloudy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 22° 15′, W. 52° 15′ †	30.10	764.5	78	25.6		WSW			4		5		NNE	0	0	Sm'h	NNE	Fair	Capt R. F. Woodbury.
Brigantine George																			Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Md. †	29.87	758.7	70	21.1	90	WSW	2	0.9		2cs	2s			0	0			Clear	
Bark Sunbeam, N. 38° 45′, W. 9° 05′ †	30.02	762.5	70	21.1	80	NE			2		8		NE	0	0			Cloudy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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W. B. Hazen

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

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 16, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	Barometer. Corrected for instrumental error and temperature. Inch.	Barometer. Corrected for instrumental error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From	Clouds. Direction. Lower From	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather	Observers.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
‡Mogador, Morocco			30.21	767.2	69.1	20.6	82	NE			3		1			0	0	Very fair	Dr. Ollive.
‡Nemours			30.02	762.5	62.8	17.1	98	SSW			1		4			0.244	6.2	Cloudy	Raynard.
‡Algiers			30.07	763.8	66.2	19.0	87	W			3		9			Inap.	Inap.	Very cloudy	Nicolas.
‡La Calle			29.98	761.4	69.4	20.8	91	ENE			3		4			0.079	2.0	Cloudy	Fonfrède.
‡Tunis			29.94	760.5															Jacques.
‡Sfax			30.11	764.8															Gau.
‡Saida			30.07	763.8	63.1	17.3	49	NW			5		10			0	0	Covered	Dumas.
‡Tebessa			30.08	764.0	75.6	24.2	35	W			5		5			Inap.	Inap.	Cloudy	Watrin.
‡Gerfville																			Lonchamp.
‡Laghouat			30.00	762.0	77.4	25.2	22	S			3		2			0.606	15.4	Fair	Herbin.
‡Biskra			30.06	763.4															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.95	760.7	30.04	763.0	61.4	16.3	75	N	7	3.1			6			0	0	Fine	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.24	742.8	29.77	756.1	74.1	23.4	45	SW			2		2			0.004	0.1		Prof. Ivan Stoxir.
Cracow, I. R. Obs'y	29.04	737.7	29.79	756.6	68.0	20.0	73	ESE	5.6	2.5			1			0	0		Dr. Wierzbicki.
Eperies	28.93	734.7	29.77	756.2	68.0	20.0	38	Calm			0	ics	0			0	0		Julius Mikolik.
Gratz	28.54	724.9	29.73	755.2	72.9	22.7	39	SSW			1		3			0	0		Andreas Rospini.
‡Hermannstadt	28.41	721.6	29.82	757.3	59.7	15.4	73	E			3		8			0.181	4.6		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.42	721.8	29.70	754.4	70.0	21.1	51	SSW			1		1			0	0		The Staff.
Lemberg	28.84	732.6	29.80	757.0	63.5	17.5	50	SE			1		5			0	0		Dr. T. Stanecki.
Pola	29.77	756.2	29.88	759.0	71.6	22.0	58	SSE			2		0			0	0		I. R. Hydrographic Office.
Szathmar	29.35	745.5	29.80	756.9	68.5	20.3	36	NE			1		2			0	0		Beicht Peter, S. J.
Szegedin	29.54	750.4	29.82	757.3	64.6	18.1	47	Calm			0		0			0	0		Karl Stancel.
Trieste	29.80	756.8	29.90	759.4	67.6	19.8	53	NW			1		1			0	0	Clear	Secco.
Vienna	29.46?	748.3?	30.16?	756.0?	71.4	21.9	48	SE			1		1			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.37	746.0	29.47	748.5	44.1	6.7	77	NNW	29	13.0			9			0.035	0.9	Drizzling	W. Boswell.
Armagh, Observatory	29.56	750.8	29.79	756.7	48.9	9.4	72	NNW	13	5.8			8					Squally	S. Call.
Bidston, Liverpool Obs'y			29.54	750.3	51.5	10.8	70	WNW	51	22.8			2					Blue sky	John Hartnup.
Bolton, Sharples	28.87	733.3	29.40	746.7	51.3	10.7	82	NNW	30	13.4			9					Squally	Thomas Mackereth.
Bradford, Yorkshire	29.04	737.6	29.44	747.8	53.1	11.7	58	NW			3		9			0.02	0.5	Overcast	J.McLandsbo ough,F.R.S
Bridgetown, Barbadoes	29.90	759.4	29.93	760.2	85	29.4	70	NE			2		4					D. clouds	Corpl. J. Surgener,AH.C.
Cardington			29.50	749.3	53.0	11.7	80	NW			3.0		10					Overcast	John McLaren.
Chatham, School M. E.	29.90	759.4	30.03	762.7	51.6	10.9	81	SW			3		8					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.67	753.6	29.90	759.4	54.8	12.7	63	WNW			5		5					Gloomy	The Staff.
Fort Napier, Natal	27.58	700.5	29.79	756.7	83.4	28.6	100	Calm			0		3					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.60	751.8	29.83	757.7	88	31.1	92	NW			1		4					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			29.79	756.7	54	12.2	67	N			4		8			0.67	17.0	D. clouds	J. O'Donaghue.
Gibraltar, Mediterranean	30.03	762.7	30.08	764.0	71.8	22.1	78	SW			3		0					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.37	746.0	29.57	751.1	51.1	10.6	47	N			6		6			Blank		D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	29.41	747.0	29.58	751.3	51.1	10.6	84	WSW			2		10					Raining	The Staff.
Guernsey	29.59	751.6	29.81	757.2	55.5	13.1	68	WNW			4		0			Blank		Blue sky	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.57	751.1	29.60	751.8	52.2	11.2	65	W	20	8.9			10					Overcast	The Staff.
Leicester, Museum	29.30	744.2	29.56	750.8	52.0	11.1	70	W			4		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.90	759.4	29.98	761.5	68.2	20.1	66	NE			1		7			0.09	2.3	D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas	29.82	757.4	29.87	758.7	83.0	28.3	83	W			1		7					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.04	737.6	29.56	750.8	50.0	10.0	70	WNW			6		8					Drizzling	John Mac Email.
Oxford, Radcliffe Obs'y	29.37	746.0	29.60	751.8	51.4	10.8	74	W			5		10					Showery	The Staff.
Plymouth	29.70	755.9	29.83	757.7	56.2	13.4	65	NW			5		8					D. clouds	John Merrifield.
Sandwick Manse, Orkneys			29.58	751.3	44.1	6.7	81	NNW	34	15.2			2					Showery	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.69	754.1	29.75	755.6	62.6	17.0	76	SW			2		8					Showery	Serg't W. H. Lyne.
Sheffield	29.24	742.7	29.53	750.0	52.9	11.6	84	WNW			4		10			0	0	Overcast	W. F. Cooper.
Silloth Rectory	29.57	751.1	29.60	751.8	55.6	13.1	66	NW			4		6			0.066	1.7	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.52	749.8	49.0	9.4	57	NW	28	12.5			10					Threatening	Rev. S. J. Perry.
Stratfield Turgiss	29.41	747.0	29.62	752.3	52.7	11.5	63	W			3-4		8					Squally	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	29.93	760.2	29.95	760.7	60	15.6	60	NW			8		4					D. clouds	W. Newcombe.
Valencia, Observatory	29.96	761.0	29.98	761.5	52.6	12.0	68	WNW	23	10.3			6			Blank		D. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.01	762.2	30.05	763.3	45	7.2	85	NE	8	3.6			10s			0	0	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	30.05	763.3	30.11	764.8	43	6.1	71	N	5	2.2			10s		N	0	0	Cloudy	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	30.09	764.3	30.11	764.8	42	5.6	93	NE	4	1.8			10n		Calm	0	0	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.19	741.4	30.01	762.2	52	11.1	86	SE	8	3.6		0	5ks		SW	0	0	Fair	James Stewart.
Fredericton, N. B																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.89	759.2	30.02	762.5	48	8.9	78	E	8	3.6			8n			0	0	Cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.38	746.2	29.72	754.9	49	9.4	89	NE	9	4.0			10s		NE	0.42	10.7	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	29.56	750.8	29.76	755.9	47	8.3	98	NE	19	8.5			10s		NE	0.47	11.9	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.18	741.2	29.86	758.4	53	11.7	73	N	11	4.9		0	0			0	0	Clear	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.11	739.4	29.80	756.9	49	9.4	93	NW	8	3.6			10k		NW	0.03	0.8	Threatening	H. Morgan.
Port Stanley, Ontario	29.20	741.7	29.85	758.2	48	8.9	89	W	10	4.5			8ks		N	0.20	5.1	Cloudy	M. Payne.
Quebec, Quebec*	29.64	752.8	29.97	761.2	45	7.2		NE			5		10n		NE	0.19	4.8	Heavy rain	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.40	746.7	29.86	758.4	51	10.6	65	N	2	0.9		2c	0	SW		0.45	11.4	Fair	W. H. McIntyre.
Saugeen, Ontario*	29.16	740.7	29.87	758.7	50	10.0	78	N	14	6.3		2cs	0			0.04	1.0	Clear	K. Stewart.
St. Andrews, N. B	29.88	758.9	29.93	760.2	47	8.3	84	E	4	1.8			10n			0.07	1.8	Cloudy	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.07	763.8	30.11	764.8	45	7.2	82	NE	2	0.9		10cs	0	W		0	0	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.41	747.0	29.79	756.7	52	11.1	83	N	8	3.6			10ks		NE	0.47	11.9	Cloudy	Magnetic Observatory.
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	29.85	758.2	29.92	760.0	47	8.3	94	E	5	2.2			10s		NE	0.03	0.8	Light rain	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.96	761.0	30.21	767.3	35	1.7	90	NE	1	0.4		5k	5s			0	0	Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	30.04	763.0			64.5	18.1	86	W	19.0	8.5			18			0	0		John Duthie.
Cape Town, C. G. H. Obs'y	30.03	762.7	30.07	763.8	60.6	15.9		NW	10.2	4.6		5	5ks;n			0	0		The Staff, for D. Gill.
Worcester*†.	28.92	734.6			68.7	20.4	49	NW			1	0	5			0	0	Fine	C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.89	759.2	29.91	759.8	64.8	18.2	96	SE	2.7	1.2			10			0	0	Covered	M. Marc Dechevrens, S.J.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Barometer. Corrected for instru-m'tal error and tem-perature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	25.18	665.6	29.90	759.4	66.6	19.2	86					10s				0.24	6.	Clear	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.41	747.0	29.45	748.0	60.3	15.7	60	SSW	16	7			7						Oversergent Fischer.
Fanöe	29.39	746.5	29.41	747.0	53.8	12.1	78	S			6		9						Overloerer Lauridsen.
Godthaab, Greenland	29.80	756.9	29.84	758.0	36.0	2.2	85	SW			4		8						S. Kleinschmidt.
Stykkisholm, Iceland	29.85	758.2	29.89	759.3	33.8	1.0		Calm			0		0						A. O. Thorlacius.
Thorshavn	29.78	756.4	29.82	757.3	35.2	1.8	68	N	22	10			7					Snowing	Overloerer Bergh.
Vestervig	29.27	743.5	29.37	745.9	51.8	11.0	87	SSW			6		4						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.43	747.6	30.08	764.1	58.6	14.8	61	NW			1		8n		E			Sprinkling	M. Labroue, Director.
Alençon Normal School	29.41	746.9	29.96	760.9	57.9	14.4	80	W			4		8kn		W	0	0	Very cloudy	M. Nicot, Director.
Arras, Engineer School	29.55	750.6	29.81	757.2	51.8	11.0	63	W			4		10kn		W			Sprinkling	M. Klein, Commandant.
Avignon, Normal School	29.84	758.0	29.92	760.0	77.0	25	35	W			1		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.35	745.4	29.90	759.4	57.2	14.0	49	W			2		8		W			Sprinkling	M. Saillard, Director.
Beauvais, Normal School	29.54	750.2	29.80	756.9	59.5	15.3	58	W			3		10		W	0	0	Covered	M. Frère Eugene Marie.
Besançon, Normal School	29.11	739.5	30.00	762.1	53.6	12	76	SSW			2		10n		SW			Raining	M. Gobin, Director.
Bordeaux, Observatory	29.82	757.3	30.07	763.8	63.1	17.3	48	NW			1		8			0.031	0.8	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.42	747.3	29.97	761.1	59.4	15.2	55	W			4	ck	0	W		0.016	0.4		M. Postel, Director.
Brest, Naval Observatory	29.76	756 0	30.01	762.2	59.7	15.4	60	W			4		8		W	0.039	1.0		M. de Kermaree, Dir.
Caen, Normal School	29.73	755.2	29.80	757.0	63.7	17.6	43	W			2		5		W	0.008	0.2	Cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.47	748.6	29.79	756.7	65.1	18.4	59	S			3		8		W	0.008	0.2	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.20	743.1	29.70	755.9	52.9	11.0	75	SW			3		8			0.020	0.5	¾ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.63	727.3	29.97	761.2	60.8	16.0	49	W			1		8			0	0	¾ cover d	M. Allnard, Director.
Cluny, Normal School	29.13	739.8	29.97	761.1	51.1	10.6	80	SE			1		6		S	0.004	0.1		M. de Villemontée, Dir.
Commercy, Normal School	28.99	736.4	29.85	758.1	58.1	14.5	58	WSW			3		8kn	WSW	WSW	0.016	0.4	Very cloudy	Dr. Coulet, Director.
Gap, Normal School	27.37	695.2	29.84	757.9	64.4	18	54	SE			2					0	0		M. Jeangirard, Director.
Grésque, du. Rhone	28.87	733.2	30.01	762.2	73.6	23.1	39	NW			2		0			0	0	Clear	M. Kina, Director.
Grenoble, Normal School	29.11	739.4	29.85	758.1	73.8	23.2	35	W			1		0sk			0	0		M. Ablard, Director.
Guéret, Normal School	28.43	722.0	30.12	765.0	53.6	12	57	W			3		n		W	0.083	2.1		M. Rivoire, Director.
Lamballe, Normal School	29.67	753.6	29.94	760.5	58.1	14.5	74	S			6		Fg		S	0.12	3.	Foggy	M. Ollitrault, Director.
Lescar, Normal School	29.58	751.2	30.24	768 2	59.4	15.2	60	W			3					0	0		M Chauvin, Director.
Lorient, Naval Observatory	29.92	760 0	30.02	762.6	62.6	17.0	43	SW			3		5		SW	0.020	0.5	½ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.92	734.5	29.98	761.4	53.6	12.0	65	NNW			1		10		NW	0	0	Covered	M. André, Director.
Mans, Normal School	29.61	752.1	29.92	759.9	56.3	13.5	71	WNW			4		5		NW	0	0	Cloudy	M Piboen, Director.
Marseille, Observatory	29.69	754.2	29.93	760.9	69.4	20.8	51	W			1		0			0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.83	630.6	30.06	763.6	50.0	10.0	72	W	7.4	3.3			9		NW	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.82	757.3	29.92	760.0	75.9	24.4	50	NW			3		0			0	0	Clear	M. P. Galzin, Director.
Nancy, Normal School	29.10	739.0	29.86	758.4	56.8	13.8	48	SSW			2		5ckn		SW	0	0	Cloudy	M. Hasse.
Nantes, Observatory	29.84	758 0	30.00	762.1	59.4	15.2	52	SSW			3-4		8k;n		WSW	0.020	0.5		M. Larocque, Director.
Nice	29.88	759.0	29.92	759.9	65.5	18.6	63	E			3		1		E	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.86	758.4	29.97	761.1	71.2	21.8	34	NE	18.6	8.3			2	W		0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.55	572.7			37.0	2.8							1		SW	0	0	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	28.88	733.6	29.90	759.5	77.9	25.5	26	SW			1		10			0	0	Covered	M. Tailliou.
Puy de Dôme Obs'y, Summit	25.08	637.0			33.6	0.9	100	W			4		10			0	0	Covered	M. Allnard, Director.
Rochefort, Naval Obs'y	30.04	763.1	30.08	763.9	66.2	19.0	50	W			2		5		W	0	0	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.82	757.3	30.03	762.8	58.6	14.8	93	NW			2		8		E	0	0	Very cloudy	M. Mouillot, Director.
Rodez, Normal School	27.91	709.0	30.08	764.1	49.3	9.6	86	NW					10		SE	0.08	2.	Covered	M. Richard, Director.
Rouen, Normal School	29.71	754.5	29.79	756.7	60.1	15.6	49	SW			4		8		SW	0	0	Very cloudy	M. Plattier, Director.
Saint Lô, Normal School	29.70	754.4	29.86	758.4	55.9	13.3	71	W			2		10		WSW	0.020	0.5	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.07	753.7	29.84	757.9	59.5	15.3	68	WSW			3		8	WSW	W	0.028	0.7		M. Renou, Director.
Toulouse, Observatory	29.42	747.2	30.14	765.6	54.1	12.3	83	NW			3					0	0		M. Baillard, Director.
Tours	29.76	750.0	29.96	761.0	55.4	13.0	81	WSW			3		8		WNW			Rainy	M. de Tastes.
Versailles, Observatory	29.34	745.2	29.83	757.7	59.4	15.2	47	W			4					0.173	4.4		Dr. A. Bérigny, Director.
Sub-Series.																			
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.91	734.2	29.76	756.0	68.0	20.0	33	SW			3		3k	SSW		0	0		Prof. Dr. Hoh.
Berlin	29.40	746.8	29.57	751.0	77.0	25.0	20	SW			6		8			0	0		Prof. Dr. Arndt.
Breslau	29.22	742.3	29.75	755.6	75.0	23.9	25	S			2		2			0	0		Royal University Obs'y.
Carlsruhe	29.39	746.4	29.81	757.1	58.3	14.6	73	W			4		10	SW		0.016	0.4		Albert Senz.
Cassel	28.95	735.2	29.66	753.4	62.2	16.8	40	SSW			8		7	S		0	0		Dr. H. Möhl.
Frankfort on the Main	29.43	747.4	29.78	756.4	63.5	17.5	45	SW			4		10			0	0		Physical Society.
Friedrichshafen	28 36	720.3	29.74	755.4	68.5	20.3	46	SW			5		6	W		0.035	0.9		Wilhelm, Chief Tel.
Hamburg	29.48	748.9	29.56	750.7	61.7	16.5	56	SW			7		7			0	0		Dr. R. Kleeman.
Kiel	29.50	749.2	29.51	749.0	53.1	11.7	71	SW			3		10			0.004	0.1		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.21	742.0	29.61	752.1	75.2	24.0	27	SW			4		7	WSW		0	0		Prof. Dr. Brahns.
Magdeburg	29.27	743.4	29.54	750.3	70 5	24.7	31	SSW			7		5k	SSW		0	0		Dr. Assmann.
Memel	29.78	750.4	29.83	757.0	68.2	20.1	40	S			2-3	2c	0						Reinbrecht & Issermann.
Munich	27.97	710.4	29.84	757.9	71.2	21.8	30	W			2		2	W		0	0		Central Station.
Neufahrwasser	29.72	754.8	29.73	755.2	75.2	24.0	26	S			3		2			0	0	Hazy	A. Lothes.
Neustadt, Palatinate	29.25	742.9	29.77	756.2	66.6	15.9	53	W			7		10	W		0	0		Dicknether.
Stuttgart	28.80	731.6	29.05	753.2	72.5	22.5	27	W			7		6	W				Light rain	Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.24	717 3	29.71	754.7	70.2	21.2	34	W			6		5	W		0.024	0.6		Prof. Kemlein.
Wustrow	29.45	748.1	29.48	748.7	72.7	22.6	41	SW			6		8k			0	0		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.48	748.8	29.87	758.6	70.5	21.4	.....	S	.....	.....	2.5	.....	0	.....	.....	.....	.....	Clear.	A. Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.70	754.4	29.75	755.7	86.5	30.3	83	SSW	30.0	13.4	.....	.....	0	.....	.....	0	0	Blue sky.	
Deesa	29.17	741.0	29.62	752.3	106.5	41.4	11	W	15.6	7.0	.....	.....	0	.....	.....	0	0	Blue sky.	
Bombay	29.79	756.6	29.83	757.6	88.0	31.1	69	WSW	12.0	5.4	.....	.....	4	.....	WSW	0	0	D. clouds.	
Poona, Yarrowda.	27.95	710.0	29.70	755.8	93.0	33.9	24	WNW	23.0	10.3	.....	.....	0	.....	.....	0	0	Blue sky.	
Belgaum	27.27	692.8	29.77	756.1	84.4	29.1	60	SW	12.0	5.4	.....	.....	0	.....	.....	0	0	Misty.	
Lahore	28.84	732.5	29.55	750.5	100.2	37.9	27	W	1.5	0.7	.....	.....	0	.....	.....	0	0	Blue sky.	
Roorkee	28.73	729.8	29.60	751.9	94.8	34.9	37	W	2.9	1.3	.....	.....	1	.....	.....	0	0	Misty.	
Agra	29.03	737.4	29.57	751.2	99.1	37.3	25	E	2.9	1.3	.....	.....	0	.....	.....	0	0	.....	
Nagpur	28.56	725.3	29.54	750.2	108.7	42.6	16	NW	5.1	2.3	.....	.....	8	.....	W	0	0	D. clouds.	
Jubbulpore	28.26	717.7	29.55	750.4	103.2	39.6	13	NW	6.6	3.0	.....	.....	9	.....	.....	0	0	D. clouds.	
Lucknow	29.23	742.4	29.59	751.6	93.0	33.9	40	ESE	4.5	2.0	.....	.....	0	.....	.....	0	0	Blue sky.	
Allahabad	29.25	743.0	29.55	750.6	96.5	35.8	37	ENE	4.6	2.1	.....	.....	0	.....	.....	0.03	0.8	Blue sky.	
Patna	29.42	747.2	29.60	751.7	91.9	33.3	48	ENE	5.2	2.3	.....	.....	6	NE	ENE	0	0	D. clouds.	
Hazaribagh	27.65	702.3	29.61	752.1	87.8	31.0	37	SE	9.5	4.2	.....	.....	6	.....	W	0	0	.....	
Cuttack	29.58	751.3	29.66	753.3	86.6	30.3	67	S	7.0	3.1	.....	.....	7	.....	.....	0.03	0.8	D. clouds.	
Calcutta, Alipore	29.66	753.4	29.68	753.9	86.1	30.1	70	SW	7.0	3.1	.....	.....	0	.....	.....	0.19	4.8	Blue sky.	
Dhubri	29.61	752.1	29.73	755.2	82.1	27.8	74	Calm	4.3	1.9	.....	.....	1	.....	SW	1.68	42.7	D. clouds.	
Chittagong	29.67	753.7	29.76	755.9	83.3	28.5	71	Calm	3.1	1.4	.....	.....	1	.....	.....	0	0	Blue sky.	
Sibsagar	29.44	747.8	29.78	756.3	79.5	26.4	73	ENE	1.7	0.8	.....	.....	10	W	W	0.08	2.0	D. clouds.	
Zanzibar, Africa	.....	.....	29.97	761.2	82.7	28.2	61	S	14	6.3	.....	.....	7	.....	S	0	0	D. clouds.	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.47	748.6	29.88	758.9	72.0	22.2	40	S	1.8	0.8	.....	.....	1	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.34	745.3	29.85	758.1	70.3	21.3	47	N	6.9	3.1	.....	.....	3	.....	.....	0	0	.....	Prof. Schiaparelli.
Padua	29.76	755.8	29.87	758.6	71.1	21.7	49	NNW	3.1	1.4	.....	.....	2	SW	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.95	735.2	29.83	757.7	71.2	21.8	52	SE	4.3	1.9	.....	.....	2	.....	.....	0.047	1.2	.....	Prof. P. F. Denza.
Genoa	29.79	756.6	29.59	751.5	61.7	16.5	74	S	6.3	2.8	.....	.....	10	SE	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	27.97	710.5	29.85	758.2	66.9	19.4	48	S	.....	.....	6	.....	0	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.82	757.4	29.87	758.6	72.0	22.2	36	SW	10.5	4.7	.....	.....	1	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.68	753.9	29.93	760.3	69.1	20.6	50	SW	.....	.....	2	.....	2	.....	.....	0	0	.....	Prof. Costantino Pitter.
Leghorn	29.89	759.2	29.98	761.4	66.2	19.0	67	WNW	0.7	0.3	.....	.....	2	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.79	756.6	29.96	760.9	70.9	21.6	46	SW	7.4	3.3	.....	.....	0	.....	.....	0	0	.....	Prof. P. S. Ferrari.
Lecce	29.67	753.7	29.92	760.0	72.0	22.2	42	NNW	6.9	3.1	.....	.....	2	N	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.08	738.6	29.96	761.0	66.6	19.2	72	ESE	4.3	1.9	.....	.....	0	.....	.....	0	0	.....	Prof. D. Conti.
Cagliari	29.75	755.7	29.95	760.6	66.2	19.0	62	S	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	29.77	756.2	30.02	762.5	65.3	18.5	55	NE	6.3	2.8	.....	.....	10	.....	.....	0	0	.....	Prof. G. Cinacciatore.
Syracuse	29.93	760.2	29.97	761.3	72.0	22.2	46	S	3.1	1.4	.....	.....	8	E	.....	0	0	.....	Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.46	748.3	29.97	761.3	65.8	18.8	70	WNW	2.5	1.1	.....	.....	3	W	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	22.11	561.5	.....	.....	41.4	5.2	50	SW	.....	.....	2	6ck	0	S	.....	0	0	Cloudy	Prof. P. F. Denza.
Valdobbia	22.14	562.4	.....	.....	41.5	5.3	63	N	.....	.....	6	.....	7k	WNW	.....	0	0	Cloudy	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.89	759.2	29.91	759.7	61.5	16.4	89	WSW	1.1	0.5	.....	0	18	.....	.....	0	0	Clear.	K. Sasaki.
Kioto	29.76	755.9	29.93	760.2	64.3	17.9	74	ENE	4.9	1.8	.....	0	0	.....	.....	0	0	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.69	754.1	29.89	759.2	66.8	19.3	82	WSW	0.9	0.4	.....	0	1s	.....	.....	0.010	0.2	Clear.	S. Takehayashi.
Tokei Obs'y, Yeddo	29.94	760.5	30.01	762.2	62.2	16.8	92	S	2.5	1.1	.....	.....	10s	.....	.....	0	0	Cloudy	The Staff.
Wakayama	29.88	758.9	29.93	760.2	60.9	16.1	92	Calm	0	0	.....	0	0	.....	.....	Inap.	Inap.	Clear.	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. M Idrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.96	761.0	30.16	765.9	74.8	23.8	81	E	15.0	6.7	.....	.....	10	.....	ESE	0.10	2.5	Drizzling	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Barcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanajuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez.
Leon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Leal.
Mazatlan	29.66	753.4	29.92	760.1	73.0	22.8	95	ESE	0.9	0.4	.....	2c	2s	SW	.....	0	0	Gloomy	F. Quijano, C. E.
Mexico, Central Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff.
Pabellon, Aguascalientes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. P. Spina.
San Luis Potosi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Barroeta, M. D.
Tlacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.60	751.7	29.60	751.7	55.6	13.1	.....	WSW	.....	.....	6	.....	.....	.....	.....	0.079	2.0	.....	
Groningen	29.42	747.2	29.47	748.6	54.5	12.5	.....	SW	.....	.....	6	.....	.....	.....	.....	0.043	1.1	.....	
Helder	29.44	747.7	29.44	747.7	52.5	11.4	.....	SSW	.....	.....	5	.....	.....	.....	.....	0.035	0.9	.....	
Helievoetsluis	29.53	750.1	29.53	750.1	53.1	11.7	82	SW	.....	.....	6	.....	.....	.....	.....	0	0	.....	
Utrecht	29.50	749.4	29.55	750.6	56.8	13.8	70	WSW	.....	.....	5	.....	8	.....	.....	0.039	1.0	Very cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Barometer. Reduced to sea-level. Inch.	Mill	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.17	740.9	29.23	742.5	52.2	11.2	71	S	12.3	5.5	.....	.....	10	.....	.....	0.441	11.2	.....	
Christiania	29.21	741.9	29.35	745.5	54.5	12.5	85	SE	9	4	.....	.....	10	.....	.....	0.134	3.4	Light rain	
Gjæsvær	29.69	754.0	29.71	754.6	33.8	1.0	.....	S	.....	.....	2	.....	5	.....	.....	.....	.....	.....	
Lodingen	29.65	753.1	29.70	754.3	41.9	5.5	42	SSW	.....	.....	2	.....	5	.....	.....	0	0	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.29	769.3	30.45	773.3	63.3	17.4	88	WNW	4.9	2.2	.....	.....	4	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.05	738.1	30.04	763.1	67.5	19.7	56	WNW	4.3	1.9	.....	.....	2	.....	.....	0.831	21.1	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.21	767.3	30.30	769.5	66.0	18.9	62	SW	5.6	2.5	.....	.....	2	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.82	757.3	30.17	766.4	64.6	18.1	66	N	18.1	8.1	.....	.....	9	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.38	771.7	30.45	773.5	64.4	18.0	65	NW	0.7	0.3	.....	.....	10	.....	.....	0	0	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	29.82	757.5	29.84	758.0	37.2	2.9	88	NE	4	2	.....	.....	10	.....	.....	.....	.....	.....	Capt. Sselliwerstow.
Astrakhan	29.96	761.0	29.88	758.9	71.4	21.9	48	ESE	22	10	.....	cs	6s	.....	.....	.....	.....	Light clouds	Capt. Wisganow.
Barnaul	‡ 29.45	747.9	29.92	760.0	56.5	13.6	38	WNW	9	4	.....	.....	9	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	29.72	754.8	29.95	760.8	60.8	16.0	39	E	9	4	.....	5ck	0	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	29.04	737.5	29.97	761.2	68.2	20.1	31	WSW	7	3	.....	ck	8k	.....	.....	.....	.....	.....	Meteorological Obs'y.
Kasan	29.77	756.2	30.03	762.8	71.8	22.1	32	WSW	4	2	.....	.....	1	.....	.....	.....	.....	.....	Observatory.
Kertch	29.73	755.1	29.75	755.6	59.7	15.4	90	NE	2	1	.....	.....	5	.....	.....	.....	.....	.....	Lagorio & Sastyrez.
Kieff	29.20	741.6	29.83	757.7	56.5	13.6	75	NNE	9	4	.....	.....	10cks;ks	.....	.....	.....	.....	.....	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.56	750.9	29.77	756.1	54.9	12.7	96	E	13	6	.....	.....	10	.....	.....	.....	.....	Blank	Meteorological Obs'y.
Moscow	29.44	747.8	29.97	761.2	70.7	21.5	30	S	4	2	.....	.....	4ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.56	700.1	29.89	759.3	35.6	2.0	47	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaiev	29.77	756.1	29.84	757.9	64.8	18.2	63	N	4	2	.....	.....	9km	.....	.....	.....	.....	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lieut. Iwanow.
Pekin, China	29.44	747.7	29.58	751.3	82.0	27.8	50	Calm	0	0	.....	c	5k	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	29.99	761.8	30.01	762.2	51.6	10.9	37	W	7	3	.....	c	4ks	.....	.....	.....	.....	Solar co-ona	Central Physical Obs'y.
Tashkend, Laboratory	28.47	723.0	29.99	761.8	70.3	21.3	80	SE	4	2	.....	.....	10	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.41	721.7	29.78	756.4	70.0	21.1	65	E	2	1	.....	.....	10k	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	29.39	746.4	29.79	756.7	72.0	22.2	30	SSE	9	4	.....	.....	0	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.45	748.0	29.85	758.2	70.9	21.6	38	SE	4	2	.....	.....	8	.....	.....	.....	.....	.....	Berg, Assistant.
Yeniseisk	29.68	753.9	29.97	761.3	43.2	6.2	61	SSW	7	3	.....	.....	7	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	29.58	751.3	48.9	9.4	60	N	.....	.....	6	.....	10k	.....	.....	0.01	0.3	Overcast	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.80	756.9	46	7.8	92	NW	.....	.....	4	5	3	NW	.....	0	0	D. clouds	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	29.48	748.8	.....	.....	.....	N	.....	.....	7	.....	10	.....	.....	Blank	.....	.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.90	759.4	30.00	762.1	72.0	22.2	49	SW	4.5	2.0	.....	.....	0	.....	.....	0	0	.....	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.15	765.9	30.21	767.3	62.2	16.8	71	NW	2.5	1.1	.....	.....	10	.....	.....	0.150	3.8	Covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.13	689.1	.....	.....	60.1	15.6	91	NE	6.3	2.8	.....	2	4	SW	.....	0	0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.79	705.8	29.93	760.3	75.0	23.9	39	SW	5.4	2.4	.....	0	1	.....	.....	0	0	Light clouds	The Staff.
Murcia, Met. Obs'y	‡ 29.82	757.5	29.97	761.2	77.9	25.5	39	SSW	2.9	1.3	.....	5	4	W	.....	0	0	Almost cov'd	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.25	743.0	30.16	766.0	58.5	14.7	53	N	15.4	6.9	.....	.....	8	.....	.....	0.004	0.1	Almost cov'd	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.85	758.4	29.93	760.1	77.7	25.4	71	NW	4.5	2.0	.....	0	3k	.....	WNW	0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.82	757.4	29.87	758.7	86.8	30.4	75	SSW	11.0	5.0	.....	0	1ks	.....	E	0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.04	763.1	30.14	765.6	66.7	19.3	72	W	7.5	3.4	.....	0	6	.....	W	0	0	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.79	756.6	29.88	758.9	76.6	24.8	94	SE	5.4	2.4	.....	3c	6kn	SE	SE	0.728	18.5	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.76	756.0	29.91	759.7	83.3	28.5	71	NNW	4.3	2.2	.....	.....	4k	.....	NW	0	0	Partly cld'y	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.91	759.6	29.95	760.6	37.8	3.2	59	S	.....	.....	2	.....	5	.....	.....	0	0	.....	
Umea	29.75	755.7	29.80	757.0	38.5	3.6	87	SE	.....	.....	4	.....	10	.....	.....	0.311	7.9	.....	
Hernosand	29.05	753.2	29.71	754.5	37.6	3.1	91	E	.....	.....	2	.....	10	.....	.....	0	0	.....	
Stockholm	29.52	749.8	29.70	754.3	55.8	13.2	47	S	.....	.....	6	.....	10	.....	.....	0.031	0.8	.....	
Wisby	29.64	752.9	29.70	754.4	59.4	15.2	49	SSE	.....	.....	6	.....	5	.....	.....	0	0	.....	
Sub-Series.																			
Upsala	29.55	750.6	29.64	752.8	59.2	15.1	51	SE	17.4	7.8	.....	.....	10	.....	.....	0.035	0.9	.....	Nils Ekholm
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.47	723.2	29.86	758.4	68.9	20.5	23	WSW	.....	.....	4	.....	8	.....	.....	0	0	Covered	The Observatory.
Zurich	‡ 28.20	716.3	29.80	755.8	68.0	20.0	48	W	.....	.....	6	.....	5	.....	.....	0.126	3.2	Lightly cl'dy	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.80	756.8	59.5	15.3	85	SW	7	3.0	.....	.....	10	.....	SW	0.339	8.6	Raining	The Observatory.
Valona	.....	.....	29.98	761.5	68.4	20.2	.....	SW	.....	.....	1	.....	2	.....	.....	0	0	Slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.88	759.0	76.1	24.5	59	WSW	.....	.....	3	.....	1k	.....	SW	0	0	.....	Prof. C. V. A. van Dyck.

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

UNITED STATES SERIES.

By authority of the Secretary of War.

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

Albany, New York	29.61	752.1	29.69	754.1	59.5	15.3	82	W	1	0.4			10n		SW	0.45	11.4	Light rain	
Alpena, Michigan	29.32	744.7	29.96	761.0	48	8.9	78	N	9	4.0		0	0			0.15	3.8	Clear	
Atlanta, Georgia	28.68	728.5	29.78	756.4	65.0	18.3	52	NW	10	4.5		0	0			0	0	Clear	
Atlantic City, New Jersey	29.62	752.3	29.64	752.8	61	16.1	88	N	12	5.4		5k	0	W		0.11	2.8	Fair	
Augusta, Georgia	29.59	751.6	29.78	756.4	70.0	21.1	66	NW	6	2.7		0	0			0	0	Clear	
Baltimore, Maryland	29.65	753.1	29.70	754.4	66	18.9	64	NW	7	3.1		8cs;k	0	W;NW		0.03	0.8	Fair	
Barnegat, New Jersey	29.61	752.1	29.63	752.6	55	12.8	100	NE	12	5.4			10n		N	0.16	4.1	Light rain	
Bismarck, Dakota	28.02	711.7	29.88	758.9	56	13.3	87	NE	6	2.7		5c	0	W		0.15	3.8	Fair	
Boise City, Idaho	27.24	691.9	30.20	767.1	38.1	3.4	63	NW	2	0.9		0	0			0	0	Clear	
Boston, Massachusetts	29.62	752.3	29.77	756.1	46.3	7.9	96	NE	10	4.5			Fg			0.20	5.1	Dense fog	
Brackettville, Texas	28.75	730.2	29.78	756.4	66	20.0	90	E	4	1.8			10ks			0	0	Cloudy	
Brownsville, Texas	29.87	758.7	29.91	759.7	73	22.8	90	SE	4	1.8		5ck	0	E		0	0	Fair	
Buffalo, New York	29.06	738.1	29.74	755.4	48	8.9	97	W	3	1.3			10n			0.13	3.3	Light rain	
Burlington, Vermont	29.42	747.3	29.70	754.4	51.5	10.8	97	N	7	3.1			10s		NE	0.22	5.6	Cloudy	
Cairo, Illinois	29.61	752.1	29.99	761.7	63	17.2	67	NE	12	5.4		0	0			0	0	Clear	
Campo, California	27.32	693.9	29.89	759.2	50	10.0	79	W	2	0.9			10s			0	0	Cloudy	
Camp Thomas, Arizona	27.10	688.3			54	12.2	87	Calm			0	0	0			Inap.	Inap.	Clear	
Cape Henry, Virginia	29.64	752.8	29.66	753.4	65	18.3	84	NW	12	5.4		5k	0	NW		0.28	7.1	Fair	
Cape May, New Jersey	29.61	752.1	29.64	752.8	62	16.7	83	N	8	3.6			10ks		NW	0	0	Cloudy	
Castroville, Texas	29.14	740.1	29.83	757.7	64	17.8	78	W	3	1.3			10s			0	0	Cloudy	
Cedar Keys, Florida	29.82	757.4	29.84	757.9	77	25.0	82	W	10	4.5		0	2ks		W	0	0	Clear	
Champaign, Illinois	29.20	741.7	30.00	762.0	50	10.0	79	N	14	6.3		0	0			0	0	Clear	
Charleston, S. Carolina	29.66	753.4	29.71	754.6	74	23.3	81	N	11	4.9		0	0			0.20	5.1	Clear	
Charlotte, N. Carolina	28.89	733.8	29.65	753.1	70.0	21.1	40	N	6	2.7		0	0			0.86	21.8	Clear	
Chattanooga, Tennessee	29.05	737.9	29.83	757.7	63	17.2	62	NW	4	1.8		0	0			Inap.	Inap.	Clear	
Cheyenne, Wyoming	23.93	607.8	29 87	758.7	53	11.7	54	N	12	5.4		0	0			Inap.	Inap.	Clear	
Chicago, Illinois	29.32	744.7	30.00	762.0	54.2	12.3	67	N	11	4.9		0	0			0	0	Clear	
Chincoteague, Virginia	29.62	752.3	29.64	752.8	66	18.9	74	N	18	8.0		5k	0	W		0	0	Fair	
Cincinnati, Ohio	29.27	743.4	29.91	759.7	56	13.3	63	N	6	2.7		10cs	0	NW		0	0	Cloudy	
Cleveland, Ohio	29.17	740.9	29.89	759.2	45.3	7.4	90	N	13	5.8			10s		N	0	0	Cloudy	
Coleman City, Texas	28.14	714.7	29.77	756.1	60	15.6	82	Calm	0	0		2c	0	SW		0	0	Fair	
Columbus, Ohio	29.03	737.3	29.80	758.4	54	12.2	74	N	9	4.0		10k	0	NW		0	0	Cloudy	
Concho, Texas	28.05	712.5	29.71	754.6	57	13.9	75	Calm	0	0		2c	0			0	0	Clear	
Corsicana, Texas	29.47	748.5	29.92	760.0	71	21.7	71	W	4	1.8		0	2s			0	0	Clear	
Davenport, Iowa	29.43	747.5	30.05	763.3	57	13.9	63	NE	4	1.8		0	0			0	0	Clear	
Dayton, Washington T'y	28.48	723.4	30.20	767.1	38.9	3.8	39	S	1	0.4		0	0			0	0	Clear	
Deadwood, Dakota	25.31	642.9			51	10.6	86	W	1	0.4			10n			0.08	2.0	Light rain	
Decatur, Texas	28.75	730.2	29.87	758.7	74	23.3	59	SE	4	1.8		5ck	0	SE		0	0	Fair	
Delaware Breakwater, Del.	29.64	752.8	29.66	753.4	64	17.8	94	NW	7	3.1		0	8s		SW	0	0	Cloudy	
Denison, Texas	29.16	740 7	29.92	760.0	74	23.3	81	N	1	0.4		0	0			0	0	Clear	
Denver, Colorado	24.66	626.4	29.88	758.9	53.8	12.1	55	S	2	0.9		2ck	0	Calm		0	0	Clear	
Des Moines, Iowa	29.16	740.7	30.02	762.5	58	14.4	76	S	6	2.7		5k	0			0	0	Fair	
Detroit, Michigan	29.23	742.4	29.93	760.2	48.2	9.0	85	N	11	4.9			10s		E	0.03	0.8	Cloudy	
Dodge City, Kansas	27.32	693.9	29.53	750.0	62	16.7	83	S	5	2.2		0	0			0	0	Clear	
Dubuque, Iowa	29.36	745.7	30.00	763.5	54.2	12.3	61	NE	2	0.9		0	0			0	0	Clear	
Duluth, Minnesota	29.45	748.0	30.13	765.3	46	7.8	77	E	1	0.4		0	0			0	0	Clear	
Eagle Pass, Texas	29.14	740.1	29.85	758.2	68	20.0	84	Calm	0	0		0	5s		SE	0	0	Fair	
Eagle Rock, Idaho	25.23	640.8	29.88	758.9	41	5.0	65	SW	22	9.8		5cs	2s	SW	SW	0	0	Fair	
Eastport, Maine	29.88	758.9	29.94	760.5	44	6.7	77	NE	26	11.6			10s		NE	0.02	0.5	Cloudy	
El Paso, Texas	26.16	664.5			59	15.0	70	NE	1	0.4		0	1s			0.26	6.6	Clear	
Erie, Pennsylvania	29.09	738.9	29.79	756.7	48	8.9	85	NW	13	5.8			10s		NW	0.23	5.8	Cloudy	
Escanaba, Michigan	29.42	747.3	30.08	764.0	50	10.0	65	N	11	4.9		0	0			Inap.	Inap.	Clear	
Florence, Arizona	28.31	719.1	29.91	759.7	60	15.6	77	NE	1	0.4		0	0			0	0	Clear	
Fort Apache, Arizona	24.95	633.7	30.40	772.1	43	6.1	92	E	2	0.9		0	0			0.20	5.1	Clear	
Fort Assinnaboine, Montana	27.21	691.1			45	7.2	53	W	9	4.0		5c	0	Calm		0	0	Fair	
Fort Bennett, Dakota	28.14	714.7			59	15.0	88	SE	42	18.8			10n		W	0.29	7.4	Light rain	
Fort Benton, Montana																			
Fort Buford, Dakota	27.89	708.4	29.70	754.4	48	8.9	93	NW	27	12.1		10cs	0	Calm		0.02	0.5	Cloudy	
Fort Custer, Montana	26.94	684.3			37	2.8	90	N	2	0.9			10n		Calm	0.17	4.3	Light rain	
Fort Davis, Texas	25.14	638.5	30.10	764.5	60	15.6	65	SW	4	1.8		0	0			0	0	Clear	
Fort Elliott, Texas	27.20	690.9	29.41	747.0	62	16.7	61	S	16	7.2		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.38	746.2	29.90	759.4	67	19.4	89	Calm	0	0		1c	0	S		0.90	22.9	Clear	
Fort Grant, Arizona	25.15	638.8	29.95	760.7	58	14.4	42	E	5	2.2		0	0			0.01	0.3	Clear	
Fort Griffin, Texas	28.59	726.2	29.81	757.2	65.2	18.4	78	Calm	0	0		0	0			0	0	Clear	
Fort Keogh, Montana	27.47	697.7			48	8.9	62	NW	17	7.6			10s			0.02	0.5	Cloudy	
Fort Macon, North Carolina	29.03	752.6	29.04	752.8	70	21.1	85	NW	7	3.1		0	Hz		Calm	0.11	2.8	Clear	
Fort McKavett, Texas	27.70	703.6	29.57	751.1	61.1	16.2	82	SE	3	1.3		1cs	0			0	0	Clear	
Fort Missoula, Montana	26.83	681.5			38	3.3	72	N	2	0.9		0	0			0	0	Clear	
Fort St. Michaels																			
Fort Shaw, Montana	26.45	671.8			31	— 0.6	58	W	7	3.1		0	0			0	0	Clear	
Fort Sill, Indian Territory	28.71	729.2	29.78	756.4	66	18.9	79	N	4	1.8		1c	0	W		0	0	Clear	
Fort Stevenson, Dakota	27.98	710.7			62	16.7	83	NE	6	2.7		2c	0	Calm		0.04	1.0	Clear	
Fort Verde, Arizona					55	12.8	68	S			1	5k	0	SW		0.06	1.5	Fair	
Fredericksburg, Texas	28.22	710.8	29.76	755.9	58	14.4	88	W	1	0.4		2ck	0			0	0	Fair	
Galveston, Texas	29.93	760.2	29.97	761.2	74	23.3	81	W	5	2.2		1k	Hz			0	0	Dense haze	
Grand Haven, Michigan	29.35	745.5	29.99	761.7	56	13.3	75	Calm	0	0		c	0			0	0	Clear	
Hatteras, North Carolina	29.03	752.6	29.05	753.1	70	21.1	85	S	14	6.3		0	0			Inap.	Inap.	Clear	
Helena, Montana	25.87	657.1			47	8.3	48	S	6	2.7		c	0			0	0	Clear	
Henrietta, Texas	28.91	734.3	29.80	756.9	68	20.0	84	SE	2	0.9		c	0			0	0	Clear	
Indianapolis, Indiana	29.17	740.9	29.96	761.0	51	10.6	72	N	8	3.6		0	0			0	0	Clear	
Indianola, Texas	29.95	760.7	29.98	76..5	72.8	22.7	85	SE	2	0.9		0	2ks		S	0	0	Fair	
Jacksboro, Texas	28.77	730.7	29.86	758.4	68	20.0	74	S	1	0.4		1cs	0	S		0	0	Clear	
Jacksonville, Florida	29.74	755.4	29.78	756.4	81	27.2	67	SW	6	2.7		0	0			0	0	Clear	
Keokuk, Iowa	29.39	746.5	30.03	762.7	55.4	13.0	74	E	5	2.2		2cs;k	0	Calm		0	0	Clear	
Key West, Florida	29.00	751.8	29.93	760.2	78.4	25.8	73	NW	12	5.4		2k	0	NW		0	0	Fair	
Kittyhawk, North Carolina	29.66	753.4	29.08	753.9	70	21.1	75	W	8	3.6		8c;k	0	W;N		0	0	Fair	
Knoxville, Tennessee	28.85	732.8	29.83	757.7	60	15.6	66	Calm	0	0		0	0			Inap.	Inap.	Clear	
La Crosse, Wisconsin	29.32	744.7	30.00	763.5	58.2	14.6	76	E	4	1.8		0	0			0	0	Clear	
La Mesilla, New Mexico	20.03	661.2	30.18	766.6	56	13.3	87	N	2	0.9		0	0			0.25	6.3	Clear	
Laredo, Texas	29.40	748.3	29.79	756.7	72	22.2	90	SE	2	0.9		0	0			0	0	Clear	
Leavenworth, Kansas	29.11	739.4	29.92	760.0	68	20.0	56	SE	4	1.8		1cs	0			0	0	Clear	
Lewiston, Idaho	29.38	746.2	30.04	763.0	40	4.4	56	E	1	0.4		0	5s		Calm	0	0	Fair	
Little Rock, Arkansas	29.02	752.3	29.93	760.2	68	20.0	84	NW	1	0.4		0	0			0	0	Clear	
Los Angeles, California	29.56	750.8	29.92	760.0	59.3	15.2	88	Calm	0	0			10s		Calm	0	0	Cloudy	
Louisville, Kentucky	29.34	745.2	29.89	759.2	55	12.8	68	N	14	6.3		0	0			0	0	Clear	
Lynchburg, Virginia	29.03	737.3	29.68	753.9	68	20.0	47	NW	5	2.2		0	0			0	0	Clear	
Madison, Wisconsin	29.04	737.6	30.02	762.5	51	10.6	79	NW	8	3.6		0	0			0	0	Clear	
Marquette, Michigan	29.41	747.0	30.11	764.8	53	11.7	42	NW	8	3.6		0	0			0.03	0.8	Clear	
Mason, Texas	28.31	719.1	30.05	763.3	58.1	14.5	94	SW	2	0.9		1c	0	W		0	0	Clear	
Memphis, Tennessee	29.02	752.3	29.94	760.5	73	22.8	55	Calm	0	0		0	0			0	0	Clear	
Milwaukee, Wisconsin	29.28	743.7	30.00	762.0	55	12.8	56	N	6	2.7		0	0			0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.83	757.7	29.90	759.4	71.5	21.9	72	N	7	3.1	.....	1k	o	.....	.....	0.05	1.3	Clear.	
Montgomery, Alabama	29.67	753.6	29.89	759.2	70.1	21.2	61	NW	3	1.3	.....	o	o	.....	.....	o	o	Clear.	
Moorhead, Minnesota	28.98	736.1	29.93	760.2	53.2	11.8	67	SE	16	7.2	.....	.....	10s	.....	SE	o	o	Cloudy.	
Morgantown, W. Virginia	28.80	731.5	29.70	755.9	57	13.9	69	N	13	5.8	.....	.....	10s	.....	NW	o	o	Cloudy.	
Mt. Washington, N. H.	23.60	599.4	29.96	761.0	34	1.1	95	SE	26	11.6	.....	.....	10n;fg	.....	SE	1.14	29.0	Light rain	
Nashville, Tennessee	29.37	740.0	29.88	758.9	63.5	17.5	64	W	5	2.2	.....	o	o	.....	.....	o	o	Clear.	
New Haven, Connecticut	29.57	751.1	29.08	753.9	52	11.1	93	NE	15	6.7	.....	.....	10n	.....	NE	0.04	1.0	Light rain	
New London, Connecticut	29.64	752.8	29.69	754.1	52	11.1	93	SE	7	3.1	.....	.....	10s	.....	SE	0.04	1.0	Cloudy.	
New Orleans, Louisiana	29.86	758.4	29.91	759.7	76.5	24.7	75	NW	5	2.2	.....	o	o	.....	.....	o	o	Clear.	
Newport, Rhode Island	29.67	753.0	29.72	754.9	50.0	10.0	96	N	11	4.9	.....	.....	Fg	.....	.....	0.28	7.1	Dense fog	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	29.63	752.6	29.66	753.4	48.5	9.2	100	NE	22	9.8	.....	.....	Fg	.....	Calm	0.12	3.0	Dense fog	
New York, New York	29.49	749.0	29.66	753.4	56.5	13.6	97	E	16	7.2	.....	.....	10n;fg	.....	E	0.24	6.1	Light rain	
Norfolk, Virginia	29.60	751.8	29.66	753.4	67	19.4	74	NE	16	7.2	.....	8ck	o	NW	.....	Inap.	Inap.	Fair	
North Platte, Nebraska	26.91	684.3	29.40	746.7	63	17.2	75	E	9	4.0	.....	2c	o	W	.....	o	o	Clear.	
Olympia, Washington T'y	30.30	769.0	30.34	770.6	36.0	2.2	95	NE	2	0.9	.....	.....	Fg	.....	Calm	o	o	Dense fog	
Omaha, Nebraska	28.83	732.3	29.89	759.2	64	17.8	77	SE	12	5.4	.....	5cs	1ks	.....	SW	o	o	Cloudy.	
Oswego, New York	29.39	746.5	29.71	754.6	45.4	7.4	97	N	4	1.8	.....	.....	Fg	.....	.....	0.11	2.8	Dense fog	
Pensacola, Florida	29.84	757.9	29.87	758.7	76	24.4	69	N	10	4.5	.....	o	o	.....	.....	o	o	Clear.	
Philadelphia, Pa	29.61	752 1	29.66	753.4	59	15.0	76	NE	8	3.6	.....	10k	Fg	W	.....	0.31	7.9	Cloudy.	
Phœnix, Arizona	28.72	729.5	30.49	774.4	62	16.7	83	Calm	o	o	.....	o	o	.....	.....	0.12	3.0	Clear.	
Pike's Peak, Colorado	17.81	452 4	30.02	762.5	25	— 3.9	50	SW	26	11.6	.....	2cf	o	.....	.....	0.03	0.8	Clear.	
Ploche, Nevada	23.96	608.0	29.73	755.1	46	7.8	92	N	2	0.9	.....	.....	10s	.....	N	0.01	0.3	Cloudy.	
Pittsburg, Pennsylvania	28.99	736.3	29.79	756.7	52.8	11.6	68	N	11	4.9	.....	10k	o	NW	.....	o	o	Cloudy.	
Port Eads, Louisiana	29.90	759.4	29.90	759.4	75.0	23.9	86	NW	10	4.5	.....	o	Hz	.....	Calm	o	o	Clear.	
Port Huron, Michigan	29.24	742.7	29.90	759.4	44.6	7.0	100	N	13	5.8	.....	.....	10ks	.....	NW	0.12	3.0	Cloudy.	
Portland, Maine	29.80	756.9	29.85	758.2	46	7.8	92	NE	15	6.7	.....	.....	10n	.....	Calm	0.75	19.0	Light rain	
Portland, Oregon	30.24	768.1	30.32	770.1	46.0	7.8	72	N	9	4.0	.....	o	o	.....	.....	o	o	Clear.	
Portsmouth, N. Carolina	.....	.....	.....	.....	71	21.7	75	W	7	3.1	.....	2k	o	W	.....	0.06	1.5	Clear.	
Prescott, Arizona	24.08	620.9	30.04	763.0	44	6.7	84	S	2	0.9	.....	5k	o	S	.....	0.29	7.4	Fair	
Punta Rassa, Florida	29.85	758.2	29.87	758.7	78.5	25.8	78	W	14	6.3	.....	.....	10ks	.....	W	o	o	Cloudy.	
Red Bluff, California	29.51	749.5	29.84	757.9	66.0	18.9	28	N	14	6.3	.....	o	o	.....	.....	o	o	Clear.	
Rio Grande City, Texas	29.72	754.9	29.93	760.2	73	22.8	85	SE	.....	.....	1	o	o	.....	.....	o	o	Clear.	
Rochester, New York	29.11	739.4	29.72	754.9	47	8.3	100	NE	6	2.7	.....	.....	10n	.....	Calm	0.17	4.3	Light rain	
Roseburg, Oregon	29.66	753.4	30.25	768.3	42.8	6.0	74	N	4	1.8	.....	o	o	.....	.....	o	o	Clear.	
Sacramento, California	29.74	755.4	29.81	757.2	64.8	18.2	68	NE	5	2.2	.....	o	o	.....	.....	o	o	Clear.	
St. Louis, Missouri	29.44	747.8	30.01	762.2	56.0	13.3	63	NE	11	4.9	.....	o	o	.....	.....	o	o	Clear.	
St. Paul, Minnesota	29.20	741.7	30.02	762.5	54	12.2	73	E	6	2.7	.....	5cs	o	W	.....	o	o	Fair	
Salt Lake City, Utah	25.54	648.7	29.87	758.7	53	11.7	86	Calm	o	o	.....	.....	10n	.....	.....	1.52	38.9	Light rain	
San Antonio, Texas	29.25	742.9	29.94	760.5	62.0	16.7	94	Calm	o	o	.....	.....	9s	.....	SE	o	o	Cloudy.	
San Diego, California	29.81	757.2	29.88	758.9	58.5	14.7	88	Calm	o	o	.....	.....	10s	.....	.....	o	o	Cloudy.	
Sandusky, Ohio	29.24	742.7	29.90	759.4	50	10.0	79	NW	24	10.7	.....	.....	10s	.....	.....	0.08	2.0	Cloudy.	
Sandy Hook, New Jersey	29.02	752.3	29.05	753.1	57.5	14.2	97	E	19	8.5	.....	.....	10n	.....	.....	0.42	10.7	Light rain	
San Francisco, California	29.82	757.4	29.88	758.9	54	12.2	86	W	3	1.3	.....	.....	Fg	.....	W	o	o	Dense fog	
Santa Fé, New Mexico	23.29	591.0	29.83	757.7	50	10.0	39	NW	1	0.4	.....	o	o	.....	.....	o	o	Clear.	
Savannah, Georgia	29.66	753.4	29.74	755.4	75.5	24.2	58	NW	9	4.0	.....	o	o	.....	.....	o	o	Clear.	
Shreveport, Louisiana	29.73	755.1	29.90	761.0	75	23.9	77	NE	3	1.3	.....	5c;k	o	.....	.....	o	o	Fair	
Silver City, New Mexico	24.23	615.4	30.41	772.4	44	6.7	84	Calm	o	o	.....	o	o	.....	.....	0.28	7.1	Clear.	
Sitka, Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Inap.	Inap.	.....	
Smithville, North Carolina	29.01	752.1	29.05	753.1	71	21.7	85	NW	4	1.8	.....	o	Hz	.....	.....	0.21	5.3	Clear.	
Socorro, New Mexico	25.39	644.9	29.45	748.0	56	13.3	69	N	1	0.4	.....	o	o	.....	.....	0.05	1.3	Clear	
Spokane Falls, Wash. Ter.	28.10	713.3	30.01	762.2	31	— 0.6	68	Calm	o	o	.....	o	5s	.....	.....	o	o	Fair	
Springfield, Illinois	29.37	746.0	30.04	763.0	55	12.8	68	NE	4	1.8	.....	o	o	.....	.....	o	o	Clear.	
Springfield, Massachusetts	29.01	752.1	29.74	755.4	51	10.6	93	NE	6	2.7	.....	.....	10n	.....	NE	0.09	2.3	Light rain	
Stockton, Texas	20.88	682.7	29.88	758.9	60.8	16.0	82	SE	8	3.6	.....	o	o	.....	.....	o	o	Clear.	
St. Vincent, Minnesota	29.12	739.6	29.90	759.4	55	12.8	68	SE	12	5.4	.....	10cs	o	W	.....	o	o	Cloudy.	
Thatcher's Island, Mass	29.73	755.1	29.78	756.4	45	7.2	100	SE	17	7.6	.....	.....	Fg	.....	.....	0.44	11.2	Dense fog	
Toledo, Ohio	29.24	742.7	29.92	760.0	51	10.6	72	N	8	3.6	.....	.....	10ks	.....	NW	o	o	Cloudy.	
Tucson, Arizona	27.41	696.2	29.96	761.0	62	16.7	56	SE	3	1.3	.....	o	o	.....	.....	o	o	Clear.	
Umatilla, Oregon	29.94	760.5	30.45	773.4	44.5	6.9	49	W	2	0.9	.....	o	o	.....	.....	o	o	Clear.	
Uvalde, Texas	28.97	735.8	29.77	756.1	66	18.9	79	Calm	o	o	.....	.....	10s	.....	Calm	o	o	Cloudy.	
Vicksburg, Mississippi	29.70	754.4	29.95	760.7	71	21.7	85	N	3	1.3	.....	o	o	.....	.....	o	o	Clear.	
Visalia, California	29.41	747.0	29.77	756.1	61	16.1	61	SE	4	1.8	.....	5c	o	.....	.....	o	o	Fair	
Washington, D. C.	29.59	751.6	29.70	754.4	63	17.2	62	N	3	1.3	.....	2k	o	N	.....	0.12	3.0	Fair	
Wickenburg, Arizona	.....	.....	.....	.....	58	14.4	64	Calm	.....	.....	o	5k	o	.....	.....	o	o	Fair	
Wilmington, N. Carolina	29.59	751.6	29.04	752.8	70	21.1	85	N	4	1.8	.....	1c	o	Calm	.....	1.18	30.0	Clear.	
Winnemucca, Nevada	25.00	651.8	30.02	762.5	30	2.2	29	NE	8	3.6	.....	o	o	.....	.....	o	o	Clear.	
Wood's Holl, Mass.	29.07	753.6	29.70	754.4	51	10.6	93	N	11	4.9	.....	.....	Fg	.....	N	0.16	4.1	Dense fog	
Yankton, Dakota	28.62	720.9	29.87	758.7	62	16.7	83	E	8	3.6	.....	o	o	.....	.....	o	o	Clear.	
Yuma, Arizona	29.05	753.1	29.79	756.7	67.1	19.5	69	S	4	1.8	.....	o	o	.....	.....	o	o	Clear.	
Sub-Series.																			
Bogota, U. S. Columbia	22.09	561.1	.....	.....	51.0	10.6	84	Calm	o	o	.....	5k	o	.....	.....	o	o	Fair	Thomas Herran
Buff Bay Town, Jamaica	29.70	754.4	30.01	762.2	70	24.4	90	E	.....	.....	.....	o	o	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.92	760.0	29.98	761.5	78	25.6	69	NW	2.4	1.1	.....	o	o	.....	.....	o	o	Clear.	A. Van Cangehem, Ass't.
Jakobshavn, Greenland	29.84	758.0	29.89	759.3	37.0	2.8	.....	Calm	.....	.....	o	.....	.....	.....	.....	o	o	.....	K. V. Möller.
Kingston, Jamaica, W. I.	29.90	759.4	29.91	759.7	77 3	25.2	66	N	2	0.9	.....	o	o	.....	.....	o	o	Fine	Robert Johnstone
Navassa, W. I.	29.82	757.4	29.90	759.4	79	26.1	78	NE	8	3.6	.....	8k	2n	NE	NE	o	o	Fair	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	79	26.1	87	E	.....	.....	2	5k	8ks	E	.....	o	o	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Colmbia	29.43	747.5	29.99	761.7	76	24.4	100	Calm	.....	.....	o	.....	10n	.....	Calm	1.16	29.5	Raining	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	77.0	25.	.....	SE	.....	.....	2	2ck	1ks	SE	SE	o	o	.....	Earl Flint.
Santiago de Cuba, W. I.	29.88	758.9	29.90	759.4	75	23.9	76	Calm	o	o	.....	o	o	.....	.....	o	o	Clear	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	30.08	764.0	30.13	765.3	33.0	0.6	95	NE	10	4.5	.....	4k	Fg	NE	.....	o	o	Foggy	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.	Force	Amount and kind.		Direction.							
									Up'er	Lo'er	Upper.	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross, N. 33° 50′, E. 128° 53′	29.97	761.2	67	19.4	...	Calm		0.		2							D. clouds	Comm. A. J. Errington.
H. M. S. Alert																		Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.93	760.2	68.5	20.3	56	SW		1		7							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																		Capt. Hon. W. H. Joliffe.
H. M. S. Arab																		Comm. R. W. Stopford.
H. M. S. Bacchante																		Capt. Lord C. Scott.
H. M. S. Beacon, N. 23° 38′, E. 58° 36′	29.79	756.7	90	32.2	47	NW		1		2	W						D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			60	15.6		SSW		1		10					1	SSE	Raining	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	29.99	761.7	77	25.0	95	SSE		2		10							Raining	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	30.00	762.0	67	19.4	74	NW		2		7	W						D. clouds	Com. F. W. Richards.
H. M. S. Champion, Ascension I'ds, Africa	29.98	761.5	81	27.2	91	SE		4		4					2	WSW	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																		Capt. H. T. Gerfell.
H. M. S. Comus, N. 29° 47′, E. 122° 43′	29.89	759.2	62	16.7	100	N		2		10							Foggy	Capt. J. W. East.
H. M. S. Condor																		Comm. F. W. Egerton.
H. M. S. Coquette																		Lt. Comm. J. L. Barr.
H. M. S. Cruizer, Syracuse, Sicily	29.93	760.2	70	21.1		SSE		3		4	ESE				2	NNW	D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa																		Capt. S. Long.
H. M. S. Danae, S. 14° 32′, W. 6° 47	30.10	764.5	75	23.9	95	E		3-4		4					4	SSE	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring, N. 6° 43′, E. 78° 30′	29.84	757.9	84	28.9		WSW		4		2	WSW				2	WSW	D. clouds	Capt. F. J. Eliott.
H. M. S. Dido																		Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.83	757.7	74	23.3		SSE		1-2		3	SSE						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																		Capt. Hulton.
H. M. S. Druid, N. 46° 36′, W. 53° 12′	30.15	765.8	40	4.4	82	NE		3-4		7	NE				1	E	Squally	Capt. W. R. Kennedy.
H. M. S. Dryad																		Capt. John Hext.
H. M. S. Eclipse																		Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 4° 41′, E. 104° 47′	29.79	756.7	84	28.9		S		1									Misty	Comm. C. Johnstone.
H. M. S. Emerald, S. 8° 05′, E. 178° 30′	29.86	758.4	83	28.3	87	Calm		0		3					2	SE	D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																		Capt. L. Ching.
H. M. S. Euryalus, N. 8° 13′, E. 81° 37′	29.75	755.6	86	30.0	76	SSW		1		10					2	SW	Overcast	Capt. R. D. King.
H. M. S. Falcon																		Comm. W. H. C. Selby.
H. M. S. Fantome, N. 42° 45′, W. 58° 47′	30.06	763.5	49	9.4		NE		2-3		9	ENE				3	ENE	D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn, N. 14° 03′, E. 42° 44′	29.73	755.1	93	33.9	83	S		3-4		4	S				2	SW	D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo																		Comm. R. N. Custance.
H. M. S. Flying Fish, Off Hong-Kong, China	29.84	757.9	77	25.0	91	ENE		1		10					1	E	Misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 39° 45′, W. 138° 30′	30.42	772.7	54	12.2	80	SSW		3		9					1	WNW	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet																		Capt. L. F. Jones.
H. M. S. Griffon, N 23° 09′, W. 82° 22′	29.97	761.2	81	27.2	85	N		1									Blue sky	Comm. J. Ingles.
H. M. S. Hecla																		Capt. T. L. H. Ward.
H. M. S. Humber, N. 22° 10′, W. 72° 25′	29.93	760.2	78	25.6		Calm		0		0					Sm'h		Blue sky	Capt. J. L. Way.
H. M. S. Inconstant, S. 40° 16′, E. 132° 10′	29.89	759.2	53.5	11.9	77	SSW		3-5		1	SSW				3	W	Squally	Capt. C. C. P. Fitzgerald.
H. M. S. Iris, N. 36° 34′, E. 180 43′	30.00	762.0	71	21.7	71	WSW		3		4	WSW				2	WNW	D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 26° 10′, E. 119° 55′	29.89	759.2	67	19.4	79	NE		1-2		8					1-2	SW	Misty	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.91	759.7	65	18.3		SSE		1		8	N						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																		Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	29.90	759.4	70	21.1		Calm		0		10							Overcast	Capt. S. Grove.
H. M. S. London																		Capt. C. J. Brownrigg.
H. M. S. Magpie, Now Chow I'd, China Sea	29.76	755.4	79.3	26.3	85	SE		1		10							Misty	Capt. A. Carpenter.
H. M. S. Midge, Taku, China	* 29.85	758.2				NW		2		2	SW						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 36° 07′, W. 5° 21′	30.03	762.7	65	18.3	84	WNW		2		4	ENE						D. clouds	Capt. H. H. Rawson.
H. M. S. Modeste, N. 1° 20′ E. 105° 56′	29.84	757.9	84	28.9	83	Calm		0		10							Overcast	Capt. J. G. Mead.
H. M. S. Monarch, Goletta, Tunis, N. Africa	30.05	763.3	67	19.4	95	ENE		2		10	ENE						Thund'rst'm	Capt. G. Tryon, C. B

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton.																			
Halifax, Nova Scotia	29.98	761.5	46	7.8	84	ENE			3		10	E				Sm'h		Overcast	Capt. E. B Drummond.
H. M. S. Orontes,																			
Mauritius, Mauritius †	30.06	763.5	77.5	25.3	84	ESE			3-4		9	SSW				3	SSW	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican,																			
N. 8° 40′, W. 79° 05′	29.86	758.4	80.5	26.9		NE			2		6					2	Con.	Showery	Capt. F. R. Dicken.
H. M. S. Penguin,																			
S. 50° 11′, W. 74° 49′	29.96	761.0	41	5.0		NNE			3-4		10							Overcast	Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler,																			
Fernando, Po I'd, Africa	29.90	759.4	81	27.2		WSW			1		10	Calm						D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket,																			
Esquimalt, Vancouvers Id	30.35	770.9	31	— 0.6		Calm			0		1							Blue sky	Capt. V. B. Orlebar.
H. M. S. Ruby,																			
S. 4° 37′, E. 55° 27′	29.94	760.5	78.4	25.8	84	ESE			1		10							Overcast	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis,																			Capt. G. O. Twiss.
N. 36° 36′, W. 2° 32′	30.07	763.8	62	16.7	88	W			3		3	WSW				Sm'h		D. clouds	
H. M. S. Shannon,																			Capt. J. D'Arcy.
S. 2° 16′, W. 25° 42′	30.05	763.3	82	27.8	83	ESE			4		3	ESE				4	ESE	D. clouds	
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis,																			Capt. P. W. Stephens.
S. 14° 34′, W. 146° 56′	29.89	759.2	81	27.2	87	ESE			3		2	S				2	SE	D. clouds	
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph,																			
Coquimbo, Chili, S. A	30.09	764.3	54	12.2	80	NNE			1		0							Blue sky	Capt. A. H. Markham.
H. M. S. Turquoise,																			
S. 26° 00′, W. 71° 10′	30.04	763.0	63	17.2	83	SSE			4		5	SSE				2	S	D. clouds	Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent,																			
Port Royal, Jamaica, W. I.			77	25.0		Calm			0		3							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene,																			
S. 36° 24′, E. 167° 16′	30.30	769.6	65	18.3	84	SSW			2-3		3	N				1	S	D. clouds	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark,																			
N. 28° 20′, E. 51° 15′	29.84	757.9	81.5	27.5	81	NW			3		4	NW				3	NW	Misty	Capt. T. P. Nesham.
H. M. S. Zephyr,																			
N. 30° 36′, E. 122° 03′	29.91	759.7	63	17.2	?	E			1		10							Foggy	Lt. Comm. G. W. Pollar
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo,																			
Mossamedes, Benguela	30.02	762.5	70.7	21.5	62	W			5		0					2		Blue sky	Carlos Candid dos Reis, Comd't.
Quanza,																			
N. 29° 17′, W. 19° 34′	30.38	771.6	70.7	21.5	78	ENE			3		4		NE			2	NE	D. clouds	Carlos M. de Silva Costa, Comd't.
Rio Lima,																			
Santiago, Cape Verd Id's	30.00	762.0	77.4	25.2	83	NE			5		5					2	SE	D. clouds	S. C da Silva Costa, Comd't.
Sado																			G. A de Brito Capello, Comd't.
Tamega,																			
Macao, China	29.84	757.9	75.1	24.5	92	Calm			0		10		S	20	hours			Thnd'r str'm	P. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	29.93	760.2	75	23.9	77	NNE	4	1.8			2		NE	0	0			Fair	
N. Yard, Portsmouth, N. H.	29.80	756.9	46	7.8	92	NE	12	5.4		10c	0			0.3	8.			Rainy	
Naval Hospital, Yokahama, Japan	29.86	758.4	64	17.8	92	SW			1		10		W	0	0			Cloudy	
Adams, Chimbote, Peru	29.79	756.7	69	20.6	85	Calm			0		8					Long	SSW	Cloudy	
Alaska, Callao, Peru	29.89	759.2	65	18.3	94	Calm			0		10			0	0	Sm'h		Cloudy	
Alert, Port Lloyd, Bonin Id.*	29.90	759.4	78	25.6	78	S			2		2		Calm			Sm'h		Clear	
Alliance, Norfolk, Va	29.69	754.1	70	21.1	80	N			3		2		NW	Light				Clear	
Ashuelot, Kobe, Japan	29.93	760.2	65	18.3	84	W			1		5		Calm					Fair	
Colorado, New York, N. Y	29.62	752.3	57	13.9	100	NE	10	4.5			10			0.026	0.7			Raining	
Constitution, Norfolk, Va	29.60	751.8	69	20.6	75	N	3	1.3			8		W					Fair	
Franklin, Norfolk, Va	29.62	752.3	69	20.6	70	N	18	8.0			5		NW	0.2	5.			Fair	
Galena, Villafranca, France	29.92	760.0	67	19.4	69	E			1		2		E			Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	29.85	758.2	56	13.3	75	SW	1.2	0.5			8		SW					Fair	
Jamestown, Sitka, Alaska*	30.20	767.1	42	5.6	91	NE			1		2			0	0			Fair	
Kearsarge, Port Royal, S. C	29.75	755.6	74	23.3	76	WNW			2		2					Sm'h		Fair	
Lackawanna, S. 21° 00′, W. 100° 05′.†	30.21	767.3	71	21.7	95	NE			2		10		NE			Sm'h	SE	Cloudy	
Marion, Montevideo, Uruguay	30.11	764.8	55	12.8	87	NE			1		5		Calm	0	0	Sm'h		Fair	
Michigan, Erie, Pennsylvania	29.74	755.4	49	9.4		NE	3	1.3			10		W					Raining	
Minnesota, Newport, R. I	29.71	754.6	53	11.7	100	NNE			4		10		NNE			Sm'h		Foggy	
Monocacy, Yokohama, Japan	30.01	762.2	67	19.4	95	Calm			0		10		Calm					Misty	
New Hampshire, Port Royal, S. C	29.71	754.6	75	23.9	64	NW	5	2.2			0			0	0			Clear	
Nipsic, N. 43° 30′, E. 7° 13′	29.96	761.0	66	18.9	74	S			1		0					Sm'h		Hazy	
Onward, Callao, Peru†	29.94	760.5	66	18.9	94	Calm			0		10		N			Long	W	Cloudy	
Palos, Yokohama, Japan	30.00	762.0	64	17.8	89	WSW			1		10							Cloudy	
Passaic, Washington, D. C	29.87	758.7	59	15.0	94	NW			2		8		NW					Cloudy	
Pensacola, N. 37° 35′, W. 142° 26′	30.40	772.1	59	15.0	82	SE			2-3		2			0	0	Sm'h		Clear	
Portsmouth, Near Fort Norfolk, Va	29.64	752.8	69	20.6	85	NE			6		2		NE			Sm'h		Clear	
Powhatan, N. 34° 43′, W. 75° 47′	29.68	753.9	75	23.9	81	W			3		2		S			Long	SW	Fair	
Quinnebaug, N. 24° 13′, W. 24° 22′	30.20	767.1	73	22.8	72	E			4		8		E			Long	E	Cloudy	
Ranger, N. 15° 48′, W. 97° 15′.*	29.83	757.7	81	27.2	87	ENE			3		2		Calm	0	0	Sm'h		Fair	
Richmond, Yokohama, Japan	30.01	762.2	67	19.4	84	SSW			2		10		SSW	0	0			Cloudy	
Saratoga, Norfolk, Va	29.53	750.0	68	20.0	95	N			2		5		N	0	0			Fair	
Shenandoah, Montevideo, Uruguay.*	30.10	764.5	53	11.7	86	Calm			0		2					Sm'h		Fair	
St. Louis, League Island, Pa	29.20	741.7	60	15.6	44	NE	2	0.9			2		NE	0.35	8.9			Clear	
Swatara, Shanghai, China†*	29.89	759.2	70	21.1	85	SSE			2		8		E					D. clouds	
Tennessee, Hampton Roads, Va	29.67	753.6	68	20.0	79	N	19	8.5			8		WSW	1.29	32.8	Sm'h		Cloudy	
Ticonderoga, S. 45° 01′, W. 110° 18′	29.63	752.6	43	6.1	83	SSE			6		10		S	0.05	1.3	Long	S	Rain & hail	
Trenton, Villafranca, France*	29.91	759 7	72	22.2	67	SE			2		2			0	0	Sm'h		Fair	
Vandalia, Boston Mass	29.75	755.6	49	9.4	93	NNE			2		0							Clear	
Wabash, Boston, Massachusetts	29.81	757.2	47	8.3	85	NNE	9	4.0			10		NNE	0.02	0.5			Misty	
Wachusetts, N. 36° 50′, W. 125° 56′	29.94	760.5	55	12.8	87	N			7-9		2		N			R'gh	N	Fair	
Wyoming, N. 31° 20′, W. 63° 42′	29.91	759.7	70	21.1	90	SW			3		8		SW			Sm'h	SW	Fair	

LINES AND VESSELS.	BAROMETER REDUCED TO SEA-LEVEL.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND.				CLOUDS.				RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		SEA-SWELL.		WEATHER.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. O. J. Russell.
S. S. Bateshire,																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant ‡																			Capt. E. J. Molony.
Chin Yang																			Capt. N. Youlden.
S. S. Cipero,																			
N. 14° 08′, W. 58° 16′	29.98	761.5	81.1	27.3	96	E			3		8					2	E	D. clouds	Capt. W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne,																			
N. 7° 59′, W. 49° 25′	29.99	761.7	80.6	27.0	77	NE			4		7							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart, ‡																			
N. 42° 35′, W. 32° 56′	30.33	770.4	61.5	16.4	83	S			4		6							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow, ‡																			
N. 17° 23′, E. 90° 54′	29.78	756.4	85.0	29.4	79	SSW			2		0							Blue sky	Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randell.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡																			
N. 16° 00′, W. 34° 12′	30.10	764.5	76.5	24.7	77	E			4		3							Misty	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. O. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland, ‡																			
Belfast, Ireland	29.66	753.4				NNW			8		9								Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria, ‡																			
S. 80° 46′, W. 12° 31′	30.03	762.7	80	26.7	78	SE			5		8							Showery	Capt. M. Perry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡																			
N. 80° 4 0′, E. 88° 39′	29.81	757.2	82.0	27.8	89	WSW			4		8							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton, ‡																			
Strait of Bonifacio	30.00	762.0	63	17.2	89	WSW			2		1							Blue sky	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE.																			
A. Schumacher & Co.																			
S. S. Buenos Ayrean,																			
N. 48° 33′, W. 46° 32′	30.05	763.3				WNW			5		8		NW			Mod.	N	Cloudy	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE.																			
Ch. G. Francklyn.																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE.																			
Ismay, Imrie & Co.																			
S. S. Adriatic																			
S. S. Baltic,																			Capt. J. W. Jennings.
N. 45° 01′, W. 44° 42′	29.99	761.7	50	10.0	100	N			3		10						W	Drizzling	Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic,																			
N. 42° 52′, W. 47° 55′ †	29.96	761.0	49	7.2		NE			4		10		NE	24 hours Drizzles		Sm'h		Overcast	Capt. Benj. Gleadell.
S. S. Germanic,																			
Liverpool, England †	29.60	751.8	50	10.0		NW			6		8?		NW	Showers				Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—OF BREMEN.																			
A. Schumacher & Co.																			
S. S. Hermann																			
S. S. Hohenzollern,																			
N. 39° 39′, W. 58° 46′ ‡	29.95	760.7	69.1	20.6		E			3		5		E	0	0	Mod.	E	Fair	Capt. H. Baur.
S. S. Köln,																			
N. 42° 18′, W. 58° 56′	30.07	763.8	53.0	11.7	93	ENE			4-5		10		ENE	10 hours rain	& fog	Mod.	ENE	Cloudy	Capt. Th. Jüngst.
S. S. Leipzig,																			
N. 47° 36′, W. 21° 06′	30.16	766.1	62.0	16.7		SW			3		8		WSW	1 hour		Mod.	WSW; NNE	Fair	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Helmbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 46° 31′, W. 34° 02′....*†	30.17	766.3	57	13.9	94	WSW	.....	.....	6	.....	10	.....	WSW	.....	.....	R'gh	wsw	Foggy	Capt. J. W. Shackford.
S. S. Indiana.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. R. W. Sargent.
S. S. Ohio, N. 41° 50′, W. 43° 50′....†*	30.24	768.1	66	18.9	100	SW	.....	.....	3	.....	5	.....	SW	Light		Mod.	SW	Fair	Wm. Shackford, Chief Off'r.
S. S. Pennsylvania, Kinsale, Ireland.....*	29.89	759.2	64	17.8	68	NW	.....	.....	4	.....	2	.....	NW	.....	.....	Sm'h	W	Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, Guaymas, Mexico.....†	29.76	755.9	72	22.2	76	WNW	.....	.....	1	.....	2	.....	NW	0	0	.....	.....	Clear.....	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, Yokohama, Japan .....†	30.08	764.0	65	18.3	89	S	.....	.....	2	.....	10	.....	.....	0	0	Sm'h	.....	Overcast.....	Capt. H. Davison.
S. S. Gaelic, N. 28° 25′, E. 123° 42′....*†	30.01	762.2	70	21.1	95	NNW	.....	.....	2	.....	8	.....	N	.....	.....	Sm'h	.....	Cloudy.....	Capt. W. H. Kidley.
S. S. Oceanic, N. 44° 49′, E. 175° 14′.....	30.35	770.9	47	8.3	85	S	.....	.....	5	.....	10	.....	SW	0	0	3	SW	Overcast.....	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon.....†	30.19	766.8	48.0	8.9	85	N	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	Clear.....	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. J. N. Ingalls.
S. S. Dakota.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. H. G. Morse.
S. S. Idaho, Puget Sound.....†	30.30	769.6	40	4.4	82	SW	.....	.....	1	.....	Fog	.....	.....	.....	.....	.....	.....	Foggy.....	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 32° 42′, W. 117° 16′...†	29.92	760.0	63	17.2	78	Calm	.....	.....	0	.....	0	.....	.....	0	0	Sm'h	.....	Clear.....	Geo. H. Harrison.
S. S. Senator, San Francisco, Cal.....	.....	.....	53	11.7	93	SW	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	Hazy	Capt. Thos. Wallace.
S. S. State of California, N. 41° 40′, W. 124° 50′...†	29.99	761.7	50	10.0	79	N	.....	.....	4	.....	5?	.....	NW	.....	.....	Short	NW	Clear?.....	Capt. G. Debney.
S. S. Victoria, N. 41° 46′, W. 124° 20′.....†	29.97	761.3	48	8.9	100	NW	.....	.....	6	.....	5	.....	NW	.....	.....	High	NW	Fair	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, Sydney, N. S. Wales.....	30.25	768.3	65	18.3	94	Calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	Clear	A. Bannerman, 2d Officer.
S. S. City of New York, Sydney, N. S. W.....†	30.24	768.1	65	18.3	89	Calm	.....	.....	0	.....	10	.....	Calm	.....	.....	.....	.....	Cloudy.....	Wm. H. Hawes, 2d Officer.
S. S. City of Panama.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. D. S. Austin.
S. S. City of Peking, N. 22° 17′, E. 115° 15′.....†	29.88	758.9	78	25.6	91	ESE	.....	.....	2	.....	8	.....	SE	0	0	Sm'h	.....	Cloudy.....	Capt. G. G. Berry.
S. S. City of Sidney, N. 33° 30′, W. 134° 21′....†	30.33	770.4	59	15.0	70	NNE	.....	.....	6	.....	8	.....	NE	0	0	H'vy.	NE	Cloudy.....	Capt. H. C. Dearborn.
S. S. City of Tokio.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 13° 22′, W. 89° 36′.....†	29.91	759.7	82	27.8	79	ENE	.....	.....	4	.....	5	.....	SE	0.10	2.5	Sm'h	SE	Fair.....	Capt. R. R. Searle.
S. S. Granada, N. 15° 06′, W. 95° 00′.....†	29.86	758.4	83	28.3	83	NNW	.....	.....	4	.....	2	.....	NNW	0	0	Light	SW	Clear.....	Capt. M. Connolly.
S. S. Zealandia, N. 22° 00′, W. 156° 21′.....	30.27	768.8	66	18.9	89	E	.....	.....	3	.....	0	.....	.....	0	0	Sm'h	E	Clear.....	.....
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Sam'l Jackson.
S. S. Nederland, N. 40° 00′, W. 67° 40′....†	29.27	743.4	57	13.9	81	S	.....	.....	1	.....	8	.....	S	2 hours		Sm'h	.....	Hazy.....	A. Fedderson, 2d Officer.
S. S. Rhynland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Wm. Geo. Randle.
S. S. Vaderland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, N. 37° 00′, W. 73° 42′.....	29.59	751.6	69	20.6	85	WNW	5	2.2	.....	.....	10ks	.....	.....	0.02	0.5	Sw'll	S	Cloudy.....	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 22° 10′, W. 54° 03′...*†	30.12	765.0	79	26.1	.....	E	.....	.....	3	.....	10	.....	E	0	0	Sm'h	E	Fair.....	Capt. B. F. Woodbury.
Brigantine George, N. 36° 55′, W. 70° 10′.....†	29.81	757.2	76	24.4	.....	S	.....	.....	7	.....	10	.....	SW	Light		R'gh	SW	Threatening	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Chesapeake bay Md†	29.79	756.7	65	18.3	78	NNW	3	1.3	.....	2c	2s	.....	.....	0.01	0.3	.....	.....	Fine.....	.....
Bark Sunbeam, N. 38° 46′, W. 9° 06′.....†	30.17	766.3	63	17.2	67	N	.....	.....	6	.....	5	.....	N	0	0	.....	.....	Fair	Capt. Jos. Hand.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
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PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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W. B. Hazen

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

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 17, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco																			
‡Nemours			30.14	765.6	70.2	21.2	75	NE			4		0			0	0	Clear	Dr. Ollive.
‡Algiers			30.08	763.9	73.9	23.3	86	NE			1		5			0	0	Cloudy	Raynard.
‡La Calle			30.11	764.9	65.8	18.8	68	NE			2		3			0.370	9.4	Pretty fair	Nicolas.
‡Tunis			30.01	762.3	65.8	18.8	79	NW			4		7			0.020	0.5	Cloudy	Fonfrède.
‡Sfax			29.91	759.7															Jacques.
‡Saida			30.10	764.4															Gau.
‡Tebessa			30.13	765.2	65.5	18.6	50	NW			5		8			0	0	Very cloudy	Dumas.
‡Gerville			30.12	765.1	66.2	19.0	100	WNW			3		10			1.417	36.0	Covered	Watrin.
‡Laghouat																			Lonchamp.
‡Biskra			30.02	762.5	66.6	19.2	48	N			4		1			0.268	6.8	Very fair	Herbin.
			30.11	764.7															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.22	767.6	30.31	769.9	53.7	12.1	81	S	6	2.7			9			0.16	4.1	Raining	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.42	747.2	29.97	761.1	56.5	13.6	67	NE			3		10			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.14	740.1	29.90	759.5	55.4	13.0	73	WNW	4.3	1.9			10			0.035	0.9		Dr. Wierzbicki.
Eperies	28.93	734.7	29.78	756.5	61.9	16.6	61	N			3		9kn			0	0		Julius Mikolik.
Gratz	28.73	729.8	29.97	761.3	56.7	13.7	66	SSW			2		10			0.299	7.6		Andreas Rospini.
‡Hermannstadt	28.37	720.7	29.75	755.7	66.2	19.0	49	N			1		2			0	0		Prof. A Gottschling.
Kremsmunster, Obs'y	28.08	728.4	30.02	762.4	54.3	12.4	64	SW			2		8			0.193	4.9		The Staff.
Lemberg	28.75	730.3	29.71	754.5	66.9	19.4	52	NW			2		4			0.075	1.9		Dr. T. Stanecki.
Pola	29.75	755.6	29.86	758.4	64.0	17.8	63	SE			1		10			0	0		I. R. HydrographicOffice.
Szathmar	29.32	744.6	29.76	756.0	70.2	21.2	37	NW			2		5			0.020	0.5		Beicht Peter, S. J.
Szegedin					65.5	18.6							6						Karl Stancel.
Trieste	29.79	756.6	29.89	759.2	58.5	14.7	55	ENE			3		10			0.083	2.1	Covered	Secco.
Vienna	29.26	743.3	29.98	761.5	55.8	13.8	60	NW			2		10			0.020	0.5		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed May 15, 1882.

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

BRITISH SERIES.

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

Aberdeen	29.50	749.3	29.60	751.8	45.6	7.6	85	SSE	23	10.3			9			0.230	6.3	Squally	W. Boswell.
Armagh, Observatory	29.23	742.4	29.46	748.3	55.0	12.8	90	SW	21	9.4			10					Squally	S. Call.
Bidston, Liverpool Obs'y			29.62	752.3	51.2	10.7	91	S	25	11.2			10					Raining	John Hartnup.
Bolton, Sharples	29.12	739.6	29.66	753.4	45.9	7.7	94	S	18	8.0			10					Raining	Thomas Mackereth.
Bradford, Yorkshire	29.28	743.7	29.67	753.6	46.7	8.2	92	S			2		10			0.17	4.3	Raining	J. McLandsbo ough, F.R.S
Bridgetown, Barbadoes	29.94	760.5	29.96	761.0	85	29.4	72	SE			2		6					Gloomy	Corpl. J. Surgener, A.H.C.
Cardington			29.86	758.4	55.0	12.8	78	SW			2.0		10					Drizzling	John McLaren.
Chatham, School M. E.	29.83	757.7	29.96	761.0	57.1	13.9	53	SW			3		5					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.70	754.4	29.93	760.2	54.9	12.7	91	SW			6		10					Foggy	The Staff.
Fort Napier, Natal	27.69	703.3	29.90	759.4	77.4	25.2	41	Calm			0		2					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.60	751.8	29.83	757.7	89	31.7	88	SW			1		5					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			29.69	754.1	55	12.8	93	N			6		8			0.06	1.5	D. clouds	J. O'Donaghue.
Gibraltar, Mediterranean	30.05	763.3	30.10	764.5	73.4	23.0	77	WSW			3		0					Blue sky	2nd Cpl. C. Baldwin.
Glasgow, Observatory	29.25	743.2	29.46	748.3	46.8	8.2	79	SE			3		10k					D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	29.76	755.9	29.93	760.2	58.7	14.8	84	SW			2		10					Overcast	The Staff.
Guernsey	29.81	757.2	30.03	762.7	54	12.2	80	SW			2		10					Gloomy	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.91	759.7	29.98	760.7	55.0	12.8	58	SW	25	11.2			10					Threatening	The Staff.
Leicester, Museum	29.52	749.8	29.78	756.4	49.8	9.9	87	SW			5		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.72	754.9	29.80	756.9	63.6	17.6	76	SE			2		8			0.90	22.9	Overcast	F. S. Vine, A. H. C.
Nassau, Bahamas	29.84	757.9	29.88	758.9	81.0	27.2	78	W			3		6					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.25	742.9	29.78	756.4	48.0	8.9	90	S			5		10					Raining	John Mac Email.
Oxford, Radcliffe Obs'y	29.67	753.6	29.90	759.4	50.2	10.1	83	S			6		10					Raining	The Staff.
Plymouth	29.88	758.9	29.95	760.7	52.8	11.6	92	SW			5		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.59	751.6	45.9	7.7	76	SE	25	11.2			10					Overcast	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.80	756.9	29.86	758.4	63.2	17.3	77	SW			1		4					D. clouds	Serg't W. H. Lyne.
Sheffield	29.44	747.8	29.73	755.1	49.2	9.6	97	SSW			4		10			0.24	6.1	Raining	W. F. Cooper.
Silloth Rectory	29.44	747.8	29.47	748.5	52.4	11.3	92	W			5		10			0.394	10.0	Raining	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.64	752.8	46.5	8.1	89	S	27	12.1			10					Raining	Rev. S. J. Perry.
Strathfield Turgiss	29.72	754.9	29.94	760.5	53.7	12.1	66	SW			4-5		9					Squally	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	29.86	758.4	29.89	759.2	56	13.3	87	SW			7		10					Raining	W. Newcombe.
Valencia, Observatory	29.59	761.6	29.62	752.3	54.9	12.7	92	SW	26	11.6			10					Raining	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.24	768.1	30.28	769.1	44	6.7	88	NE	9	4.0			10s			0.105	2.7	Light rain	H. J. Cundall, C. E.
Chatham, N. B.*	30.29	769.4	30.36	771.1	41	5.0	95	N	9	4.0			10n		N	0.22	5.6	Light rain	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	30.32	770.1	30.35	770.9	46	7.8	94	NE	25	11.2		2cs	5ks	Calm	Calm	0	0	Fair	J. McWilliams.
Fort Garry, Manitoba*	29.07	738.4	29.88	758.9	52	11.1	99	S	10	4.5			10n		S	0.220	5.6	Light rain	James Stewart.
Fredericton, N. B																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.05	763.3	30.19	766.8	42	5.6	92	NE	9	4.0			10ks		E	0.397	10.1	Cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.60	751.8	29.94	760.5	45	7.2	87	N	13	5.8			10s		N	1.09	27.7	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	29.84	757.9	30.05	763.3	44	6.7	84	NE	28	12.5			10s		NE	0.10	2.5	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.38	746.2	30.07	763.8	54	12.2	67	NE	12	5.4		0	0			0	0	Clear	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.28	743.7	29.98	761.5	46	7.8	10	NE	12	5.4			10k		NE	0.03	0.8	Light rain	H. Morgan.
Port Stanley, Ontario	29.32	744.7	29.97	761.2	49	9.4	83	N	3	1.3			8ks		NE	0	0	Cloudy	M. Payne.
Quebec, Quebec*	29.86	758.4	30.18	766.6	45	7.2	76	NE			7	0	5s		NE	0.02	0.5	Clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.66	753.4	30.12	765.0	49	9.4	57	NE	10	4.5		0	0			0	0	Clear	W. H. McIntyre.
Saugeen, Ontario*	29.34	745.2	30.05	763.3	53	11.7	60	N	10	4.5		0	0			0	0	Clear	K. Stewart.
St. Andrews, N. B	30.01	762.2	30.06	763.5	43	6.1	91	E	20	8.9			10n			1.34	34.0	Heavy rain	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.32	770.1	30.37	771.4	40	4.4	80	NE	9	4.0		10cs	2s		SE	0	0	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.63	752.6	30.01	762.2	49	9.4	75	NE	14	6.3			10ks		E	0.28	7.1	Cloudy	Magnetic Observatory
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	29.90	759.4	29.96	761.0	43	6.1	92	NE	26	11.6			10s		NE	1.78	45 2	Cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	30.22	767.6	30.47	773.9	39	3.9	82	NE	1	0.4		0	0			0	0	Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Cape St. Francis Lt. House	29.98	761.5			63.5	17.5	97	SW	13.5	6.0			7cs			0	0	Cloudy	John Duthie.
Cape Town, C. G. H. Obs'y	30.10	764.5	30.14	765.5	57.6	14.2		S	6.7	3.0		5	5n			0.255	6.5	Vapory	The Staff, for D. Gill.
Worcester *†	28.96	735.6			63.8	17.7	53	NW			1	5	5			0	0	Overcast	C. Stokes.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.82	757.4	29.84	758.0	64.6	18.1	93	ESE	6.0	2.7			10			0	0	Covered	M. Marc Dechevrens, S.J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

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

San José	26.20	665.5	29.92	760.0	67.1	19.5	93	NE			1	3ck	0			0.63	16.	Clear	Amand Maison.

DANISH SERIES.

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

Copenhagen	29.75	755.6	29.80	756.8	48.7	9.3	43	NW	27	12			7						Oversergent Fischer.
Fande	29.89	759.2	29.91	759.7	47.5	8.6	59	W			6		6						Overloerer Lauridsen.
Godthaab, Greenland	29.88	759.0	29.93	760.1	33.3	0.7	83	SSW			4		6					Snowing	S. Kleinschmidt.
Stykkisholm, Iceland	29.77	756.2	29.82	757.3	37.0	2.8		E			2		0						A. O. Thorlacius.
Thorshavn	29.67	753.7	29.71	754.6	37.4	3.0	64	ENE	13	6			3						Overloerer Bergh.
Vestervig	29.72	754.8	29.81	757.2	46.0	7.8	76	W			6		2						Loerer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.57	751.0	30.22	767.5	63.3	17.4	52	NNW			1	ck	0	E	E	0	0		M. Labroue, Director.
Alençon Normal School	29.62	752.3	30.17	766.3	59.0	15	80	S			1		2ks	SW	S	0.04	1.	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	29.84	758.0	30.10	764.5	58.6	14.8	38	W			2	ck	n		SW	0	0		M. Klein, Commandant.
Avignon, Normal School	29.93	760.2	30.01	762.2	65.5	18.6	27	N			6		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.60	751.7	30.15	765.7	59.4	15.2	61	SW			1		8kn		W	0.094	2.4	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.83	757.6	30.10	764.4	61.0	16.1	43	W			2		8		W	0.020	0.5	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.20	743.1	30.14	765.5	57.2	14	57	N			1		kn		N	0.177	4.5		M. Gobin, Director.
Bordeaux, Observatory	29.95	760.6	30.21	767.2	61.7	16.5	51	NW			1		8		NW	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.68	753.8	30.23	767.8	59.0	15	45	W			2	ck	0	W		0.020	0.5		M. Postel, Director.
Brest, Naval Observatory	29.88	758.9	30.12	765.1	56.1	13.4	77	SW			3		10		SW			Raining	M. de Rermaree, Dir.
Caen, Normal School	30.00	762.0	30.07	763.8	62.8	17.1	61	SW			2		2		SW	0.008	0.2	Slightly cl'dy	M. Bétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.82	757.4	30.13	765.4	65.5	18.6	76	Calm			0		0			0.098	2.5	Clear	M. Jadot, Director.
Charleville, Normal School	29.60	751.8	30.10	764.5	62.6	17	52	SW			2		5			0	0	½ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.78	731.1	30.13	765.4	59.0	15.0	43	NE			1		8		W	0.031	0.8	¼ covered	M. Allnard, Director.
Cluny, Normal School	29.30	744.3	30.15	765.7	59.9	15.5	44	N			1		4		NW	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.26	743.3	30.13	765.4	57.0	13.9	58	NNW			1	5ck	0	NNW	NNW	0.16	4.	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.41	696.1	29.89	759.1	62.6	17	79	SE			1					0.12	3.		M. Jeangirard, Director.
Grèasque, du. Rhone	28.82	732.0	29.96	761.0	64.9	18.3	29	NW			3		0			0	0	Clear	M. Kina, Director.
Grenoble, Normal School	29.28	743.8	30.04	763.1	59.0	15	47	NNW			3		k			0.008	0.2		M. Ablard, Director.
Guéret, Normal School	28.60	726.5	30.20	767.1	54.3	12.4	56	NW			1		kn		SE	0.04	1.		M. Rivoire, Director.
Lamballe, Normal School	29.82	757.3	30.09	764.3	59.0	15	63	S			4				S	0.110	2.8		M. Ollitrault, Director.
Lescar, Normal School	29.63	752.5	30.29	769.3	64.4	18	46	SW			1	0	0	W		0.063	1.6		M. Chauvin, Director.
Lorient, Naval Observatory	30.09	764.2	30.19	766.8	59.0	15.0	61	SW			2		10		SSW	0	0	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.09	738.9	30.15	765.7	59.4	15.2	30	N			1		8		N	0	0	Very cloudy	M. André, Director.
Mans, Normal School	29.87	758.6	30.18	766.5	56.8	13.8	53	NW			3		5		NW	0.12	3.	Cloudy	M Piboen, Director.
Marseille, Observatory	29.95	753.2	29.92	760.0	64.6	18.1	32	NW			4-5		0			0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.84	631.0	30.08	764.0	50.4	10.2	39	E	7.4	3.3			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.91	759.8	30.02	762.5	68.7	20.4	43	NNW			3		0			0	0	Clear	M. P. Galzin, Director.
Nancy, Normal School	29.37	746.0	30.13	765.2	57.2	14	43	NNW			1		5kn			0.08	2.	Cloudy	M. Hasse.
Nantes, Observatory	30.05	763.3	30.21	767.4	59.4	15.2	52	SW			1-2		8n;k		WSW	0.04	1.		M. Larocque, Director.
Nice	29.82	757.4	29.85	758.3	66.6	19.2	67	SE			3		2	E	SE	0	0	Slightly cl'dy	Capt. Boissière, Director.
Perpignan, Observatory	29.98	701.4	30.08	704.1	63.7	17.6	27	N	31.8	14.2			1	NW		0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.59	573.8			41.9	5.5							1		N	0.055	1.4	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	28.98	736.0	30.03	762.8	60.8	16	35	SW			1		0			0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.24	641.2			36.7	2.6	71	NW			2		8		N	0.260	6.6	¾ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	30.20	767.1	30.23	767.9	63.3	17.4	50	WSW			2		8		NW	0	0	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.98	761.4	30.19	766.8	63.3	17.4	47	WNW			1		5		E	0	0	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.98	710.8	30.13	765.3	57.9	14.4	34	NW			2		2		S	0	0	Slightly cl'dy	M. Richard, Director.
Rouen, Normal School	30.00	762.0	30.09	764.2	59.7	15.4	55	WSW			3		8		W	0	0	Very cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.96	760.9	30.11	764.9	58.6	14.8	50	S			1		8		W	0	0	Very cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.96	761.0	30.13	765.2	62.4	16.9	42	SSW			1		8	N	W	0.079	2.0		M. Renou, Director.
Toulouse, Observatory	29.52	749.9	30.25	768.4	63.0	17.2	40	NW			1				WNW	0	0		M. Bailland, Director.
Tours								WSW			1		5		W	0.169	4.3	½ covered	M. de Tastes.
Versailles, Observatory	29.62	752.4	30.11	764.9	60.8	16.0	44	SW			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			

GERMAN SERIES.

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

Bamberg	29.20	741.7	30.06	763.6	54.1	12.3	60	WNW			2		4k	NW		0.020	0.5	Lightrain	Prof. Dr. Hoh.
Berlin	29.78	756.5	29.95	760.8	56.7	13.7	37	N			4		8			0.004	0.1		Prof. Dr. Arndt.
Breslau	29.41	747.0	29.94	760.4	60.1	15.6	43	WNW			2		10			0	0		Royal University Obs'y.
Carlsruhe	29.08	753.9	30.11	764.8	56.5	13.6	74	N			1		10	W		0	0		Albert Senz.
Cassel	29.31	744.5	30.03	762.7	54.0	12.2	35	WNW			4		5	NW		0.055	1.4		Dr. H. Möhl.
Frankfort on the Main	29.74	755.5	30.10	764.6	63.3	17.4	38	NNW			1		5			0.020	0.5		Physical Society.
Friedrichshafen	28.07	728.3	30.12	765.1	51.4	10.8	64	S			2		10	W		0	0		Wilhelm, Chief Tel.
Hamburg	29.93	760.3	30.00	762.1	49.8	9.9	55	WNW			4		9			0.075	1.9		Dr. R. Kleeman.
Kiel	29.91	759.6	29.92	760.0	43.9	6.6	58	W			4		10			0.122	3.1		Prof. Dr. G. Karsten.
Leipsic, Astronl Obs'y	29.61	752.1	30.04	762.9	50.7	10.4	52	WNW			3		9	NW		0	0		Prof. Dr. Bruhns.
Magdeburg	29.71	754.5	30.00	761.9	53.4	11.9	53	NW			6		7k	NW		0.043	1.1		Dr. Assmann.
Memel	29.74	755.5	29.79	756.7	49.8	9.9	76	W			4		10s						Reinbrecht & Issermann.
Munich	28.24	717.4	30.11	764.8	53.1	11.7	55	W			2		9	NW		0.181	4.6		Central Station.
Neufahrwasser	29.80	757.0	29.82	757.4	60.4	15.8	46	WNW			4		10			0	0		A. Lothes.
Neustadt, Palatinate	29.55	750.6	30.08	764.0	58.3	14.6	52	SW			1		7			0	0		Dicknether.
Stuttgart	29.13	739.8	30.02	762.4	57.6	14.2	50	NW			2		7	N		0.008	0.2		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.58	725.8	30.06	763.5	50.5	10.3	76	W			4		9	W		0.047	1.2		Prof. Kemlein.
Wustrow	29.93	760.1	29.95	760.7	48.7	9.3	62	WNW			6	5cs	0			0	0		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instrumental error and temperature. Inch.	Barometer. Corrected for instrumental error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.48	748.9	29.87	758.6	74.1	23.4		NE			2.0	1ck	0					Clear.	A. Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.58	751.2	29.62	752.5	89.2	31.8	76	SSW	34.0	15.2		0				0	0	Misty	
Deesa	29.12	739.6	29.57	751.0	105.4	40.8	18	WSW	15.6	7.0		1			SSW	0	0	D. clouds	
Bombay	29.75	755.7	29.79	756.6	88.1	31.2	70	WSW	11.0	4.9		0				0	0	Blue sky	
Poona, Yarrowda	27.92	709.1	29.72	755.0	91.7	33.2	19	W	8.0	3.6		0				0	0	Blue sky	
Belgaum	27.27	692.7	29.77	756.2	82.1	27.8	61	SW	11.0	4.9		0				0	0	Misty	
Lahore	28.78	731.1	29.49	749.0	101.9	38.8	24	N	3.2	1.4		0				0	0	Blue sky	
Roorkee	28.67	728.1	29.53	750.1	94.8	34.9	43	Calm	3.1	1.4		0				0	0	Sultry	
Agra	28.96	735.5	29.49	749.0	105.1	40.6	25	N	4.4	2.0		0				0	0		
Nagpur	28.51	724.1	29.49	749.0	108.7	42.6	20	NW	7.6	3.4		8			NW	0	0	D. clouds	
Jubbulpore	28.23	717.1	29.52	749.7	105.7	40.9	11	N	5.0	2.2		6				0	0	D. clouds	
Lucknow	29.20	741.6	29.56	750.7	98.0	36.7	32	Calm	3.2	1.4		2		ESE		0	0	D. clouds	
Allahabad	29.25	742.9	29.55	750.5	98.2	36.8	32	NE	3.8	1.7		0				0	0	Blue sky	
Patna	29.40	746.8	29.58	751.3	89.8	32.1	50	ENE	9.5	4.2		2		ENE	ENE	0	0		
Hazaribagh	27.58	700.4	29.52	749.9	89.6	32.0	43	ESE	10.1	4.5		2			W	0.01	0.3		
Cuttack	29.50	749.4	29.58	751.4	89.9	32.2	65	S	8.0	3.6		0				0	0	Blue sky	
Calcutta, Alipore	29.58	751.4	29.60	751.9	85.8	29.9	72	SSW	9.0	4.0		0				0	0	Blue sky	
Dhubri	29.52	749.8	29.64	752.8	81.2	27.3	78	ESE	3.8	1.7		2			SSW	0	0	D. clouds	
Chittagong	29.61	752.1	29.70	754.3	83.7	28.7	80	SW	4.8	2.2		4				0	0	Blue sky	
Sibsagar	29.36	745.7	29.70	754.2	79.1	26.2	82	SW	1.1	0.5		8		W	W	0	0	D. clouds	
Zanzibar, Africa			29.98	761.5	75.3	24.1	84	WSW	14	6.3		9			S	0.74	18.8	Threatening	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.55	750.6	30.00	761.9	53.1	11.7	75	N	0.7	0.3			10			0.118	3.0		Prof. Giovanni Clodig.
Milan	29.39	746.4	29.89	759.2	68.9	20.5	36	E	13.6	6.1			5			0	0		Prof. Schiaparelli.
Padua	29.82	757.5	29.93	760.3	54.1	12.3	76	NNE	21.0	9.4			10		NE	0.043	1.1		Prof. Dott. Lorenzoni.
Moncalieri	28.95	735.3	29.84	757.8	68.9	20.5	23	E	6.9	3.1			2			0	0		Prof. P. F. Denza.
Genoa	29.67	753.7	29.87	758.6	63.5	17.5	59	SW	6.9	3.1			0			0.016	0.4		Prof. G. M. Garibaldi.
Mondovi	27.98	710.7	29.80	758.4	63.7	17.6	22	NW			4		0			0	0		Prof. D. C. Bruno.
Pesaro	29.78	756.5	29.83	757.7	64.0	17.8	74	E	8.1	3.6			9		SW	0	0		Prof. Luigi Guidi.
Florence	29.58	751.4	29.84	757.8	69.8	21.0	47	NW			4		7		SW	0	0		Prof. Costantino Pitter.
Leghorn	29.77	756.2	29.80	758.4	64.9	18.3	65	NW	3.8	1.7			5			0	0		Prof. P. Monte.
Rome	29.69	754.0	29.85	758.3	70.3	21.3	40	SW	6.9	3.1			4			0	0		Prof. P. S. Ferrari.
Lecce	29.58	751.4	29.83	757.7	73.0	22.8	45	S	0.7	0.3			4			0	0		Prof. C. de Giorgi.
Cosenza	28.95	735.3	29.83	757.7	72.3	22.4	72	SSE	3.1	1.4			3		SE	0	0		Prof. D. Conti.
Cagliari	29.67	753.5	29.86	758.4	68.5	20.3	29	NW			6		1			0	0		Prof. A. Pacinotti.
Palermo	29.63	752.5	29.87	758.8	66.2	19.0	65	NE	7.4	3.3			9			0	0		Prof. G. Ciaccatore.
Syracuse	29.80	756.8	29.84	757.9	66.7	19.3	63	SE	5.6	2.5			10		S	0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.32	744.7	29.83	757.6	69.6	20.9	61	WSW	8.1	3.6			5		W	0	0		Prof. F. Brioschi.
Stelvio	22.12	561.8			28.8	— 1.8	88	NE			2		10cks		N	0.197	5.0		Prof. P. F. Denza.
Valdobbia	22.13	562.1			36.0	2.2	70	N			6		6k		N	0	0	Cloudy	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y †..	29.97	761.2	29.98	761.5	65.7	18.7	86	W	1.9	0.8		0	1s			0	0	Clear	K. Sasaki.
Kioto	29.83	757.7	30.00	762.0	67.3	19.6	73	SE	1.0	0.4		0	0			0	0	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.77	756.1	29.97	761.2	70.8	21.6	74	Calm	0	0			8s			0	0	Cloudy	S. Takehayashi.
Tokei Obs'y, Yeddo	29.95	760.7	30.02	762.5	64.1	17.8	81	SE	3.5	1.6		0	0			0	0	Clear	The Staff.
Wakayama	29.96	761.0	30.01	762.2	65.7	18.7	81	SW	2.5	1.1		0	0			0	0	Clear	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.96	761.0	30.15	765.8	72.8	22.7	88	ESE	13.0	5.8			8		Var.	0.08	2.0	Drizzling	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.67	753.5	29.93	760.1	72.5	22.5	92	ESE	1.8	0.8			1cs	0		0	0	Foggy	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barreeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.05	763.3	30.05	763.3	58.1	14.5		SW			4					0.016	0.4		
Groningen	29.95	760.8	30.01	762.2	53.4	11.9		W			2					0.016	0.4		
Helder	30.00	762.0	30.00	762.0	50.5	10.3		SSW			4					0.260	6.6		
Hellevoetsluis	30.03	762.7	30.03	762.7	59.0	15.0	63	SW			4					0	0		
Utrecht	30.00	762.0	30.05	763.2	58.8	14.9	48	WSW			2		8			0.012	0.3	Very cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.58	751.2	29.64	752.8	42.1	5.6	61	WNW	24.6	11.0		8							
Christiania	29.22	742.3	29.37	746.0	50.9	10.5	42	NNW	18	8		7				0.028	0.7		
Gjæsvær	29.27	743.4	29.29	744.0	34.7	1.5		NE			4		10			0.252	6.4		
Lodingen	29.13	739.8	29.17	741.0	33.6	0.9	85	NE			6		10			0.102	2.6	Snowing. Snowing.	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.27	768.8	30.43	772.8	63.0	17.2	78	W	10.5	4.7		4				0	0		Dr. J. A. Sampaio.
Campo Major	29.12	739.7	30.10	764.5	72.3	22.4	45	WNW	0.7	0.3		2				0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.22	767.6	30.31	769.8	66.7	19.3	68	SW	3.8	1.7		5				0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.85	758.2	30.21	767.3	64.6	18.1	49	N	18.1	8.1		0				0	0		The Staff.
Ponta Delgada, Azores	30.37	771.5	30.45	773.3	66.2	19.0	63	Calm	0	0		3				0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski																			Capt. Lasarew.
Archangel	29.91	759.6	29.93	760.1	59.5	15.3	52	ESE	13	6		0							Capt. Sseliwerstow.
Astrakhan	29.92	760.0	29.84	757.9	68.4	20.2	67	SE	9	4		10ks							Capt. Wisganow.
Barnaul	29.49	749.0	29.97	761.2	68.0	20.0	28	W	13	6		1k							Meteorological Obs'y.
Dorpat	29.45	747.9	29.68	753.8	72.0	22.2	34	S	13	6		10k	0						Observatory.
Ekaterinburg	29.20	741.6	30.13	765.4	68.9	20.5	29	WNW	13	6			8kn					Solar halo	Meteorological Obs'y.
Kasan	29.85	758.2	30.11	764.7	73.9	23.3	30	S	9	4		4c	0						Observatory.
Kertch	29.74	755.3	29.76	755.8	66.3	15.7	70	Calm	0	0			8						Lagorio & Sastyres.
Kieff	29.07	738.4	29.68	753.9	59.7	15.4	54	NNE	11	5			8cks						Observatory.
Krotkowo																			Cand. Farjanow.
Lugan	29.47	748.6	29.67	753.7	64.2	17.9	62	SSW	22	10			6					Blank	Meteorological Obs'y.
Moscow	29.39	746.6	29.92	760.0	68.2	20.1	36	SSE	7.8	3.5			8ks						Meteorological Obs'y.
Nertchinsk	27.70	703.5	29.99	761.8	41.9	5.5	34	N	4	2			9						Meteorological Obs'y.
Nikolaiev	29.69	754.1	29.70	755.9	69.6	20.9	55	WSW	9	4			10kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	29.42	747.2	29.56	750.8	86.7	30.4	46	Calm	0	0			5k						Physical Observatory.
St. Petersburg	29.72	755.0	29.74	755.4	69.3	20.7	35	SSE	18	8			10k;n						Central Physical Obs'y.
Tashkend, Laboratory	28.35	720.2	29.85	758.1	78.3	25.7	49	Calm	0	0			0						Teich, A. M.
Tiflis	28.36	720.4	29.72	755.0	69.4	20.8	56	SSW	13	6			10n						Physical Observatory.
Warsaw	29.42	747.3	29.84	757.9	56.1	13.4	70	NW	20	9			10ks						Astronomical Obs'y.
Wilna	29.32	744.7	29.72	754.9	71.2	21.8	37	SW	2	1			4						Berg, Assistant.
Yeniseisk	29.55	750.5	29.84	757.8	45.5	7.5	87	S	4	2			10					Raining	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.50	749.3	46.0	7.8	86	SW			3		10s			0.34	8.6	Overcast	Andrew Gibb.
Monach Lt. House, Hebrides			29.38	746.2	43	6.1	92	SSE			7		10			0.6	15.	Cloudy	J. Youngclause.
North Unst, Shetland Isl'ds			29.61	752.1				SE			3	2	3	E					Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.08	764.0	30.18	766.6	64.0	17.8	61	SE	5.4	2.4		1				0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.21	767.2	30.26	768.6	65.7	18.7	60	N	1.8	0.8		4	5	N		0	0	Almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.24	091.8			54.3	12.4	87	NE	10.1	4.5		0	0			0	0	Clear	Domingo Martin.
Madrid, Royal Obs'y	27.88	708.2	30.05	763.3	70.2	21.2	59	S	4.9	2.2		0	0			0	0	Clear	The Staff.
Murcia, Met. Obs'y	29.93	760.1	30.07	763.8	74.5	23.6	51	ESE	4.3	1.9		0	2			0	0	Almost clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.29	743.9	30.17	766.4	64.2	17.9	42	NE	0	0			0			0	0	Clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.85	758.2	29.92	759.9	75.3	24.1	78	WNW	1.8	0.8		0	1k			0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.80	757.0	29.85	758.3	87.5	30.8	74	S	6.6	3.0		0	3ks		E	0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.12	765.0	30.22	767.0	64.2	17.9	71	WNW	8.9	4.0		0	1		NW	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.84	758.0	29.93	760.3	78.8	26.0	87	SE	0	0		50s	3k		SE	0.492	12.5	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.75	755.6	29.89	759.3	83.1	28.4	72	N	1.8	0.8			10kn		NNE	0.03	0.8	Cloudy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.40	746.8	29.44	747.8	39.6	4.2	90	S			2		10			0.532	13.5		
Umea	29.38	746.3	29.43	747.6	38.8	3.8	97	SW			2		10			0.299	7.6		
Hernosand	29.32	744.8	29.37	745.1	45.5	7.5	82	S			4		9			0.083	2.1		
Stockholm	29.28	743.7	29.46	748.2	52.2	11.2	72	SSW			6		10			0.063	1.6	Raining	
Wisby	29.52	749.8	29.58	751.3	54.0	12.2	70	SW			4		5			0	0		
Sub-Series.																			
Upsala	29.30	744.2	29.39	746.4	54.1	12.3	61	SW	21.3	9.5			8		SW	0.039	1.0		Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.71	729.1	30.13	765.2	54.7	12.6	48	N			2		9			0.071	1.8	Covered	The Observatory.
Zurich	28.48	723.4	30.11	764.9	55.4	13.0	59	W			4		6			0.004	0.1	Cloudy	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.92	759.9	61.2	16.2	66	ENE	3	1.5		6		N		0	0		The Observatory.
Valona			29.91	759.8	72.5	22.5		W			1	0				0	0	Clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.89	759.3	73.0	22.8	57	W			2	48		SW		0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.80	756.9	29.88	758.9	53	11.7	73	N	6	2.7			10s		N	0.55	14.0	Cloudy	
Alpena, Michigan	29.49	749.0	30.13	765.3	53	11.7	48	NE	7	3.1		0	0			0	0	Clear	
Atlanta, Georgia	28.74	730.0	29.87	758.7	55.0	12.8	71	N	7	3.1		0	0			0	0	Clear	
Atlantic City, New Jersey	29.78	756.4	29.80	756.9	52	11.1	93	NE	9	4.0			10s;fg		Calm	0	0	Cloudy	
Augusta, Georgia	29.70	754.4	29.90	759.4	65.3	18.5	44	N	10	4.5		5k	0	N		0	0	Fair	
Baltimore, Maryland	29.75	755.6	29.80	756.9	58	14.4	64	NW	6	2.7			10s			0	0	Threatening	
Barnegat, New Jersey	29.75	755.6	29.78	756.4	50	10.0	100	NE	15	6.7			10s		NE	0.03	0.8	Threatening	
Bismarck, Dakota	28.22	716.8	30.07	763.8	49	9.4	71	NW	10	4.5			10s		Calm	0.40	10.2	Cloudy	
Boise City, Idaho	27.42	696.5	30.38	771.6	40.3	4.6	65	W	2	0.9		0	0			0	0	Clear	
Boston, Massachusetts	29.70	754.4	29.86	758.4	43.0	6.1	93	NE	24	10.7			10n		NE	0.42	10.7	Light rain	
Bracketville, Texas	28.72	729.5	29.74	755.4	70	21.1	95	E	9	4.0			10ks		E	0	0	Cloudy	
Brownsville, Texas	29.82	757.4	29.86	758.4	76	24.4	86	SE	4	1.8		2c	0			0	0	Clear	
Buffalo, New York	29.23	742.4	29.94	760.5	43	6.1	92	NE	12	5.4			10n		NE	0.91	23.1	Light rain	
Burlington, Vermont	29.66	753.4	29.95	760.7	47.2	8.4	83	N	13	5.8			10s		E	0.06	1.5	Cloudy	
Cairo, Illinois	29.68	753.9	30.06	763.5	63	17.2	72	Calm	0	0		0	0			0	0	Clear	
Campo, California	27.35	694.7	29.92	760.0	53	11.7	86	NW	1	0.4		0	0			0	0	Clear	
Camp Thomas, Arizona	27.13	689.1			59	15.0	38	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	29.75	755.6	29.77	756.1	60	15.6	65	NW	12	5.4		0	0			0	0	Clear	
Cape May, New Jersey	29.75	755.6	29.78	756.4	56	13.3	81	NE	10	4.5			10s		NW	0	0	Cloudy	
Castroville, Texas	29.12	739.6	29.79	756.7	75	23.9	77	S	2	0.9			10s		S	0	0	Cloudy	
Cedar Keys, Florida	29.80	756.9	29.83	757.7	72	22.2	50	NW	6	2.7		0	0			0	0	Clear	
Champaign, Illinois	29.26	743.2	30.06	763.5	50	10.0	72	NE	9	4.0		0	0			0	0	Clear	
Charleston, S. Carolina	29.76	755.9	29.81	757.2	65	18.3	54	N	14	6.3		0	8ks		N	0	0	Cloudy	
Charlotte, N. Carolina	29.02	737.1	29.81	757.2	64.0	17.8	43	N	6	2.7		0	0			0	0	Clear	
Chattanooga, Tennessee	29.16	740.7	29.94	760.5	59.5	15.3	63	N	6	2.7		0	0			0	0	Clear	
Cheyenne, Wyoming	24.07	611.4	30.01	762.2	41	5.0	82	NE	4	1.8			10s			0.13	3.3	Cloudy	
Chicago, Illinois	29.40	746.7	30.09	764.3	52.6	11.4	73	N	7	3.1		5c	0			0	0	Fair	
Chincoteague, Virginia	29.75	755.6	29.77	756.1	58	14.4	82	SE	2	0.9		2k	0	SW		0	0	Fair	
Cincinnati, Ohio	29.37	746.0	30.01	762.2	57	13.9	58	N	4	1.8		Hz	0			0	0	Clear	
Cleveland, Ohio	29.24	742.7	29.96	761.0	49	9.4	93	N	12	5.4			10ks		N	0	0	Cloudy	
Coleman City, Texas	28.12	714.2	29.74	755.4	63	17.2	83	S	1	0.4		5k	0	W		0	0	Fair	
Columbus, Ohio	29.13	739.9	29.96	761.0	52	11.1	66	NW	6	2.7		0	0			0	0	Clear	
Concho, Texas	28.01	711.4	29.62	752.3	67	19.4	95	S	10	4.5			10s			0	0	Cloudy	
Corsicana, Texas	29.50	749.3	29.95	760.7	73	22.8	63	S	4	1.8		0	0			0	0	Clear	
Davenport, Iowa	29.47	748.5	30.10	764.5	57	13.9	69	E	4	1.8		1c	0	SE		0	0	Clear	
Dayton, Washington T'y	28.58	725.9	30.29	769.4	47	8.3	55	N	5	2.2		0	0			0	0	Clear	
Deadwood, Dakota	25.47	646.9			37	2.8	81	N	1	0.4			10s			0.16	4.1	Cloudy	
Decatur, Texas	28.75	730.2	29.87	758.7	71	21.7	66	SE	4	1.8		5c	0	S		Inap.	Inap.	Fair	
Delaware Breakwater, Del	29.75	755.6	29.77	756.1	54	12.2	93	NE	8	3.6			10s		NE	0	0	Cloudy	
Denison, Texas	29.15	740.4	29.91	759.7	74	23.3	76	S	1	0.4		0	0			0.13	3.3	Clear	
Denver, Colorado	24.78	629.4	30.00	762.0	52.5	11.4	79	N	6	2.7			10s		Calm	Inap.	Inap.	Cloudy	
Des Moines, Iowa	29.17	740.9	30.04	763.0	58	14.4	82	SE	4	1.8		2c	0			0	0	Clear	
Detroit, Michigan	29.31	744.5	30.00	762.0	54.0	12.2	61	N	13	5.8		0	0			0	0	Clear	
Dodge City, Kansas	27.31	693.7	29.51	749.5	62	16.7	83	S	11	4.9		4c;ck	0	S		0	0	Fair	
Dubuque, Iowa	29.41	747.0	30.11	764.8	56	13.3	57	E	1	0.4		5c	0	Calm		0	0	Fair	
Duluth, Minnesota	29.44	747.8	30.12	765.0	46	7.8	77	NE	2	0.9		2cs	0			0	0	Clear	
Eagle Pass, Texas	29.11	739.4	29.82	757.4	71	21.7	85	SE	4	1.8		0	5s		SE	0	0	Fair	
Eagle Rock, Idaho	25.31	642.9	29.96	761.0	37	2.8	63	S	5	2.2			10ks		S	0	0	Cloudy	
Eastport, Maine	29.99	761.7	30.06	763.5	40.5	4.7	98	NE	48	21.5			10n		NE	2.63	66.8	Heavy rain	
El Paso, Texas	26.16	664.4			62	16.7	22	W	4	1.8		0	1ks			0	0	Clear	
Erie, Pennsylvania	29.22	742.2	29.94	760.5	45	7.2	92	NE	12	5.4			10n		NE	0.25	6.3	Light rain	
Escanaba, Michigan	29.52	749.8	30.18	766.6	48	8.9	70	N	5	2.2		0	0			0	0	Clear	
Florence, Arizona	28.38	720.8	29.98	761.5	53	11.7	54	NE	1	0.4		0	0			0	0	Clear	
Fort Apache, Arizona	24.99	634.7	30.44	773.2	43	6.1	75	NE	4	1.8		0	0			0	0	Clear	
Fort Assinnaboine, Montana	27.33	694.2			36	2.2	45	W	10	4.5		0	0			0	0	Clear	
Fort Bennett, Dakota	28.44	722.4			51	10.6	65	NW	11	4.9			10s		NW	0.95	24.1	Cloudy	
Fort Buford, Dakota	28.10	713.7	30.00	762.0	41	5.0	74	W	20	8.9		5cs	0	W		0	0	Fair	
Fort Custer, Montana	27.06	687.3			39	3.9	81	W	4	1.8			10s		Calm	0.11	2.8	Cloudy	
Fort Davis, Texas	25.14	638.5	30.10	764.5	57	13.9	87	E	4	1.8		0	5s		E	0.61	15.5	Fair	
Fort Elliott, Texas	27.15	689.6	29.36	745.7	60	15.6	65	SE	4	1.8		10c	0	SE		0	0	Cloudy	
Fort Gibson, Indian T'y	29.41	747.0	29.93	760.2	71	21.7	75	SE	6	2.7		0	0			0	0	Clear	
Fort Grant, Arizona	25.18	639.6	29.98	761.5	55	12.8	39	N	4	1.8		0	0			0	0	Clear	
Fort Griffin, Texas	28.56	725.4	29.77	756.1	68.8	20.4	61	E	4	1.8		5ck	0			0	0	Fair	
Fort Keogh, Montana	27.68	703.1			41	5.0	73	NW	14	6.3			10s		NW	0.03	0.8	Cloudy	
Fort Macon, North Carolina	29.76	755.9	29.77	756.1	63	17.2	67	N	14	6.3		2k	2s	Calm	Calm	0	0	Fair	
Fort McKavett, Texas	27.67	702.8	29.52	749.8	67.8	19.9	90	S	7	3.1			10s		Calm	0.24	6.1	Cloudy	
Fort Missoula, Montana	27.02	686.3			44	6.7	76	NW	4	1.8		0	0			0	0	Clear	
Fort St. Michaels																			
Fort Shaw, Montana	26.64	676.6			33	0.6	70	NW	3	1.3		0	0			0	0	Clear	
Fort Sill, Indian Territory	28.70	729.0	29.77	756.1	63	17.2	83	N	2	0.9		1c	0			0	0	Clear	
Fort Stevenson, Dakota	28.19	716.0			47	8.3	85	NW	12	5.4			10s		NW	0.58	14.7	Cloudy	
Fort Verde, Arizona					52	11.1	66	W			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.20	716.3	29.72	754.9	67	19.4	89	Calm	0	0		0	7ks			0	0	Fair	
Galveston, Texas	29.92	760 0	29.96	761.0	75	23.9	86	SW	3	1.3		1ck;hz	0			0	0	Clear	
Grand Haven, Michigan	29.46	748.3	30.10	764.5	58	14.4	53	NW	6	2.7		0	0			0	0	Clear	
Hatteras, North Carolina	29.77	756.1	29.79	756.7	65	18.3	94	N	12	5.4		2k	0			0	0	Clear	
Helena, Montana	26.00	660.4			39	3.9	91	N	2	0.9		5k	0	Calm		0	0	Fair	
Henrietta, Texas	28.90	734.0	29.80	756.9	66	18.9	69	SE	4	1.8		5cs	0			0	0	Fair	
Indianapolis, Indiana	29.24	742.7	30.01	762.2	55	12.8	62	N	4	1.8		0	0			0	0	Clear	
Indianola, Texas	29.91	759.7	29.94	760.5	73.3	22.9	90	S	5	2.2		0	2ks		SW	0.50	12.7	Fair	
Jacksboro, Texas	28.77	730.7	29.87	758.7	65	18.3	73	S	1	0.4		5c	0	SW		0	0	Fair	
Jacksonville, Florida	29.75	755.6	29.79	756.7	74	23.3	43	W	6	2.7		0	0			0	0	Clear	
Keokuk, Iowa	29.42	747.3	30.06	763.5	58.0	14.4	64	SE	5	2.2		2cs	0	Calm		0	0	Clear	
Key West, Florida	29.88	758.9	29.91	759.7	78.2	25.7	79	W	10	4.5		2k	0	SW		0	0	Fair	
Kittyhawk, North Carolina	29.80	756.9	29.82	757.4	61	16.1	66	N	15	6.7			10ks		NW	Inap.	Inap.	Clear	
Knoxville, Tennessee	28.98	736.1	29.96	761.0	57.5	14.2	66	NE	2	0.9		0	0			0	0	Clear	
La Crosse, Wisconsin	29.34	745.2	30.09	764.3	63.1	17.3	47	SE	5	2.2		2c	0			0	0	Fair	
La Mesilla, New Mexico	26.02	660.9	30.18	766.6	54	12.2	55	Calm	0	0		0	2ks			0	0	Fair	
Laredo, Texas	29.42	747.3	29.75	755.6	76	24.4	80	SE	6	2.7		0	0			0	0	Clear	
Leavenworth, Kansas	29.13	739.9	29.94	760.5	66	18.9	54	SE	6	2.7		1cs	0			0	0	Clear	
Lewiston, Idaho	29.52	749.8	30.19	766.8	40	4.4	48	NE	1	0.4		0	0			0	0	Clear	
Little Rock, Arkansas	29.69	754.1	30.00	762.0	66	18.9	74	Calm	0	0		0	0			0	0	Clear	
Los Angeles, California	29.60	751.8	29.96	761.0	57.2	14.0	87	S	2	0.9			10s		Calm	0.01	0.3	Cloudy	
Louisville, Kentucky	29.44	747.8	29.99	761.7	57.5	14.2	69	N	8	3.6		0	0			0	0	Clear	
Lynchburg, Virginia	29.13	739.9	29.78	756.4	61	16.1	55	W	6	2.7		4k	0	NW		0	0	Fair	
Madison, Wisconsin	29.12	739.6	30.11	764.8	52	11.1	66	NE	5	2.2		8c	0	Calm		0	0	Fair	
Marquette, Michigan	29.47	748.5	30.19	766.8	46	7.8	62	Calm	0	0		0	0			0	0	Clear	
Mason, Texas	28.29	718.6	29.99	761.7	67	19.4	89	S	3	1.3		0	1s		Calm	0	0	Clear	
Memphis, Tennessee	29.71	754.6	30.04	763.0	67	19.4	55	Calm	0	0		1c	0	NE		0	0	Clear	
Milwaukee, Wisconsin	29.40	746.7	30.13	765.3	50	10.0	65	NW	7	3.1		2c	0	NW		0	0	Fair	

MAY 17, 1881.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.87	758.7	29.94	760.5	67	19.4	64	NW	8	3.6	.....	5c	o	NW	.....	o	o	Fair	
Montgomery, Alabama	29.69	754.1	29.92	760.0	62	16.7	66	N	4	1.8	.....	o	o	.....	.....	o	o	Clear	
Moorhead, Minnesota	28.92	734.6	29.84	757.9	59	15.0	94	S	18	8.0	.....	.....	10s	.....	S	Inap.	Inap	Cloudy	
Morgantown, W. Virginia	28.87	733.3	29.85	758.2	50	10.0	86	N	6	2.7	.....	.....	10n	.....	.....	0.07	1.8	Light rain	
Mt. Washington, N. H.	23.66	601.0	30.02	762.5	28	— 2.2	100	NE	50	22.4	.....	.....	Fg	.....	NE	1.64	41.7	Dense fog	
Nashville, Tennessee	29.48	748.8	30.01	762.2	58.9	14.9	72	NE	2	0.9	.....	o	o	.....	.....	o	o	Clear	
New Haven, Connecticut	29.65	753.1	29.77	756.1	47	8.3	85	N	20	8.9	.....	.....	10s	.....	NE	0.49	12.4	Cloudy	
New London, Connecticut	29.81	757.2	29.86	758.4	47	8.3	92	E	16	7.2	.....	.....	10s	.....	E	1.20	30.5	Cloudy	
New Orleans, Louisiana	29.88	758.9	29.93	760.2	75.0	23.9	54	NE	10	4.5	.....	1c	Sk	NW	.....	o	o	Clear	
Newport, Rhode Island	29.71	754.6	29.76	755.9	44.0	6.7	100	N	21	9.4	.....	.....	10n	.....	NE	0.70	17.8	Heavy rain	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	29.68	753.9	29.71	754.6	45.0	7.2	92	NE	40	17.9	.....	.....	10s	.....	NE	0.41	10.4	Cloudy	
New York, New York	29.64	752.8	29.81	757.2	50	10.0	86	NE	14	6.3	.....	.....	10s;fg	.....	NE	0.02	0.5	Cloudy	
Norfolk, Virginia	29.73	755.1	29.79	756.7	61	16.1	61	N	7	3.1	.....	o	o	.....	.....	o	o	Clear	
North Platte, Nebraska	27.01	686.0	29.54	750.3	51	10.6	86	N	20	8.9	.....	.....	10s	.....	.....	o	o	Cloudy	
Olympia, Washington T'y	30.23	767.8	30.27	768.8	42.0	5.6	87	NE	1	0.4	.....	8cs	Sk	SW	Calm	o	o	Fair	
Omaha, Nebraska	28 88	733.5	29.54	760.5	63	17.2	72	N	8	3.6	.....	o	7ks;s	.....	SW	o	o	Cloudy	
Oswego, New York	29.58	751.3	29.91	759.7	43.6	6.4	100	NE	16	7.2	.....	.....	10n	.....	NE	0.54	13.7	Light rain	
Pensacola, Florida	29.88	758.9	29.91	759.7	70	21.1	57	N	6	2.7	.....	o	o	.....	.....	o	o	Clear	
Philadelphia, Pa	29.75	755.0	29.80	756.9	53	11.7	80	E	13	5.8	.....	.....	10s	.....	E	0.05	1.3	Cloudy	
Phoenix, Arizona	28.76	730.5	30.54	775.7	59	15.0	70	NE	1	0.4	.....	o	o	.....	.....	o	o	Clear	
Pike's Peak, Colorado	17.78	451.6	30.00	762.0	25	— 3.9	38	SW	34	15.2	.....	o	o	.....	.....	o	o	Clear	
Ploche, Nevada	24.07	611.4	29.84	757.9	40	4.4	69	NW	7	3.1	.....	1k	o	N	.....	0.19	4.8	Clear	
Pittsburg, Pennsylvania	29.00	738.1	29.86	758.4	49.8	9.9	73	N	5	2.2	.....	.....	10s	.....	NW	0.03	0.8	Cloudy	
Port Eads Louisiana	29.90	759.4	29.90	759.4	76.1	24.5	77	NE	13	5.8	.....	o	Hz	.....	Calm	o	o	Clear	
Port Huron, Michigan	29.36	745.7	30.02	762.5	50.7	10.4	65	N	20	8.9	.....	o	o	.....	.....	o	o	Clear	
Portland, Maine	29.88	758.9	29.94	760.5	46	7.8	92	NE	28	12.5	.....	.....	10n	.....	Calm	0.61	15.5	Light rain	
Portland, Oregon	30.18	766.6	30.26	768.6	48.9	9.4	73	NW	4	1.8	.....	1cs	o	NW	.....	o	o	Clear	
Portsmouth, N. Carolina	.....	.....	.....	.....	62	16.7	77	NE	19	8.5	.....	2k	o	Calm	.....	o	o	Clear	
Prescott, Arizona	24.71	627.6	30.07	763.8	40	4.4	56	S	1	0.4	.....	o	o	.....	.....	o	o	Clear	
Punta Rassa, Florida	29.82	757.4	29.84	757.9	80	26.7	78	W	12	5.4	.....	o	8ks	.....	W	o	o	Fair	
Red Bluff, California	29.63	752.6	29.97	761.2	65.0	18.3	26	N	9	4.0	.....	o	o	.....	.....	o	o	Clear	
Rio Grande City, Texas	29.70	754.4	29.91	759.7	73	22.8	90	SE	.....	.....	1	o	o	.....	.....	o	o	Clear	
Rochester, New York	29.30	744.2	29.92	760.0	42	5.6	100	NE	10	4.5	.....	.....	10n	.....	Calm	1.33	33.8	Light rain	
Roseburg, Oregon	29.63	752.6	30.22	767.6	38.5	3.6	81	NE	1	0.4	.....	o	o	.....	.....	o	o	Clear	
Sacramento, California	29.86	758.4	29.93	760.2	59.0	15.0	82	SE	2	0.9	.....	o	o	.....	.....	o	o	Clear	
St. Louis, Missouri	29.49	749.0	30.00	763.5	62.0	16.7	51	NE	3	1.3	.....	5c	o	NW	.....	o	o	Fair	
St. Paul, Minnesota	29.20	741.7	30.01	762.2	56	13.3	81	SE	8	3.6	.....	.....	10ks	.....	SE	o	o	Cloudy	
Salt Lake City, Utah	25.72	653.3	30.04	763.0	42	5.6	42	N	6	2.7	.....	o	o	.....	.....	0.21	5.3	Clear	
San Antonio, Texas	29.27	743.4	29.95	760.7	73.3	22.9	90	Calm	o	o	.....	.....	10s	.....	Calm	o	o	Cloudy	
San Diego, California	29.83	757.7	29.90	759.4	59.1	15.1	82	N	1	0.4	.....	.....	10s	.....	.....	o	o	Cloudy	
Sandusky, Ohio	29.32	744.7	29.98	761.5	53	11.7	80	NW	26	11.6	.....	o	o	.....	.....	o	o	Clear	
Sandy Hook, New Jersey	29.78	756.4	29.81	757.2	51.0	10.6	100	NE	25	11.2	.....	.....	10n	.....	.....	0.08	2.0	Light rain	
San Francisco, California	29.93	760.2	29.99	761.7	53	11.7	93	W	6	2.7	.....	.....	Fg	.....	W	o	o	Dense fog	
Santa Fé, New Mexico	23.25	590.5	29.79	756.7	50	10.0	39	Calm	o	o	.....	o	o	.....	.....	0.01	0.3	Clear	
Savannah, Georgia	29.72	754.9	29.81	757.2	67.5	19.7	53	N	12	5.4	.....	o	o	.....	.....	o	o	Clear	
Shreveport, Louisiana	29.75	755.6	29.99	761.7	70.3	21.3	90	NE	3	1.3	.....	o	Hz	.....	.....	o	o	Clear	
Silver City, New Mexico	24.23	615.4	30.38	771.6	47	8.3	48	NW	1	0.4	.....	o	o	.....	.....	o	o	Clear	
Sitka Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.11	2.8	.....	
Smithville, North Carolina	29.76	755.9	29.79	756.7	63	17.2	72	N	7	3.1	.....	8k	Hz	SW	.....	o	o	Cloudy	
Socorro, New Mexico	25.32	643.1	29.38	746.2	57	13.9	25	NE	1	0.4	.....	2k	o	SW	.....	o	o	Fair	
Spokane Falls, Wash. Ter.	28.32	719.3	30.26	768.6	33	0.6	50	NE	1	0.4	.....	5cs	o	.....	.....	o	o	Fair	
Springfield, Illinois	29.42	747.3	30.09	764.3	55	12.8	62	NE	4	1.8	.....	o	o	.....	.....	o	o	Clear	
Springfield, Massachusetts	29.71	754.6	29.84	757.9	48	8.9	78	NE	12	5.4	.....	.....	10s	.....	NE	1.04	26.4	Cloudy	
Stockton, Texas	29.94	684.3	29.94	760.5	63.0	17.2	89	SW	8	3.6	.....	.....	10n	.....	SW	0.36	9.1	Light rain	
St. Vincent, Minnesota	29.01	736.8	29.78	756.4	55	12.8	93	SE	8	3.6	.....	.....	10s	.....	Calm	0.43	10.9	Cloudy	
Thatcher's Island, Mass	29.81	757.2	29.87	758.7	40	4.4	100	NE	34	15.2	.....	.....	10n	.....	NE	0.70	17.8	Heavy rain	
Toledo, Ohio	29.33	745.0	30.00	762.0	53	11.7	61	NW	11	4.9	.....	o	o	.....	.....	o	o	Clear	
Tucson, Arizona	27.44	697.0	29.99	761.7	60	15.6	44	SE	3	1.3	.....	o	o	.....	.....	o	o	Clear	
Umatilla, Oregon	30.00	762.0	30.52	775.2	39.3	4.1	69	SE	6	2.7	.....	o	o	.....	.....	o	o	Clear	
Uvalde, Texas	28.94	735.1	29.74	755.4	72	22.2	85	SE	1	0.4	.....	.....	10s	.....	Calm	o	o	Cloudy	
Vicksburg, Mississippi	29.75	755.6	30.00	762.0	67	19.4	55	NE	6	2.7	.....	5c	o	N	.....	o	o	Fair	
Visalia, California	29.50	749.3	29.86	758.4	61	16.1	66	SW	1	0.4	.....	o	o	.....	.....	o	o	Clear	
Washington, D. C.	29.66	753.4	29.77	756.1	56	13.3	75	NW	6	2.7	.....	.....	10s	.....	NW	o	o	Cloudy	
Wickenburg, Arizona	.....	.....	.....	.....	50	10.0	45	Calm	.....	.....	o	o	o	.....	.....	o	o	Clear	
Wilmington, N. Carolina	29.74	755.4	29.80	756.9	64	17.8	57	NE	6	2.7	.....	2k	o	Calm	.....	o	o	Fair	
Winnemucca, Nevada	25.77	654.5	30.13	765.3	38	3.3	38	NE	6	2.7	.....	o	o	.....	.....	o	o	Clear	
Wood's Holl, Mass	29.72	754.9	29.75	755.0	46	7.8	92	N	23	10.3	.....	.....	10n	.....	N	0.24	6.1	Light rain	
Yankton, Dakota	28.52	724.4	29.70	755.9	64	17.8	94	SE	20	8.9	.....	.....	10n	.....	.....	1.10	27.9	Heavy rain	
Yuma, Arizona	29.68	753.9	29.82	757.4	64.6	18.1	63	S	1	0.4	.....	o	o	.....	.....	o	o	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.02	559.3	.....	.....	55.0	12.8	83	Calm	o	o	.....	5cs	2ks	.....	.....	o	o	Cloudy	Thomas Herran
Buff Bay Town, Jamaica ‡	29.74	755.4	30.05	763.3	74	23.3	72	E	.....	.....	.....	o	o	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.92	760.0	29.97	761.2	77	25.0	72	Calm	o	o	.....	o	o	.....	.....	o	o	Clear	A. Van Caneghem, Asst.
Jakobshavn, Greenland	29.80	756.8	29.85	758.1	32.4	0.2	.....	Calm	.....	.....	o	10	o	.....	.....	o	o	.....	K. V. Möller.
Kingston, Jamaica, W. I.	29.94	760.5	29.95	760.7	79.2	26.2	64	Calm	o	o	.....	o	o	.....	.....	o	o	Fine	Robert Johnstone.
Navassa, W. I.	29.80	758.4	29.94	760.5	79	26.1	78	N	10	4.5	.....	o	2s	.....	NE	o	o	Fair	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	80	26.7	87	E	.....	.....	2	5ck	5k	E	.....	0.110	2.8	½ Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.46	748.3	30.02	762.5	77	25.0	94	Calm	.....	.....	o	.....	8ks	.....	Calm	0.02	0.5	Threatening	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	.....	.....	.....	SE	.....	.....	1	3ck	1ks	SE	SW	2.95	75.	.....	Earl Flint.
Santiago de Cuba, W. I.	29.91	759.7	29.94	760.5	78	25.6	82	Calm	o	o	.....	2k	o	.....	.....	o	o	Fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	77.0	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	30.04	763.0	30.08	764.0	33.0	0.6	100	NE	16	7.2	.....	.....	10n	.....	NE	0.50	12.7	Raining	J. Fortescue & W Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross, N. 33° 49′, E. 128° 39′	29.93	760.2	70	21.1		Calm			0		0							Blue sky.	Comm. A. F. Errington.
H M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.86	758.4	62.7	17.1	83	Var.			1		10							Raining	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 23° 38′, E. 58° 36′	29.70	754.4	90	32.2	53	WNW			2		3	NW						D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			65	18.3		SSE			1		0							Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	30.01	762.2	77	25.0	86	ESE			2		8							D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	30.11	764.8	61	16.1	66	S			2		10							Raining	Com. F. W. Richards.
H. M. S. Champion, Ascension I'ds, Africa	29.96	761.0	81	27.2	70	SE			3–5		5	Calm				3	WSW	Squally	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Chusan Archipelago	29.77	756.1	68	20.0	95	S			2		2							D. clouds	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 37° 03′, E. 15° 12′	29.82	757.4	66	18.9		SSE			2		8	ESE				2	SSE	D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, S. 13° 02′, W. 8° 08	30.05	763.3	76	24.4	95	ESE			4		4					3	SE	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.91	759.7	74	23.3	90	SSE			4		3	SSE						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 34′, W. 52° 41′	30.44	773.2	38.5	3.6	81	ENE			1		6					1	NE	D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, N. 8° 34′, E. 81° 10′	29.73	755.1	91	32.8		SW			2		6							D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 4° 30′, E. 104° 55′	29.75	755.6	84	28.9		Calm			0									Misty	Comm. C. Johnstone.
H. M. S. Emerald, S. 8° 05′, E. 178° 30′	29.77	756.1	83	28.3	87	N			1–3		7	N						Showery	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, N. 5° 41′, E. 82° 38′	29.72	754.9	85	29.4	79	SSW			5–6		3	SSW				4	SSW	Squally	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 44° 04′, W. 57° 14′	30.22	767.6	41	5.0		ENE			4		4	ENE				1	ENE	Misty	Capt. W. C. Karslake.
H. M. S. Fawn, N. 14° 03′, E. 42° 44′	29.69	754.1	93.5	34.2	44	SSW			3		2	SSW				2	S	D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo																			Comm. R. N. Custance.
H M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 41° 35′, W. 137° 40′	30.26	768.6	56	13.3	87	SW			3		9					1	WNW	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 53° 10′, E. 70° 54′	29.26	743.2	41	5.0	82	NNW			3		10					4	Con.	Overcast	Capt. L. F. Jones.
H. M. S. Griffon, N 23° 09′, W. 82° 22′	29.93	760.2	80	26.7	87	N			1									Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 25° 10′, W. 70° 02′	29.93	760.2	79	26.1		SSW			1		1					Sm'h		Blue sky	Capt. J. L. Way.
H. M. S. Inconstant, S. 40° 00′, E. 137° 38′	30.38	771.6	53	11.7	80	NNW			3		9	NNW				2	NW	D. clouds	Capt. C. C. P. Fitzgerald.
H. M. S. Iris, N. 34° 48′, E. 22° 16′	29.93	760.2	68	20.0	84	WSW			1		3	WSW				1	WNW	D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 26° 10′, E. 119° 55′	29.86	758.4	67	19.4	84	NE			1		7	SSW				1–2	S	Misty	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.00	762.0	66	18.9		Calm			0		1	Calm						Blue sky	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	29.90	759.4	74	23.3		Calm			0		4							D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Now Chow I'd, China Sea	29.71	756.4	79.6	26.4	87	SSE			1		6	SW						Misty	Capt. A. Carpenter.
H. M. S. Midge, Taku, China *	29.83	757.7				Calm			0		2	SW						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 36° 07′, W. 5° 21′	30.09	764.3	66	18.9	81	WSW			4		0							Blue sky	Capt. H. H. Rawson.
H. M. S. Modeste, N. 1° 20′ E. 105° 56′	29.89	759.2	83	28.3	96	Calm			0		1							Blue sky	Capt. J. G. Mead.
H. M. S. Monarch, Goletta, Tunis, N. Africa	29.89	759.2	62	16.7	88	NNW			4		10	NNE						Raining	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	30.14	765.5	43.5	6.4	83	ESE			3		10	ESE						Overcast	Capt. E. B. Drummond.
H. M. S. Orontes, S. 22° 20′, E. 53° 12′ †	30.19	766.8	74.5	23.6	74	ESE			4-5		5					3	SSE	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 45′, W. 79° 07′	29.90	759.4	78.5	25.8		Calm			0		7					2	S	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin, S. 50° 59′, W. 74° 12′	29.44	747.8	49	9.4		N			4-8		10							Overcast	Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, Fernando Po I'd, Africa	29.91	759.7	81	27.2		WSW			2		10	Calm						D. clouds	Capt. Hon. A.C.Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	30.29	769.4	43	6.1		WNW			1									Blue sky	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.91	759.7	78.4	25.8	84	SE			2		6							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis, N. 36° 33′, W. 7° 44′	30.15	765.8	64	17.8	62	WNW			2		3	WNW				1	WNW	D. clouds	Capt. G. O. Twiss.
H. M. S. Shannon, N. 0° 26′, W. 25° 16′	30.02	762.5	80.5	26.9	87	ESE			3		0					4	ESE	Blue sky	Capt. J. D'Arcy.
H. M. S. Tenedos																			Capt. T. L. H. Ward.
H. M. S. Thetis, S. 13° 08′, W. 146° 30′	29.90	759.4	83	28.3	83	SE			4		8					3	SE	D. clouds	Capt. C. G. Fane.
H. M. S. Thunderer																			Capt. P. W. Stephens.
H. M. S. Triumph, Coquimbo, Chili, S. A	30.01	762.2	52	11.1	93	E			1		2	Calm						Misty	Capt. P. H. Colomb.
H. M. S. Turquoise, S. 27° 03′, W. 70° 38′	30.00	762.0	57	13.9	100	Calm			0		10							Foggy	Capt. A. H. Markham.
H. M. S. Tweed																			Capt. M. B. Medlycott.
H. M. S. Tyne, Suez, Egypt	29.79	756.7	78	25.6	43	NNW			1		4							D. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I			78	25.6		Calm			0		2							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, N. 36° 01′, E. 165° 22′	30.27	768.8	64	17.8	89	SSW			1		4	SSW				1	S	D. clouds	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Abu Shehr Roads, Persia	29.70	754.4	78.5	25.8	80	NNE			1		4							D. clouds	Capt. T. P. Nesham.
H. M. S. Zephyr, N. 30° 36′, E. 122° 03′	29.87	758.7	64	17.8	?	E			3		7	E						Misty	Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, Mossamedes, Benguela	30.07	763.8	64.4	18.0	72	W			4		0					2		Blue sky	Carlos Candido dos Reis, Comd't.
Quanza, N. 27° 20′, W. 20° 41′	30.32	770.2	71.6	22.0	77	ENE			3		2		NE			2	NE	D. clouds	Carlos M. da Silva Costa, Comd't
RioLima																			S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.78	756.4	78.4	25.8	85	SSW			3		7		S	6 h	ours	2		Drizzling	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡ N. 50° 49′, E. 0° 50′	30.00	762.0	50.9	10.5	86	SSW			3		10							Misty	Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	29.99	761.7	68	20.0	56	NW	3	1.3			2		NW	0	0			Fair	
N. Yard. Portsmouth, N. H.	29.88	758.9	41	5.0	92	NE	34	15.2		5c	0	NE		1.1	28.			Misty	
Naval Hospital, Yokahama, Japan	29.84	757.9	65.5	18.6	86	SW			1		0			0	0			Clear.	
Adams, Chimbote, Peru	29.83	757.7	65	18.3	89	NE			1		2					Long	SW	Fair	
Alaska, Callao, Peru	29.97	761.2	65	18.3	94	SE			1		8			0	0	Sm'h		Cloudy	
Alert, Port Lloyd, Bonin Id.*	29.90	759.4	76	24.4	82	Calm			0		2		Calm			Sm'h		Clear	
Alliance, Norfolk, Va	29.80	756.9	66	18.9	68	NNW			1		2			0	0			Clear.	
Ashuelot. Kobe, Japan	30.01	762.2	66	18.9	84	W			1		2		Calm					Fair	
Colorado, New York, N. Y.	29.78	756.4	50	10.0	93	NE	8	3.6			10			0.005	0.1			Cloudy	
Constitution, Norfolk, Va	29.70	754.4	65	18.3	58	NNW	4	1.8			2							Fair	
Franklin, Norfolk, Va	29.75	755.6	61	16.1	61	N	7	3.1			0			0	0			Clear	
Galena. Villafranca, France	29.84	757.9	68	20.0	79	ESE			1		2					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	30.02	762.5	55	12.8	81	SW	1.2	0.5			10		SW					Cloudy	
Jamestown, Sitka, Alaska*	29.69	754.1	44	6.7	92	E			1		10			0.40	10.2			Cloudy	
Kearsarge. Port Royal, S. C	29.82	757.4	69	20.6	61	NE			4		2		NE			Sm'h		Fair	
Lackawanna, S. 22° 22′, W. 102° 13′...†	30.19	766.8	73	22.8	100	NNE			2-3		5		NE			Sm'h	NE	Fair	
Marion, Montevideo, Uruguay	30.17	766.3	59	15.0	82	NE			1		10		Calm	0	0	Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	29.89	759.2	45	7.2		NE	6	2.7			10							Cloudy	
Minnesota, Newport, R. I	29.75	755.6	47	8.3	92	NNE			9		10		NE			R'gh	NNE	Raining	
Monocacy, Yokohama, Japan	29.99	761.7	68	20.0	84	W			1		0							Clear	
New Hampshire, Port Royal, S. C	29.77	756.1	74	23.3	59	NNE	26	11.6			0			0	0			Clear	
Nipsic. Villafranca, France	29.84	757.9	70	21.1	66	NNW			1		2					Sm h		D. clouds	
Onward, Callao, Peru†	30.00	762.0	65	18.3	100	SSE			1		8		NNW			Long	W	Cloudy	
Palos, Yokohama. Japan	30.11	764.8	66	18.9	94	S			3		2							Fair	
Passaic, Washington, D. C	29.80	756.9	56	13.3	87	NW			1		8		NW					Cloudy.	
Pensacola, N. 37° 56′, W. 141° —′	30.32	770.1	60	15.6	82	SE			2		2		S	0	0	Long		Fair	
Portsmouth, Elizabeth River, Va	29.79	756.7	61	16.1	71	NNW			2		2		NW			Sm'h		Clear	
Powhatan, N. 33?° —′, W. 79?° —′	29.79	756.7	70	21.1	75	NNW			3		8		W			Mod.	N	Fair	
Quinnebaug, N. 23° 45′, W. 27° 05′	30.21	767.3	74	23.3	72	ENE			4		8		ENE			Long	E	Cloudy	
Ranger, Chipequa, Mexico*	29.80	756.9	80	26.7	78	N			1		2		Calm	0	0	Sm'h		Fair	
Richmond, Yokohama, Japan	30.00	762.0	69	20.6	80	WSW			2		0			0	0			Clear	
Saratoga, Norfolk, Va	29.77	756.1	60	15.6	71	NNW			2		2		Calm	0	0			Fair	
Shenandoah, Montevideo, Uruguay*	30.17	766.3	59	15.0	82	E			1		10					Sm'h		Cloudy	
St. Louis, League Island, Pa	29.37	746.0	54	12.2	84	NNE	7	3.1			10		NE	0	0			Cloudy	
Swatara. Shanghai, China†*	29.81	757.2	69	20.6	85	SE			2		8		Calm					D. clouds	
Tennessee, Hampton Roads, Va	29.81	757.2	60	15.6	71	NW	9	4.0			2			0	0	Sm'h		Clear	
Ticonderoga, S. 44° 13′, W. 106° 37′	29.99	761.7	48	8.9	92	WSW			4		5		WSW	0.05	1.3	Long	SW	Fair	
Trenton, Villafranca, France*	29.81	757.2	76	24.4	73	SE			2		0			0	0	Sm'h		Clear	
Vandalia. Boston Mass	29.85	758.2	45	7.2	100	NNE			6		10							Cloudy	
Wabash, Boston, Massachusetts	29.84	757.9	46	7.8	84	NNE	20	8.9			10		N;E	0.50	12.7			Cloudy	
Wachusetts, N. 36° 32′, W. 125° 49′	30.03	762.7	57	13.9	87	NNW			6		0					R'gh	N	Clear	
Wyoming, Bermuda, W. I	29.95	760 7	73	22.8	85	SW			2		5		SW			Sm'h	SW	Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 16° 16′, W. 55° 45′	30.03	762.7	81	27.2	78	E			2		2					1	E	Blue sky	W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne, N. 6° 27′, W. 51° 26′	29.99	761 7	82.9	28.3	58	NE			4		7							D. clouds	Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 43° 59′, W. 29° 11′	30.17	766.3	60.5	15.8	94	S			5		10							Drizzling	Capt. J. E. C. Patterson.
Barque Ellesa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow, ‡ N. 20° 25′, E. 88° 40′	29.63	752.6	84.5	29.2	85	SSW			3		10							Overcast.	Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee, ‡ N. 19° 10′, W. 35° 50′	30.13	765.3	75.3	24.1	81	E			4		6ks							Showery	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ S. 7° 54′, W. 14° 25′	30.02	762.5	81.5	27.5	74	ENE			5		8							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 7° 52′, E. 85° 43′	29.73	755.1	81.0	27.2	91	SW			4		6							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, ‡ N. 43° 00′, E. 4° 45′	29.89	759.2	62	16.7	72	W			5		0							Blue sky	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 50° 38′, W. 39° 36′	30.13	765.3				NW			4		5		N			Mod.	N	Fair	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Jemay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic, N. 42° 50′, W. 51° 58′	30.18	766.6	47	8.3	92	ENE			4		10					Light	E	Misty	Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 45° 29′, W. 40° 55′ †	30.20	767.1	49	9.4		NNE			4		8		NE	0	0	Mod.	NE	Fair	Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England †	29.71	754.6	46	7.8		SSE			5		10?		S	7 hours				Clear?	Capt. Ch. W. Kennedy
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Thol.
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, ‡ N. 40° 37′, W. 53° 01′	30.18	765.6	63.5	17.5		SSE			3		8		S	0	0	Sm'h	S	Fair	Capt. Th. Jüngst.
S. S. Köln, N. 40° 52′, W. 64° 36′	29.89	759.2	58.5	14.7	?	E			3		8		E	0	0	Sm'h	E	Cloudy	Capt. F. Pfeiffer.
S. S. Leipzig, N. 48° 35′, W. 14° 15′	29.93	760.2	59.0	15.0		SW			6		10			1 hour		Long	wsw	Hazy	Capt. G. Meyer.
S. S. Ohio																			Capt. C. Heimbourh.
S. S. Strassburg																			
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Skoldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, N. 44° 26′, W. 39° 55′	30.16	766.1	55	12.8	87	NNE			2		10		NNW			Sm'h	NNW	Raining	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio, N. 43° 53′, W. 37° 03′ *†	30.33	770.4	55	12.8	100	NE			3		10		NE	Light		Sm'll	SE	Misty	W. Shackford, Chief Off'r
S. S. Pennsylvania, Near Liverpool, England*†	29.59	751.6	50	10.0	79	SW			5		10		S					Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, Guaymas, Mexico†	29.77	756.1	72	22.2	58	W			1		0			0	0			Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 34° 50′, E. 140° 51′ †	30.10	764.5	69	20.6	80	NE			3		2		NE	0	0	Mod.	E	Clear	Capt. H. Davison.
S. S. Gaelic, N. 26° 18′, E. 118° 57′ *†	29.99	761.7	71	21.7	95	NW			2		5		W			Sm'h		Fair	Capt. W. H. Kidley.
S. S. Oceanic, N. 44° 16′, E. 169° 02′	30.06	763.5	43	6.1	75	WSW			4		10		W	0	0	Mod.	WSW	D. clouds	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 40° 45′, W. 124° 20′ †	29.98	761.5	49.5	9.7	82	NNW			3		0					Long	NNW	Clear	Capt. Fred. Belles.
S. S. Oregon, Portland, Oregon†	30.19	766.8	51.0	10.6	79	NW			1		2		NW					Fair	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, Tacoma, Washington Ter. †	30.32	770.1	47	8.3	85	NW			2		5							Hazy	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 33° 40′, W. 118° 12′ †	29.96	761.0	64	17.8	73	Calm			0		8		SW	Drizzles		Sm'h		Cloudy	Geo. H. Harrison.
S. S. Senator, San Francisco, Cal†	30.06	763.5	53	11.7	93	W			1		10							Misty	Capt. Thos. Wallace.
S. S. State of California, N. 40° 45′, W. 124° 55′ †	29.97	761.2	52	11.1	86	N			4		5?		NW			Short	NW	Clear?	Capt. G. Debney.
S. S. Victoria, N. 43° 40′, W. 124° 16′ †	30.21	767.4	50	10.0	100	N			4		5		NW			High	NW	Fair	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, Sydney, N. S. W	30.19	766.8	68	20.0	95	Calm			0		0							Clear	A. Bannerman, 2d Officer
S. S. City of New York, Sydney, N. S. W †	30.22	767.6	68	20.0	90	Calm			0		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt. D. S. Austin.
S. S. City of Peking, N. 24° 52′, E. 118° 22′ †	29.86	758.4	72	22.2	95	ESE			2		8		ENE	0	0	Sm'h		Cloudy	Capt. G. G. Berry.
S. S. City of Sidney, N. 35° 22′, W. 129° 42′ †	30.21	767.3	58	14.4	76	N			5		5		NNE	0	0	H'vy	NE	Hazy	Capt. H. C. Dearborn.
S. S. City of Tokio																			A. L. Ritchie, 2d Officer
S. S. Colima, N. 12° 05′, W. 87° 52′ †	29.95	760.7	81	27.2	74	SSE			2		8		Calm	0	0	Mod.	SSE	Cloudy	Capt. R. R. Searle.
S. S. Granada, N. 16° 28′, W. 99° 18′ †	29.85	758.2	83	28.3	79	WSW			4		2		WSW	Squalls		Sm'll	SSW	Clear	Capt. M. Connolly.
S. S. Zealandia, N. 19° 04′, W. 158′ 51°	30.12	765.0	68	20.0	84	ENE			2		5?		SE	0	0	Sm'h	NE	Cloudy?	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, N. 40° 05′, W. 62° 28′ †	29.87	758.7	73	22.8	95	S			1		5?		S	0	0	Sm'h		Clear?	A. Feddersen, 2d Officer.
S. S. Rhynland																			Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 37° 33′, W. 73° 00′	29.74	755.4	60	15.6	76	NNW	8	3.6			10d		N	0	0	Mod.	N	Cloudy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 21° 30′, W. 56° 40′ *†	30.10	764.5	79	26 1		S			4		8		S	0	0	Sm'h	E	Fair	Capt B. F. Woodbury.
Brigantine George, N. 36° 30′, W. 68° 35′ †	29.85	758.2	75	23.9		S			5		10		SW	Showers		Mod.	SW	Squally	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Md. †	29.89	759.2	56	13.3	94	ENE	2	0.9			10n							Raining	
Bark Sunbeam, Lisbon, Portugal†	30.22	767.6	70	21.1	85	N			6		0			0	0			Clear	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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W. B. Hazen

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

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 18, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco	‡		30.07	763.8	68.7	20.4	89	NE			2		3			0	0	Pretty fair	Dr. Ollive.
Nemours	‡		30.04	763.0	71.4	21.9	87	NE			1		0			0	0	Clear	Raynard.
Algiers	‡		30.09	764.2	66.6	19.2	68	NNE			3		0			0	0	Clear	Nicolas.
La Calle	‡		30.05	763.6	67.6	19.8	65	NW			5		5			0	0	Cloudy	Fonfréde.
Tunis	‡		29.98	761.4															Jacques.
Sfax	‡		30.10	764.4															Gau.
Saida	‡		30.11	764.8	75.6	24.2	26	N			5		0			0	0	Clear	Dumas.
Tebessa	‡		30.11	764.9	55.4	13.0	64	N			5		3			Inap.	Inap.	Pretty fair	Watrin.
Geryville	‡																		Lonchamp.
Laghouat	‡		30.06	763.6	74.1	23.4	43	N			3		0			0	0	Clear	Herbin.
Biskra	‡		30.15	765.7															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.28	769.1	30.37	771.4	45.0	7.2	93	E	2	0.9			1			0	0	Very fine	R. L. J. Ellery.
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.48	748.8	30.02	762.4	66.6	19.2	47	E			3		3			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.25	743.1	30.01	762.3	60.8	16.0	46	SW	4.3	1.9			3			0	0		Dr. Wierzbicki.
Eperies	29.14	740.2	30.00	762.1	62.6	17.0	46	Calm			0	6cu	0			0.030	1.0		Julius Mikolik.
Gratz	28.79	731.2	30.01	762.3	63.7	17.6	42	SSE			2		0			0	0		Andreas Rospini.
Hermannstadt	28.54	724.8	29.92	760.0	68.4	20.2	54	S			3		8			0.031	0.8		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.64	727.6	29.95	760.9	63.3	17.4	62	SSW			1		0			0.024	0.6		The Staff.
Lemberg	29.00	736.7	29.98	761.5	57.6	14.2	68	NW			1		8			Inap.	Inap.		Dr. T. Stanecki.
Pola	29.89	759.1	30.00	761.9	67.3	19.6	47	E			2		0			0	0		I. R. Hydrographic Office.
Szathmar	29.49	749.1	29.95	760.6	65.5	18.6	51	N			2		2			0	0		Beicht Peter, S. J.
Szegedin	29.63	752.6	29.91	759.6	63.7	17.6	63	N			2		2			0	0		Karl Stancel.
Trieste	29.93	760.1	30.03	762.7	69.8	21.0	33	NE			2		1			0	0	Clear	Secco.
Vienna	29.33	745.0	30.04	763.0	61.5	16.4	54	E			1		5			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.23	742.4	29.33	745.0	46.2	7.9	92	SE	13	5.8			9			0.515	13.1	Overcast	W. Boswell.
Armagh, Observatory	29.08	738.6	29.30	744.2	52.6	11.4	78	SW	19	8.5			8					Squally	S. Call.
Bidston, Liverpool Obs'y			29.44	747.8	58.0	14.4	51	SW	32	14.3			3					Blue sky	John Hartnup.
Bolton, Sharples	28.91	734.3	29.44	747.8	56.8	13.8	60	SW	6	2.7			7					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.15	740.4	29.55	750.6	54.7	12.6	72	SW			2		6			0.02	0.5	D. clouds	J.McLandsbo ough, F.R.S
Bridgetown, Barbadoes	29.94	760.5	29.97	761.2	85	29.4	68	NE			2		7					Gloomy	Corpl. J. Surgener, AH.C.
Cardington			29.56	750.8	63.0	17.2	72	W			2.0		6					D. clouds	John McLaren.
Chatham, School M. E.	29.52	749.8	29.65	753.1	55.1	12.8	94	SW			4		10					Drizzling	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.44	747.8	29.67	753.6	53.9	12.2	82	SW			4		10					Rain & fog	The Staff.
Fort Napier, Natal	27.63	701.8	29.85	758.2	68.2	20.1	60	Calm			0		4?					Overcast?	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.60	751.8	29.83	757.7	89	31.7	84	SW			1		4					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			29.49	749.0	52	11.1	79	WSW			6		10			0.14	3.6	Raining	J. O'Donaghue.
Gibraltar, Mediterranean	30.00	762.0	30.06	763.5	69.6	20.9	84	W			4		0					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.08	738.6	29.28	743.7	54.1	12.3	66	SW			6		7			Blank		D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	29.46	748.3	29.62	752.3	59.2	15.1	86	SW			1		9					Overcast	The Staff.
Guernsey	29.61	752.1	29.82	757.4	55	12.8	97	SSW			5		10					Raining	Dr. S. E. Hoskins, F.R.S.
Kew, Observatory	29.60	751.8	29.64	752.8	57.0	13.9	80	SW	14	6.3			8					Threatening	The Staff.
Leicester, Museum	29.27	743.4	29.53	750.0	57.8	14.3	67	SW			4		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.75	755.6	29.83	757.7	62.6	17.0	87	NE			3		8			0.16	4.1	Overcast	F. S. Vine, A. H. C.
Nassau, Bahamas	29.87	758.7	29.92	760.0	76.5	24.7	94	SW			1		8			Blank		D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.02	737.1	29.53	750.0	55.5	13.1	78	SSW			5		10					Squally	John Mac Emall.
Oxford, Radcliffe Obs'y	29.37	746.0	29.60	751.8	58.2	14.6	73	WSW			4		8					Threatening	The Staff.
Plymouth	29.59	751.6	29.66	753.4	55.0	12.8	88	SW			4		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.38	746.2	43.3	6.3	84	E	33	14.8			10					Misty	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.86	758.4	29.93	760.2	73.0	22.8	84	NE			2		1					Blue sky	Serg't W. H. Lyne.
Sheffield	29.22	742.2	29.50	749.3	60.1	15.6	75	SSW			5		9			0	0	Overcast	W. F. Cooper.
Silloth Rectory	29.35	745.5	29.38	746.2	56.9	13.8	72	SW			5		5			0.070	1.8	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.47	748.5	54.1	12.3	75	SW	20	8.9			10					D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	29.43	747.5	29.64	752.8	59.3	15.2	68	SW			3		10					Showery	Rev C.H.Griffiths, F.M.S.
Truro, Royal Institution	29.60	753.4	29.68	753.9	58	14.4	70	SW			6		6					D. clouds	W. Newcombe.
Valencia, Observatory	29.38	746.2	29.40	746.7	54.2	12.3	71	SW	33	14.8			4					Misty	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.31	769.9	30.36	771.1	46	7.8	66	E	10	4.5			10n			0.080	2.1	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	30.33	770.4	30.39	771.9	44	6.7	84	NE	10	4.5			10n		NE	0.04	1.0	Cloudy	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	30.35	770.9	30.38	771.6	41	5.0	81	Calm	0	0		0	2s		Calm	0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.20	741.7	30.03	762.7	44	6.7	84	W	8	3.6		5ck	0	W		0.110	2.8	Fair	James Stewart.
Fredericton, N. B																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.16	766.1	30.30	769.6	41	5.0	99	NE	20	8.9			10n			0.401	10.2	Cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.73	755.1	30.07	763.8	49	9.4	87	NE	7	3.1		2c	8ks	NE	NE	0.07	1.8	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S																			C. H Rigby.
Montreal, Quebec*	29.94	760.5	30.14	765.5	48	8.9	80	NE	14	6.3		8ck	2ks	SE	NE	0.14	3.6	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nuson.
Parry Sound, Ontario*	29.42	747.3	30.12	765.0	50	10.0	93	NE	1	0.4		5k	5n	NE	NE	0.02	0.5	Cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.37	746.0	30.07	763.8	46	7.8	10	NE	6	2.7		10c	0	NE		0.02	0.5	Cloudy	H. Morgan.
Port Stanley, Ontario	29.42	747.3	30.07	763.8	47	8.3	92	NE	3	1.3			10n		NE	0.13	3.3	Light rain	M. Payne.
Quebec, Quebec*	29.94	760.5	30.27	768.8	43	6.1	92	NE			5		10n		NE	0.03	0.8	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.09	754.1	30.15	765.8	49	9.4	82	E	4	1.8			10s		E	0	0	Cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.37	746.0	30.09	764.3	49	9.4	91	NE	6	2.7			8ks		E	0	0	Cloudy	K. Stewart.
St. Andrews, N .B	30.15	765.8	30.20	767.1	42	5.6	98	NE	3	1.3			10n			2.91	73.9	Light rain	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.41	772.4	30.45	773.4	42	5.6	73	E	8	3.6		10cs	0	W		Inap	Inap.	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.72	754.9	30.11	764.8	47	8.3	94	NE	5	2.2			10n		NE	0.24	6.1	Cloudy	Magnetic Observatory
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.06	763.5	30.12	765.0	43	6.1	97	E	22	9.8		Fg	Fg			0.62	15.7	Foggy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	30.27	768.8	30.52	775.2	48	8.9	85	SE	1	0.4		0	0			0	0	Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	30.08	764.0			63.0	17.2	97	WSW	20.5	9.2			10n			0.100	2.5	Raining	John Duthie.
Cape Town, C. G. H. Obs'y	30.12	765.0	30.16	766.1	62.1	16.7		S	6.7	3.0		0	1			0	0		The Staff, for D. Gill.
Worcester*†	29.04	737.6			60.8	16.0	60				1	5	5			0	0	Dull	C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.69	754.0	29.71	754.6	70.0	21.1	91	SE	3.8	1.7		3k	0			0	0	Cloudy	M. Marc Dechevrens, S.J.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.22	666.0	29.94	760.5	66.2	19.0	90	NE			1	10	0			0.12	3.	Clear	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.58	751.4	29.63	752.6	51.4	10.8	93	SW	20	9		10						Raining	Oversergent Fischer.
Fande	29.54	750.3	29.56	750.8	48.6	9.2	99	WSW			4	10						Raining	Overloerer Lauridsen.
Godthaab, Greenland	29.65	753.1	29.69	754.2	31.8	—0.1	96	Calm			0	10							S. Kleinschmidt.
Stykkisholm, Iceland	29.71	754.7	29.75	755.8	39.2	4.0		E			2	0							A. O. Thorlacius.
Thorshavn	29.59	751.5	29.02	752.4	39.7	4.3	58	ENE	25	11		6							Overloerer Bergh.
Vestervig	29.39	746.5	29.48	748.9	47.1	8.4	100	SW			6	10						Foggy	Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.41	746.9	30.04	763.0	66.6	19.2	31	WSW			1		0			0	0	Clear	M. Labroue, Director.
Alençon Normal School	29.28	743.7	29.83	757.7	60.8	16	75	S			3		10n		S	0	0	Covered	M. Nicot, Director.
Arras, Engineer School	29.55	750.6	29.81	757.1	63.0	17.2	59	SW			3		kn		SW	0	0		M. Klein, Commandaut.
Avignon, Normal School	29.95	750.8	30.03	762.8	73.9	23.3	30	W			1		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.42	747.2	29.95	761.0	64.8	18.2	38	SW			2		8kn		SW	0	0	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.01	752.0	29.87	758.6	66.0	18.9	53	SW			3		8		WSW	0	0	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.13	739.9	30.00	761.9	64.0	17.8	46	S			1					0	0		M. Gobin, Director.
Bordeaux, Observatory	29.77	750.1	30.02	762.6	68.4	20.2	43	S			1		2		WSW	0	0	Slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	29.48	748.8	30.02	762.6	62.6	17	62	SSW			1	cl	0	SSW		0	0		M. Postel, Director.
Brest, Naval Observatory	29.57	751.0	29.81	757.2	56.1	13.4	84	SW			2		10		SW	0.012	0.3	Raining	M. de Rermaree, Dir.
Caen, Normal School	29.09	754.1	29.76	755.9	68.2	20.1	67	S			3		8		SW	0	0	Very cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.58	751.4	29.90	759.5	65.1	18.4	59	S			3		8			0	0	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.38	746.3	29.89	759.1	61.2	16.2	58	SW			2		8			0	0	¼ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.63	727.2	29.94	760.4	70.2	21.2	33	E			1	2c	0			0	0	Slightly cl'dy	M. Allnard, Director.
Cluny, Normal School	29.17	741.0	30.00	762.0	79.5	21.4	37	W			2		0			0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.10	739.0	29.95	760.8	64.4	18	39	W			2		2ks	W	W	0	0	Slightly cl'dy	Dr. Coulet, Director.
Gap, Normal School	27.51	698.8	30.04	763.1	55.0	12.8	78	SE			1		2		S	0.04	1.	¼ covered	M. Joangirard, Director.
Gréasque, du. Rhone	28.97	735.8	30.11	764.8	69.4	20.8	30	S			2		2		S	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.24	742.6	29.98	761.6	68.4	20.2	32	W			1		0			0	0	Clear	M. Ablard, Director.
Guéret, Normal School	28.45	722.5	30.00	762.1	61.5	16.4	50	SW			2	cl	0		NE	0	0		M. Rivoire, Director.
Lamballe, Normal School	29.52	749.7	29.78	756.5	59.4	15.2	72	S			4		10		S			Raining	M. Ollitrault, Director.
Lescar, Normal School	29.48	748.9	30.14	765.6	65.8	18.8	31	SW			1		0			0	0		M Chauvin, Director.
Lorient, Naval Observatory	29.81	757.2	29.91	759.8	59.0	15.0	78	SW			8		10			0.591	15.0	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.98	730.1	30.01	762.3	67.5	19.7	28	SE			1		0			0	0	Clear	M. André, Director.
Mans, Normal School	29.04	752.1	29.91	759.8	62.1	16.7	64	W			4		8		W	0	0	Very cloudy	M Piboeu, Director.
Marseille, Observatory	29.78	756.5	30.05	763.3	69.6	20.9	48	SSW			1		1		NE	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.87	631.6	30.10	764.0	54.5	12.5	44	SE	16.8	7.5			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.90	759.5	30.01	762.2	71.8	22.1	48	SSE			2		0			0	0	Clear	M. P. Galzin, Director.
Nancy, Normal School	29.20	741.0	29.94	760.5	68.0	20	29	S			1		2k			0	0	Slightly cl'dy	M. Hasse.
Nantes, Observatory	29.80	756.8	29.96	760.9	59.4	15.2	78	WSW			1-2		10		WSW	0	0	Covered	M. Larocque, Director.
Nice	29.98	761.6	30.02	762.5	68.0	20.0	57	SE			3		1	E	SE	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.92	760.0	30.03	762.7	69.8	21.0	29	S	7.4	3.3			0			0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.59	573.8			49.3	9.6							0			0	0	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	28.93	734.8	29.96	760.9	71.2	21.8	29	SW			1		0			0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.17	639.3			46.4	8.0	47	WSW			2		0			0	0	Clear	M. Allnard, Director.
Rochefort, Naval Obs'y	29.99	761.8	30.02	762.6	65.5	18.6	56	SSW			3		8	NNW	SSW	0	0	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.77	756.2	29.99	761.7	60.4	15.8	73	SW			3		8		E	0	0	Very cloudy	M. Mouillot, Director.
Rodez, Normal School	27.91	708.9	30.02	762.4	64.8	18.2	27	NW			1		0			0	0	Clear	M. Richard, Director.
Rouen, Normal School	29.70	754.3	29.78	756.5	60.8	16	73	S			4		10		SSW	0	0	Covered	M. Platrier, Director.
Saint Lô, Normal School	29.66	753.3	29.82	757.3	60.4	15.8	69	SSW			1		10		SSW	0	0	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.74	755.5	29.91	759.7	61.2	16.2	58	SSW			3		10		SW	0	0		M. Renou, Director.
Toulouse, Observatory	29.38	746.2	30.10	764.6	73.0	22.8	40	SSE			1					0	0		M. Baillaud, Director.
Tours	29.76	756.0	29.96	761.0	64.4	18.0	59	WSW			4		5		W	0	0	½ covered	M. de Tastes.
Versailles, Observatory	29.40	746.7	29.89	759.2	62.6	17.0	55	SW			4					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.10	739.2	29.97	761.1	67.6	19.8	42	WSW			2		3k	WSW		0	0		Prof. Dr. Hoh.
Berlin	29.68	753.9	29.85	758.1	69.8	21.0	31	SW			3		8			0	0		Prof. Dr. Arndt.
Breslau	29.48	748.9	30.02	762.4	62.8	17.1	32	SSW			2		1			0	0		Royal University Obs'y.
Carlsruhe	29.50	749.4	29.92	760.0	66.0	18.9	52	SW			4		0			0	0		Albert Senx.
Cassel	29.17	741.0	29.89	759.2	69.1	20.6	33	SSW			4		5	S		0	0		Dr. H. Möhl.
Frankfort on the Main	29.57	751.0	29.92	760.0	69.8	21.0	29	SW			2		3			0	0		Physical Society.
Friedrichshafen	28.57	725.7	29.99	761.7	59.4	15.2	42	SW			3		2	W		0	0		Wilhelm, Chief Tel.
Hamburg	29.07	753.7	29.74	755.5	55.8	13.2	90	SW			4		10			0.047	1.2		Dr. R. Kleeman.
Kiel	29.66	753.3	29.07	753.7	52.2	11.2	90	SW			5		10			0.140	3 7		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.49	749.1	29.90	759.5	69.4	20.8	29	SW			3		7			0.028	0.7		Prof. Dr. Bruhns.
Magdeburg	29.56	750.7	29.84	757.8	64.6	18.1	48	SSW			7		10ks	SSW		0	0		Dr. Assmann.
Memel	29.92	759.9	29.97	761.1	56.3	13.5	47	SW			4	6c	0						Reinbrecht & Issermann.
Munich	28.18	715.8	30.04	763.1	62.1	16.7	32	SE			2		1			0.016	0.4		Central Station.
Neufahrwasser	29.88	759.0	29.90	759.4	63.5	17.5	31	SW			4		10			0	0		A. Lothes.
Neustadt, Palatinate	29.39	740.4	29.91	759.7	68.7	20.4	35						2			0	0		Dicknether.
Stuttgart	29.00	736.5	29.86	758.5	68.0	20.0	31	SW			1		2	W		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.52	721.5	30.01	762.2	63.1	17.3	32	W			4		4	W		0	0		Prof. Kemlein.
Wustrow	29.72	755.0	29.75	755.6	59.3	13.5	94	SSW			5		10			0	0		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.51	749.5	29.89	759.2	72.1	22.3		NE		2.5		5						½ Clear	A. Wourlisch
INDIAN SERIES.																			
Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.56	750.8	29.61	752.0	88.3	31.3	80	SSW	31.0	13.8		0				0	0	Misty	
Deesa	29.10	739.2	29.55	750.5	105.2	40.7	18	WSW	16.2	7.2		0				0	0	Blue sky	
Bombay	29.70	754.5	29.74	755.4	89.0	31.7	69	WNW	11.0	4.9		3				0	0	D. clouds	
Poona, Yarrowda	27 88	708.0	29.67	753.7	92.8	33.8	22	WSW	20.0	8.9		0				0	0	Blue sky	
Belgaum	27.22	691.4	29.70	754.3	86.7	30.4	52	SW	13.0	5.8		0				0	0	Misty	
Lahore	28.72	729.5	29.42	747.2	106.3	41.3	14	N	1.9	0.8		2				0	0	Misty	
Roorkee	28.58	726.0	29.44	747.8	98.9	37.2	35	Calm	3.9	1.7		0				0	0		
Agra	28.88	733.6	29.41	746.9	110.1	43.4	18	NW	4.7	2.1		8		NW		0	0		
Nagpur	28.48	723.5	29.46	748.3	109.7	43.2	16	NW	7.6	3.4		8		NW		0	0	D. clouds	
Jubbulpore	28.21	716.6	29.49	749.1	105.5	40.8	8	NW	6.7	3.0		2				0	0	D. clouds	
Lucknow	29.11	739.5	29.47	748.6	100.9	38.3	35	ENE	2.5	1.1		0				0	0	Blue sky	
Allahabad	29.16	740.8	29.46	748.2	101.6	38.7	38	NE	2.7	1.2		0				0	0	Blue sky	
Patna	29.37	746.1	29.55	750.6	89.8	32.1	57	E	5.6	2.5		2		E	E	0	0		
Hazaribagh	27.57	700.4	29.53	750.1	86.8	30.4	55	E	6.4	2.9		0				0	0	Misty	
Cuttack	29.42	747.2	29.50	749.2	94.7	34.8	56	S	5.0	2.2		9				0	0	Threatening	
Calcutta, Alipore	29.55	750.6	29.57	751.1	81.0	27.2	78	ESE	13.0	5.8		9		W		0.06	1.5	D. clouds	
Dhubri	29.49	748.9	29.60	752.0	82.0	27.8	72	Calm	5.8	2.6		4				0	0	D. clouds	
Chittagong	29.55	750.6	29.64	752.9	75.0	23.9	88	E	4.3	1.9		8				0	0	D. clouds	
Sibsagar	29.28	743.8	29.62	752.2	84.2	29.0	75	E	1.5	0.7		7		SW	SW	0	0	D. clouds	
Zanzibar, Africa			29.95	760.7	81.2	27.3	77	SSE	11	4.9		8			SSE	0.10	2.5	Threatening	
ITALIAN SERIES.																			
By authority of the Minister of Agriculture, Industry and Commerce.																			
Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.62	752.4	30.03	762.7	68.0	20.0	32	Calm	0	0		2				0.039	1.0		Prof. Giovanni Clodig.
Milan	29.53	750.0	30.03	762.8	70.0	21.1	31	SW	1.3	0.6		4		W		0	0		Prof. Schiaparelli.
Padua	29.93	760.2	30.04	763.0	65.5	18.6	43	NNE	5.6	2.5		0				0.858	21.8		Prof. Dott. Lorenzoni.
Moncalieri	29.16	740.6	30.04	763.1	67.3	19.6	44	SE	3.1	1.4		2				0	0		Prof. P. F. Denza.
Genoa	29.84	757.8	30.03	762.7	68.4	20.2	40	N	8.7	3.9		0				0	0		Prof. G. M. Garibaldi.
Mondovi	28.16	715.2	30.04	762.9	61.5	16.4	41	W			4	2				0	0		Prof. D. C. Bruno.
Pesaro	29.97	761.2	30.02	762.4	62.1	16.7	69	N	9.8	4.4		6		ENE		0.236	6.0		Prof. Luigi Guidi.
Florence	29.72	755.0	29.98	761.4	68.0	20.0	38	NE			6	1				0	0		Prof. Costantino Pittor.
Leghorn	29.90	759.5	29.99	761.7	72.1	22.3	33	NE	8.7	3.9		2				0	0		Prof. P. Monte.
Rome	29.71	754.7	29.88	759.0	70.3	21.3	44	S	1.8	0.8		9				0.008	0.2		Prof. P. S. Ferrari.
Lecce	29.63	752.5	29.87	758.8	68.0	20.0	57	WNW	12.5	5.6		7				0.024	0.6		Prof. C. de Giorgi.
Cosenza	28.96	735.6	29.84	758.0	66.7	19.3	73	WNW	7.4	3.3		7		NW		0.220	5.6		Prof. D. Conti.
Cagliari	29.72	754.8	29.91	759.7	72.0	22.2	30	NW			4	4		N		0	0		Prof. A. Pacinotti.
Palermo	29.65	753.2	29.90	759.5	65.7	18.7	57	NW	9.8	4.4		10				0	0		Prof. G. Cincciatore.
Syracuse	29.76	756.0	29.81	757.1	62.6	17.0	79	E	7.4	3.3		10		NE		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.34	745.1	29.85	758.1	69.8	21.0	44	E	8.1	3.6		7		SE		0	0		Prof. F. Brioschi.
Stelvio	22.20	563.8			38.7	3.7	43	SW			1	0				0	0	Clear	Prof. P. F. Denza.
Valdobbia	22.24	564.8			43.3	6.3	71	NNW			1	5ck	0	NNW		0	0	Cloudy	Prof. P. F. Denza.
JAPANESE SERIES.																			
Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.96	761.0	29.98	761.5	68.9	20.5	78	W	3.4	1.5		0	7s			0.066	1.7	Cloudy	K. Sasaki.
Kioto	29.88	758.9	30.05	763.3	66.6	19.2	76	S	1.9	0.8		0	0			0.004	0.1	Clear.	M. Tojima.
Nagasaki, I. M. Obs'y	29.75	755.6	29.95	760.7	67.5	19.7	93	ESE	7.9	3.5			9s			0.140	3.6	Cloudy	S. Takehayashi.
Tokei Obs'y, Yeddo	29.98	761.5	30.05	763.3	65.7	18.7	66	S	9.7	4.3		0	0			0	0	Clear.	The Staff.
Wakayama	29.99	761.7	30.04	763.0	67.6	19.8	72	E	2.3	1.0		0	0			0	0	Clear	Y. Kuwamuca.
MAURITIUS SERIES.																			
Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.93	760.2	30.12	765.0	72.1	22.3	88	ESE	21.0	9.4			10		ESE	0.22	5.6	Squally	A. N. Figon.
MEXICAN SERIES.																			
By authority of the Secretary of Public Works.																			
Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.66	753.3	29.92	759.9	72.0	22.2	95	ESE	0.9	0.4		4cs	1k			0	0	½ cloudy	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES.																			
Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.73	755.2	29.73	755.2	61.5	16.4		SW			5					0.043	1.1		
Groningen	29.62	752.4	29.68	753.8	56.1	13.4		SW			5					0.339	8.6		
Helder	29.63	752.6	29.63	752.6	52.5	11.4		SSW			5					0.421	10.7		
Hellevoetsluis	29.71	754.6	29.71	754.6	61.0	16.1	76	SW			5					0.110	2.8		
Utrecht	29.69	754.0	29.73	755.2	62.6	17.0	69	SSW			5		8			0.280	7.1	Very cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.28	743.8	29.35	745.4	46.4	8.0	46	NW	2.5	1.1	.....	.....	3	.....	.....	0	0	.....	
Christiania	29.27	743.4	29.42	747.2	39.7	4.3	80	NNE	11	5	.....	.....	10	.....	.....	0.008	0.2	Light rain	
Gjesvær	29.02	737.1	29.04	737.7	32.0	0.0	.....	NE	.....	.....	6	.....	10	.....	.....	.....	.....	Rain & snow	
Lodingen	29.26	743.2	29.31	744.4	34.7	1.5	73	N	.....	.....	4	.....	8	.....	.....	0	0	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.11	764.8	30.26	768.7	63.7	17.6	80	WNW	5.6	2.5	.....	.....	2	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.06	738.2	30.02	762.5	74.5	23.6	46	WNW	3.8	1.7	.....	.....	1	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.11	764.8	30.20	767.0	68.0	20.0	58	SW	7.4	3.3	.....	.....	5	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.80	757.8	30.15	765.8	65.7	18.7	55	NNW	9.4	4.2	.....	.....	1	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.22	767.5	30.29	769.3	69.1	20.6	54	W	13.0	5.8	.....	.....	4	.....	.....	0	0	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Archangel	29.55	750.6	29.57	751.1	55.2	12.9	88	SSE	13	6	.....	.....	10	.....	.....	.....	.....	.....	Capt. Lasarew.
Astrakhan	30.00	762.0	29.92	759.9	70.5	21.4	64	SSE	13	6	.....	.....	10ks	.....	.....	Blank		.....	Capt. Sseliwerstow.
Barnaul	30.00	762.0	29.92	759.9	70.5	21.4	64	SSE	13	6	.....	.....	10	.....	.....	.....	.....	.....	Capt. Wisganow.
Dorpat	29.66	753.4	30.18	766.5	35.8	2.1	64	NW	22	10	.....	.....	10	.....	.....	.....	.....	Snowing	Meteorological Obs'y.
Ekaterinburg	29.64	752.8	29.88	758.9	56.1	13.4	37	SW	11	5	.....	4ck	0	.....	.....	.....	.....	.....	Observatory.
Kasan	29.34	745.3	30.27	768.9	75.9	24.4	27	SSE	7	3	.....	10c	0	.....	.....	.....	.....	Hazy	Meteorological Obs'y.
Kertch	29.83	757.6	30.08	764.1	75.6	24.2	27	SSE	16	7	.....	.....	10	.....	.....	.....	.....	.....	Observatory.
Kieff	29.97	761.3	29.99	761.8	61.0	16.1	77	S	4	2	.....	.....	5	.....	.....	.....	.....	.....	Lagorio & Sastyrez.
Krokowo	29.21	741.8	29.83	757.6	59.7	15.4	73	NW	4	2	.....	.....	8cks;n	.....	.....	.....	.....	.....	Observatory.
Lugan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Moscow	29.68	753.8	29.88	758.9	67.8	19.9	53	SW	9	4	.....	.....	8	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	29.31	744.4	29.84	758.0	62.6	17.0	64	S	4	2	.....	.....	8ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaiev	27.85	707.5	30.22	767.6	33.1	0.6	56	Calm	0	0	.....	.....	5	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaievsk, on the Amoor	29.84	757.9	29.91	759.7	67.5	19.7	78	Calm	0	0	.....	.....	8kn	.....	.....	.....	.....	.....	Capt. Kurdakow.
Pekin, China	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lieut. Iwanow.
St. Petersburg	29.86	758.5	30.00	762.1	58.3	14.6	58	NE	11	5	.....	.....	10n	.....	.....	.....	.....	Raining	Physical Observatory.
Tashkend, Laboratory	29.81	757.2	29.83	757.6	46.4	8.0	62	NW	20	9	.....	4c;cs	0	.....	.....	.....	.....	Light clouds	Central Physical Obs'y.
Tiflis	28.35	720.2	29.85	758.1	78.8	26.	44	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Teich, A. M.
Warsaw	28.50	723.8	29.85	758.2	75.0	23.9	37	NW	4	2	.....	.....	4n	.....	.....	.....	.....	.....	Physical Observatory.
Wilna	29.59	751.6	30.01	762.2	60.1	15.6	38	WSW	7	3	.....	.....	0	.....	.....	.....	.....	.....	Astronomical Obs'y.
Yeniseisk	29.56	750.8	29.97	761.3	58.3	14.6	38	W	2	1	.....	.....	0	.....	.....	.....	.....	.....	Berg, Assistant.
	29.66	753.3	29.95	760.7	37.2	2.9	75	NW	20	9	.....	.....	9	.....	.....	.....	.....	Rain & snow	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	29.33	745.0	58.0	14.4	70	W	.....	.....	3	.....	8k	.....	.....	0.12	3.0	Showery	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.19	741.4	54	12.2	93	S	.....	.....	4	.....	10	.....	.....	0.2	5	Overcast	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	29.50	749.3	.....	.....	.....	E	.....	.....	4	6	4	NE	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.94	760.5	30.04	763.1	66.2	19.	52	SSW	3.6	1.6	.....	.....	k	.....	.....	0	0	Clear.	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.00	762.0	30.05	763.4	72.9	22.7	63	NW	2.2	1.0	.....	0	0	.....	.....	0	0	Clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.10	688.4	.....	.....	69.1	20.6	80	S	5.1	2.3	.....	0	0	.....	.....	0	0	Clear	Domingo Martin.
Madrid, Royal Obs'y	27.83	706.8	29.98	761.4	73.8	23.2	29	W	8.3	3.7	.....	0	0	.....	.....	0	0	Clear	The Staff.
Murcia, Met. Obs'y	29.89	759.3	30.04	763.0	80.6	27.0	52	ESE	2.9	1.3	.....	0	3	.....	.....	0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.14	740.1	30.02	762.6	63.7	17.6	65	SW	15.0	6.7	.....	.....	8	.....	.....	0	0	Almost cov'd	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.87	758.6	29.93	760.3	76.9	24.9	80	W	3.6	1.6	.....	0	0	.....	.....	0	0	Clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.80	756.9	29.85	758.2	87.5	30.8	65	NNW	4.4	2.0	.....	0	6kn	.....	E	0	0	Very cloudy	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.02	762.4	30.12	764.9	68.2	20.1	72	W	6.6	3.0	.....	0	1	W	.....	0	0	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.83	757.7	29.92	760.0	77.7	25.4	97	SE	4.3	1.9	.....	6cs	3k	SE	SE	0	0	Overcast	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.74	755.5	29.89	759.2	81.3	27.4	78	N	1.0	0.5	.....	.....	10kn	.....	NNE	Inap.	Inap.	Cloudy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.11	739.5	29.15	740.5	38.5	3.6	87	SW	.....	.....	4	.....	10	.....	.....	0	0	.....	
Umea	29.43	747.6	29.48	748.9	46.0	7.8	52	NW	.....	.....	6	.....	1	.....	.....	0	0	.....	
Kernosand	29.51	749.6	29.56	750.9	43.3	6.3	46	S	.....	.....	4	.....	8	.....	.....	0	0	.....	
Stockholm	29.36	745.8	29.54	750.3	42.1	5.6	89	SSW	.....	.....	6	.....	10	.....	.....	0.004	0.1	Raining	
Wisby	29.02	752.3	29.08	753.8	44.2	6.8	88	WSW	.....	.....	6	.....	10	.....	.....	.....	.....	Raining	
Sub-Series.																			
Upsala	29.41	747.0	29.50	749.2	42.1	5.6	98	SSE	15.0	6.7	.....	.....	10	.....	S	0.126	3.2	Raining	Nils Ekholm
SWISS SERIES. Furnished bythe co-operation of Prof. Rob: Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.60	726.5	30.01	762.2	60.3	15.7	42	N	.....	.....	2	.....	0	.....	.....	0	0	Clear	The Observatory.
Zurich	28.38	720.8	29.98	761.4	65.2	19.0	43	W	.....	.....	2	.....	0	.....	.....	0	0	Clear	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.99	761.7	68.4	20.2	33	NNE	11	5.0	.....	.....	0	.....	.....	0	0	.....	The Observatory.
Valona	.....	.....	29.91	759.8	75.6	24.2	.....	S	.....	.....	1	.....	5	.....	.....	0	0	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.89	759.1	72.1	22.3	62	N	.....	.....	2	3c	0	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.99	761.7	30.07	763.8	54	12.2	80	NE	3	1.3			10s		NE	0.02	0.5	Cloudy	
Alpena, Michigan	29.44	747.8	30.08	764.0	54	12.2	55	W	4	1.8		0	0			0	0	Clear	
Atlanta, Georgia	28.78	731.0	29.90	759.4	60.2	15.7	54	NE	4	1.8		0	0			0	0	Clear	
Atlantic City, New Jersey	29.97	761.2	29.98	761.5	49	9.4	93	NE	16	7.2			10s		NE	0.05	1.3	Threatening	
Augusta, Georgia	29.77	756.1	29.97	761.2	61.7	16.5	51	NE	6	2.7		0	0			0	0	Clear.	
Baltimore, Maryland	29.94	760.5	29.99	761.7	55	12.8	74	N	8	3.6		0	8ks		NE	0.24	6.1	Fair	
Barnegat, New Jersey	29.95	760.7	29.97	761.2	48	8.9	93	E	15	6.7			10s		E	0.08	2.0	Threatening	
Bismarck, Dakota	28.35	720.1	30.20	767.1	45	7.2	76	NW	2	0.9		5c	0	S		0.01	0.3	Fair.	
Boise City, Idaho	27.49	698.2	30.45	773.4	46.2	7.9	62	S	4	1.8		0	0			0	0	Clear	
Boston, Massachusetts	29.95	760.7	30.11	764.8	42.3	5.7	95	NE	20	8.9			10n		NE	0.69	17.5	Light rain	
Brackettville, Texas	28.73	729.7	29.74	755.4	70	21.1	95	E	10	4.5			10s		E	0.06	1.5	Cloudy	
Brownsville, Texas	29.83	757.7	29.87	758.7	77	25.0	73	SE	4	1.8		2c	0			0	0	Clear.	
Buffalo, New York	29.34	745.2	30.04	763.0	45.5	7.5	92	NE	5	2.2			10s		E	0.08	2.0	Cloudy	
Burlington, Vermont	29.82	757.4	30.11	764.8	50.2	10.1	92	N	1	0.4			10s		E	0.03	0.8	Cloudy	
Cairo, Illinois	29.65	753.1	30.03	762.7	64	17.8	63	Calm	0	0		0	0			0	0	Clear	
Campo, California	27.41	696.2	29.98	761.5	42.4	5.8	74	E	3	1.3		0	0			0.02	0.5	Clear	
Camp Thomas, Arizona	27.12	688.8			51	10.6	46	Calm			0	2c	0			0	0	Clear	
Cape Henry, Virginia	29.87	758.7	29.88	758.9	56	13.3	81	NE	24	10.7			10n		NE	0.01	0.3	Light rain	
Cape May, New Jersey	29.92	760.0	29.95	760.7	50	10.0	86	N	14	6.3			10s		N	0.01	0.3	Cloudy	
Castroville, Texas	29.16	740.7	29.84	757.9	72	22.2	85	SE	5	2.2			10n			0.03	0.8	Light rain	
Cedar Keys, Florida	29.86	758.4	29.88	758.9	69	20.6	85	N	6	2.7		0	0			0	0	Clear.	
Champaign, Illinois	29.24	742.7	30.04	763.0	52	11.1	73	SE	8	3.6		0	0			0	0	Clear	
Charleston, S. Carolina	29.85	758.2	29.90	759.4	60	15.6	65	NW	8	3.6		2ck	0	NW		0	0	Clear	
Charlotte, N. Carolina	29.96	738.1	29 85	758.2	61.0	16.1	50	N	6	2.7		0	Sk			0	0	Clear	
Chattanooga, Tennessee	29.17	740.9	29.95	760.7	58	14.4	64	NW	3	1.3		0	0			0	0	Clear	
Cheyenne, Wyoming	24.25	615.9	30.19	766.8	32	0.0	79	N	10	4.5		0	2s			0.29	7.4	Clear	
Chicago, Illinois	29.36	745.7	30.05	763.3	53.3	11.8	61	E	2	0.9		0	0			0	0	Clear	
Chincoteague, Virginia	29.91	759.7	29.93	760.2	51	10.6	86	NE	23	10.3			10s		NE	Inap.	Inap.	Threatening	
Cincinnati, Ohio	29.39	746.5	30.04	763.0	53	11.7	73	NE	5	2.2		0	0			0	0	Clear	
Cleveland, Ohio	29.32	744.7	30.05	763.3	46.7	8.2	89	NE	5	2.2			10s		NE	0.03	0.8	Cloudy	
Coleman City, Texas	28.10	713.7	29.72	754.9	63	17.2	89	SE	1	0.4		5c	0	SW		0.23	5.8	Fair	
Columbus, Ohio	29.18	741.2	30.01	762.2	51	10.6	72	N	6	2.7			10s		N	0.01	0.3	Cloudy	
Concho, Texas	27.97	710.4	29.60	751.8	61	16.1	94	Calm	0	0		8k	0	S		3.40	86.4	Cloudy	
Corsicana, Texas	29.48	748.8	29.94	760.5	70	21.1	75	Calm	0	0		0	5s			0	0	Fair	
Davenport, Iowa	29.42	747.3	30.05	763.3	58	14.4	48	E	2	0.9		2cs	0	Calm		0	0	Clear	
Dayton, Washington T'y	28.50	723.9	30.19	766.8	51.5	10.8	52	N	3	1.3		0	0			0	0	Clear	
Deadwood, Dakota	25.60	650.2			34	1.1	61	SW	2	0.9		0	0			0.12	3.0	Clear	
Decatur, Texas	28.73	729.7	29.84	757.9	72	22.2	76	SE	8	3.6			10s			0	0	Cloudy	
Delaware Breakwater, Del	29.92	760.0	29.95	760.7	52	11.1	93	NE	24	10.7			10ks		NE	0	0	Threatening	
Denison, Texas	29.15	740.4	29.91	759.7	74	23.3	76	SE	3	1.3		8ck	0	Calm		Inap.	Inap.	Fair	
Denver, Colorado	25.03	635.8	30.25	768.3	35.0	1.7	95	W	2	0.9			10n		Calm	0.79	20.1	Heavy snow	
Des Moines, Iowa	29.15	740.4	30.01	762.2	58	14.4	76	SE	2	0.9		8ck	0			0	0	Fair	
Detroit, Michigan	29.38	746.2	30.07	763.8	54.8	12.7	81	SE	2	0.9			10s		Calm	0	0	Cloudy	
Dodge City, Kansas	27.46	697.5	29.76	755.9	47	8.3	85	N	38	17.0		0	10s			2.07	52.6	Cloudy	
Dubuque, Iowa	29.37	746.0	30.07	763.8	55.2	12.9	74	Calm	0	0		0	Hz		Calm	0	0	Clear	
Duluth, Minnesota	29.33	745.0	30.01	762.2	49	9.4	78	NE	1	0.4			10s			0.01	0.3	Cloudy	
Eagle Pass, Texas	29.15	740.4	29.85	758.2	71	21.7	85	Calm	0	0		0	5s		SE	0.14	3.6	Fair	
Eagle Rock, Idaho	25.56	649.2	30.21	767.3	27	— 2.8	64	N	6	2.7		0	0			0.04	1.0	Clear	
Eastport, Maine	30.15	765.8	30.22	767.6	42	5.6	91	NE	24	10.7			10n		NE	3.87	98.3	Light rain	
El Paso, Texas	26.14	663.9			60	15.6	55	E	4	1.8		0	2s		NW	0	0	Clear	
Erie, Pennsylvania	29.32	744.7	30.03	762.7	46	7.8	92	NE	8	3.6			Fg			0.07	1.8	Dense fog	
Escanaba, Michigan	29.44	747.8	30.09	764.3	54	12.2	74	Calm	0	0		2c	0	W		0	0	Clear	
Florence, Arizona	28.35	720.1	29.95	760.7	60	15.6	49	W	1	0.4		0	0			0	0	Clear	
Fort Apache, Arizona	24.98	634.5	30.42	772.7	43	6.1	75	E	2	0 9		0	2s		Calm	0	0	Fair	
Fort Assinnaboine, Montana	27.37	695.2			36	2.2	63	W	12	5.4		0	0			0	0	Clear	
Fort Bennett, Dakota	28.60	726.4			48	8.9	85	NW	2	0.9		10cs	0			0.27	6.9	Cloudy	
Fort Benton, Montana																			
Fort Buford, Dakota	28.14	714.7	30.03	762.7	37	2.8	81	Calm	0	0		0	0			0	0	Clear	
Fort Custer, Montana	27.09	688.1			39	3.9	63	SW	4	1.8		0	0			0	0	Clear	
Fort Davis, Texas	25.16	639.1	30.12	765.0	61	16.1	61	SW	8	3.6		0	0			0	0	Clear	
Fort Elliott, Texas	27.25	692.1	29.51	749.5	52	11.1	79	NW	24	10.7		0	5s		SW	0	0	Fair	
Fort Gibson, Indian T'y	29.39	746.5	29.91	759.7	69	20.6	80	SE	4	1.8			10s		NW	0	0	Threatening	
Fort Grant, Arizona	25.16	639.1	29.96	761.0	57	13.9	25	N	4	1.8		0	5s		S	0	0	Fair	
Fort Griffin, Texas	28.54	724.9	29.76	755.9	64.8	18.2	84	W	2	0.9		2k	0			0	0	Clear	
Fort Keogh, Montana	27.70	703.6			37	2.8	70	Calm	0	0			10s			0.02	0.5	Cloudy	
Fort Macon, North Carolina	29.79	756.7	29.80	756.9	63*	17.2	82	NE	5	2.2		0	0			0	0	Clear	
Fort McKavett, Texas	27.04	702.0	29.50	749.3	64	17.8	89	SW	6	2.7		5k	2ks	Calm	Calm	0.04	1.0	Fair	
Fort Missoula, Montana	27.01	686.0			49	9.4	57	SE	1	0.4		4cs	0	SW		1.01	25.7	Fair	
Fort St. Michaels												0	0			0	0	Clear	
Fort Shaw, Montana	26.56	674.6			42	5.6	50	W	12	5.4		2ck	0	SW		0	0	Clear	
Fort Sill, Indian Territory	28.69	728.7	29.75	755.6	66	18.9	89	N	6	2.7		2ck	8s	W		0	0	Cloudy	
Fort Stevenson, Dakota	28.31	719.1			40	4.4	91	W	4	1.8		0	0			0	0	Clear	
Fort Verde, Arizona					57.8	14.3	53	NW			4	0	0			0	0	Clear	
Fredericksburg, Texas	28.13	714.5	29.65	753.1	64	17.8	94	SW	8	3.6		0	9s			1.75	44.4	Cloudy	
Galveston, Texas	29.92	760.0	29.96	761.0	75	23.9	86	NW	6	2.7		2cs	0	W		0	0	Clear	
Grand Haven, Michigan	29.43	747.5	30.07	763.8	55	12.8	62	NE	2	0.9		0	0			0	0	Clear	
Hatteras, North Carolina	29.77	756.1	29.79	756.7	60	15.6	88	NE	28	12.5			10s		NE	0.60	15.2	Cloudy	
Helena, Montana	20.07	662.2			40	4.4	56	Calm	0	0		2c	0	Calm		0	0	Fair	
Henrietta, Texas	28.88	733.5	29.76	755.9	72	22.2	71	SE	5	2.2			10s		SW	0	0	Cloudy	
Indianapolis, Indiana	29.25	742.9	30.02	762.5	59	15.0	59	N	2	0.9		0	0			0	0	Clear	
Indianola, Texas	29.92	760.0	29.95	760.7	74.1	23.4	86	S	4	1.8		1cs	5ks	NW	Calm	0	0	Fair	
Jacksboro, Texas	28.74	730.0	29.82	757.4	70	21.1	75	SE	6	2.7		5cs	2ks	Calm	SE	0	0	Fair	
Jacksonville, Florida	29.83	757.7	29.88	758.9	69	20.6	80	N	6	2.7		0	0			0	0	Clear	
Keokuk, Iowa	29.38	746.2	30.03	762.7	56.8	13.8	54	E	7	3.1		8c	0	N		0	0	Fair	
Key West, Florida	29.91	759.7	29.94	760.5	78.2	25.7	69	Calm	0	0		0	0			0	0	Clear	
Kittyhawk, North Carolina	29.87	758.7	29.89	759.2	55	12.8	87	NE	34	15.2			10n		NE	Inap.	Inap.	Light rain	
Knoxville, Tennessee	28.99	736.3	29.99	761.7	53	11.7	73	NE	2	0.9			9s		NE	0	0	Cloudy	
La Crosse, Wisconsin	29.29	744.0	30.04	763.0	61.2	16.2	66	S	1	0.4		0	5s			0	0	Fair	
La Mesilla, New Mexico	26.01	660.6	30.16	766.1	60	15.6	49	SW	1	0.4		0	5s			0	0	Fair	
Laredo, Texas	29.46	748.3	29.79	756.7	72	22.2	90	NE	4	1.8			10s		Calm	0	0	Cloudy	
Leavenworth, Kansas	29.12	739.6	29.94	760.5	66	18.9	54	W	6	2.7			10s		W	0	0	Cloudy	
Lewiston, Idaho	29.47	748.5	30.13	765.3	48	8.9	54	E	2	0.9			10s		Calm	0	0	Cloudy	
Little Rock, Arkansas	29.68	753.9	29.99	761.7	63	17.2	89	Calm	0	0		2c	0			0	0	Clear	
Los Angeles, California	29.61	752.1	29.97	761.2	55.4	13.0	93	S	2	0.9			Fg		Calm	0	0	Dense fog	
Louisville, Kentucky	29.45	748.0	30.00	762.0	56.0	13.3	69	N	10	4.5		0	0			0	0	Clear	
Lynchburg, Virginia	29.24	742.7	29.91	759.7	58	14.4	76	NE	4	1.8			10n			0.03	0.8	Light rain	
Madison, Wisconsin	29.07	738.4	30.05	763.3	54	12.2	67	NW	3	1.3		5c	0	NW		0	0	Fair	
Marquette, Michigan	29.34	745.2	30.02	762.5	67	19.4	29	SW	9	4.0		0	0			0	0	Clear	
Mason, Texas	28.25	717.5	29.96	761.0	65.2	18.4	84	SW	6	2.7		1cs	7s	W	W	1.40	35.6	Cloudy	
Memphis, Tennessee	29.68	753.9	30.01	762.2	67	19.4	69	Calm	0	0		0	0			0	0	Clear	
Milwaukee, Wisconsin	29.34	745.2	30.07	763.8	49	9.4	71	NE	1	0.4		1c	2ks			0	0	Fair	

UNITED STATES SERIES—CONTINUED.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Mobile, Alabama	29.89	759.2	29.96	761.0	61	16.1	61	N	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Montgomery, Alabama	29.73	755.1	29.96	761.0	61.8	16.6	66	N	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Moorhead, Minnesota	29.10	739.1	30.05	763.3	51	10.6	80	NW	6	2.7	.....	.....	10s	.....	NW	0.04	1.0	Cloudy	
Morgantown, W. Virginia	28.98	736.1	29.97	761.2	52	11.1	79	N	4	1.8	.....	.....	10s	.....	.....	0.05	1.3	Cloudy	
Mt. Washington, N. H	23.89	606.8	30.25	768.3	40	4.4	100	SE	36	16.1	.....	.....	Fg	.....	SE	0.75	19.0	Dense fog	
Nashville, Tennessee	29.46	748.3	29.99	761.7	61.5	16.4	60	N	2	0.9	.....	0	Sk	.....	N	0	0	Dense smoke	
New Haven, Connecticut	29.91	759.7	30.03	762.7	46	7.8	92	NE	14	6.3	.....	.....	10s	.....	NE	0.26	6.6	Cloudy	
New London, Connecticut	29.98	761.5	30.03	762.7	46	7.8	92	E	12	5.4	.....	.....	10s	.....	E	0.66	16.8	Cloudy	
New Orleans, Louisiana	29.91	759.7	29.97	761.2	70.7	21.5	48	NE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Newport, Rhode Island	29.98	761.5	30.04	763.0	44.8	7.1	94	N	16	7.2	.....	.....	10s	.....	Calm	0.16	4.1	Cloudy	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	29.96	761.0	29.99	761.7	44.5	6.9	92	NE	28	12.5	.....	.....	10s	.....	NE	0.84	21.3	Cloudy	
New York, New York	29.84	757.9	30.02	762.5	47	8.3	85	NE	16	7.2	.....	.....	10s	.....	NE	0.01	0.3	Cloudy	
Norfolk, Virginia	29.84	757.9	29.89	759.2	55	12.8	81	NE	13	5.8	.....	.....	10n	.....	NE	Inap.	Inap.	Light rain	
North Platte, Nebraska	27.26	692.4	29.87	758.7	44	6.7	84	N	20	8.9	.....	.....	10s	.....	N	0	0	Cloudy	
Olympia, Washington T'y	30.17	766.3	30.21	767.3	43.0	6.1	92	NE	1	0.4	.....	1cs	0	Calm	.....	0	0	Clear	
Omaha, Nebraska	28.88	733.5	29.94	760.5	62	16.7	88	SE	4	1.8	.....	.....	10n	.....	.....	2.09	53.1	Heavy rain	
Oswego, New York	29.73	755.1	30.06	763.5	50.0	10.0	86	NE	4	1.8	.....	.....	10s	.....	NE	0.04	1.0	Cloudy	
Pensacola, Florida	29.91	759.7	29.94	760.5	66	18.9	54	N	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Philadelphia, Pa	29.94	760.5	30.00	762.0	49	9.4	93	E	17	7.6	.....	.....	10s;hz	.....	N	0.02	0.5	Cloudy	
Phœnix, Arizona	28 74	730 0	30.53	775.4	56	13.3	75	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.74	450.6	29.95	760.7	15	— 9.4	82	Calm	0	0	.....	.....	Fg	.....	.....	0.15	3.8	Dense fog	
Ploche, Nevada	24.21	614.9	29.98	761.5	37	2.8	45	N	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Pittsburg, Pennsylvania	29.17	740 9	29.98	761.5	51.5	10.8	72	NE	3	1.3	.....	.....	10s	.....	N	0	0	Cloudy	
Port Eads, Louisiana	29.95	760.7	29.96	761.0	72.1	22.3	62	E	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Port Huron, Michigan	29.42	747.3	30.09	764.3	48.0	8.9	85	E	4	1.8	.....	.....	10n	.....	Calm	Inap.	Inap.	Light rain	
Portland, Maine	30.11	764.8	30.16	766.1	46	7.8	92	NE	17	7.6	.....	.....	10s	.....	Calm	0.72	18.3	Cloudy	
Portland, Oregon	30.11	764.8	30.19	766.8	50.9	10.5	76	NW	1	0.4	.....	2cs	0	N	.....	0	0	Clear	
Portsmouth, N. Carolina	.....	.....	.....	.....	62	16.7	77	NE	28	12.5	.....	8k	0	SW	.....	0.36	9.1	Cloudy	
Prescott, Arizona	24.76	628.9	30.12	765.0	45	7.2	53	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	29.86	758.4	29.88	758.9	77	25.0	51	NW	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Red Bluff, California	29.67	753.6	30.01	762.2	62.0	16.7	41	N	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Rio Grande City, Texas	29.72	754.9	29.93	760.2	73	22.8	85	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Rochester, New York	29.44	747.8	30.00	763.5	40	7.8	92	E	4	1.8	.....	0	5s	.....	Calm	0	0	Fair	
Roseburg, Oregon	29.00	751.8	30.18	766.6	46.2	7.9	84	Calm	0	0	.....	.....	10ks	.....	E	0.12	3.0	Cloudy	
Sacramento, California	29.88	758.9	29.96	761.0	64.8	18.2	68	N	5	2.2	.....	0	0	.....	.....	0	0	Clear	
St. Louis, Missouri	29.46	748.3	30.02	762.5	58.0	14.4	64	NE	6	2.7	.....	1c	0	.....	.....	0	0	Clear	
St. Paul, Minnesota	29.14	740.1	29.95	760.7	62	16.7	72	E	6	2.7	.....	5ck	2ks	W	E	0.02	0.5	Fair	
Salt Lake City, Utah	25 89	657.6	30.22	767.6	41	5.0	49	NE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
San Antonio, Texas	29.27	743.4	29.94	760.5	72.8	22.7	85	Calm	0	0	.....	7cs	2s	SE	SE	Inap.	Inap.	Threatening	
San Diego, California	29.80	758.4	29.93	760.2	59.8	15.4	82	N	4	1.8	.....	.....	10s	.....	.....	0	0	Cloudy	
Sandusky, Ohio	29.39	746.5	30.06	763.5	50	10.0	86	N	15	6.7	.....	.....	10s	.....	N	0.02	0.5	Cloudy	
Sandy Hook, New Jersey	29.99	761.7	30.02	762.5	48.0	8.9	100	NE	20	8.9	.....	.....	10n	.....	.....	0.31	7.9	Light rain	
San Francisco, California	29.92	760.0	29.99	761.7	52	11.1	89	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Santa Fé, New Mexico	23.24	590.3	29.78	756.4	53	11.7	48	E	6	2.7	.....	.....	10s	.....	SE	0	0	Cloudy	
Savannah, Georgia	29.83	757.7	29.92	760.0	64	17.8	56	N	7	3.1	.....	0	2ks	.....	.....	0	0	Fair	
Shreveport, Louisiana	29.75	755.0	29.99	761.7	71	21.7	66	SE	4	1.8	.....	0	5s	.....	.....	0	0	Fair	
Silver City, New Mexico	24.19	614.4	30.23	767.8	55	12.8	39	N	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Sitka, Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.36	9.1	.....	
Smithville, North Carolina	29.80	756.9	29.84	757.9	55	12.8	93	NW	8	3.6	.....	8k	1s	W	.....	0.05	1.3	Cloudy	
Socorro, New Mexico	25.33	643.4	29.40	746.7	63	17.2	33	NE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Spokane Falls, Wash. Ter.	28.23	717.0	30.14	765.5	39	3.9	39	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Springfield, Illinois	29.39	746.5	30.06	763.5	54	12.2	55	E	3	1.3	.....	1c	0	N	.....	0	0	Clear	
Springfield, Massachusetts	29.95	760.7	30.08	764.0	46	7.8	84	NE	8	3.6	.....	.....	10s	.....	NE	0.02	0.5	Cloudy	
Stockton, Texas	20.84	681.7	29.84	757.9	66.7	19.3	95	SE	12	5.4	.....	.....	10s	.....	SE	0.09	2.3	Cloudy	
St. Vincent, Minnesota	29.19	741.4	29.98	761.5	46	7.8	69	W	12	5.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Thatcher's Island, Mass	30.07	763.8	30.13	765.3	42	5.6	100	NE	27	12.1	.....	.....	10n	.....	NE	1.44	36.6	Light rain	
Toledo, Ohio	29.39	746.5	30.07	763.8	53	11.7	86	NE	3	1.3	.....	.....	10s	.....	NE	0	0	Cloudy	
Tucson, Arizona	27.43	696.7	29.98	761.5	62	16.7	36	E	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.89	759.2	30.40	772.1	43.0	6.1	79	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Uvalde, Texas	28.90	735.6	29.75	755.6	70	21.1	85	E	4	1.8	.....	.....	10s	.....	E	0.16	4.1	Cloudy	
Vicksburg, Mississippi	29.75	755.6	30.01	762 2	64	17.8	63	Calm	0	0	.....	2c	0	.....	.....	0	0	Fair	
Visalia, California	29.57	751.1	29.94	760.5	58	14.4	58	SE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C	29.80	758 4	29.98	761.5	52	11.1	93	NE	6	2.7	.....	.....	10s	.....	NE	0.21	5.3	Cloudy	
Wickenburg, Arizona	.....	.....	.....	.....	68	20.0	34	W	.....	.....	1	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	29.79	756.7	29.84	757 9	66	18.9	76	N	6	2.7	.....	0	8s	.....	Calm	0.03	0.8	Fair	
Winnemucca, Nevada	25.89	657.0	30.25	768.3	35	1.7	53	NE	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Wood's Holl, Mass	29.98	761.5	30.02	762.5	46	7.8	92	NE	13	5.8	.....	.....	10s	.....	N	0.53	13.5	Cloudy	
Yankton, Dakota	28.75	730.2	30.04	763.0	50	10.0	100	Calm	0	0	.....	.....	10n	.....	N	1.75	44.4	Light rain	
Yuma, Arizona	29.70	754.4	29.85	758.2	67.6	19.8	51	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
SUB-SERIES.																			
Bogota, U. S. Columbia	22.13	562.1	.....	.....	52.0	11.1	88	Calm	0	0	.....	2k	0	.....	.....	0.01	0.3	Fair	Thomas Herran
Bull Bay Town, Jamaica	29.74	755.4	30.03	762.7	75	23.9	72	E	.....	.....	.....	0	0	.....	.....	.....	.....	.....	
Havana, Cuba, W. I	29.92	760.0	29.98	761.5	79	26.1	74	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	A. Van Caneghem, Ass't.
Jakobshavn, Greenland	29.58	751.3	29.63	752.6	30.7	— 0.7	.....	N	.....	.....	2	.....	10	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I	29.96	761.0	29.97	761.2	79.2	26.2	66	N	2	0.9	.....	0	0	.....	.....	0	0	Fine	Robert Johnstone
Navassa, W. I	29.88	758.9	29.96	761.0	79	26.1	82	N	5.5	2.5	.....	8n;k	2s	NE	S	0	0	Fair	F. M. Everett.
Paramaribo, S. A	30.02	762.5	30.04	762.5	81	27.2	83	E	.....	.....	2	.....	8ks	E	.....	0.430	10.9	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.40	749.7	29.95	760.7	80	26.7	76	Calm	.....	.....	0	0	5k	.....	Calm	0.04	1.0	Hazy	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	77.0	25	.....	SW	.....	.....	.....	0	1ks	.....	SW	0	0	.....	Earl Flint.
Santiago de Cuba, W. I	29.94	760.5	29.96	761.0	77	25.0	78	Calm	0	0	.....	0	2n	.....	.....	0	0	Fair	Robert Mason.
St. Thomas, W. I	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A	30.11	764.8	30.16	766.1	22.0	— 5.6	93	NE	12	5.4	.....	4k	6s	NE	NE	2.52	64.0	Snowing	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

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STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross, N. 33° 53′, E. 128° 20′	29.94	760.5	68	20.0	.....	SSE	.....	.....	2	.....	7	S	.....	.....	.....	1	S	D. clouds	Comm. A. J. Errington.
H. M. S. Alert	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.82	757.4	63.7	17.6	88	NNE	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	Raining	Capt. Lord Walter Kerr.
H. M. S. Antelope	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Hon. W. H. Jolliffe.
H. M. S. Arab,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Comm. R. W. Stopford.
H. M. S. Bacchante	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Lord C. Scott.
H. M. S. Beacon, N. 23° 38′, E. 58° 36′	29.67	753.6	89	31.7	53	E	.....	.....	1	.....	2	SE	.....	.....	.....	.....	.....	D. clouds	Comm. G. W. Hand.
H. M. S Bittern, Constantinople, Turkey	.....	.....	69	20.6	.....	Calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	30.02	762.5	76	24.4	95	ESE	.....	.....	2	.....	10	.....	.....	.....	.....	.....	.....	Raining	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	30.15	765.8	63	17.2	67	ESE	.....	.....	3	.....	3	SE	.....	.....	.....	.....	.....	D. clouds	Com. F. W. Richards.
H. M. S. Champion, Ascension I'ds, Africa	29.91	759.7	81	27.2	70	SE	.....	.....	3-4	.....	3	SSE	.....	.....	.....	2	wsw	D. clouds	Capt. G. R. Hope.
H. M. S Cockatrice	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. H. T. Gerfell.
H. M. S. Comus, Chusan Archipelago	29.75	755.6	65	18.3	94	SE	.....	.....	3	.....	4	.....	.....	.....	.....	.....	.....	Misty	Capt. J. W. East.
H. M. S. Condor	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Comm. F. W. Egerton.
H. M. S. Coquette	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lt. Comm. J. L. Barr
H. M. S. Cruizer, N. 37° 02′, E. 15° 40′	29.81	757.2	61	16.1	.....	ENE	.....	.....	3	.....	10	ENE	.....	.....	.....	3	ENE	Showery	Capt. F. A. Wetherall.
H. M. S. Curacoa	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. S. Long.
H. M. S. Danae, S. 11° 23′, W. 9° 29′	30.04	763.0	77	25.0	82	ESE	.....	.....	4	.....	4	.....	.....	.....	.....	3	ESE	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. F. J. Elliott.
H. M. S. Dido	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.04	763.0	74	23.3	88	ESE	.....	.....	4	.....	2	ESE	.....	.....	.....	.....	.....	D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Hulton.
H. M. S. Druid, N. 47° 34′, W. 52° 41′	30.47	773.9	42.5	5.8	70	ENE	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	Blue sky	Capt. W. R. Kennedy.
H. M. S. Dryad	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. John Hext.
H. M. S. Eclipse, N. 8° 34′, E. 81° 10′	29.70	754.4	90	32.2	.....	SW	.....	.....	2-3	.....	5	.....	.....	.....	.....	1	.....	D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 4° 00′, E. 105° 15′	29.73	755.1	84	28.9	.....	SW	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	Misty	Comm. C. Johnstone.
H. M. S. Emerald, S. 7° 40′, E. 177° 50′	29.80	756.9	81	27.2	100	N	.....	.....	2	.....	8	NW	.....	.....	.....	3	SSE	D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. L. Ching.
H. M. S. Euryalus, N. 3° 05′, E. 83° 00′	29.74	755.4	83	28.3	83	SSW	.....	.....	4	.....	2	SSW	.....	.....	.....	3	SSW	D. clouds	Capt. R. D. King.
H. M. S. Falcon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Comm. W. H. G. Selby.
H. M. S. Fantome, N. 45° 51′, W. 55° 23′	30.50	774.7	39	3.9	.....	ENE	.....	.....	2-3	.....	2	ENE	.....	.....	.....	1	ENE	D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn, N. 14° 03′, E. 42° 44′	29.66	753.4	92.5	33.6	55	NNW	.....	.....	1	.....	1	N	.....	.....	.....	.....	.....	Blue sky	Capt. P. Aldrich.
H. M. S. Flamingo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Comm. R. N. Custance.
H. M. S. Flying Fish	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 42° 40′, W. 136° 20′	30.25	768.3	55	12.8	93	WSW	.....	.....	1-2	.....	10	WSW	.....	.....	.....	2	W	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.58	751.3	42	5.6	66	W	.....	.....	2	.....	3	.....	.....	.....	.....	.....	.....	D. clouds	Capt. L. F. Jones.
H. M. S. Griffin, N. 23° 20′, W. 81° 50′	29.92	760.0	80	26.7	82	SW	.....	.....	2	.....	1	.....	.....	.....	.....	.....	.....	Blue sky	Comm. J. Ingles.
H. M. S. Hecla	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. T. L. H. Ward.
H. M. S. Humber, N. 28° 18′, W. 67° 30′	30.02	762.5	74	23.3	.....	SE	.....	.....	3	.....	3	SE	.....	.....	.....	2	SE	D. clouds	Capt. J. L. Way.
H. M. S. Inconstant, S. 40° 10′, E. 138° 20′	30.29	769.4	55	12.8	81	NNW	.....	.....	4-5	.....	2	NNW	.....	.....	.....	2	NW	D. clouds	Capt. C. C. P. Fitzgerald.
H. M. S. Iris, N. 33° 28′, E. 25° 08′	29.85	758.2	68	20.0	84	E	.....	.....	3-4	.....	7	ENE	.....	.....	.....	3	ESE	D. clouds	Capt. E. H. Seymour.
H. M. S. IronDuke, N. 26° 10′, E. 119° 55′	29.79	756.7	71	21.7	79	SE	.....	.....	1	.....	6	N	.....	.....	.....	.....	.....	D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.99	761.7	66	18.9	.....	Calm	.....	.....	0	.....	7	Calm	.....	.....	.....	.....	.....	D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	29.83	757.7	75	23.9	.....	SE	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	Raining	Capt. S. Grove.
H. M. S. London	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. C. J. Brownrigg.
H. M. S. Magpie, Now Chow, China	29.71	754.6	82.0	27.8	85	ESE	.....	.....	1	.....	5	.....	.....	.....	.....	1	ESE	D. clouds	Capt. A. Carpenter.
H. M. S. Midge, N. 22° 41′, E. 120° 03′	29.82	757.4	.....	.....	.....	Calm	.....	.....	0	.....	4	NE	.....	.....	.....	Sm'h	.....	D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 36° 07′, W. 5° 21	30.07	763.8	65.5	18.6	86	SSW	.....	.....	4	.....	0	.....	.....	.....	.....	.....	.....	Blue sky	Capt. H. H. Rawson.
H. M. S. Modeste, N. 1° 20′, E. 105° 56′	29.82	757.4	85	29.4	83	Calm	.....	.....	0	.....	3	.....	.....	.....	.....	.....	.....	D. clouds	Capt. J. G. Mead.
H. M. S. Monarch	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. G. C. Tryon.
Goletta, Tunis, N. Africa	29.99	761.7	65	18.3	100	NNW	.....	.....	4	.....	6	NNW	.....	.....	.....	.....	.....	D. clouds	

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	30.22	767.6				ESE			5		10	ESE						Misty	Capt. E. B Drummond.
H. M. S. Orontes, S. 24° 30', E. 48° 44'.....†	30.14	765.5	76.5	24.7	88	ENE			3-4		3	WSW				3	SSW	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55', W. 79° 30'	29.91	759.7	78.5	25.8		N			1		4	NE				2	SE	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin, S. 51° 50', W. 73° 50'	29.61	752.1	42	5.6		NW			3-4		10							Overcast	Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, Fernando, Po I'd, Africa	29.90	759.4	83	28.3		NNE			1		9	NNE						D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id	30.20	767.1	44	6.7		Calm			0									Blue sky	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37', E. 55° 27'	29.87	758.7	81.4	27.4	80	SE			1		8							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis.																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis, N. 40° 00', W. 9° 20'	30.16	766.1	63	17.2	72	NNW			1		2	NNW				1	NNW	D. clouds	Capt. G. O. Twiss.
H. M. S. Shannon, N. 3° 03', W. 25° 17'	30.01	762.2	82	27.8	87	SE			3		9	E				3	SE	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 11° 22', W. 146° 00'	29.69	754.1	81	27.2	87	ESE			3		8					3	SE	D. clouds	Capt. P. W. Stephens.
H. M. S Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A	30.08	764.0	55	12.8	93	Calm			0		10	Calm						Overcast	Capt. A. H. Markham.
H. M. S. Turquoise, S. 29° 05,' W. 71° 40'	30.02	762.5	61	16.1	100	SSE			4		10					4	S	Overcast	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.			78	25.6		N			1		2							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, S. 35° 32', E. 163° 04'	30.14	765.5	64	17.8	?	Var.			0-3		1	SW				1	S	Squally	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, Abu Shohr Roads, Persia	29.71	754.6	85.5	29.7	74	WNW			1-2		2					Sm'h		D. clouds	Capt. T. P. Nesham.
H. M. S. Zephyr, N. 31° 20', E. 121° 16'	29.76	755.9	72	22.2	100	Calm			0		1	E						Blue sky	Lt. Comm. G. W. Pollar
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, Mossamedes, Benguela	30.06	763.4	62.2	16.8	80	NNW			3		3					1		D. clouds	Carlos Candid dos Reis, Comd't.
Quanza, N. 24° 20', W. 22° 28'	30.20	767.1	77.0	25.0	74	ENE			2		10					2	NE	Overcast	Carlos M. de Silva Costa, Comd't.
Rio Lima																			S. C ns Silva Costa, Comd't.
Sado																			G. A de Brito Capello, Comd't.
Tamega, Macao, China	29.78	756.4	80.6	27.0	88	S			3		10		SSW	3	hours			Thnd'r str'm	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.02	762.5	65	18.3	78	N	4	1.8			0			0	0			Clear.	
N. Yard, Portsmouth, N. H.	30.08	764.0	46	7.8	92	NE	23	10.3		100	0	NE		0.3	8.			Misty	
Naval Hospital, Yokahama, Japan	29.88	758.9	66.5	19.2	76	SSW			3		0			6	0			Clear	
Adams, S. 7° 18′, W. 80° 18′	29.83	757.7	69	20.6	90	SE			2		2					Long	SSW	Fair	
Alaska, Callao, Peru	29.92	760.0	63	17.2	89	ENE			1		2		NE	0	0			Fair	
Alert, Port Lloyd, Bonin Id. *	29.93	760.2	77	25.0	77	Calm			0		2		Calm			Sm'h		Fair	
Alliance, Norfolk, Va	29.90	759.4	58	14.4	82	E			3		10			0	0			Cloudy	
Ashuelot, Kobe, Japan	30.05	763.3	68	20.0	74	W			1		8		Calm					Cloudy	
Colorado, New York, N. Y	30.01	762.2	48	8.9	92	N	3	1.3			10		N	0	0			Overcast	
Constitution, Norfolk, Va	29.84	757.9	56	13.3	81	NE	6	2.7			10							Cloudy	
Franklin, Norfolk, Va	29.75	755.6	56	13.3	81	ENE	10	4.5			10		ENE	0	0			Cloudy	
Galena, Villafranca, France	29.99	761.7	71	21.7	62	Calm			0		0							Clear	
Independence, N. Yard, Mare I'd, Cal	30.03	762.7	59	15.0	76	SW	1.2	0.5			0							Clear	
Jamestown, Sitka, Alaska *	30.09	764.3	39	3.9	91	E			1		5			0.121	3.1			Fair	
Kearsarge, Port Royal, S. C	29.94	760.5	62	16.7	72	N			3		2		W			Sm'h		Fair	
Lackawanna, S. 19° 30′, W. 104° 26′ †	30.21	767.3	73	22.8	100	NE			2-3		5		NE			Sm'h	NE	Fair	
Marion, Montevideo, Uruguay	30.20	767.1	59	15.0	94	SE			3		8		SE	0	0	Sm'h		Fair	
Michigan, Erie, Pennsylvania	30.00	762.0	48	8.9		NE	2	0.9			10							Foggy	
Minnesota, Newport, R. I	30.03	762.7	48	8.9	92	NNE			6		10		NNE			R'gh	NNE	Overcast	
Monocacy, Yokohama, Japan	30.07	763.8	69	20.6	80	S			2		0							Clear	
New Hampshire, Port Royal, S. C	29.88	758.9	68	20.0	95	NNE	10	4.5			5		Calm	0	0			Fair	
Nipsic, Villafranca, France	30.02	762.5	71	21.7	54	ESE			1		0					Sm'h		Hazy	
Onward, Callao, Peru †	29.99	761.7	65	18.3	89	Calm			0		5		NW			Long	W	Cloudy	
Palos, N. 34° 52′, E. 139° 33′	30.11	764.8	66	18.9	89	S			3		2							Fair	
Passaic, Washington, D. C	29.99	761.7	54	12.2	100	E			3		10		E					Misty	
Pensacola, N. 38° 23′, W. 138° 50′	30.25	768.3	59	15.0	88	ENE			2		2		NE	0	0	Long	NE	Clear	
Portsmouth, Elizabeth River, Va	29.90	759.4	55	12.8	100	NE			3		2		NNE			Sm'h		Cloudy	
Powhatan, Port Royal, S. C	29.93	760.2	67	19.4	84	NNE			3		0							Clear	
Quinnebaug, N. 23° 40′, W. 29° 08′	30.16	766.1	73	22.8	67	NE			3		2		ENE			Long	E	Fair	
Ranger, N. 15° 51′, W. 95° 46′ *	29.84	757.9	81	27.2	83	Calm			0		2		Calm	0	0	Mod.		Fair	
Richmond, Yokohama, Japan	30.07	763.8	70	21.1	57	S			3		0			0	0			Clear	
Saratoga, Norfolk, Va	29.88	758.9	58	14.4	82	ENE			2		8		ENE	0	0			Cloudy	
Shenandoah, Montevideo, Uruguay *	30.20	767.1	59	15.0	88	SE			2		8					Sm'h		Fair	
St. Louis, League Island, Pa	29.59	751.6	50	10.0	93	ENE	9	4.0			10		NE	0	0			Cloudy	
Swatara, Shangbai, China † *	29.74	755.4	75	23.9	86	SE			1		0							Blue sky	
Tennessee, Hampton Roads, Va	29.92	760.0	58	14.4	82	NE	24	10.7			10		ENE	0	0	Sm'h		Threatening	
Ticonderoga, S. 44° 18′, W. 102° 40′	30.04	763.0	49	9.4	85	SSW			6		5		SSW	0.02	0.5	Long	SW	Fair	
Trenton, Villafranca, France *	29.99	761.7	76	24.4	46	E			2		0			0	0	Sm'h		Clear	
Vandalia, Boston Mass	30.04	763.0	44	6.7	100	ENE			5		10		Calm					Cloudy	
Wabash, Boston, Massachusetts	30.14	765.5	44	6.7	92	NNE	24	10.7			10		NNE	0.93	23.6			Misty	
Wachusetts, N. 37° 30′, W. 123° 21′	29.97	761.2	55	12.8	93	NW			3		0					Long	E	Clear	
Wyoming, N. 33° 13′, W. 67° 10′	29.97	761.2	70	21.1	90	S			5		5		S			Mod.	S	Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
Britt-h Merchant. ‡																			Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 18° 25′, W. 53° 17′	30.07	763.8	78.5	25.8	86	Calm			0		8					Sl't	E	D. clouds	Capt. W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne, N. 5° 54′, W. 53° 08′	30.02	762.5	82	27.8	81	ENE			3		2							Blue sky.	Capt. W. Scott.
Barque Cloppenaame																			Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 45° 13′, W. 25° 36′	30.01	762.2	54.5	12.5	68	WNW			6		7							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow ‡																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 32° 08′, W. 52° 07′	30.06	763.5	57.5	14.2	100	SW			7		5							D. clouds	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ N. 21° 40′, W. 37° 10′	30.17	766.3	74.3	23.5	76	E			5		5k							D. clouds	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. O. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland ‡																			Capt. H. W. Dyke.
Barque Meriola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ S. 6° 31′, W. 16° 07′	29.98	761.5	82.2	27.9	75	ESE			6		5							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 6° 33′, E. 83° 03′	29.75	755.6	83.5	28.6	91	SW			6		5							D. clouds	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 52° 39′, W. 32° 48′	29.97	761.2				NNW			5		2		N			Mod.	N	Clear	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Algeria																			Capt. W. Watson.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic, N. 41° 49′, W. 59° 55′	30.16	766.1	56	13.3	100	SE			2		10					R'gh	NE; SE	Foggy	Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic N. 47° 56′, W. 33° 20′ †	30.05	763.3	50	10.0		NW			4		8		N	6 hours Showers		Mod.	N	Fair	Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England †	29.55	750.6	59	15.0		SW			5		8?		SW	Showers				Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, N. 41° 39′, W. 47° 22′ ‡	30.28	759.1	61.2	16.2		NE			4		10		ENE	0	0	Mod.	NNE	Foggy	
S. S. Köln, N. 39° 30′, W. 68° 57′	29.97	761.2	67.0	19.4	89	SSE			3		8		SE	r'h'rs	fog	Sm'h	S	Cloudy	Capt. Th. Jüngst
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Pern																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 41° 25′, W. 46° 44′....*†	30.36	771.1	66	18.9	94	SE			5		10		SE			Sm'h	SE	Misty	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio, N. 45° 44′, W. 29° 19′....†*	30.16	766.1	54	12.2	90	N			5		2		N	Light		Mod.	N	Fair	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, Liverpool, England.....*†	29.44	747.8	61	16.1	88	SW			3		2		SW					Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 24° 31′, W. 110° 25′....†	29.86	758.4	70	21.1	57	SW			5		0			0	0	Sm'll	SW	Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 36° 12′, E. 145° 01′....†	30.16	766.1	67	19.4	79	N			4		2		NNW	0	0	Mod.	NE	Clear	Capt. H. Davison.
S. S. Gaelic, N 22° 48′, E. 115° 45′....*†	29.95	760.7	76	24.4	100	SW			2		2		SW			Sm'h		Fine	Capt. W. H. Kidley.
S. S. Oceanic, N. 43° 22′, E. 164° 27′	30.26	768.6	45	7.2	92	SW			2		0			0	0	Sm'h		Blue sky	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 45° 40′, W. 124° 05′....†	30.18	766.6	54	12.2	87	N			5		2		NNE			Sm'h		Fair	Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon.....†	30.21	767.3	50.0	10.0	72	NW			1		2		NW					Fair	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, Utsalady, Washington, Ter†	30,22	767.6	47	8.3	85	NW			2		2							Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 34° 24′, W. 120° 13′...†	29.94	760.5	61	16.1	76	NW			5		8		NW	0	0	Long	WSW	Cloudy	Geo. H. Harrison.
S. S. Senator, San Francisco, Cal.....†	30.06	763.5	51	10.6	79	W			1		2							Fair	Capt. Thos. Wallace.
S. S. State of California, N. 40° 00′, W. 124° 22′ ...†	30.00	762.0	52	11.1	86	NW			3		8		NW			Sm'h	NW	Foggy	Capt. G. Debney.
S. S. Victoria, N. 46° 44′, W. 124° 18′.....†	30.22	767.5	51	10.6	93	N			4		2		NW			Sm'll	NW	Fair	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, Sydney, N. S. Wales.....	30.32	770.1	60	15.6	88	SW			3		10		SW					Raining	A. Bannerman, 2d Officer.
S. S. City of New York, Sydney, N. S. W.....†	30.31	769.9	56	13.3	100	SW			2		10		SW					Raining	Wm. H. Hawes, 2d Officer. Capt. D. S. Austin.
S. S. City of Panama																			Capt. G. G. Berry.
S. S. City of Peking, N. 26° 47′, E. 123° 17′.....†	29.86	758.4	77	25.0	91	ENE			3		10		S	0	0	Sm'h		Cloudy	Capt. H. C. Dearborn.
S. S. City of Sidney, N. 37° 11′, W. 124° 52′....†	30.05	763.3	56	13.3	75	NNW			3		2		NNE	0	0	Mod.	NE	Hazy	A. L. Ritchie, 2d Officer.
S. S. City of Tokio																			Capt. R. R. Searle.
S. S. Colima, N. 9° 43′, W. 85° 40′.. .....†	29.93	760.2	80	26.7	87	Var.			2		10		E	0.12	3.0	Sm'll	ESE	Raining	Capt. M. Connolly.
S. S. Granada, Acapulco, Mexico..... ...†	29.86	758.4	80	26.7	96	W			2		2		W	0	0	Sm'h		Clear	
S. S. Zealandia, N. 14° 20′, W. 160° 40′.....	30.04	763.0	69	20.6	75	ENE			3		1		E	0	0	Sm'h	E	Clear	
RED STAR LINE. *Jas. A. Wright President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, N. 40° 40′, W. 57° 03′... ..†	30.12	765.0	67	19.4	84	S			1		0			0	0	Sm'h		Dense fog	A. Feddersen, 2d Officer. Capt. Wm. Geo. Randle.
S. S. Rhynland																			T. H. Tobson, Chief Off'r.
S. S. Vaderland																			A. R. Mehaffey, 2d Mate.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt J. Jorgensen.
Sch'r Addie Fuller, N. 38° 39′, W. 73° 09′.....	29.83	757 7	58	14.4	82	NE	14	6.3			10d		NE	0	0	Mod.	NNE	Cloudy	Capt. L. L. Lewis.
Sch'r Annie R. Lewis																			Capt. B. F. Woodbury.
Bark Carrie Heckle, ‡ N. 21° 40′, W. 57° 50′...*†	30.14	765.5	80	26.7		SW			1		8		SW	0	0	Sm'h	E	Fair	Capt. W H. Champlin.
Brigantine George, N. 35° 05′, W. 66° 50′.....†	30.05	763.3	76	24.4		S			7		8		SSW	Showers		R'gh	SW	Squally	
U. S. F. C. S. Fish Hawk, N. E. River Head. Chesapeake bay Md†	30.04	763.0	53	11.7	93	NE	4	1.8			10n			0.06	1.5			Cloudy	Capt. Jos. Hand.
Bark Sunbeam. Lisbon, Portugal.....†..	30.22	767.6	72	22.2	85	N			4		0			0	0			Clear	

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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

THE HELIOTYPE PRINTING CO 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 19, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instru-m'tal error and tem-perature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco	‡		30.06	763.4	69.4	20.8	83	SW			1		7			0	0	Very cloudy	Dr. Ollive.
Nemours	‡		29.96	761.0	71.1	21.7	89	WSW			1		0			0	0	Clear	Reynard.
Algiers	‡		30.00	762.0	69.4	20.8	63	NE			2		0			0	0	Clear	Nicolas.
La Calle	‡		30.08	764.0	74.8	23.8	63	N			1		2			0	0	Fair	Fonfrède.
Tunis	‡		30.05	763.3															Jacques.
Stax	‡		30.13	765.3															Gau.
Saida	‡		30.05	763.2	83.1	28.4	21	N			3		4			0	0	Cloudy	Dumas.
Tebessa	‡		30.09	764.2	61.5	16.4	42	Calm			0		0			0	0	Clear	Watrin.
Geriville	‡																		Lonchamp.
Laghouat	‡		30.06	763.4	81.3	27.4	28	S			1		1			0	0	Very fair	Herbin.
Biskra	‡		30.14	765.5															Baudassé.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.24	768.1	30.33	770.4	53.6	12.0	83	NW	2	0.9			10			0	0	Dull	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.44	747.8	29.97	761.3	71.6	22.0	49	SE			3		0			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.20	741.6	29.94	760.5	69.1	20.6	47	ESE	6.3	2.8			0			0	0		Dr. Wierzbicki.
Eperies	29.08	738.7	29.93	760.2	69.8	21.0	45	SE			1	3cs	0			0	0		Julius Mikolik.
Gratz	28.73	729.8	29.94	760.5	70.2	21.2	49	SW			2		0			0	0		Andreas Rospini.
Hermannstadt	28.58	725.8	29.98	761.4	62.2	16.8	80	SSW			3		10			0.024	0.6		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.60	726.3	29.88	759.0	72.0	22.2	60	NE			1		2			0	0		The Staff.
Lemberg	29.00	736.6	29.96	761.0	65.5	18.6	60	SE			1		5			0	0		Dr. T. Stanecki.
Pola	29.88	758.9	29.99	761.7	67.6	19.8	58	WNW			3		0			0	0		I. R. Hydrographic Office.
Szathmar	29.52	749.7	29.97	761.1	70.2	21.2	35	NW			1		2			0	0		Beicht Peter, S. J.
Szegedin	29.65	753.0	29.92	759.9	68.0	20.0	54	NW			1		3			0	0		Karl Stancel.
Trieste	29.91	759.7	30.01	762.3	69.1	20.6	56	Calm			0		0			0	0	Clear	Secco.
Vienna	29.26	743.1	29.95	760.7	71.6	22.0	47	SE			1		0			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.24	742.7	29.34	745.2	52.5	11.9	72	S	17	7.6			5			0.005	0.1	Blue sky	W. Boswell.
Armagh, Observatory	29.10	739.1	29.33	745.0	52.8	11.6	88	SW	8	3.6			7					D. clouds	S. Call.
Bidston, Liverpool Obs'y			29.45	748.0	57.2	14.0	56	SW	31	13.9			6					D. clouds	John Hartnup.
Bolton, Sharples	28.93	734.8	29.45	748.0	54.3	12.4	65	SW	15	6.7			8					Raining	Thomas Mackereth.
Bradford, Yorkshire	29.05	737.9	29.44	747.8	53.0	11.7	73	SW			1		6			0.04	1.0	D. clouds	J. McLandsbo ough, F.R.S
Bridgetown, Barbadoes	29.89	759.2	29.92	760.0	89	30.0	68	SE			2		3					D. clouds	Corpl. J. Surgener, A.H.C.
Cardington			29.58	751.3	62.4	16.9	59	SW			5.0		6					D. clouds	John McLaren.
Chatham, School M. E.	29.55	750.6	29.68	753.9	59.0	15.0	62	SW			4		7					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.46	748.3	29.68	753.9	56.8	13.8	69	SW			6		5					D. clouds	The Staff.
Fort Napier, Natal	27.72	704.1	29.94	760.5	58.1	14.5	76	SE			1		7?					Overcast?	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.59	751.6	29.82	757.4	89	31.7	84	NW			1		3					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			29.27	743.4	55	12.8	74	N			6		10			0.02	0.5	Showery	J. O'Donaghue.
Gibraltar, Mediterranean	29.97	761.2	30.03	762.7	74.6	23.7	87	NE			2		3					Blue sky	2nd Cpl. C. Baldwin.
Glasgow, Observatory	29.10	739.1	29.33	745.0	53.2	11.8	65	SW			3		7k					D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	29.49	749.0	29.66	753.4	60.0	15.6	65	SW			2		6					D. clouds	The Staff.
Guernsey	29.53	750.0	29.74	755.4	56	13.3	75	SSW			3		5					D. clouds	Dr. S. E. Hoskins, F.R.S.
Kew, Observatory	29.62	752.3	29.66	753.4	58.8	14.9	60	SW	26	11.6			7					D. clouds	The Staff.
Leicester, Museum	29.28	743.7	29.53	750.0	58.1	14.5	70	SW			4		8					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.83	757.7	29.90	759.4	68.0	20.0	78	NW			2		9			0.04	1.0	Overcast	F. S. Vine, A. H. C.
Nassau, Bahamas	29.92	760.0	29.96	761.0	84.5	29.2	65	NW			1		6					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.02	737.1	29.54	750.3	52.0	11.1	88	SW			6		7					Squally	John Mac Email.
Oxford, Radcliffe Obs'y	29.40	746.7	29.63	752.6	54.4	12.4	78	WSW			5		10					Showery	The Staff.
Plymouth	29.60	751.8	29.68	753.9	58.0	14.4	75	SW			4		4					D. clouds	John Merrifield.
Sandwick Manse, Orkneys			29.42	747.3	41.1	5.1	92	E	33	14.8			10					Misty	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.82	757.4	29.88	758.9	68.6	20.3	44	NE			3		7					D. clouds	Serg't W. H. Lyne.
Sheffield	29.23	742.4	29.50	749.3	61.0	16.1	67	SSW			4		4			0.02	0.5	D. clouds	W. F. Cooper.
Silloth Rectory	29.35	745 5	29.38	746.2	54.7	12.6	73	W			6		4			0.109	2.8	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.46	748.3	52.0	11.1	80	SW	18	8.0			10			Blank		Overcast	Rev. S. J. Perry.
Stratfield Turgiss	29.45	748.0	29.66	753.4	53.8	12.1	83	SW			3-5		9					Squally	Rev C.H. Griffiths, F.M.S.
Truro, Royal Institution	29.67	753.6	29.69	754.1	62	16.7	61	SW			7		5					D. clouds	W. Newcombe.
Valencia, Observatory	29.47	748.5	29.50	749.3	53.7	12.1	76	WSW	29	13.0			7			Blank		Squally	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.14	765.5	30.18	766.6	48	8.9	93	Calm	0	0			Fg			0.015	0.4	Dense fog	H. J. Cundall, C. E.
Chatham, N. B.*	30.13	765.3	30.20	767.1	45	7.2	92	Calm	0	0			10s		NE	0.32	8.1	Cloudy	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.15	765.8	30.17	766.3	41	5.0	86	NE	5	2.2			10n		Calm	0	0	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.32	744.7	30.18	766.6	36	2.2	90	NW	4	1.8		0	2s			0	0	Fair	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.08	764.0	30.21	767.3	44	6.7	99	E	2	0.9			Fg			0.028	0.7	Foggy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.58	751.3	29.91	759.7	53	11.7	94	NE	7	3.1		2c	8ks	NE	NE	0.03	0.8	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.02?	762.5?	30.02?	762.5?	49	9.4	90	NE	13	5.8			10n			0.03	0.8	Light rain	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.30	744.2	29.99	761.7	51	10.6	84	NE	4	1.8		5k	5ks	E	E	0	0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.24	742.7	29.94	760.5	49	9.4	10	N	8	3.6			10k		N	0.06	1.5	Heavy rain	H. Morgan.
Port Stanley, Ontario	29.31	744.5	29.95	760.7	51	10.6	87	NW	6	2.7			10n		W	0.01	0.3	Light rain	M. Payne.
Quebec, Quebec*	29.89	756.9	30.12	765.0	51	10.6	79	E			1	2cs	2k	E	E	0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.56	750.8	30.02	762.5	47	8.3	88	NW	3	1.3			10s		NE	0	0	Cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.28	743.7	29.99	761.7	48	8.9	56	N	5	2.2		5k	0			Inap.	Inap.	Fair	K. Stewart.
St. Andrews, N. B.	30.09	764.3	30.15	765.8	47	8.3	98	NE	1	0.4			Fg		S	0.49	12.4	Foggy	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.16	766.1	30.20	767.1	47	8.3	88	SW	6	2.7			10n			Inap.	Inap.	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.57	751.1	29.95	760.7	51	10.6	95	N	10	4.5			10n			0.03	0.8	Light rain	Magnetic Observatory
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.07	763.8	30.13	765.3	51	10.6	96	E	8	3.6		Fg	Fg			0.02	0.5	Foggy	Lt. F. E. Wilmot, R. N
Sub-Series. St. Johns, Newfoundland	30.02	762.5	30.27	768.8	48	8.9	100	NE	3	1.3			10					Showery	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	30.18	766.6			60.0	15.6	93	WSW	20.8	9.3			10n			0.685	17.4	Raining	John Duthie.
Cape Town, C. G. H. Obs'y	30.15	765.8	30.19	766.8	64.5	18.1		S	12.2	5.5		1	1			0	0		The Staff, for D. Gill.
Worcester *†	29.09	738.9			63.6	17.6	52	SSE			1	0	0			0	0	Fine	C. Stokes.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series. Zi-Ka-Wei, near Shanghai	29.85	758.1	29.87	758.7	62.6	17.0	96	ENE	7.2	3.2			10n			0.280	7.1	Raining	M. Marc Dechevrens, S.J.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	25.18	665.0	29.90	759.4	65.3	18.5	95	SE			1	30	0			0.55	14.	Clear	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.59	751.6	29.64	752.8	54.0	12.2	88	SSW	16	7			10					Raining	Oversergent Fischer.
Fanöe	29.60	751.8	29.62	752.3	51.8	11.0	82	WSW			4		10					Raining	Overlooerer Lauridsen.
Godthaab, Greenland	29.46	748.3	29.50	749.4	31.5	—0.3	83	N			4		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.73	755.1	29.77	759.2	41.0	5.0		E			4		2						A. O. Thorlacius.
Thorshavn	29.70	754.3	29.73	755.2	38.1	3.4	76	E	22	10			10					Snow & sleet	Overlooerer Bergh.
Vestervig	29.45	748.1	29.55	750.5	47.3	8.5	100	SW			4		10					Foggy	Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.34	745.1	29.95	760.9	73.8	23.2	26	NW			1	c	0		NE	0	0		M. Labroue, Director.
Alençon Normal School	29.39	746.4	29.94	760.4	66.4	15.8	89	SW			1		5kn		W	0.181	4.6	Cloudy	M. Nicot, Director.
Arras, Engineer School	29.70	754.4	29.95	760.8	58.5	14.7	54	W			2	ck	n		W	0	0		M. Klein, Commandant
Avignon, Normal School	29.95	760 8	30.03	762.8	75.6	24.2	38	SE			1		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.36	745.8	29.90	759.4	69.4	20.8	45	WSW			3		8kn		SW	0	0	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.59	751'5	29.84	758.0	65.1	18.4	56	WSW			2		8		SW	0.039	1.0	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.08	738.0	29.93	760.3	71.6	22	40	SSW			2	c	0		SW	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.71	754.5	29.90	761.0	71.8	22.1	44	W			1		8		SW	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.39	746.5	29.93	760.1	65.3	18.5	66	W			2		kn		W	0	0		M. Postel, Director.
Brest, Naval Observatory	29.01	752.1	29.85	758.3	60.4	15.8	71	SW			2		10		SW	0.520	13.2		M. de Kermaree, Dir.
Caen, Normal School	29.71	754.7	29.78	755.5	64.6	18.1	69	SW			1		5		SW	0.799	20.3	Cloudy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.49	749.1	29.80	757.0	62.4	16.9	63	S			1		10		SW	0	0	Covered	M. Jadot, Director.
Charleville, Normal School	29.34	745.2	29.84	758.0	54.3	12.4	83	SW			2		10			0	0	Covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.58	725.9	29.87	758.8	73.9	23.3	35	E			1		2k		SW	0	0	¼ covered	M. Allnard, Director.
Cluny, Normal School	29.10	739.1	29.93	760.2	78.8	26	29	S			1		3		S	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.00	736.5	29.85	758.1	67.5	19.7	57	W			4		5kn	W	W	0	0	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.47	697.7	29.92	759.9	72.1	22.3	40	N			2					0.12	3.		M. Jeangirard, Director.
Grénsque, du. Rhone	28.97	735.8	30.11	764 8	72.0	22.2	36	SW			2		0			0	0	Clear	M. Kina, Director.
Grenoble, Normal School	29.21	741.8	29.94	760.4	76.1	24.5	33	WNW			3		28			0	0	Slightly cl'dy	M. Ahlard, Director.
Guéret, Normal School	28.32	719.2	29.85	758.1	67.3	19.0	53	SW			3	ck	0		NE	0	0		M. Rivoire, Director.
Lamballe, Normal School	29.57	751.1	29.84	757.9	63.5	17.5	47	SW			1				SW	0.47	12.		M. Ollitrault, Director.
Lesear, Normal School	29.38	746.2	30.03	762.7	72.0	22.2	64	W			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	29.83	757.6	29.93	760.2	59.0	15.0	68	SW			2		10		SW	0.004	0.1	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.89	733.9	29.91	759.7	77.4	25.2	78	SE			1		2		NW	0	0	Slightly cl'dy	M. André, Director.
Mans, Normal School	29.59	751.5	29.89	759.2	61.5	16.4	64	W			3		5		W	0.102	2.6	Cloudy	M. Piboeu, Director.
Marseille, Observatory	29.79	756.6	30.06	763.4	66.7	19.3	53	W			1		0			0	0		M. Stephan, Director.
Montlouis l'instituteur	24.85	631.3	30.09	764.3	59.9	15.5	63	SE	5.6	2.5			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.92	759.9	30.02	762.6	65.5	18.6	72	S			2		5	S	W	0	0	Cloudy	M. P. Galzin, Director.
Nancy, Normal School	29.13	739.9	29.87	758.6	72.7	22.6	34	SSW			2		5k			0	0	Cloudy	M. Hasse.
Nantes, Observatory	29.78	756.3	29.94	760.4	63.3	17.4	65	WSW			1-2		10n;k		WSW	0.126	3.2		M. Letrocque, Director.
Nice	30.00	761.9	30.03	762.8	69.1	20.6	59	SE			2		1		SE	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.87	758.8	29.98	761.5	65.7	18.7	68	SE	7.4	3.3			2	NW	N	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.59	573.8			59.9	10.5							1		SSW	0	0	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	28.88	733.5	29.90	759.4	75.2	24	54	SW			1		0			0	0	Clear	M. Taillou.
Puy de Dôme Obs'y, Summit	25.15	638.8			52.9	11.6	51	SW			3		2			0	0	¼ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	29.94	760.4	29.97	761.2	60.8	16.0	79	SW			1		10		SW	1.02	26.	Covered	Lt. E. Decanie, Director.
Roche-sur-Yon, N. School	29.74	755.3	29.95	760.7	61.5	16.4	72	SW			1		10			0.08	2.	Covered	M. Monillot, Director.
Rodez, Normal School	27.85	707.4	29.90	759.5	74.5	23.6	40	NW			1		0			0	0	Clear	M. Richard, Director.
Rouen, Normal School	29.74	755.5	29.83	757.7	61.2	16.2	59	WSW			3		8		WSW	0	0	Very cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.67	753.5	29.82	757.5	60.6	15.9	75	SSW			2		10	S	SW	0.71	18.	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.70	754.4	29.87	758.0	64.4	18.0	59	SSW			2		7		SW	0.013	1.1		M. Renou, Director.
Toulouse, Observatory	29.30	744.1	30.02	762.5	74.1	23.4	50	SSE			2					0	0		M. Baillard, Director.
Tours	29.75	755.8	29.95	760.8	66.8	19.0	73	SW			2		10		W	0.028	0.7	Covered	M. de Tastes.
Versailles, Observatory	29.37	746.0	29.86	758.5	64.0	17.8	55	W			3					0.051	1.3		Dr. A. Bérigny, Director.
Sub-Series.																			
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.05	738.0	29.91	759.8	74.3	23.5	30	W			3		2k	W		0	0		Prof. Dr. Hoh.
Berlin	29.00	751.7	29.70	755.9	73 0	23.1	31	SE			3		8			0	0		Prof. Dr. Arndt.
Breslau	29.38	740.2	29.91	759.6	73.6	23.1	29	S			2		1			0	0		Royal University Obs'y.
Carlsruhe	29.42	747.3	29.83	757.6	74.5	23.6	49	SW			4		5	SW		0	0		Albert Senx.
Cassel	29.05	738.1	29.78	752.5	68.7	20.4	37	SSW			8		0	S		0.063	1.6		Dr. H. Möhl.
Frankfort on the Main	29.48	748.7	29.82	757.5	75.2	24.0	32	SW			4		9			0	0		Physical Society.
Friedrichshafen	28.51	724.4	29.92	759.4	68.0	20.0	60	SSE			2		3	WSW		0	0		Wilhelm, Chief Tel.
Hamburg	29.02	752.3	29.99	754.1	59.7	15.4	82	SW			3		10			0.059	1.5		Dr. R. Kleeman.
Kiel	29.07	753.5	29.98	753.9	54.7	12.6	92	SW			2		10			0.528	13.4		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.39	746.0	29.80	757.0	75.4	24.1	33	SSW			3		8			0	0		Prof. Dr. Bruhns.
Magdeburg	29.49	748.3	29.74	755.4	72.0	22.2	48	SSW			6		10ks	SSW		0	0		Dr. Assmann.
Memel	29.82	757.5	29.87	758.7	70.9	21.6	37	S			3	2c	0						Reinbrecht & Issermann.
Munich	28.13	714.4	29.98	761.6	74.1	23.4	27	SW			2		1			0	0		Central Station.
Neufahrwasser	29.78	756.4	29.80	756.8	70.6	21.4	27	SSW			4		2			0	0		A. Lothes.
Neustadt, Palatinate	29.32	744.7	29.84	758.0	73.2	22.9	38	W			1		8			0	0		Dicknether.
Stuttgart	28 93	734.7	29.78	759.3	70.1	21.5	30	SW			5		3	W		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Ouerth.
Weissenburg, Bavaria	28.41	721.5	29.88	758.9	73.0	23.1	32	W			4		6	W		0	0		Prof. Kemlein.
Wustrow	29.65	753.1	29.07	753.7	65.8	18.8	65	SSW			4		10s			0	0		Prof. J. Reimer.

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

GREEK SERIES.

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

Athens	29.48	748.8	29.87	758.6	67.5	19.7		NE			1.0		10					Sprinkling	A. Wourlisch

INDIAN SERIES.

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

Kurrachee	29.54	750.3	29.59	751.5	88.9	31.6	80	SSW	34.0	15.2			1			0	0	Misty	
Deesa	29.08	738.6	29.52	749.9	105.0	40.6	19	W	15.3	6.8			5	SW	SW	0	0	D. clouds	
Bombay	29.69	754.1	29.73	755.1	89.4	31.9	66	W	12.0	5.4			0			0	0	Blue sky	
Poona, Yarrowda	27.88	708.1	29.68	753.8	93.0	33.9	18	W	12.0	5.4			0			0	0	Blue sky	
Belgaum	27.22	691.2	29.69	754.1	80.5	30.3	54	SW	14.0	6.3			0			0	0	Misty	
Lahore	28.68	728.6	29.38	746.2	107.3	41.8	18	W	2.0	0.9			6			0	0	Misty	
Roorkee	28.62	726.8	29.50	749.2	84.6	29.2	44	E	4.5	2.0			10			0	0		
Agra	28.87	733.2	29.39	746.6	109.1	42.8	16	N	5.2	2.3			0			0	0		
Nagpur	28.49	723.6	29.47	748.4	109.0	42.8	16	NW	8.7	3.9			4		W	0	0	D. clouds	
Jubbulpore	28.21	716.6	29.49	749.1	106.0	41.1	5	NW	5.3	2.4			0			0	0	Blue sky	
Lucknow	29.08	738.7	29.44	747.8	102.4	39.1	20	N	5.2	2.3			0			0	0	Blue sky	
Allahabad	29.13	740.0	29.43	747.4	104.4	40.2	32	Calm	3.4	1.5			0			0	0	Blue sky	
Patna	29.34	745.3	29.52	749.7	92.5	33.6	50	E	5.0	2.2			5	E	E	0	0	D. clouds	
Hazaribagh	27.55	699.7	29.49	749.1	89.3	31.8	54	ESE	10.1	4.5			8	W	E	0	0	Thunder	
Cuttack	29.46	748.2	29.54	750.3	85.0	29.4	63	SSE	2.0	0.9			10			0.09	2.3	Drizzling	
Calcutta, Alipore	29.53	750.0	29.55	750.6	88.5	31.4	66	ENE	5.0	2.2			0			0	0	Blue sky	
Dhubri	29.46	748.4	29.58	751.4	85.7	29.8	63	Calm	1.0	0.4			0			0	0	Blue sky	
Chittagong	29.53	750.0	29.62	752.3	83.7	28.7	73	W	4.0	1.8			5?			0	0	Blue sky?	
Sibsagar	29.29	743.9	29.62	752.2	86.0	30.0	72	SW	0.8	0.4			2			0	0	Blue sky	
Zanzibar, Africa			29.95	760.7	78.0	25.6	86		7	3.1			10			0.44	11.2	Threatening	

ITALIAN SERIES.

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

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

Udine	29.60	751.7	30.00	762.0	72.7	22.6	34	Calm	0	0			0			0	0		Prof. Giovanni Clodig.
Milan	29.48	748.8	29.98	761.6	72.0	22.2	33	NE	4.9	2.2			0			0	0		Prof. Schinparelli.
Padua	29.90	759.4	30.01	762.2	69.6	20.9	44	SW	0.7	0.3			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.09	738.8	29.97	761.3	70.9	21.6	39	SE	3.1	1.4			0			0	0		Prof. P. F. Denza.
Genoa	29.86	758.4	30.05	763.3	66.2	19.0	63	SW	4.9	2.2			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.11	713.9	29.98	761.6	68.2	20.1	38	NNE			4		0			0	0		Prof. D. C. Bruno.
Pesaro	29.97	761.2	30.02	762.4	65.8	18.8	61	NW	7.4	3.3			0			0	0		Prof. Luigi Guidi.
Florence	29.72	754.9	29.97	761.3	68.0	20.0	36	SW			2		0			0	0		Prof. Costantino Pitter.
Leghorn	29.95	760.7	30.04	762.9	68.2	20.1	65	W	1.3	0.6			0			0	0		Prof. P. Monte.
Rome	29.80	756.9	29.97	761.2	73.8	23.2	46	W	0.7	0.3			0			0.114	2.9		Prof. P. S. Ferrari.
Lecce	29.64	752.8	29.89	759.1	69.8	21.0	57	NW	24.2	10.8			1			0.012	0.3		Prof. C. de Giorgi.
Cosenza	29.04	737.6	29.92	760.0	68.4	20.2	69	WNW	3.1	1.4			8	NW		0	0		Prof. D. Conti.
Cagliari	29.82	757.3	30.01	762.2	69.4	20.8	61	S			4		1			0	0		Prof. A. Pacinotti.
Palermo	29.74	755.4	29.99	761.7	70.3	21.3	52	NNW	11.2	5.0			3	NE		0	0		Prof. G. Ciacciatore.
Syracuse	29.84	757.9	29.88	759.0	65.1	18.4	70	NE	13.0	5.8			10	NE		0.059	1.5		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.41	746.9	29.91	759.8	73.4	23.0	46	E	3.8	1.7			3	SE		0	0		Prof. F. Brioschi.
Stelvio	22.27	565.6			44.2	6.8	46	SE			1		0			0	0	Clear	Prof. P. F. Denza.
Valdobbia	22.28	566.0			46.9	8.3	72	NNW			1	2ck	0	N		0	0	Misty	Prof. P. F. Denza.

JAPANESE SERIES.

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

Hiroshima, I. M. Obs'y †.	29.90	759.4	29.91	759.7	67.4	19.7	96	Calm	0	0			10n			0.365	9.3	Raining	K. Sasaki.
Kioto	29.75	755.6	29.92	759.9	66.5	19.2	97	NW	1.1	0.5			10n			0.880	22.4	Raining	M. Tojima.
Nagasaki, I. M. Obs'y	29.76	755.9	29.96	761.0	69.2	20.7	99	WSW	6.2	2.8			10n			0.080	2.0	Drizzling	S. Takehayashi.
Tokei Obs'y, Yeddo	29.83	757.7	29.90	759.4	66.8	19.3	85	SSW	11.2	5.0		0	3s		SW	0.015	0.4	Fair	The Staff.
Wakayama	29.88	758.9	29.93	760.2	71.4	21.9	87	SSW	15.4	6.9			10n		S	0.006	0.2	Raining	Y. Kuwamuca.

MAURITIUS SERIES.

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

Mauritius Obs'y, Mauritius	29.90	759.4	30.09	764.2	75.6	24.2	72	E	15.0	6.7		7	2	NW	ESE	0.89	22.6	Cloudy	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

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

Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.70	754.3	29.96	760.9	73.0	22.8	98	NNE	0.9	0.4		1c	3ks			Inap.	Inap.	Foggy	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.

NETHERLANDS SERIES.

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

Flushing	29.76	756.0	29.76	756.0	57.2	14.0		W			5					1.032	26.2		
Groningen	29.63	752.5	29.68	753.9	54.9	12.7		WSW			3					0.563	14.3		
Helder	29.65	753.2	29.65	753.2	52.2	11.2		SSW			4					0.161	4.1		
Hellevoetsluis	29.72	754.9	29.72	754.9	55.6	13.1	82	WSW			6					1.154	29.3		
Utrecht	29.70	754.3	29.74	755.5	59.7	15.4	74	WSW			4		5			0.575	14.6	Cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.44	747.7	29.50	749.3	49.3	9.6	76	NNW	2.5	1.1	.....	.....	9	.....	.....	0.421	10.7	.....	
Christiania	29.47	748.6	29.62	752.3	47.7	8.7	76	E	9	4	.....	.....	10	.....	.....	0.008	0.2	.....	
Gjæsvær	29.59	751.5	29.61	752.1	25.1	— 3.3	.....	N	.....	.....	6	.....	10	.....	.....	.....	.....	.....	
Lodingen	29.61	752.1	29.66	753.3	33.1	0.6	88	W	.....	.....	4	.....	9	.....	.....	0.004	0.1	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.98	761.6	30.14	765.6	61.3	16.3	91	NE	5.6	2.5	.....	.....	7	.....	.....	0.295	7.5	.....	Dr. J. A. Sampaio.
Campo Major	29.03	737.3	30.04	762.9	73.4	23.0	37	W	4.3	1.9	.....	.....	2	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.05	763.2	30.14	765.5	67.8	19.9	49	SW	3.8	1.7	.....	.....	10	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.73	755.2	30.09	764.3	66.9	19.4	57	SSE	6.9	3.1	.....	.....	1	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.11	764.7	30.18	766.5	65.1	18.4	80	WSW	12.5	5.6	.....	.....	10	.....	.....	0	0	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	29.80	756.9	29.82	757.4	49.8	9.9	63	SSW	13	6	.....	.....	10	.....	.....	.....	.....	.....	Capt. Sselliwerstow.
Astrakhan	29.98	761.5	29.90	759.4	71.1	21.7	57	SE	16	7	.....	.....	7ks	.....	.....	Blank		.....	Capt. Wisganow.
Barnaul	29.86	758.4	30.37	771.3	50.7	10.4	34	Calm	0	0	.....	.....	1	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat ‡	29.66	753.4	29.89	759.3	70.0	21.1	45	SSW	11	5	.....	.....	9k	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	29.31	744.4	30.23	767.8	81.1	27.3	23	WSW	9	4	.....	ck	8ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Kasan	29.75	755.7	30.01	762.2	79.5	26.4	24	SSE	27	12	.....	.....	7	.....	.....	.....	.....	.....	Observatory.
Kertch	30.04	763.1	30.06	763.6	61.3	16.3	81	S	4	2	.....	os	5	.....	.....	.....	.....	.....	Lagodio & Sastyrez.
Kieff	29.31	744.4	29.93	760.1	66.9	19.4	46	NNE	4	2	.....	.....	7cks	.....	.....	.....	.....	.....	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Moscow	29.81	757.2	30.01	762.3	66.7	19.3	52	S	9	4	.....	.....	6	.....	.....	.....	.....	Light clouds	Meteorological Obs'y.
Nertchinsk	29.39	746.5	29.92	759.9	66.7	19.3	65	S	7.8	3.5	.....	.....	7n	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaiev	27.79	705.8	30.08	763.9	47.5	8.6	49	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaievsk, on the Amoor	29.91	759.8	29.98	761.6	54.5	12.5	56	NW	18	8	.....	.....	5k	.....	.....	.....	.....	.....	Capt. Kurdakow.
Pekin, China	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lieut. Iwanow.
St. Petersburg	30.04	763.1	30.19	766.7	65.8	18.8	34	S	9	4	.....	.....	0	.....	.....	.....	.....	.....	Physical Observatory.
Tashkend, Laboratory	29.85	758.5	29.88	758.9	61.0	16.1	59	WSW	16	7	.....	.....	10ks/n	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tiflis	28.35	720.0	29.84	757.8	81.0	27.2	45	Calm	0	0	.....	.....	1	.....	.....	.....	.....	.....	Teich, A. M.
Warsaw	28.56	725.5	29.91	759.8	78.4	25.8	44	S	2	1	.....	.....	3k	.....	.....	.....	.....	.....	Physical Observatory.
Wilna	29.53	750.1	29.94	760.5	70.9	21.6	34	S	11	5	.....	.....	0	.....	.....	.....	.....	.....	Astronomical Obs'y.
Yeniseisk	29.57	751.1	29.98	761.4	68.7	20.4	33	SSW	4	2	.....	.....	0	.....	.....	.....	.....	.....	Berg, Assistant.
	30.03	702.8	30.33	770.4	34.9	1.6	65	NW	7	3	.....	.....	10	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	29.37	746.0	52.0	11.1	73	W	.....	.....	3	.....	10k	.....	.....	0.10	2.5	Showery	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.29	744.0	51	10.6	93	SE	.....	.....	4	5	5	SE	.....	0	0	D. clouds	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	29.54	750.3	.....	.....	.....	NE	.....	.....	7	.....	10	.....	.....	Blank		.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.91	759.8	30.02	762.4	69.8	21.	62	S	4.5	2.0	.....	.....	0	.....	.....	0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.91	759.7	29.97	761.1	78.4	25.8	51	W	2.5	1.1	.....	0	0	.....	.....	0	0	Clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.05	687.1	.....	.....	68.0	20.0	82	S	9.2	4.1	.....	0	0	.....	.....	0	0	Clear	Domingo Martin.
Madrid, Royal Obs'y	27.78	705.7	29.92	760.0	76.6	24.8	29	SW	15.7	7.0	.....	0	0	.....	.....	0	0	Clear	The Staff.
Murcia, Met. Obs'y ‡	29.85	758.1	29.99	761.8	84.0	28.9	50	E	2.9	1.3	.....	0	0	.....	.....	Inap.	Inap.	Clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.03	738.1	29.95	761.0	57.4	14.1	96	SW	0	0	.....	.....	10	.....	.....	0.661	16.8	Raining	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.90	759.5	29.97	761.2	77.1	25.1	76	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.80	750.8	29.85	758.1	87.8	31.0	60	E	2.6	1.2	.....	0	0	.....	.....	0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.94	760.4	30.03	762.8	71.2	21.8	73	W	10.1	4.5	.....	1	2	NW	NW	0	0	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.89	750.1	29.98	761.4	77.7	25.4	95	SE	2.7	1.2	.....	9ck	4k	SE	SE	0.079	2.0	Overcast	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.75	755.6	29.88	759.3	83.1	28.4	69	N	1.2	0.6	.....	.....	18	.....	.....	0	0	Fair	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.73	755.1	29.77	756.1	39.9	4.4	62	SW	.....	.....	2	.....	5	.....	.....	0	0	.....	
Umea	29.71	754.6	29.75	755.9	45.0	7.2	47	S	.....	.....	4	.....	0	.....	.....	0	0	.....	
Hernosand	29.73	755.1	29.78	756.4	48.0	8.9	52	SSW	.....	.....	2	.....	3	.....	.....	0	0	.....	
Stockholm	29.51	749.5	29.09	754.0	45.0	7.2	94	E	.....	.....	2	.....	10	.....	.....	0.189	4.8	Raining	
Wisby	29.04	752.8	29.70	754.3	57.6	14.2	87	WSW	.....	.....	4	.....	10	.....	.....	0.425	10.8	Raining	
Sub-Series.																			
Upsala	29.60	751.7	29.68	753.9	44.4	6.9	96	NE	8.5	3.8	.....	.....	10	.....	E	0.780	19.8	Raining	Nils Ekholm
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.54	724.8	29.90	759.4	77.4	25.2	23	SW	.....	.....	3	.....	2	.....	.....	0	0	Clear	The Observatory.
Zurich	28.32	719.2	29.88	758.9	77.4	25.2	40	SE	.....	.....	1	.....	1	.....	.....	0	0	Clear	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.93	760.3	64.8	18.2	49	NE	27	12.0	.....	.....	5	.....	SW	0	0	.....	The Observatory.
Valona	.....	.....	29.92	759.9	74.1	23.4	.....	SW	.....	.....	1	.....	5	.....	.....	0	0	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.78	756.5	73.9	23.3	55	N	.....	.....	1	20	0	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
Albany, New York	29.89	759.2	29.97	761.2	62	16.7	67	W	4	1.8	.....	8k	0	SE	.....	0.37	9.4	Fair	
Alpena, Michigan	29.40	746.7	30.06	763.5	44	6.7	92	NW	4	1.8	.....	0	2s	.....	.....	0	0	Fair	
Atlanta, Georgia	28.79	731.3	29.92	760.0	57.0	13.9	63	NW	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Atlantic City, New Jersey	29.90	759.4	29.91	759.7	55	12.8	87	SE	9	4.0	.....	8cs;k	Fg	S	Calm	1.01	25.7	Fair	
Augusta, Georgia	29.76	755.9	29.96	761.0	62.0	16.7	67	E	2	0.9	.....	0	Hz	.....	.....	0	0	Clear	
Baltimore, Maryland	29.78	756.4	29.82	757.4	56	13.3	87	S	5	2.2	.....	.....	1on	.....	.....	0.69	17.5	Light rain	
Barnegat, New Jersey	29.90	759.4	29.92	760.0	53	11.7	86	SE	13	5.8	.....	.....	10s	S	.....	0.34	8.6	Cloudy	
Bismarck, Dakota	28.39	721.1	30.25	768.3	47	8.3	69	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Boise City, Idaho	27.34	694.4	30.30	769.6	54	12.2	57	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Boston, Massachusetts	29.87	758.7	30.03	762.7	46.1	7.8	100	NE	7	3.1	.....	.....	1on;fg	.....	.....	0.82	20.8	Light rain	
Bracketville, Texas	28.72	729.5	29.73	755.1	70	21.1	95	Calm	0	0	.....	0	2s	.....	.....	0.54	13.7	Fair	
Brownsville, Texas	29.84	757.9	29.88	758.9	73	22.8	81	S	12	5.4	.....	.....	1on	.....	.....	0.35	8.9	Raining	
Buffalo, New York	29.19	741.4	29.88	758.9	49.5	9.7	97	NE	8	3.6	.....	.....	Fg	.....	.....	0.67	1.8	Dense fog	
Burlington, Vermont	29.71	754.6	30.00	762.0	55.5	13.1	93	N	5	2.2	.....	2cs	2s	E	SE	0.03	0.8	Fair	
Cairo, Illinois	29.62	752.3	30.00	762.0	67	19.4	74	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Campo, California	27.44	697.0	30.01	762.2	42	5.6	19	NE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Camp Thomas, Arizona	27.19	690.6	.....	.....	52	11.1	41	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Cape Henry, Virginia	29.87	758.7	29.89	759.2	55	12.8	87	S	10	4.5	.....	.....	10s	.....	S	0.04	1.0	Cloudy	
Cape May, New Jersey	29.85	758.2	29.88	758.9	56	13.3	87	SE	15	6.7	.....	0	5ks	.....	SE	1.36	34.5	Fair	
Castroville, Texas	29.10	739.1	29.78	756.4	70	21.1	85	SE	2	0.9	.....	0	2s	.....	SE	0.32	8.1	Fair	
Cedar Keys, Florida	29.93	760.2	29.95	760.7	68	20.0	84	NE	4	1.8	.....	0	1s	.....	.....	0	0	Clear	
Champaign, Illinois	29.18	741.2	29.97	761.2	53.9	12.2	74	N	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Charleston, S. Carolina	29.92	760.0	29.98	761.5	69	20.6	70	SE	4	1.8	.....	0	8s	.....	SE	0	0	Cloudy	
Charlotte, N. Carolina	29.09	738.9	29.89	759.2	56.2	13.4	87	E	1	0.4	.....	.....	10s	.....	.....	Inap.	Inap.	Cloudy	
Chattanooga, Tennessee	29.19	741.4	29.99	761.7	55	12.8	81	NW	3	1.3	.....	c	0	.....	.....	0	0	Clear	
Cheyenne, Wyoming	24.28	616.7	30.22	767.6	36	2.2	71	NW	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Chicago, Illinois	29.30	744.2	29.98	761.5	55.2	12.9	56	NW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Chincoteague, Virginia	29.80	758.4	29.88	758.9	55	12.8	93	SW	16	7.2	.....	8k	2s	SW	Calm	0.05	1.3	Cloudy	
Cincinnati, Ohio	29.37	746.0	30.02	762.5	52	11.1	79	NE	4	1.8	.....	0	Sk	.....	.....	0	0	Dense smoke	
Cleveland, Ohio	29.24	742.7	29.97	761.2	49.5	9.7	94	N	9	4.0	.....	.....	1on	.....	N	0.03	0.8	Light rain	
Coleman City, Texas	28.13	714.5	29.70	755.9	58	14.4	100	N	12	5.4	.....	.....	1on	.....	N	0.21	5.3	Light rain	
Columbus, Ohio	29.14	740.1	29.97	761.2	49	9.4	85	N	4	1.8	.....	.....	10s	.....	N	0	0	Threatening	
Concho, Texas	28.05	712.5	29.70	754.4	58	14.4	94	NW	4	1.8	.....	.....	1on	.....	.....	0.14	3.6	Light rain	
Corsicana, Texas	29.40	748.3	29.90	759.4	75	23.9	77	Calm	0	0	.....	0	8s	.....	.....	0	0	Cloudy	
Davenport, Iowa	29.36	745.7	29.98	761.5	61	16.1	66	E	1	0.4	.....	2ck	0	Calm	.....	0	0	Fair	
Dayton, Washington T'y	28.32	719.3	29.94	760.5	60.5	15.8	60	N	5	2.2	.....	2c	0	W	.....	0	0	Clear	
Deadwood, Dakota	25.01	650.5	.....	.....	37	2.8	63	SW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Decatur, Texas	28.72	729.5	29.84	757.9	69	20.6	95	W	5	2.2	.....	.....	10s	.....	.....	0.69	17.5	Cloudy	
Delaware Breakwater, Del.	29.89	758.4	29.88	758.9	54	12.2	93	SE	14	6.3	.....	2ck	8s	.....	SE	0.50	12.7	Cloudy	
Denison, Texas	29.12	739 6	29.88	758.9	74	23.3	81	E	1	0.4	.....	.....	10s	.....	Calm	0.10	2.5	Cloudy	
Denver, Colorado	25.03	635.8	30.25	768.3	45.5	7.5	57	NW	7	3.1	.....	2k	8s	Calm	Calm	0.02	0.5	Cloudy	
Des Moines, Iowa	29.20	741.7	30.07	763.8	58	14.4	88	NE	4	1.8	.....	.....	10s	.....	.....	0	0	Cloudy	
Detroit, Michigan	29.28	743.7	29.97	761.2	51.0	10.6	79	N	8	3.6	.....	.....	10s	.....	NE	Inap	Inap.	Cloudy	
Dodge City, Kansas	27.50	698.5	29.82	757.4	45	7.2	100	N	31	13.9	.....	.....	1on	.....	N	1.02	25.9	Light rain	
Dubuque, Iowa	29.32	744.7	30.01	762.2	58	14.4	76	NW	6	2.7	.....	5k	Hz	NW	Calm	0	0	Fair	
Duluth, Minnesota	29.42	747.3	30.10	764.5	50	10.0	86	NE	8	3.6	.....	.....	10s	.....	NE	0.05	1.3	Cloudy	
Eagle Pass, Texas	29.14	740.1	29.85	758.2	69	20.6	95	SE	1	0.4	.....	.....	10s	.....	Calm	0.71	18.0	Cloudy	
Eagle Rock, Idaho	25.50	647.7	30.15	765.8	33	0.6	70	N	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Eastport, Maine	30.09	764.3	30.15	765.8	43	6.1	100	NE	6	2.7	.....	.....	Fg	.....	NE	0.60	15.2	Dense fog	
El Paso, Texas	25.23	666.2	.....	.....	52	11.1	73	E	8	3.6	.....	0	1ks	.....	NW	1.12	28.4	Clear	
Erie, Pennsylvania	29.20	741.7	29.91	759.7	49	9.4	93	N	12	5.4	.....	.....	1on	.....	.....	0.30	7.6	Light rain	
Escanaba, Michigan	29.36	745.7	30.01	762.2	50	10.0	72	N	4	1.8	.....	c	0	.....	.....	0	0	Clear	
Florence, Arizona	28.40	721.3	30.00	762.0	60	15.6	24	Calm	0	0	.....	c	0	.....	.....	0	0	Clear	
Fort Apache, Arizona	25.02	635.5	30.47	773.9	36	2.2	53	NE	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Fort Assinnaboine, Montana	27.24	691.9	.....	.....	47	8.3	54	NE	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Fort Bennett, Dakota	28.60	726.4	.....	.....	43	6.1	76	NW	1	0.4	.....	2c	0	NW	.....	0	0	Fair	
Fort Buford, Dakota	28.20	716.3	30.11	764.8	35	1.7	90	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Custer, Montana	27.02	686.3	.....	.....	42	5.6	74	SE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Fort Davis, Texas	25.16	639.1	30.12	765.0	47	8.3	85	N	9	4.0	.....	.....	10s	.....	N	0.48	12.2	Cloudy	
Fort Elliott, Texas	27.28	692.9	29.57	751.1	46	7.8	84	NW	28	12.5	.....	.....	10s	.....	NW	0.09	2.3	Cloudy	
Fort Gibson, Indian T'y	29.38	746.2	29.90	759.4	66	18.9	95	SE	3	1.3	.....	.....	10s	.....	E	0.78	19.8	Cloudy	
Fort Grant, Arizona	25.20	640.1	30.00	762.0	50	10.0	32	SW	4	1.8	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Fort Griffin, Texas	28.60	726.4	29.85	758.2	58.2	14.6	94	N	12	5.4	.....	.....	10s	.....	N	0.96	24.4	Cloudy	
Fort Keogh, Montana	27.66	702.6	.....	.....	40	4.4	82	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Macon, North Carolina	29.94	760.5	29.95	760.7	60	15.6	77	W	4	1.8	.....	0	0	.....	.....	1.08	27.4	Clear	
Fort McKavett, Texas	27.70	703.6	29.58	751.3	61.3	16.3	94	N	8	3.6	.....	.....	1on	.....	.....	0.26	6.6	Light rain	
Fort Missoula, Montana	26.87	682.5	.....	.....	45	7.2	68	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Fort Shaw, Montana	25.51	673.3	.....	.....	40	4.4	56	SW	1	0.4	.....	5c	0	W	.....	0	0	Fair	
Fort Sill, Indian Territory	28.71	729.2	29.81	757.2	56	13.3	94	N	13	5.8	.....	.....	1on	.....	N	1.24	31.5	Light rain	
Fort Stevenson, Dakota	28.36	720.3	.....	.....	42	5.6	83	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Verde, Arizona	.....	.....	.....	.....	50.3	10.2	32	N	.....	.....	2	0	0	.....	.....	0	0	Clear	
Fredericksburg, Texas	28.16	715.3	29.67	753.6	66	18.9	95	SW	3	1.3	.....	2ck	2s	SW	.....	1.51	38.4	Fair	
Galveston, Texas	29.88	758.9	29.92	760.0	76	24.4	82	Calm	0	0	.....	.....	10s	.....	W	0	0	Cloudy	
Grand Haven, Michigan	29.34	745.2	29.98	761.5	56	13.3	75	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Hatteras, North Carolina	29.92	760.0	29.94	760.5	60	15.6	77	W	8	3.6	.....	5cs	0	.....	.....	0.21	5.3	Fair	
Helena, Montana	25.99	660.1	.....	.....	47	8.3	55	N	1	0.4	.....	5k	0	Calm	.....	0	0	Fair	
Henrietta, Texas	28.91	734.3	29.82	757.4	60	15.6	100	NW	12	5.4	.....	.....	1on	.....	.....	1.15	29.2	Light rain	
Indianapolis, Indiana	29.19	741.4	29.96	761.0	60	15.6	62	E	1	0.4	.....	Hz	Hz	Calm	Calm	0	0	Light haze	
Indianola, Texas	29.89	759.2	29.92	760.0	75.4	24.1	86	S	7	3.1	.....	8cs	2ks	S	Calm	0	0	Cloudy	
Jacksboro, Texas	28.70	730.5	29.86	758.4	61	16.1	100	NW	8	3.6	.....	.....	1on	.....	Calm	0.13	3.3	Light rain	
Jacksonville, Florida	29.91	759.7	29.95	760.7	73	22.8	67	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Keokuk, Iowa	29.36	745.7	29.99	761.7	60.5	15.8	71	N	4	1.8	.....	8ck	0	NE	.....	0	0	Fair	
Key West, Florida	29.95	760.7	29.98	761.5	79.0	26.1	63	W	1	0.4	.....	1k	0	.....	.....	0	0	Clear	
Kittyhawk, North Carolina	29.92	760.0	29.94	760.5	58	14.4	76	NW	6	2.7	.....	2c	8ks	.....	N	0.06	1.5	Cloudy	
Knoxville, Tennessee	29.01	736.8	30.01	762.2	52	11.1	86	NW	2	0.9	.....	0	2s	.....	NW	0	0	Fair	
La Crosse, Wisconsin	29.26	743.2	30.01	762.2	60.4	15.8	82	N	16	7.2	.....	.....	10s	.....	N	0	0	Cloudy	
La Mesilla, New Mexico	26.12	663.4	30.27	768.8	51	10.6	93	S	10	4.5	.....	.....	10s	.....	.....	0.46	11.7	Cloudy	
Laredo, Texas	29.44	747.8	29.77	756.1	71	21.7	95	S	1	0.4	.....	10ck	0	SE	.....	1.85	47.0	Cloudy	
Leavenworth, Kansas	29.14	740.1	29.97	761.2	62	16.7	83	N	10	4.5	.....	.....	10s	NE	.....	0.38	9.7	Cloudy	
Lewiston, Idaho	29.30	744.2	29.95	760.7	51	10.6	48	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Little Rock, Arkansas	29.05	753.1	29.90	761.0	62	16.7	88	Calm	0	0	.....	2cs	Sk	.....	.....	0	0	Fair	
Los Angeles, California	29.62	752.3	29.99	761.7	52.2	11.2	79	W	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Louisville, Kentucky	29.42	747.3	29.97	761.2	60.0	15.6	77	E	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Lynchburg, Virginia	29.20	741.7	29.86	758.4	58	14.4	76	S	2	0.9	.....	.....	10s	.....	.....	0.30	7.6	Cloudy	
Madison, Wisconsin	29.01	736.8	29.97	761.2	57	13.9	75	S	2	0.9	.....	2c	0	.....	.....	0	0	Fair	
Marquette, Michigan	29.33	745.0	30.03	762.7	56	13.3	57	NW	2	0.9	.....	5c	0	NW	.....	0	0	Fair	
Mason, Texas	28.27	718.0	29.99	761.7	65	18.3	94	NW	4	1.8	.....	.....	10s	.....	NW	0.51	13.0	Cloudy	
Memphis, Tennessee	29.08	753.9	30.02	762.5	65	18.3	59	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Milwaukee, Wisconsin	29.26	743.2	29.98	761.5	54	12.2	74	NW	7	3.1	.....	0	Sk	.....	.....	0	0	Clear	

STATIONS.	Barometer. Corrected for instrumental error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.90	759.4	29.97	761.2	64	17.8	76	NW	4	1.8	.....	1cs	Fg	.....	.....	0	0	Clear.	
Montgomery, Alabama	29.77	750.1	30.00	762.0	61.2	16.2	66	NE	4	1.8	.....	2c	0	NW	.....	0	0	Clear.	
Moorhead, Minnesota	29.19	741 4	30.17	766.3	44	6.7	84	NW	1	2.7	.....	0	0	.....	.....	0	0	Clear.	
Morgantown, W. Virginia	28.89	733.8	29.87	758.7	52	11.1	79	NW	8	3.6	.....	.....	10s	.....	N	0	0	Cloudy.	
Mt. Washington, N. H.	23.80	600.0	30.22	767.6	44	6.7	100	SE	46	20.6	.....	.....	10n;fg	.....	SE	0.61	15.5	Light rain	
Nashville, Tennessee	29.48	748.8	30.01	762.2	55.0	12.8	83	E	3	1.3	.....	2ck	Sk	.....	.....	0	0	Dense smoke	
New Haven, Connecticut	29.84	757.9	29.96	761.0	52	11.1	96	NE	6	2.7	.....	.....	10n;fg	.....	NE	0 83	21.1	Light rain	
New London, Connecticut	29.93	760.2	29.98	761.5	52	11.1	93	E	2	0.9	.....	.....	10s	.....	E	0.47	11.9	Cloudy.	
New Orleans, Louisiana	29.88	758.9	29.94	760.5	72.3	22.4	74	Calm	0	0	.....	0	Sk	.....	.....	0	0	Clear.	
Newport, Rhode Island	29.92	760.0	29.97	761.2	49.0	9.4	99	N	7	3.1	.....	.....	Fg	.....	.....	0.55	14.0	Dense fog	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	29.93	760.2	29.96	761.0	47.8	8.8	100	NE	18	8.0	.....	.....	Fg	.....	NE	2.76	70.1	Dense fog	
New York, New York	29.77	756.1	29.95	760.7	51	10.6	100	E	12	5.4	.....	.....	10s;fg	.....	E	0.22	5.6	Cloudy.	
Norfolk, Virginia	29.85	758.2	29.91	759.7	57	13.9	87	SW	9	4.0	.....	.....	10ks	.....	W	0.01	0.3	Cloudy.	
North Platte, Nebraska	27.30	093.4	29.91	759.7	47	8.3	73	N	6	2.7	.....	5k	5s	NW	N	Inap.	Inap.	Cloudy.	
Olympia, Washington T'y	30.13	705.3	30.17	766.3	47.0	8.3	88	N	1	0.4	.....	8cs	0	SW	.....	0	0	Fair.	
Omaha, Nebraska	28.99	730.3	30.08	764.0	53.8	12.1	81	N	11	4.9	.....	.....	10s	.....	N	0.26	6.6	Cloudy.	
Oswego, New York	29.59	751.0	29.91	759.7	51.5	10.8	89	NE	2	0.9	.....	5k	0	SE	.....	0	0	Fair	
Pensacola, Florida	29.93	760.2	29.96	761.5	70	21.1	61	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Philadelphia, Pa	29.84	757.9	29.88	758.9	53	11.7	93	SE	12	5.4	.....	.....	10s	.....	E	0.98	24.9	Cloudy.	
Phœnix, Arizona	28.82	732 0	30.62	777.7	58	14.4	76	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Pike's Peak, Colorado	17.82	452 6	30.02	762.5	6	—14.4	100	NW	8	3.6	.....	.....	10n	.....	.....	0.03	0.8	Light snow.	
Pioche, Nevada	24.21	614.9	29.98	761.5	43	6.1	28	N	8	3.6	.....	0	0	.....	.....	0	0	Clear.	
Pittsburg, Pennsylvania	29.07	738.4	29.87	758.7	50.5	10.3	96	NW	7	3.1	.....	.....	10n	.....	NW	0.14	3.6	Light rain	
Port Eads, Louisiana	29.90	701.0	29.97	761.2	70.1	21.2	75	NW	2	0.9	.....	0	Hz	.....	Calm	0	0	Clear.	
Port Huron, Michigan	29.34	745.2	30.00	762.0	49.0	9.4	85	N	9	4.0	.....	8ck	0	Calm	.....	Inap.	Inap.	Fair.	
Portland, Maine	30.02	702.5	30.07	763.8	51	10.6	93	NE	9	4.0	.....	.....	10n;fg	.....	Calm	0.60	15.2	Light rain	
Portland, Oregon	30.08	704.0	30.10	766.1	51.0	10.6	83	NW	2	0.9	.....	1cs	0	.....	.....	0	0	Clear.	
Portsmouth, N. Carolina	.....	.....	.....	.....	60	15.6	77	NW	7	3.1	.....	5k	0	W	.....	0.64	16.3	Fair	
Prescott, Arizona	24.80	629.9	30.10	766.1	38	3.3	54	S	1	0.4	.....	0	0	.....	.....	0	0	Clear.	
Punta Rassa, Florida	29.94	760.5	29.96	761.0	75	23.9	50	N	3	1.3	.....	0	0	.....	.....	0	0	Clear.	
Red Bluff, California	29.04	752.8	29.98	761.5	60.5	15.8	55	NW	3	1.3	.....	0	0	.....	.....	0	0	Clear.	
Rio Grande City, Texas	29.73	755.1	29.95	760.7	70	21.1	90	SE	.....	.....	1	0	8ks	.....	SE	0.25	6.3	Fair	
Rochester, New York	29.27	743.4	29.88	758.9	49	9.4	100	NE	7	3.1	.....	.....	Fg	.....	.....	0.04	1.0	Dense fog	
Roseburg, Oregon	29.51	749.5	30.08	764.0	48.3	9.1	85	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Sacramento, California	29.92	760.0	29.99	761.7	61.7	16.5	56	SE	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
St. Louis, Missouri	29.44	747.8	30.00	762.0	62.0	16.7	59	S	6	2.7	.....	10c;ck	0	NW	.....	0	0	Cloudy.	
St. Paul, Minnesota	29.20	743.2	30.09	764.3	54	12.2	80	NW	2	0.9	.....	10ck	0	NW	.....	0.20	5.1	Cloudy.	
Salt Lake City, Utah	25.86	656.8	30.19	766.8	47	8.3	34	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
San Antonio, Texas	29.21	741.9	29.89	759.2	68.8	20.4	95	Calm	0	0	.....	4cs	0	Calm	.....	0.23	5.8	Fair	
San Diego, California	29.87	758.7	29.94	760.5	59.0	15.0	88	E	3	1.3	.....	.....	10s	.....	.....	0	0	Cloudy.	
Sandusky, Ohio	29.31	744.5	29.98	761.5	53	11.7	80	N	16	7.2	.....	.....	10s	.....	NW	0.03	0.8	Cloudy.	
Sandy Hook, New Jersey	29.91	759.7	29.94	760.5	53.0	11.7	93	SE	11	4.9	.....	.....	10s	.....	.....	0.64	16.3	Cloudy.	
San Francisco, California	29.90	760.0	30.03	762.7	52	11.1	89	E	4	1.8	.....	0	Fg	.....	.....	0	0	Clear.	
Santa Fé, New Mexico	23.33	592.6	29.87	758.7	34	1.1	90	NW	2	0.9	.....	.....	10n	.....	.....	0.34	8.6	Light snow.	
Savannah, Georgia	29.87	758.7	29.90	761.0	67.5	19.7	79	S	2	0.9	.....	1k	Fg	.....	.....	0	0	Clear.	
Shreveport, Louisiana	29.71	754.0	29.95	760.7	71.4	21.9	85	E	2	0.9	.....	.....	10n	.....	.....	0.03	0.8	Light rain	
Silver City, New Mexico	24.25	615.9	30.48	774.2	43	6.1	75	Calm	0	0	.....	5k	0	Calm	.....	0.16	4.1	Fair.	
Sitka, Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Inap.	Inap.	.....	
Smithville, North Carolina	29.93	760.2	29.97	761.2	57	13.9	87	NW	2	0.9	.....	5k	Hz	NW	.....	0.03	0.8	Fair.	
Socorro, New Mexico	25.30	644.1	29.43	747.5	49	9.4	62	NE	8	3.6	.....	.....	10s	.....	NE	0.23	5.8	Cloudy.	
Spokane Falls, Wash. Ter.	28.08	713.2	29.94	760.5	44	6.7	84	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Springfield, Illinois	29.33	745.0	29.99	761.7	60	15.6	60	NW	3	1.3	.....	2c	Hz	.....	.....	0	0	Clear.	
Springfield, Massachusetts	29.85	758.2	29.98	761.5	53	11.7	86	NE	6	2.7	.....	.....	10s	.....	NE	0.92	23.4	Cloudy.	
Stockton, Texas	29.95	684.5	29.95	760.7	52.1	11.2	100	N	16	7.2	.....	.....	10s	.....	N	0.73	18.5	Cloudy.	
St. Vincent, Minnesota	29.30	744.2	30.11	764.8	42	5.6	74	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Thatcher's Island, Mass.	29.99	761.7	30.05	763.3	44	6.7	100	NE	16	7.2	.....	.....	10n	.....	NE	1.15	29.2	Light rain	
Toledo, Ohio	29.32	744.7	30.00	762.0	50	10.0	86	W	7	3.1	.....	.....	10s;sk	.....	NW	0	0	Cloudy.	
Tucson, Arizona	27.48	698.0	30.04	763.0	57	13.9	47	E	1	0.4	.....	0	0	.....	.....	0	0	Clear.	
Umatilla, Oregon	29.72	754.9	30.22	767.6	47.0	8.3	85	SE	2	0.9	.....	2cs	0	.....	.....	0	0	Clear.	
Uvalde, Texas	28.93	734.8	29.72	754.9	68	20.0	84	Calm	0	0	.....	.....	8s	.....	SW	0.57	14.5	Cloudy.	
Vicksburg, Mississippi	29.72	754.9	29.97	761.2	68	20.0	56	E	4	1.8	.....	10s	0	.....	.....	0	0	Clear	
Visalia, California	29.59	751.0	29.95	760.7	60	15.6	71	E	1	0.4	.....	0	0	.....	.....	0	0	Clear.	
Washington, D. C.	29.71	754.6	29.82	757.4	54	12.2	93	SW	6	2.7	.....	.....	10n	.....	W	0.43	10.9	Light rain	
Wickenburg, Arizona	.....	.....	.....	.....	58	14.4	37	N	.....	.....	1	0	0	.....	.....	0	0	Clear.	
Wilmington, N. Carolina	29.91	759.7	29.96	761.0	57	13.9	94	Calm	0	0	.....	1c	0	Calm	.....	0	0	Clear.	
Winnemucca, Nevada	25.82	655.8	30.18	766.6	47	8.3	28	NE	12	5.4	.....	0	0	.....	.....	0	0	Clear.	
Wood's Holl, Mass.	29.94	760.5	29.98	761.5	54	12.2	100	E	12	5.4	.....	.....	Fg	.....	E	0.40	10.2	Dense fog	
Yankton, Dakota	28.80	731.5	30.09	764.3	53	11.7	58	N	3	1.3	.....	.....	10s	.....	.....	0.35	8.9	Cloudy.	
Yuma, Arizona	29.67	753.9	29.81	757.2	74.1	23.4	29	NE	8	3.6	.....	0	0	.....	.....	0	0	Clear.	
Sub-series.																			
Bogota, U. S. Columbia	22.13	562.1	.....	.....	53.0	11.7	76	Calm	0	0	.....	.....	10n	.....	.....	0	0	Cloudy.	Thomas Herran
Buff Bay Town, Jamaica	29.82	757.4	30.14	765.5	75	23.9	69	E	.....	.....	.....	0	0	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.90	701.0	30.00	762.0	79	26.1	69	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	A. Van Caneghem, Ass't.
Jakobshavn, Greenland	29.71	754.5	29.76	755.8	20.4	— 3.1	.....	N	.....	.....	8	.....	9	.....	.....	0.047	1.2	.....	K. V. Möller.
Kingston, Jamaica, W. I.	29.94	760.5	29.95	760.7	79 3	26.3	65	N	3	1.3	.....	0	0	.....	.....	0	0	.....	Robert Johnstone
Navassa, W. I.	29.85	758.2	29.93	760.2	81	27.2	78	N	7	3.1	.....	8k	2n	S	E	0	0	Fair.	F. M. Everett.
Paramaribo, S. A.	30.03	762.7	30.03	762.7	79	26.1	91	E	.....	.....	3	.....	10n	E	.....	0.820	20.8	Rainy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.40	746.7	29.90	761.0	77	25.0	89	Calm	.....	.....	0	.....	10ks	.....	N	2.70	68.6	Cloudy.	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	78.8	26.	.....	SE	.....	.....	1	4ck	1ks	NE	SE	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	29.93	760.2	29.96	761.0	76	24.4	72	N	1.2	0.5	.....	2ks	0	S	.....	0	0	Fair.	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	30.18	766.6	30.23	767.8	23.0	— 5.0	100	NE	17	7.6	.....	.....	10n	.....	NE	0.02	0.5	Snowing	J. Fortescue & W Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross, N. 33° 56′, E. 127° 14′	29.95	760.7	62	16.7	...	WSW			1		10							Foggy	Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.93	760.2	66.5	19.2	73	NW			1		5							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 23° 38′, E. 58° 36′	29.60	751.8	90	32.2	63	SE			1		1	NW						Blue sky	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			62	16.7		NNE			3-4		6	NNE				2	NNE	Squally	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	30.00	762.0	80	26.7	86	E			1		8							D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 11′, E 18° 26′	30.17	766.3	63	17.2	72	E			2-4		0							Blue sky	Com. F. W. Richards.
H. M. S. Champion, Ascension I'ds, Africa	29.93	760.2	83	28.3	71	SE			3-4		5	SSE				1	SE	Squally	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Chusan Archipelago	29.82	757.4	63	17.2	100	NE			1		6							Raining	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 36° 56′, E. 15° 53′	29.82	757.4	65	18.3		N			3		7	NNE				6	ENE	D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, S. 9° 51′, W. 100° 45	29.98	761.5	78	25.6	86	E			4		4					4	ESE	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.06	763.5	74	23.3	86	ESE			3		2	ESE						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 34′, W. 52° 41′	30.20	767.1	47	8.3	70	WSW			2		8							D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, N. 8° 34′, E. 81° 10′	29.76	755.9	90	32.2		SW			1-2		3					1		D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 3° 30′, E. 104° 30′	29.73	755.1	85	29.4		SSE			3							1	S	Misty	Comm. C. Johnstone.
H. M. S. Emerald, S. 6° 50′, E. 177° 20′	29.86	758.4	84	28.9	91	NNE			1-2		5	NE				3	SE	Showery	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, N. 0° 26′, E. 83° 14′	29.76	755.9	83	28.3	79	S			2		9	S				2	SSE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 47° 00′, W. 52° 44′	30.34	770.6	35	1.7		WSW			1							Sm'h		Foggy	Capt. W. C. Karslake.
H. M. S. Fawn, N. 14° 03′, E. 42° 44′	29.66	753.4	91	32.8	60	NNE			1		3	N						D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo																			Comm. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 42° 50′, W. 133° 40′	30.36	771.1	52	11.1	66	NE			5-6		8					2	WNW	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.50	749.3	40	4.4	73	NE			2		5							D. clouds	Capt. L. F. Jones.
H. M. S. Griffon, N 23° 14′, W. 84° 40′	29.95	760.7	81	27.2	83	NW			1		1							Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant, S. 39° 50′, E. 141° 30′	30.29	769.4	58	14.4	88	WNW			4		2	WNW				2	W	D. clouds	Capt. C. C. P. Fitzgerald.
H. M. S. Iris, N. 32° 24′, E. 27° 22′	29.69	754.1	71	21.7	85	ESE			4		3					5	ESE	D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 26° 30′, E. 120° 52′	29.87	758.7	75	23.9	81	SE			2-3		3	NW				1-2	NNW	D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.05	763.3	64	17.8		Calm			0		7	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	29.82	757.4	72	22.2		Calm			0		10							Raining	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Nowy Chow I'd, China Sea	29.76	755.9	82.9	28.3	84	WSW			1		6							D. clouds	Capt. A. Carpenter.
H. M. S. Midge, N. 23° 00′, E. 119° 24′	29.85	758.2				Calm			0		3	NE				Sm'h		D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 36° 07′, W. 5° 21′	29.97	761.2	67	19.4	89	Calm			0		1	SSE						Blue sky	Capt. H. H. Rawson.
H. M. S. Modeste, N. 1° 20′ E. 105° 56′	29.76	755.9	85	29.4	83	Calm			0		4							Raining	Capt. J. G. Mead.
H. M. S. Monarch, Goletta, Tunis, N. Africa	30.07	763.8	63	17.2	94	NNW			3		5	NNW						D. clouds	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S Northampton, Halifax, Nova Scotia	30.22	767.6	48	8.9	96	Calm			0									Foggy	Capt. E. B. Drummond.
H. M. S. Orontes, S. 26° 40′, E. 44° 28′ †	29.90	759.4	77.5	25.3	84	WNW			3-4		3	WSW				2	ENE	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S Pelican, N. 80° 55′, W. 79° 30′	29.89	759.2	80	26.7		N			1		5	S						Misty	Capt. F. R. Dicken.
H. M. S. Penguin, S. 52° 22′, W. 73° 40′	29.39	746.5	40	4.4		N			3-5		10							Raining	Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, Fernando Po I'd, Africa	29.91	759.7	80	26.7		NNW			1		8	ENE						D. clouds	Capt. Hon. A.C.Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	30.26	768.6	48	8.9		WSW			2		7							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.88	758.9	81.4	27.4	85	SE			1		7							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis, N. 44° 16′, W. 8° 45′	30.01	762.2	59	15.0	70	WNW			4		8	WNW				6	WNW	D. clouds	Capt. G. O. Twiss.
H. M. S. Shannon, N. 5° 16′, W. 25° 05′						NNE			2		8	NNE				2	NNE	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 10° 12′, W. 146° 00′	29. 85	758.2	80	26.7	87	E			4		6					3	SE	D. clouds	Capt. P. W. Stephens.
H. M. S. Thunderer, Naples, Italy	29.94	760.5	79	26.1	43	NNE			2		2							D. clouds	Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A	30.03	762.7	57	13.9	81	Calm			0		10	Calm						Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 31° 30′, E. 32° 10′	29.79	756.7	70	21.1	80	N			4		9								Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I			79	26.1		N			1		2							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, N. 35° 01′, E. 159° 57′	30.14	765.5	64	17.8	83	SSE			4-6		9	SE						Showery	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Abu Shehr Roads, Persia	29.62	752.3	87.5	30.8	67	NW			5		3	NW				Sm'h		Squally	Capt. T. P. Nesham.
H. M. S. Zephyr, N. 31° 20′, E. 121° 26′	29.84	757.9	74	23.3	95	NE			2		9							Raining	Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, Mossamedes, Benguela	29.97	761.2	63.3	17.4	78	NW			3		4					1		D. clouds	Carlos Candido dos Reis, Comd't.
Quanza, N. 21° 00′, W. 23° 49′	30.18	766.5	77.9	25.5	72	NE			4		3		NE			3	NE	D. clouds	Carlos M. da Silva Costa, Comd't
Rio Lima																			S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.85	758.3	79.7	26.5	88	S			3		10		SSW	3 hours				Thund'rst'm	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis, ‡ N. 56° 16′, E. 5° 45′	29.54	750.2	44.6	7.0	100	SSW			2		7							Overcast	Com. Th. Ulner.

STATIONS AND VESSELS.*	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the last 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.01	762.2	68	20.0	65	NNW	5	2.2			0			0	0			Clear.	
N. Yard, Portsmouth, N. H.	30.07	763.8	48	8.9	85	NE	20	8.9		10c	0	NE		1.3	33.			Rainy.	
Naval Hospital, Yokahama, Japan	29.80	756.9	67.5	19.7	87	SW			4		8		SW	Slight				Sprinkling	
Adams, Payta, Peru	29.82	757.4	69	20.6	90	ESE			1		10					Sm'h		Cloudy	
Alaska, Callao, Peru	29.92	760.0	64	17.8	89	Calm			0		10			0	0	Sm'h		Hazy	
Alert, Port Lloyd, Bonin Id.*	29.93	760.2	76	24.4	85	Calm			0		5		Calm			Sm'h		Fair	
Alliance, Norfolk, Va	29.91	759.7	56	13.3	94	SSW			1		8			Light				Cloudy	
Ashuelot, Kobe, Japan	29.94	760.5	68	20.0	95	W			1		10		Calm					Raining	
Colorado, New York, N. Y.	29.93	760.2	52	11.1	100	SE	2	0.9			10		Calm	0.06	1.5			Overcast	
Constitution, Norfolk, Va	29.86	758.4	55	12.8	93	S	3	1.3			10		SW					Overcast	
Franklin, Norfolk, Va	29.85	758.2	55	12.8	87	S	7	3.1			8		S	0.01	0.3			Cloudy	
Galena, Villafranca, France	30.02	762.5	68	20.0	90	Calm			0		0					Sm'h		Clear	
Independence, N. Yard, Mare I'd, Cal.	30.01	762.2	58	14.4	88	WSW	6.0	2.7			0							Clear	
Jamestown, Sitka, Alaska	30.11	764.8	42	5.6	91	ESE			1		8			0.11	2.8			Fair	
Kearsarge, Port Royal, S. C.	29.98	761.5	74	23.3	76	SE			1		0					Sm'h		Clear	
Lackawanna, S. 18° 31′, W. 107° 11′	30.21	767.3	73	22.8	100	ENE			1-4		10		NE			Sm'h	NE	Cloudy	
Marion, Montevideo, Uruguay	30.20	767.1	50	10.0	93	N			3		10		NW	0	0	Sm'h		Foggy	
Michigan, Erie, Pennsylvania	29.83	757.7	49	9.4		N	3	1.3			10		N					Raining	
Minnesota, Newport, R. I.	30.04	763.0	53	11.7	100	NNE			3		10					Sm'h		Drizzling	
Monocacy, Yokohama, Japan	29.93	760.2	68	20.0	90	S			3-5		10		SW					Cloudy	
New Hampshire, Port Royal, S. C.	29.95	760.7	73	22.8	63	SSE	3	1.3			2		Calm	0	0			Clear	
Nipsic, Villafranca, France	30.03	762.7	72	22.2	58	ESE			1		0					Sm'h		Blue sky	
Onward, Callao, Peru	29.98	761.5	64	17.8	94	Calm			0		10		NW			Long	W	Cloudy	
Palos, N. 33° 35′, E. 136° 12′	30.04	763.0	67	19.4	95	NE			5		10					Short	N	Cloudy	
Passaic, Washington, D. C.	29.82	757.4	55	12.8	87	S			2		10		E					Raining	
Pensacola. N. 38° 14′, W. 137° 20′	30.27	768.8	57	13.9	100	N			3-5		5			Light		Cross		Fair	
Portsmouth, Elizabeth River, Va.	29.91	759.7	55	12.8	100	SSW			2		2?		SW			Sm'h		Cloudy?	
Powhatan. Port Royal, S. C.	29.95	760.7	76	24.4	64	ESE			1		2							Clear	
Quinnebaug, N. 23° 14′, W. 31° 15′	30.17	766.3	75	23.9	68	E			3		2		E			Sm'h		Clear	
Ranger, N. 15° 51′, W. 95° 46′	29.81	757.2	79	25.1	82	N			1		2		Calm	0.01	0.3	Sm'h		Fair	
Richmond, Yokohama, Japan	29.93	760.2	70	21.1	80	S			4		10		S					Rainy	
Saratoga, Norfolk, Va	29.89	759.2	54	12.2	87	S			1		8		S	Light				Cloudy	
Shenandoah, Montevideo, Uruguay.*	30.21	767.3	49	9.4	93	NNW			3		10					Sm'h		Foggy	
St. Louis, League Island, Pa.	29.41	747.0	58	14.4	88	SE	12	5.4			8		SE	1.20	30.5			Cloudy	
Swatara, Shanghai, China†	29.83	757.7	66	18.9	89	NNE			4		10		Calm					Drizzling	
Tennessee, Hampton Roads, Va.	29.90	759.4	56	13.3	94	SSW	15	6.7			10		WSW	Inap.	Inap.	Sm'h		Cloudy	
Ticonderoga, S. 44° 58′, W. 100° 37′	30.26	768.6	49	9.4	85	SSW			1		10		S	0	0	Long	SW	Cloudy	
Trenton, Villafranca, France.*	30.01	762.2	72	22.2	54	S			1		0			0	0	Sm'h		Clear	
Vandalia. Boston Mass.	30.01	762.2	48	8.9	100	NE			2		10		Calm					Cloudy	
Wabash, Boston, Massachusetts	30.04	763.0	49	9.4	93	N	8	3.6			10		NE	1.01	25.7			Rain & fog	
Wachusetts, Off San Francisco, Cal.	30.04	763.0	59	15.0	88	S			1		Fg					Long		Dense fog	
Wyoming, N. 34° 37′, W. 70° 07′	29.91	759.7	68	20.0	100	SW			2		2		Calm			Mod.	SW	Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant ‡																			Capt. E. J. Molony.
Chin Yang																			Capt. N. Youlden.
S. S. Cipero, N 20° 28′, W. 50° 50′	30.03	762.7	77	25.0	86	ESE			3		6					1	ESE	D. clouds	Capt. W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 46° 31′, W. 20° 55′	29.98	761.5	54.0	12.2	64	WNW			5		5							Showery	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt W. Waring.
S. S. Han Kow ‡																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randell.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ N. 25° 00′, W. 39° 10′	30.22	767.6	71.1	21.7	80	E			5	30	0	E						D. clouds	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland ‡																			Capt. H. W. Dyke.
Barque Mertola																			Capt E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cumbria, ‡ S. 4° 55′, W. 17° 44′	29.95	760.7	83.2	28.4	71	ESE			5		8							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 6° 01′, E. 80° 12′	29.73	755.1	82.5	28.1	87	W			3		4							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire ‡																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 54° 02′, W. 26° 23′	29.76	755.9				W			2		5		W			Cross	W; NE	Showers	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Gallia																			
S. S. Scythia, N. 40° 34′, W. 68° 50′	29.74	755.4	55	12.8	100	E			5		Fog			Hea	vy	Mod.	SE	Foggy	Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			Capt. M. Murphy.
S. S. Adriatic, N. 51° 23′, W. 9° 50′ †	29.48	748.8	58	14.4		W			6		8		W					D. clouds	Capt. J. W. Jennings.
S. S. Baltic, N. 40° 54′, W. 66° 43′	30.00	762.0	47	8.3	100	S			3		10						S	Dense fog	Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 49° 41′, W. 25° 09′ †	29.81	757.2	50	10.0		W			4		10		NW	0	0	Mod.	N	Cloudy	Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England †	29.55	750.6	50	10.0		SSW			6		8?		WSW	Show	ers			Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			
S. S. Hohenzollern, N. 43° 13′, W. 42° 01′ ‡	30.33	770.4	61.2	16.2		ENE			2		2		ENE	0	0	Sm'h	E	Clear	Capt. H. Baur.
S. S. Köln, N. 37° 46′, W. 74° 09′	29.96	761.0	56.0	13.3	87	SW			2		5		SW	0	0	Sm'h	SW	Fair	
S. S. Leipzig																			Capt. Th. Jüngst.
S. S. Ohio																			Capt. F. Pfeiffer.
S. S. Strassburg																			Capt. G. Meyer.
																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Pern																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, N. 39° 39′, W. 53° 18′	30.10	764.5	65	18.3	94	ENE			2		10		ENE			Sm'h	E	Overcast	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio, N. 47° 50′, W. 21° 48′ *†	30.02	762.5	50	10.0	100	NW			4		5		NW	Sho	wers	Mod.	NW	Fair	W. Shackford, Chief Off'r
S. S. Pennsylvania, Liverpool, England *†	29.44	747.8	60	15.6	88	SW			3		8		SW					Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 23° 26′, W. 107° 26′ †	29.82	757.4	77	25.0	77	Calm			0		0			0	0	G'tl	SW	Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 37° 53′, E. 149° 33′ †	30.08	764.0	59	15.0	94	NE			3		10		ENE	0	0	Mod.	NE	Overcast	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China *†	29.97	761.2	83	28.3	87	E			2		10		SW					Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 41° 55′, E. 158° 43′	30.23	767.8	50	10.0	86	ESE			3		Fog			0	0	Mod.	SW	Misty	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, N. 44° 50′, W. 124° 20′ †	30.21	767.3	52.5	11.4	96	NW			3		10					Mod.	NW	Cloudy	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, Seattle, Wash. Ter †	30.22	767.6	53	11.7	80	N			2		0							Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 36° 25′, W. 121° 57′ †	30.02	762.5	64	17.8	62	NW			5		8		NW	0	0	Cross	SW to NW	Cloudy	Geo. H. Harrison.
S. S. Senator, N. 35° 30′, W. 121° 20′ †	30.06	763.5	53	11.7	93	NE			1		10					Sm'h		Foggy	Capt. Thos. Wallace.
S. S. State of California, N. 38° 57′, W. 123° 50′ †	29.99	761.7	52	11.1	98	NW			3		10		W			Sm'h	NW	Foggy	Capt. G. Debney.
S. S. Victoria, N. 49° 04′, W. 123° 16′ †	29.96?	761.0?	49	9.4	100	NE			2		2					Sm'h		Clear	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 33° 51′, E. 152° 40′	30.29	769.4	60	15.6	76	SE			3		5		SE			Mod.	SE	Cloudy	A. Bannerman, 2d Officer
S. S. City of New York, Sydney, N. S. W †	30.30	769.6	58	14.4	100	W			1		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama																			Capt? D. S. Austin.
S. S. City of Peking, N. 28° 50′, E. 127° 50′ †	29.86	758.4	77	25.0	91	S			3		5		S	0	0	Sm'h		Fair	Capt. G. G. Berry.
S. S. City of Sidney, San Francisco, Cal †	30.02	762.5	56	13.3	69	W			5		2		W	0	0	Sm'h		Clear	Capt. H. C. Dearborn, A. L. Ritchie, 2d Officer
S. S. City of Tokio																			
S. S. Colima, N. 9° 48′, W. 84° 49′ †	29.95	760.7	80	26.7	82	ENE			3		5		Calm	0	0	Sm'll	SSE	Fair	Capt. R. R. Searle.
S. S. Granada, N. 17° 02′, W. 100° 10′ †	29.84	757.9	81	27.2	91	WNW			1		0			0	0	Light	SW	Clear	Capt. M. Connolly.
S. S. Zealandia, N. 9° 30′, W. 162′ 30°	29.96	761.0	70	21.1	75	ENE			4		2?		NE	0	0	Sm'h	NE	Cloudy?	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, N. 44° 11′, W. 51° 44′ †	30.18	766.6	64	17.8	83	S			1		8		S	0	0	Sm'h		Hazy	A. Feddersen, 2d Officer.
S. S. Rhynland																			Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 38° 06′, W. 73° 55′	29.91	759.7	58	14.4	82	Calm	0	0			2k			2.26	57.4	Sw'll	SE	Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 21° 40′, W. 58° 05′ *†	30.12	765.0	80	26.7		ESE			1		1		ESE	0	0	Sm'h	E		Capt B. F. Woodbury.
Brigantine George, N. 35° 10′, W. 67° 00′ †	30.13	765.3	75	23.9		S			7		8		SSW	Sho	wers	R'gh	SSW	Squally	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Md. †	29.94	760.5	67	19.4	94	S	2	0.9			10n			0.13	3.3			Raining	
Bark Sunbeam, Lisbon, Portugal †	30.12	765.0	74	23.3	76	SW			1		2		N	0	0			Fair	Capt. Jos. Hand.

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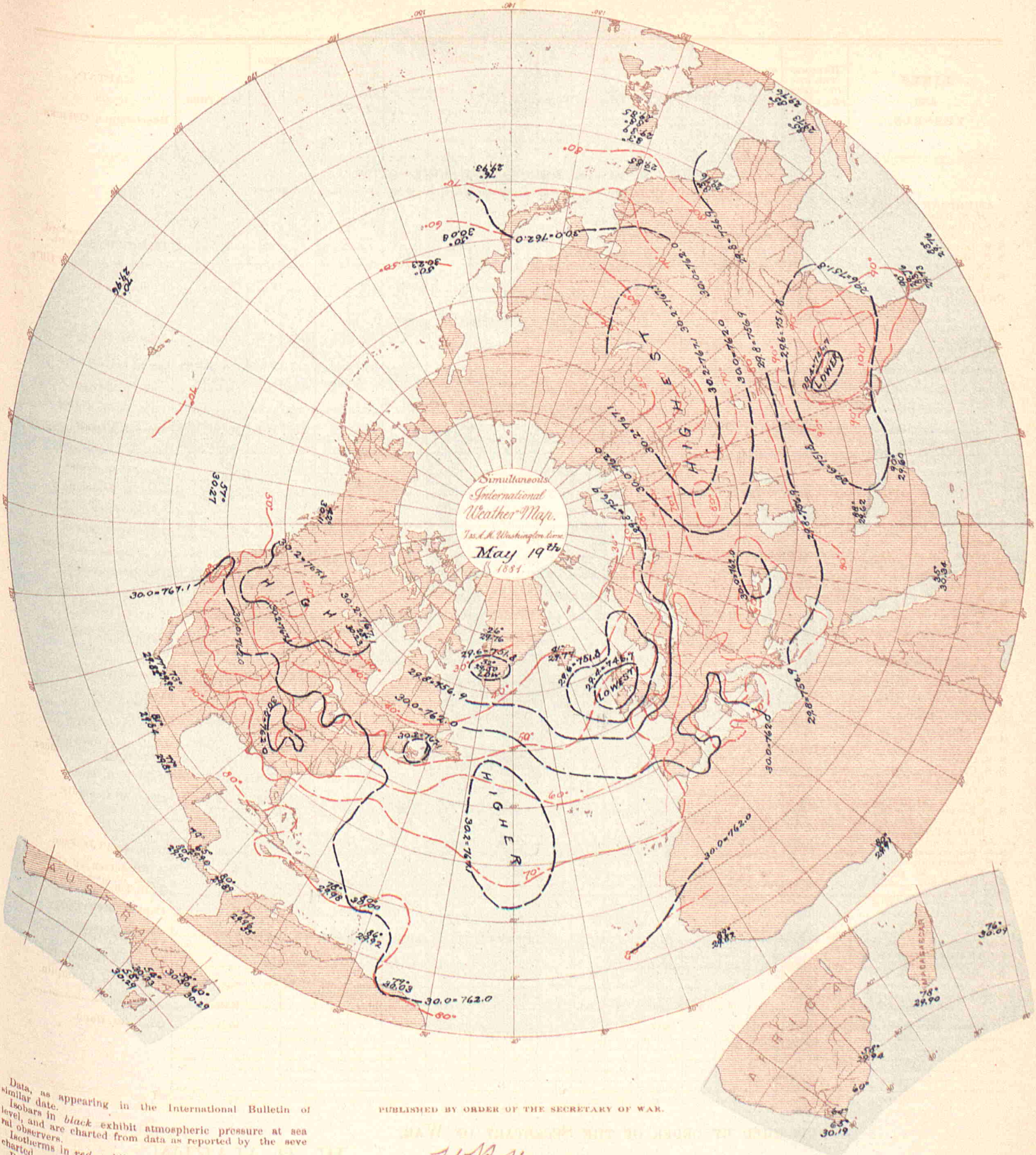
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 20, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco	‡		30.09	764.2	71.2	21.8	82	W			1		5			0	0	Cloudy	Dr. Ollive.
Nemours	‡		29.96	761.0	69.8	21.0	93	WNW			1		1			0	0	Very fair	Reynard.
Algiers	‡		30.01	7.2.2	73.0	22.8	48	S.			1		10			0	0	Covered	Nicolas.
La Calle	‡		30.05	763.3	71.2	21.8	79	ENE			2		1			0	0	Very fair	Fonfrède.
Tunis	‡		30.00	763.5															Jacques.
Sfax	‡		30.14	765.5															Gau.
Saida	‡		30.04	762.9	83.5	28.6	30	W			1		10			0	0	Covered	Dumas.
Tebessa	‡		30.08	763.9	71.6	22.0	28	W			2		1			0	0	Very fair	Watrin.
Geriville																			Lonchamp.
Laghouat	‡		30.05	763.3	70.9	21.6	42	S			4		1			0	0	Very fair	Herbin.
Biskra	‡		30.10	764.5															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.28	769.1	30.37	771.4	56.7	13.7	88	WSW	3	1.3			10			0.01	0.3	Dull	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.47	748.4	29.99	761.7	77.0	25.0	47	SE			3		0			0	0		Prof. Ivan Stoxir.
Cracow, I. R. Obs'y	29.22	742.3	29.95	761.0	75.2	24.0	41	ESE	1.8	c.8			2			0	0		Dr. Wierzbicki.
Eperies	29.14	740.2	29.98	761.6	73.8	23.2	31	SE			1		0			0	0		Julius Mikolik.
Gratz	28.77	730.8	29.97	761.3	72.7	22.6	69	S			2		0			0	0		Andreas Rospini.
Hermannstadt	28.01	726.7	29.99	761.8	71.1	21.7	53	E			2		2			0	0		Prof. A Gottschling.
Kremsmunster, Obs'y	28.60	726.5	29.88	758.9	75.3	24.6	59	NNE			3		0			0	0		The Staff.
Lemberg	29.02	737.1	29.97	761.2	71.8	22.1	51	NW			1		1			0	0		Dr. T. Stanecki.
Polt	29.85	758.5	29.97	761.3	72.7	22.6	58	WNW			2		0			0	0		I. R. HydrographicOffice.
Szathmar	29.56	750.9	30.01	762.2	74.8	23.8	25	S			1		0			0	0		Beicht Peter, S. J.
Szegedin	29.71	754.6	29.98	761.5	70.9	21.6	44	S			1		2			0	0		Karl Stancel.
Trieste	29.87	758.7	29.97	761.3	69.1	20.6	55	SW			1		0			0	0	Clear	Secco.
Vienna	29.30	744.3	29.99	761.8	74.3	23.5	53	SE			2		0			0	0		I. R. Central Met.' Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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

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

BRITISH SERIES.

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

Aberdeen	29.49	749.0	29.58	751.3	50.0	10.0	74	SSE	10	4.5			7			0.195	5.0	D. clouds	W. Boswell.
Armagh, Observatory	29.49	749.0	29.72	754.9	53.9	12.2	75	W	11	4.9			7					D. clouds	S. Call.
Bidston, Liverpool Obs'y			29.78	756.4	53.0	11.7	61	W	28	12.5			6					D. clouds	John Hartnup.
Bolton, Sharples	29.28	743.7	29.80	756.9	55.8	13.2	55	W	18	8.0			6					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.36	745.7	29.75	755.6	55.6	13.1	56	W			2		4			0.01	0.3	D. clouds	J. McLandsbo ough, F.R.S
Bridgetown, Barbadoes	29.88	758.9	29.91	759.7	85	29.4	72	NE			1		6					Gloomy	Corpl. J. Surgener, AH.C.
Cardington			29.87	758.7	63.6	17.6	60	SW			6.0		4					D. clouds	John McLaren.
Chatham, School M. E.	29.76	755.9	29.89	759.2	60.6	15.9	57	S			2		6					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.77	756.1	30.00	762.0	57.8	14.3	61	WSW			4		5					D. clouds	The Staff.
Fort Napier, Natal	27.69	703 3	29.90	759.4	68.2	20.1	100	W			3		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.61	752.1	29.84	757.9	88	31.1	84	W			1		2					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			29.357	745.5?	60	15.6	65	N			4		8			0.03	0.8	Showery	J. O'Donaghue.
Gibraltar, Mediterranean	29.97	761.2	30.02	762.5	75.8	24.3	85	W			4		0					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.39	746.5	29.59	751.6	53.8	12.1	68	SW			3		9k					D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	29.75	755.6	29.92	760.0	64.6	18.1	53	SW			2		6					D. clouds	The Staff.
Guernsey	29.79	756.7	30.01	762.2	56	13.3	71	SW			3		3					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.89	759.2	29.93	760.2	58.0	14.4	47	WSW	12	5.4			8					D. clouds	The Staff.
Leicester, Museum	29.59	751.6	29.84	757.9	58.0	14.4	53	SW			1		6					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.96	761.0	30.04	763.0	75.4	24.1	46	NW			2		0			0	0	Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.92	760.0	29.97	761.2	84.0	28.9	71	S			1		8					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.34	745.2	29.86	758.4	54.6	12.6	72	WSW			5		6					Showery	John Mac Emall.
Oxford, Radcliffe Obs'y	29.68	753.9	29.91	759.7	56.0	13.3	70	SSW			3		9					Showery	The Staff.
Plymouth	29.90	759.4	29.97	761.2	58.0	14.4	72	SW			4		2					D. clouds	John Merrifield.
Sandwick Manse, Orkneys			29.61	752.1	47.4	8.6	89	ENE	10	4.5			10					Misty	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.81	757.2	29.87	758.7	59.6	15.3	77	NE			3		10					Gloomy	Serg't W. H. Lyne.
Sheffield	29.54	750.3	29.82	757.4	57.8	14.3	75	SW			4		6?			0.10	2.5	Overcast?	W. F. Cooper.
Silloth Rectory	29.87	758.7	29.90	759.4	56.5	10.3	80	W			6		5			0.040	1.0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.79	756.7	54.0	12.2	61	WSW	28	12.5			8					D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	29.73	755.1	29.95	760.7	55.0	12.8	79	W			1		5					Showery	Rev C.H.Griffiths, F.M.S.
Truro, Royal Institution	29.98	761.5	30.00	762.0	60	15.6	60	NW			6		4					D. clouds	W. Newcombe.
Valencia, Observatory	29.87	758.7	29.90	759.4	53.5	11.9	68	WSW	18	8.0			5					D. clouds	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.18	766.6	30.22	767.6	45	7.2	90	NE	10	4.5			10n			0	0	Threatening	H. J. Cundall, C. E.
Chatham, N. B.*	30.24	768.1	30.30	769.6	43	6.1	88	NE	14	6.3			10n		NE	0.12	3.0	Heavy rain	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.24	768.1	30.26	768.6	38	3.3	88	NE	40	17.9			10s		NE	0.09	2.3	Threatening	J. McWilliams.
Fort Garry, Manitoba*	29.25	743.2	30.11	764.8	38	3.3	86	E	8	3.6	0	0				0	0	Clear	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.05	763.3	30.19	766.8	49	9.4	99	SE	5	2.2			Fg			0.010	0.3	Foggy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.52	749.8	29.86	758.4	51	10.6	94	SE	2	0.9			10s		Calm	0.59	15.0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H Rigby.
Montreal, Quebec*	29.70	754.4	29.90	759.4	61	16.1	82	E	9	4.0			8c	2ks	Calm	0.09	2.3	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.16	740.7	29.84	757.9	55	12.8	80	W	2	0.9			2cs	2ks	W	W		Light rain	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.24	742.7	29.93	760.2	50	10.0	93	SW	4	1.8			10c	0	NW		0.01	0.3	Fair	H. Morgan.
Port Stanley, Ontario	29.28	743.7	29.93	760.2	48	8.9	94	NW	4	1.8			5ck	0	NW		0.04	1.0	Fair	M. Payne.
Quebec, Quebec*	29.77	756.1	30.09	764.3	46	7.8	92	NE			6			10n		NE	0.11	2.8	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.36	745.7	29.81	757.2	54	12.2	90	Calm	0	0				8ks		Calm	0	0	Cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.19	741.4	29.90	759.4	49	9.4	91	W	8	3.6			8k	0	N		0	0	Cloudy	K. Stewart.
St. Andrews, N. B.	30.02	762.5	30.08	764.0	52	11.1	97	SE	1	0.4				Fg			0.24	6.1	Foggy	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.27	768.8	30.31	769.9	44	6.7	83	E	11	4.9			10cs	2n	NW	Calm	0	0	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.51	749.5	29.89	759.2	54	12.2	93	W	2	0.9			2ck	5ks	NE	NE	Inap.	Inap.	Cloudy	Magnetic Observatory
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.01	762.2	30.07	763.8	57	13.9	98	SE	3	1.3			Fg	Fg			0	0	Foggy	Lt. F. E. Wilmot, R. N
SUB-SERIES.																			
St. Johns, Newfoundland	30.08	764.0	30.33	770.4	35	1.7	80	NE	2	0.9			0	0			0	0	Fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't

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

CAPE COLONY SERIES.

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

Cape St. Francis Lt. House	30.00	762.0			62.5	16.9	94	W	13.5	6.0		4c	0			0.450	11.4	Fine	John Duthie.
Cape Town, C. G. H. Obs'y	30004	763.0	30.08	764.0	64.4	18.0		S	10.6	4.7		2c;cs	0			0	0		The Staff, for D. Gill.
Worcester *†	28.96	735.6			64.5	18.1	49	E			1	0	2			0	0	Fine	C. Stokes.

CHINESE SERIES.

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

SUB-SERIES.																			
Zi-Ka-Wei, near Shanghai	29.97	761.1	29.99	761.7	59.2	15.1	97	NE	3.4	1.5			10n			0.331	8.4	Raining	M. Marc Dechevrens, S.J.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	25.22	666.0	29.94	760.5	67.1	19.5	86					9cs	0			0	0		Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.89	759.1	29.93	760.3	53.8	12.1	85	SSW	16	7		7							Oversergent Fischer.
Farö	29.89	759.3	29.91	759.8	52.2	11.2	88	WSW			6	3							Overloerer Lauridsen.
Godthaab, Greenland	29.71	754.7	29.76	755.8	38.1	3.4	55	NNE			5	0							S. Kleinschmidt.
Stykkisholm, Iceland	29.75	755.7	29.80	756.8	41.4	5.2		SE			6	2							A. O. Thorlacius.
Thorshavn	29.81	757.1	29.84	758.0	41.4	5.2	65	ENE	13	6		6							Overloerer Bergh.
Vestervig	29.72	754.8	29.81	757.2	51.3	10.7	92	SW			6	2							Locarer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.45	748.0	30.10	764.5	60.4	15.8	48	N			1	8n		SE		0	0	Very cloudy	M. Labroue, Director.
Alençon Normal School	29.54	750.4	30.10	764.4	59.7	15.4	78	W			1	5kn		SW		0.004	0.1	Cloudy	M. Nicot, Director.
Arras, Engineer School	29.80	756.8	30.05	763.3	58.3	14.6	50	WNW			2	k		W		0	0		M. Klein, Commandant.
Avignon, Normal School	29.93	760.2	30.01	762.2	77.0	25	44	W			1	0				0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.54	750.4	30.10	764.4	61.2	16.2	58	SW			1	10kn		WSW		0.248	6.3	Covered	M. Saillard, Director.
Beauvais, Normal School	29.80	756.8	30.06	763.4	65.7	18.7	38	WSW			3	8		W		0	0	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.24	742.7	30.12	765.1	60.8	16	69	SSW			1	cn		NNE		0.059	1.		M. Gobin, Director.
Bordeaux, Observatory	29.84	758.0	30.11	764.7	57.4	14.1	84	SE			1	10				0.248	6.3	Covered	M. Rayet, Director.
Bourges, Normal School	29.57	751.1	30.11	764.9	60.1	15.6	64	NNW			1	ck	0	NNW		0.16	4.		M. Postel, Director.
Brest, Naval Observatory	29.84	757.9	30.08	764.1	64.0	17.8	63	SW			2	4			SW	0	0		M. de Kermaree, Dir.
Caen, Normal School	29.95	760.7	30.02	762.5	66.2	19	59	WSW			1	5			W	0.04	1.	Cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N. Sch'l	29.72	754.8	30.03	762.8	69.1	20.6	71	SW			1	8		NW	NW	0.039	1.0	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.53	750.0	30.04	762.9	66.2	19	54	SSW			1	2				0.295	7.5	¼ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.72	729.5	30.08	763.9	55.8	13.2	90	N			1	10				0.224	5.7	Covered	M. Allnard, Director.
Cluny, Normal School	29.24	742.7	30.11	764.8	59.0	15	78	WNW			1	7			NW	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.22	742.2	30.07	763.8	69.1	20.6	38	W			1	5ck	0	W	W	0.260	6.6	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.48	698.1	29.92	759.9	74.8	23.8	45	N			1		2		S	0	0	¼ covered	M. Jeangirard, Director.
Grenaque, du. Rhone	28.95	735.3	30.09	764.3	73.9	23.3	33	S			2		2		S	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.24	742.8	29.99	761.7	68.5	20.3	64	NW			2	c	kn		NNW	0	0		M. Ablard, Director.
Guéret, Normal School	28.52	724.4	30.09	764.2	56.3	13.5	57	NW			1	10n			SE	0.402	10.2	Raining	M. Rivoire, Director.
Lamballe, Normal School	29.74	755.4	30.01	762.3	48.2	9	86	WNW			2	10			WNW	0.020	0.5	Heavy rain.	M. Ollitrault, Director.
Lescar, Normal School	29.50	749.4	30.17	765.4	59.7	15.4	89	SW			3					0.177	4.5		M. Chauvin, Director.
Lorient, Naval Observatory	30.10	764.4	30.20	767.0	57.9	14.4	63	SW			3	8			SW	0	0	¼ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.02	737.1	30.05	763.5	63.7	17.6	56	E			1	10			N	0	0	Covered	M. André, Director.
Mans, Normal School	29.78	756.5	30.09	764.3	60.6	15.9	52	NNW			1	2			W	0.004	0.1	Slightly cl'dy	M Piboen, Director.
Marseille, Observatory	29.76	755.8	30.02	762.5	73.2	22.9	45	SSE			1-2	1			ESE	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.87	631.6	30.10	764.6	51.8	11.0	87	E	5.6	2.5		9			E	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.88	759.0	29.98	761.6	75.6	24.2	57	NNE			2	0				0	0	Clear	M. P. Galzin, Director.
Nancy, Normal School	29.32	744.6	30.07	763.8	59.0	15	68	SSW			1	10kn				0.398	10.1	Sprinkling	M. Hasse.
Nantes, Observatory	29.95	760.7	30.11	764.8	63.0	17.2	50	SW			1-2	8kn			SSW	0.035	0.9		M. Larocque, Director.
Nice	29.99	761.8	30.02	762.6	69.1	20.6	67	S			1	1	S		S	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.91	759.8	30.02	762.5	70.5	21.4	57	S	5.6	2.5		9			SW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.58	573.6			49.5	9.7						10			SW	0.114	2.9	Snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.89	733.9	29.91	759.7	76.3	24.6	42	SW			1	0				0.283	7.2	Clear	M. Taillieu.
Puy de Dôme Obs'y, Summit	25.21	640.2			44.4	6.9	100	WSW			1	10				0.276	7.0	Foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	30.11	764.7	30.14	765.5	69.3	20.7	57	W			1	8			SW	0	0	¼ covered	Lt. E. Decante, Director
Roche-sur-Yon, N. School	29.90	759.4	30.11	764.8	64.8	18.2	55	SW			1	5			E	0.055	1.4	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.91	709.0	30.01	762.3	66.6	19.2	64	NW			1	2			E	0	0	Slightly cl'dy	M. Richard, Director.
Rouen, Normal School	29.95	760.6	30.03	762.8	61.9	16.6	71	SSW			3	5			SSW	0	0	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.91	759.8	30.07	763.8	60.8	16	63	WSW			1	8			WSW	0	0	Very cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.91	759.7	30.08	763.9	66.4	19.1	36	WSW			1	4		SW	WSW	0.008	0.2		M. Renou, Director.
Toulouse, Observatory	29.36	745.8	30.09	764.2	72.7	22.6	50	NW			1					0	0		M. Baillaud, Director.
Tours	29.89	759.1	30.08	764.1	64.4	18.0	51	W			1	8			W	0.094	2.4	¼ covered	M. de Tastes.
Versailles, Observatory	29.58	751.3	30.07	763.8	63.0	17.2	41	W			2					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.17	741.0	30.04	763.0	68.4	20.2	58	W			2	6k		W		0	0		Prof. Dr. Hoh.
Berlin	29.82	757.5	29.99	761.8	66.7	19.3	51	SW			1	10				0.008	0.2		Prof. Dr. Arndt.
Breslau	29.44	747.8	29.97	761.3	81.7	27.6	28	SSW			2	7				0	0		Royal University Obs'y.
Carlsruhe	29.05	753.0	30.07	763.8	60.3	15.7	80	W			2	10		SW		0	0		Albert Senx.
Cassel	29.30	744.1	30.01	762.3	64.0	17.8	58	S			2	4		S		0.031	0.8		Dr. H. Möhl.
Frankfort on the Main	29.72	754.8	30.08	764.0	61 2	16.2	71	SW			1	10				0.098	2.5		Physical Society.
Friedrichshafen	28.59	726.1	29.97	761.3	70.3	21.3	57	SW			3	4		W		0.287	7.3		Wilhelm, Chief Tel.
Hamburg	29.90	759.4	29.97	761 2	63.3	17.4	57	SW			2	8				0.020	0.5		Dr. R. Kleeman.
Kiel	29.92	760.0	29.94	760.4	52.7	11.5	67	W			2	7				0.075	1.9		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.01	752.0	30.02	762.4	67.3	19.6	53	WSW			2	9		WSW		0.008	0.2	Sprinkling	Prof. Dr. Bruhns.
Magdeburg	29.69	754.0	29.97	761.1	63.0	17.2	71	WNW			4	10n		SW		0.012	0.3		Dr. Assmann.
Memel	30.02	762.5	30.07	763.7	50.3	13.5	72	NW			3-4	5c	0						Reinbrecht & Issermann.
Munich	28.17	715.6	30.04	762.9	74.3	23.5	37	NW			3		2	W		0	0		Central Station.
Neufahrwasser	30.00	763.4	30.07	763.8	54.3	12.4	74	NE			1	10				0.020	0.5		A. Lothes.
Neustadt, Palatinate	29.52	749.7	30.04	763.1	59.4	15.2	80	W			2	10				0	0		Dickmether.
Stuttgart	29.11	739.3	29.98	761.5	63.9	17.7	59	N			1	8		SW		0.016	0.4		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.54	725.0	30.03	762.7	68.7	20.4	48	NW			4	8		NW		0	0		Prof. Kemlein.
Wustrow	29.97	761.3	30.00	761.9	57.2	14.0	86	SW			1	8ks				0	0		Prof. J. Reimer.

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

GREEK SERIES.

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

Athens	29.48	748.7	29.86	758.4	71.8	22.1		NE			4.0		0					Clear.	A. Wourlisch

INDIAN SERIES.

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

Kurrachee	29.58	751.4	29.63	752.6	87.2	30.7	84	WSW	37.0	16.5			7			0	0	Misty	
Deesa	29.13	739.9	29.58	751.4	102.6	39.2	24	SW	17.9	8.0			4	SW	SW	0	0	D. clouds	
Bombay	29.73	755.1	29.75	756.0	88.4	31.3	69	WNW	11.0	4.9			0			0	0	Blue sky	
Poona, Yarrowda	27.90	708.7	29.70	754.4	93.3	34.1	24	W	18.0	8.0						0	0	Blue sky	
Belgaum	27.24	691.8	29.70	754.5	89.4	31.9	49	W	6.0	2.7			1		W	0	0	D. clouds	
Lahore	28.75	730.5	29.46	748.2	104.3	40.2	21	E	5.5	2.5			0			0	0	Misty	
Roorkee	28.68	728.5	29.55	750.4	94.8	34.9	37	W	6.3	2.8			0			0	0	Misty	
Agra	28.97	735.8	29.50	749.2	107.1	41.7	21	SE	7.1	3.2			0			0	0		
Nagpur	28.57	725.6	29.55	750.6	106.9	41.6	16	W	8.1	3.6			6		W	0	0		
Jubbulpore	28.27	718.1	29.50	750.8	105.3	40.7	11	NW	3.3	1.5			0			0	0	Blue sky	
Lucknow	29.24	742.6	29.68	753.9	94.0	34.4	40	ENE	5.6	2.5			0			0.12	3.0	Blue sky	
Allahabad	29.27	743.5	29.58	751.2	94.7	34.8	50	NE	5.5	2.5			0			0.22	5.6	Blue sky	
Patna	29.42	747.2	29.59	751.6	93.1	33.9	52	E	4.3	1.9			0			0.58	14.7	Blue sky	
Hazaribagh	27.64	702.1	29.59	751.7	89.8	32.1	42	NNW	10.4	4.6			0			1.19	30.2	Thnd'rstorm	
Cuttack	29.48	748.9	29.56	750.9	93.0	33.9	53	ESE	2.0	0.9			1			0.10	2.5	Blue sky	
Calcutta, Alipore	29.60	751.8	29.62	752.3	87.3	30.7	70	NE	2.0	0.9			7			Inap.	Inap.	D. clouds	
Dhubri	29.54	750.2	29.66	753.3	81.7	27.6	82	E	2.5	1.1			2			0	0	D. clouds	
Chittagong	29.57	751.2	29.66	753.4	85.0	29.4	77	WSW	2.8	1.2			5			0	0	Blue sky	
Sibsagar	29.34	745.2	29.67	753 6	85.7	29.8	73	NE	1.1	0.5			5	W	W	0.25	6.4	D. clouds	
Zanzibar, Africa			29.93	760.2	84.5	29.2	70	SSE	5	2.2			7		SE	0	0	D. clouds	

ITALIAN SERIES.

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

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

Udine	29.58	751.3	29.98	761.6	80.2	26.8	30	SE	0.7	0.3			0			0	0		Prof. Giovanni Clodig.
Milan	29.45	748.1	29.96	760.9	78.4	25.8	31	E	2.5	1.1			1			0	0		Prof. Schiaparelli.
Padua	29.87	758.8	29.98	761.6	75.4	24.1	39	Calm	0	0			0			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.08	738.6	29.97	761.1	74.7	23.7	43	S	3.1	1.4			1			0	0		Prof. P. F. Denza.
Genoa	29.85	758.2	30.04	763.1	65.5	18.6	71	SW	4.9	2.2			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.10	773.7	29.98	761.4	72.3	22.4	43	NE			4		0			0	0		Prof. D. C. Bruno.
Pesaro	29.94	7.0.5	29.99	761.7	69.1	20.6	58	NW	9.4	4.2			0			0	0		Prof. Luigi Guidi.
Florence	29.71	754.0	29.90	761.0	73.4	23.0	47	W			2		0			0	0		Prof. Costantino Pitter.
Leghorn	29.94	760.4	30.02	762.6	66.2	19.0	71	NNW	9.4	4.2			2			0	0		Prof. P. Monte.
Rome	29.77	756.2	29.94	760.5	78.4	25.8	39	W	4.9	2.2			0			0	0		Prof. P. S. Ferrari.
Lecce	29.67	753.5	29.91	759.8	71.4	21.9	50	N	28.0	12.5			3			0	0		Prof. C. de Giorgi.
Cosenza	29.05	738.2	29.95	760.6	73.8	23.2	73	ESE	3.8	1.7			6	SE		0.012	0.3		Prof. D. Conti.
Cagliari	29.81	757.2	30.00	762.1	68.4	20.2	60	SE			4		0			0	0		Prof. A. Pacinotti.
Palermo	29.76	755.9	30.01	762.2	72.9	22.7	34	E	5.6	2.5			0			0	0		Prof. G. Ciaccialore.
Syracuse	29.88	759.0	29.93	760.1	70.9	21.6	69	E	5.6	2.5			5	WSW		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.41	747.1	29.92	759.9	75.9	24.4	50	WSW	6.3	2.8			0			0	0		Prof. F. Brioschi.
Stelvio	22.32	566.8			46.4	8.0	36	SE			1		2cn	W		0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.32	566.9			53.4	11.9	63	E			2		5k	WNW		0	0	Cloudy	Prof. P. F. Denza.

JAPANESE SERIES.

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

Hiroshima, I. M. Obs'y	30.04	763.0	30.05	763.3	58.4	14.5	55	NNE	11.5	5.1		clk	10s			0	0	Covered	K. Sasaki.
Kioto	29.93	760.2	30.11	764.8	53.1	11.7	68	NW	4.5	2.0		10s	10s			0	0	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.77	756.1	29.97	761.2	57.9	14.4	96	NE	6.4	2.9		10n	10n			1.420	36.1	Raining	S. Takehayashi.
Tokei Obs'y, Yeddo	30.02	762.5	30.09	764.3	57.2	14.0	68	Calm	0	0		0	2s			0	0	Clear	The Staff.
Wakayama	30.04	763.0	30.09	764.3	54.9	12.7	56	N	11.2	5.0			10s			0	0	Cloudy	Y. Kuwamuca.

MAURITIUS SERIES.

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

Mauritius Obs'y, Mauritius	29.86	758.4	30.05	763.3	77.6	25.3	73	ENE	13.0	5.8		2	2	WNW	ENE	0	0	Fine	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

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

Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.63	752.5	29.88	759.1	72.0	22.2	92	NNE	0.9	0.4		0	1k			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.

NETHERLANDS SERIES.

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

Flushing	30.00	762.1	30.00	762.1	58.6	14.8		W			4					0.063	1.6		
Groningen	29.89	759.1	29.94	760.5	58.5	14.7		SW			5					0	0		
Helder	29.92	760.0	29.92	760.0	54.1	12.3		SSW			4					0	0		
Hellevoetsluis	29.98	761.5	29.98	761.5	57.7	14.3	74	WSW			5					0.058	2.5		
Utrecht	29.95	760.7	30.00	761.9	61.3	16.3	64	WSW			4		5			0	0	Cloudy	H. van der Bra[illegible]

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. h'r	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES.																			
Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.58	751.2	29.64	752.8	51.8	11.0	73	SSE	11.0	4.9	.....	.....	9	.....	.....	0.709	18.0	Raining	
Christiania	29.55	753.2	29.80	756.9	46.6	8.1	92	SSW	7	3	.....	.....	10	.....	.....	0.370	9.4	Raining	
Gjæsvær	29.88	758.9	29.90	759.5	31.6	— 0.2	.....	Calm	.....	.....	0	.....	9	.....	.....	.....	.....	.....	
Lodingen	29.91	759.6	29.95	760.8	32.9	0.5	61	NE	.....	.....	4-5	.....	5	.....	.....	0	0	.....	
PORTUGUESE SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.05	763.2	30.21	767.2	61.2	16.2	87	SE	12.2	5.0	.....	.....	4	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.02	737.0	29.98	761.6	74.7	23.7	48	W	4.9	2.2	.....	.....	5	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.08	763.9	30.17	736.2	66.4	19.1	62	Calm	0	0	.....	.....	10	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.75	755.9	30.11	764.9	67.8	19.9	43	NNE	19.9	8.9	.....	.....	7	WSW	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.15	765.7	30.22	767.5	61.5	16.4	79	ESE	7.4	3.3	.....	.....	10	.....	.....	0.020	0.5	.....	
RUSSIAN SERIES.																			
Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	29.74	755.3	29.76	755.8	58.8	14.9	67	Calm	0	0	.....	.....	10	.....	.....	.....	.....	.....	Capt. Sselliwerstow.
Astrakhan	30.19	766.8	30.11	764.7	76.5	24.7	49	SE	2	1	.....	2cs	0	.....	.....	.....	.....	Light clouds	Capt. Wisganow.
Barnaul	29.77	755.2	30.28	769.0	49.1	9.5	64	SW	4	2	.....	.....	10	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	29.72	754.9	29.95	760.9	63.1	17.3	51	WSW	13	6	.....	.....	0	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	29.33	744.9	30.24	768.2	82.2	27.9	22	W	9	4	.....	1cc	0	.....	.....	.....	.....	Hazy	Meteorological Obs'y.
Kasan	29.81	757.1	30.00	763.5	80.6	27.0	21	SE	20	9	.....	.....	4	.....	.....	.....	.....	.....	Observatory.
Kertch	30.02	762.5	30.04	763.0	66.4	19.1	63	ENE	7	3	.....	.....	0	.....	.....	.....	.....	.....	Lagodio & Sastyrez.
Kieff	29.35	745.4	29.95	760.8	71.4	21.9	39	NE	7	3	.....	ck	7ks	.....	.....	.....	.....	.....	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.79	755.9	29.96	761.0	71.4	21.9	50	WSW	4	2	.....	.....	7	.....	.....	.....	.....	.....	Meteorological Obs'y.
Moscow	29.44	747.7	29.97	761.1	71.4	21.9	48	WNW	7.8	3.5	.....	.....	5ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.60	701.0	29.81	757.2	59.0	15.0	35	Calm	0	0	.....	.....	7	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaiev	29.99	761.7	30.06	763.5	75.0	23.9	61	N	4	2	.....	.....	6kn	.....	.....	.....	.....	.....	Capt. Kurdakow.
Nikolnievsk, on the Amoor	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lieut. Iwanow.
Pekin, China	29.87	758.8	30.02	762.4	67.6	19.8	27	SW	7	3	.....	.....	4ks	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	29.83	757.7	29.85	758.1	52.3	11.3	71	WNW	22	10	.....	c	2k;ks	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.35	720.2	29.84	758.0	80.1	25.7	33	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.09	728.8	30.08	763.9	69.6	20.9	75	Calm	0	0	.....	.....	10ks	.....	.....	.....	.....	Light rain	Physical Observatory.
Warsaw	29.56	750.9	29.97	761.1	78.4	25.8	31	W	4	2	.....	ck	3k	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.57	751.1	29.97	761.2	75.9	24.4	38	W	4	2	.....	.....	4	.....	.....	.....	.....	Light clouds	Berg, Assistant.
Yeniseisk	29.97	761.1	30.20	768.6	44.4	6.9	85	S	7	3	.....	.....	10	.....	.....	.....	.....	Raining	M. O. Marks.
SCOTTISH SERIES.																			
Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	29.53	752.6	54.2	12.3	72	SW	.....	.....	3	.....	7k	.....	.....	0.07	1.8	Showery	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.05	753.1	49	9.4	93	NE	.....	.....	3	5	5	NE	.....	0.1	3.	Showery	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	29.05	753.1	.....	.....	.....	NE	.....	.....	4	.....	10	.....	.....	Blank		.....	Robert Burnet.
SPANISH SERIES.																			
Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.94	760.4	30.04	763.1	65.8	18.8	78	E	4.0	1.8	.....	.....	0	.....	.....	0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.09	764.3	30.15	765.7	57.9	14.4	91	NW	2.5	1.1	.....	.....	10	.....	.....	0.213	5.4	Raining	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.04	686.9	.....	.....	65.1	18.4	90	N	6.5	2.9	.....	0	8	.....	.....	0	0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.77	705.4	29.91	759.6	70.8	24.9	32	SW	13.2	5.9	.....	3	0	NW	.....	0	0	Light clouds	The Staff.
Murcia, Met. Obs'y	29.83	757.7	29.98	761.4	83.5	28.0	45	E	4.7	2.1	.....	0	3	.....	.....	0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.19	741.4	30.10	764.4	59.4	15.2	55	NE	4.9	2.2	.....	.....	7	.....	.....	0.358	9.1	Cloudy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.87	758.6	29.93	760.2	77.6	25.3	78	ENE	1.8	0.8	.....	1c	0	W	.....	0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.81	757.1	29.80	758.4	87.8	31.0	49	E	1.1	0.5	.....	0	1s	.....	.....	0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.96	760.9	30.05	763.4	72.1	22.3	68	W	9.6	4.3	.....	0	1	.....	NW	0	0	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.88	758.9	29.97	761.2	77.7	25.4	90	SE	2.5	1.1	.....	4cs	2k	SE	SE	0.551	14.0	D. clouds	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.75	755.7	29.90	759.4	85.3	29.6	62	NNW	0.8	0.4	.....	.....	4ks	.....	NW	0	0	Lightly cl'dy	José L. Fastovra.
SWEDISH SERIES.																			
Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.80	756.8	29.84	757.8	43.5	6.4	45	N	.....	.....	4	.....	5	.....	.....	0	0	.....	
Umea	29.82	757.3	29.87	758.6	48.0	9.2	36	NE	.....	.....	4	.....	5	.....	.....	0	0	.....	
Hernosand	29.85	758.3	29.91	759.6	48.0	8.9	47	SE	.....	.....	2	.....	7	.....	.....	0	0	.....	
Stockholm	29.75	755.7	29.93	760.2	54.7	12.0	63	W	.....	.....	2	.....	10	.....	.....	0.583	14.8	.....	
Wisby	29.80	758.4	29.92	759.9	54.0	12.2	72	W	.....	.....	4	.....	7	.....	.....	0.024	0.6	.....	
Sub-Series.																			
Upsala	29.82	757.5	29.91	759.7	47.7	8.7	81	NE	4.0	1.8	.....	.....	10	.....	W	0.075	1.9	.....	Nils Ekholm
SWISS SERIES.																			
Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.60	726.5	29.97	761.3	72.9	22.7	41	WSW	.....	.....	3	.....	7	.....	.....	0.012	0.3	.....	The Observatory.
Zurich	28.41	721.7	30.00	762.0	69.8	21.0	55	NW	.....	.....	4	.....	3	.....	.....	0.701	17.8	Clear	The Observatory.
TURKISH SERIES.																			
Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.93	760.2	58.3	14.6	75	NNE	19	8.5	.....	.....	10	.....	NE	0.102	2.6	.....	The Observatory.
Valona	.....	.....	29.98	761.4	63.0	17.2	.....	SW	.....	.....	1	.....	10	.....	.....	0	0	Covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.77	756.1	82.8	28.2	59	SSE	.....	.....	4	7ck	0	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	BAROMETER. Corrected for instrum'tal error and temperature. Mill.	BAROMETER. Reduced to sea-level. Inch.	BAROMETER. Reduced to sea-level. Mill.	TEMPERATURE OF THE AIR. Fah.	TEMPERATURE OF THE AIR. Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	WIND. Velocity. Miles p. h'r	WIND. Velocity. Mtrs p. sec	WIND. Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	CLOUDS. Amount and kind. Lo'er 0—10	CLOUDS. Direction. Upper. From.	CLOUDS. Direction. Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.88	758.9	29.96	761.0	61	16.1	77	S	5	2.2	.....	.....	10ks	.....	S	0.81	20.6	Cloudy	
Alpena, Michigan	29.25	742.9	29.88	758.9	54	12.2	74	NW	15	6.7	.....	5cs	2ks	W	NW	0	0	Fair	
Atlanta, Georgia	28.79	731.3	29.92	760.0	58.2	14.6	65	NE	8	3.6	.....	1k	0	Calm	.....	0	0	Clear	
Atlantic City, New Jersey	29.91	759.7	29.92	760.0	55	12.8	100	S	5	2.2	.....	5k	5s;fg	S	S;O	0.09	2.3	Cloudy	
Augusta, Georgia	29.78	756.4	29.87	761.2	63.3	17.4	78	NW	1	0.4	.....	5cs	Hz	W	.....	0	0	Fair	
Baltimore, Maryland	29.87	758.7	29.92	760.0	60	15.6	77	NE	4	1.8	.....	8k	0	N	.....	0.28	7.1	Fair	
Barnegat, New Jersey	29.90	759.4	29.92	760.0	53	11.7	100	SE	9	4.0	.....	.....	10s	.....	S	0.11	2.8	Cloudy	
Bismarck, Dakota	28.19	716.0	30.05	763.3	53	11.7	73	SE	4	1.8	.....	6	0	.....	.....	0	0	Clear	
Boise City, Idaho	27.13	689.1	30.09	764.3	57	13.9	63	NW	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Boston, Massachusetts	29.86	758.4	30.02	762.5	47.0	8.3	96	E	1	0.4	.....	.....	Fg	.....	.....	0.28	7.1	Dense fog	
Bracketville, Texas	28.78	731.0	29.83	757.7	59	15.0	70	W	4	1.8	.....	2ck	0	W	.....	0	0	Fair	
Brownsville, Texas	29.86	758.4	29.91	759.7	67	19.4	89	N	4	1.8	.....	2c	0	.....	.....	0.61	15.5	Clear	
Buffalo, New York	29.20	741.7	29.90	759.4	45	7.2	96	SW	5	2.2	.....	.....	Fg	.....	.....	0.10	2.5	Dense fog	
Burlington, Vermont	29.65	753.1	29.93	760.2	60.0	15.6	80	S	7	3.1	.....	2ck	5s	E	S	0.29	7.4	Fair	
Cairo, Illinois	29.59	751.6	29.67	761.2	68	20.0	70	Calm	0	0	.....	5c	0	Calm	.....	0	0	Fair	
Campo, California	27.44	697.0	30.01	762.2	42	5.6	42	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Camp Thomas, Arizona	27.27	692.6	.....	.....	49	9.4	71	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Cape Henry, Virginia	29.90	759.4	29.92	760.0	60	15.6	88	SW	4	1.8	.....	0	0	.....	.....	0.17	4.3	Clear	
Cape May, New Jersey	29.86	758.4	29.89	759.2	58	14.4	94	S	10	4.5	.....	.....	10ks	.....	.....	0.34	8.6	Cloudy	
Castroville, Texas	29.14	740.1	29.83	757.7	59	15.0	88	W	4	1.8	.....	0	0	.....	.....	0.31	7.9	Clear	
Cedar Keys, Florida	29.89	759.2	29.91	759.7	72	22.2	67	NE	3	1.3	.....	8c	0	.....	.....	0	0	Fair	
Champaign, Illinois	29.18	741.2	29.96	761.0	55.5	13.1	68	N	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Charleston, S. Carolina	29.88	758.9	29.94	760.5	67	19.4	84	N	4	1.8	.....	8cs	0	N	.....	0	0	Cloudy	
Charlotte, N. Carolina	29.10	739.1	29.88	758.9	65.0	18.3	58	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Chattanooga, Tennessee	29.18	741.2	29.96	761.0	59	15.0	76	NW	2	0.9	.....	1c	0	Calm	.....	0	0	Clear	
Cheyenne, Wyoming	24.22	615.2	30.16	766.1	34	1.1	79	W	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Chicago, Illinois	29.30	744.2	29.98	761.5	53.6	12.0	73	N	10	4.5	.....	.....	10s	.....	.....	0	0	Cloudy	
Chincoteague, Virginia	29.90	759.4	29.92	760.0	58	14.4	94	W	8	3.6	.....	1k	0	W	.....	0.09	2.3	Clear	
Cincinnati, Ohio	29.32	744.7	29.96	761.0	58	14.4	82	E	3	1.3	.....	0	8k;fg	.....	.....	0	0	Dense smoke	
Cleveland, Ohio	29.24	742.7	29.96	761.0	52	11.1	93	SE	3	1.3	.....	10k	Fg	N	.....	0.04	1.0	Cloudy	
Coleman City, Texas	28.10	713.7	29.74	755.4	54	12.2	93	NW	4	1.8	.....	.....	10s	.....	NW	0.05	1.3	Cloudy	
Columbus, Ohio	29.10	739.1	29.92	760.0	56	13.3	81	NE	3	1.3	.....	.....	10ks	.....	N	0.02	0.5	Cloudy	
Concho, Texas	28.01	711.4	29.67	753.6	53	11.7	80	W	2	0.9	.....	5k	0	NW	.....	0.02	0.5	Fair	
Corsicana, Texas	29.45	748.0	29.90	759.4	63	17.2	83	NW	4	1.8	.....	0	2ks	.....	.....	1.47	37.3	Clear	
Davenport, Iowa	29.27	746.0	29.99	761.7	59	15.0	65	N	8	3.6	.....	1cs	0	Calm	.....	0	0	Clear	
Dayton, Washington T'y	28.33	719.6	29.98	761.5	54.3	12.4	67	SW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Deadwood, Dakota	25.49	647.4	.....	.....	50	10.0	32	SW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Decatur, Texas	28.70	729.0	29.84	757.9	61	16.1	88	W	6	2.7	.....	.....	10s	.....	.....	0.03	0.8	Cloudy	
Delaware Breakwater, Del.	29.88	758.9	29.90	759.4	56	13.3	94	SW	8	3.6	.....	.....	10ks	.....	SW	0.08	2.0	Cloudy	
Denison, Texas	29.08	738.6	29.85	758.2	69	20.6	90	W	2	0.9	.....	.....	10s	.....	Calm	0.61	15.5	Cloudy	
Denver, Colorado	24.96	634.0	30.18	766.6	42.3	5.7	79	S	4	1.8	.....	5ck	2s	E	Calm	0	0	Fair	
Des Moines, Iowa	29.20	741.7	30.07	763.8	56	13.3	69	NE	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Detroit, Michigan	29.26	743.2	29.94	760.5	55.5	13.1	87	S	5	2.2	.....	.....	10s	.....	NW	0	0	Cloudy	
Dodge City, Kansas	27.43	696.7	29.71	754.6	50	10.0	100	NE	26	11.6	.....	.....	10n	.....	N	1.82	46.2	Light rain	
Dubuque, Iowa	29.32	744.7	30.01	762.2	59.1	15.1	59	NW	5	2.2	.....	0	Hz	.....	.....	0	0	Clear	
Duluth, Minnesota	29.41	747.0	30.08	764.0	55	12.8	67	NW	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Eagle Pass, Texas	29.20	741.7	29.93	760.2	59	15.0	76	NW	4	1.8	.....	2ck	0	W	.....	0	0	Fair	
Eagle Rock, Idaho	25.39	644.9	30.04	763.0	44	6.7	52	W	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Eastport, Maine	30.03	762.7	30.10	764.5	46	7.8	100	NE	5	2.2	.....	.....	Fg	.....	NE	0.69	17.5	Dense fog	
El Paso, Texas	26.26	667.0	.....	.....	49	9.4	85	SE	3	1.3	.....	0	5s	.....	.....	0.21	5.3	Fair	
Erie, Pennsylvania	29.22	742.2	29.92	760.0	53	11.7	86	SW	7	3.1	.....	.....	10s	.....	.....	0.04	1.0	Cloudy	
Escanaba, Michigan	29.36	745.7	30.00	762.0	57	13.9	63	W	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Florence, Arizona	28.42	721.9	30.02	762.5	60	15.6	44	NE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Fort Apache, Arizona	25.04	636.0	30.49	774.4	37	2.8	71	NE	4	1.8	.....	0	0	.....	.....	Inap	Inap.	Clear	
Fort Assinnaboine, Montana	27.16	689.9	.....	.....	38	3.3	63	NE	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Fort Bennett, Dakota	28.47	723.1	.....	.....	55	12.8	62	S	2	0.9	.....	1c	0	NW	.....	0	0	Clear	
Fort Benton, Montana	27.15	689.6	.....	.....	51	10.6	59	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Buford, Dakota	27.95	709.9	29.77	750.1	50	10.0	86	S	2	0.9	.....	5cs	0	W	.....	0	0	Fair	
Fort Custer, Montana	26.79	680.5	.....	.....	47	8.3	77	SW	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Fort Davis, Texas	25.31	642.9	30.27	768.8	47	8.3	77	NE	7	3.1	.....	0	0	.....	.....	0.07	1.8	Clear	
Fort Elliott, Texas	27.14	689.3	29.40	746.7	48	8.9	85	N	20	8.9	.....	.....	10n	.....	N	0.42	10.7	Light rain	
Fort Gibson, Indian T'y	29.36	745.7	29.88	758.9	64	17.8	94	Calm	0	0	.....	.....	10n	.....	E	1.06	26.9	Light rain	
Fort Grant, Arizona	25.22	640.6	30.02	762.5	48	8.9	36	E	4	1.8	.....	0	0	.....	.....	0.03	0.8	Clear	
Fort Griffin, Texas	28.53	724.6	29.77	756.1	58.2	14.6	82	SW	7	3.1	.....	.....	10s	.....	N	0.02	0.5	Cloudy	
Fort Keogh, Montana	27.47	697.7	.....	.....	49	9.4	57	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Macon, North Carolina	29.92	760.0	29.93	760.2	63	17.2	94	N	4	1.8	.....	2k	0	Calm	.....	0.24	6.1	Clear	
Fort McKavett, Texas	27.69	703.3	29.51	749.5	50.2	10.1	86	SW	5	2.2	.....	0	0	.....	.....	0.78	19.8	Clear	
Fort Missoula, Montana	26.67	677.4	.....	.....	58	14.4	58	Calm	0	0	.....	5ck	0	.....	.....	0	0	Fair	
Fort St. Michaels	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Shaw, Montana	26.45	671.8	.....	.....	46	7.8	54	W	4	1.8	.....	5c	0	W	.....	0	0	Fair	
Fort Sill, Indian Territory	28.62	726.9	29.70	754.4	59	15.0	94	S	6	2.7	.....	.....	10s	.....	SW	0.02	0.5	Cloudy	
Fort Stevenson, Dakota	28.13	714.5	.....	.....	55	12.8	74	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Fort Verde, Arizona	.....	.....	.....	.....	53.7	12.1	43	NW	.....	.....	1	0	0	.....	.....	0	0	Clear	
Fredericksburg, Texas	28.19	710.0	29.74	755.4	57	13.9	87	NW	4	1.8	.....	0	0	.....	.....	1.12	28.4	Clear	
Galveston, Texas	29.84	757.9	29.88	758.9	71	21.7	90	W	4	1.8	.....	.....	10n	.....	NW	0.52	13.2	Light rain	
Grand Haven, Michigan	29.32	744.7	29.95	760.7	57	13.9	75	NE	3	1.3	.....	.....	10s	.....	NW	0	0	Cloudy	
Hatteras, North Carolina	29.92	760.0	29.94	760.5	64	17.8	83	E	10	4.5	.....	.....	10ks	.....	SW	0.13	3.3	Cloudy	
Helena, Montana	25.81	655.6	.....	.....	51	10.6	46	S	2	0.9	.....	5k	0	Calm	.....	0	0	Fair	
Henrietta, Texas	28.86	733.0	29.77	756.1	58	14.4	100	SW	6	2.7	.....	.....	10n	.....	.....	0.02	0.5	Light rain	
Indianapolis, Indiana	29.16	740.7	29.92	760.0	62	16.7	46	Calm	0	0	.....	Hz	Hz	Calm	Calm	0	0	Clear	
Indianola, Texas	29.87	758.7	29.90	759.4	68.2	20.1	90	NW	9	4.0	.....	8cs	0	N	.....	0.58	14.7	Fair	
Jacksboro, Texas	28.72	729.5	29.83	757.7	57	13.9	94	NW	6	2.7	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
Jacksonville, Florida	29.67	758.7	29.92	760.0	74	23.3	76	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Keokuk, Iowa	29.34	745.2	29.98	761.5	63.0	17.2	69	NE	8	3.6	.....	2c	0	N	.....	0	0	Fair	
Key West, Florida	29.93	760.2	29.96	761.0	79.3	26.3	67	W	10	4.5	.....	5k	Hz	.....	.....	0	0	Fair	
Kittyhawk, North Carolina	29.93	760.2	29.96	761.0	61	16.1	88	SW	4	1.8	.....	2ck	0	.....	.....	0.08	2.0	Fair	
Knoxville, Tennessee	29.00	736.0	30.00	762.0	53	11.7	86	N	1	0.4	.....	8c	0	NW	.....	0	0	Fair	
La Crosse, Wisconsin	29.28	743.7	30.02	762.5	60.2	15.7	65	N	7	3.1	.....	0	0	.....	.....	0	0	Clear	
La Mesilla, New Mexico	20.13	663.7	30.28	769.1	47	8.3	77	Calm	0	0	.....	0	5s	.....	.....	0.20	5.1	.....	
Laredo, Texas	29.58	751.3	29.92	760.0	65	18.3	89	N	4	1.8	.....	8c	0	NE	.....	0	0	Fair	
Leavenworth, Kansas	29.17	740.9	30.00	762.0	60	15.6	65	N	6	2.7	.....	.....	10s	.....	.....	0.05	1.3	Cloudy	
Lewiston, Idaho	29.17	740.9	29.81	757.2	55	12.8	38	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Little Rock, Arkansas	29.01	752.1	29.92	760.0	66	18.9	84	E	4	1.8	.....	.....	10s	.....	.....	0	0	Threatening	
Los Angeles, California	29.57	751.1	29.93	760.2	54.2	12.3	74	W	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Louisville, Kentucky	29.37	746.0	29.91	759.7	62.4	16.9	72	W	1	0.4	.....	0	Sk	.....	.....	0	0	Clear	
Lynchburg, Virginia	29.20	743.2	29.93	760.2	61	16.1	55	NW	5	2.2	.....	0	0	.....	.....	0.04	1.0	Clear	
Madison, Wisconsin	29.01	736.8	29.98	761.5	58	14.4	76	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Marquette, Michigan	29.32	744.7	30.01	762.2	57	13.9	63	W	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Mason, Texas	28.29	718.6	30.04	763.0	58.2	14.6	82	W	5	2.2	.....	0	0	.....	.....	0.18	4.6	Clear	
Memphis, Tennessee	29.63	752.6	29.96	761.0	68	20.0	60	E	1	0.4	.....	5ck	Hz	SW	Calm	0	0	Fair	
Milwaukee, Wisconsin	29.27	743.4	29.98	761.5	55	12.8	61	N	9	4.0	.....	1ck	Sk	.....	.....	0	0	Fair	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.86	758.4	29.94	760.5	66	18.9	80	NW	4	1.8	.....	5ck	b	W	.....	0	0	Fair	
Montgomery, Alabama	29.73	755.1	29.97	761.2	62.2	16.8	71	NE	3	1.3	.....	2c	0	NW	.....	0	0	Clear	
Moorhead, Minnesota	29.08	738.6	30.03	762.7	51	10.6	79	SE	8	3.6	.....	5c	0	.....	.....	0	0	Fair	
Morgantown, W. Virginia	28.97	735.8	29.95	760.7	54	12.2	87	W	4	1.8	.....	.....	10s	.....	NW	0.22	5.6	Cloudy	
Mt. Washington, N. H.	23.79	604.3	30.15	765.8	39	3.9	100	SE	32	14.3	.....	.....	10n;fg	.....	SE	2.91	73.9	Light rain	
Nashville, Tennessee	29.44	747.8	29.90	761.0	60.5	15.8	77	Calm	0	0	.....	0	Sk	.....	.....	0	0	Dense smoke	
New Haven, Connecticut	29.85	758.4	29.98	761.5	51	10.6	93	Calm	0	0	.....	.....	10s;fg	.....	.....	0.71	18.0	Cloudy	
New London, Connecticut	29.96	761.0	30.00	762.0	50	10.0	100	NW	4	1.8	.....	.....	Fg	.....	.....	0.80	20.3	Dense fog	
New Orleans, Louisiana	29.85	758.2	29.90	759.4	72.0	22.2	78	S	1	0.4	.....	.....	10s	.....	S	Inap.	Inap	Threatening	
Newport, Rhode Island	29.94	760.5	29.99	761.7	52.0	11.1	98	Calm	0	0	.....	.....	Fg	.....	.....	0.15	3.8	Light rain	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	29.96	761.0	29.99	761.7	49.2	9.6	93	Calm	0	0	.....	.....	Fg	.....	Calm	0.85	21.8	Dense fog	
New York, New York	29.78	756.4	29.90	761.0	52.5	11.4	97	E	7	3.1	.....	.....	10n;fg	.....	.....	0.01	0.3	Light rain	
Norfolk, Virginia	29.87	758.7	29.93	760.2	62	16.7	83	NW	5	2.2	.....	2c	0	.....	.....	0.15	3.8	Clear	
North Platte, Nebraska	27.20	692.4	29.90	759.4	39	3.9	82	W	3	1.3	.....	5c	0	W	.....	0	0	Fair	
Olympia, Washington T'y	30.15	765.8	30.19	766.8	38.0	3.3	94	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Omaha, Nebraska	28.97	735.8	30.00	763.5	54.5	12.5	84	N	6	2.7	.....	0	1s	.....	.....	0	0	Clear	
Oswego, New York	29.50	750.8	29.88	758.9	56.6	13.7	90	NW	1	0.4	.....	.....	10s	.....	.....	0.35	8.9	Cloudy	
Pensacola, Florida	29.90	759.4	29.93	760.2	69	20.6	80	W	3	1.3	.....	8cs	0	W	.....	0	0	Fair	
Philadelphia, Pa	29.86	758.4	29.91	759.7	55	12.8	93	NE	9	4.0	.....	.....	10n;fg	.....	.....	0.19	4.8	Light rain	
Phœnix, Arizona	28 81	731.8	30.00	777.2	57	13.9	63	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.83	452.9	30.04	763.0	8	—13 3	33	NE	8	3.6	.....	0	5s	.....	NE	0.16	4.1	Fair	
Pioche, Nevada	24.12	612.6	29.89	759.2	48	8.9	36	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Pittsburg, Pennsylvania	29.14	740.1	29.94	760.5	54	12.2	87	NW	6	2.7	.....	.....	Fg	.....	Calm	0.17	4.3	Dense fog	
Port Eads, Louisiana	29.90	759.4	29.91	759.7	71.1	21.7	90	SE	2	0.9	.....	1ck	8s	SE	Calm	0	0	Cloudy	
Port Huron, Michigan	29.28	743.7	29.93	760.2	52.5	11.4	79	S	1	0.4	.....	2ck	0	NW	.....	Inap.	Inap.	Clear	
Portland, Maine	29.90	761.0	30.01	762.2	50	10.0	93	NE	3	1.3	.....	.....	Fg	.....	.....	0.21	5 3	Dense fog	
Portland, Oregon	30.13	765.3	30.20	767.1	43.7	6.5	77	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Portsmouth, N. Carolina	.....	.....	.....	.....	63	17.2	78	E	6	2.7	.....	5k	0	NE	.....	0	0	Fair	
Prescott, Arizona	24.80	629.9	30.10	766.1	43	6.1	59	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	29.92	760.0	29.94	760.5	74	23.3	59	E	4	1.8	.....	2c	0	Calm	.....	0	0	Fair	
Red Bluff, California	29.55	750.6	29.89	759.2	63.5	17.5	70	NW	1	0.4	.....	5c	0	Calm	.....	0	0	Fair	
Rio Grande City, Texas	29.75	755.6	29.90	761.0	65	18.3	94	Calm	0	0	.....	0	0	.....	.....	0.72	18.3	Clear	
Rochester, New York	29.20	743.2	29.86	758.4	56	13.3	87	W	10	4.5	.....	.....	10ks	.....	W	0.35	8.9	Cloudy	
Roseburg, Oregon	29.56	750.8	30.13	765.3	51	10.6	79	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Sacramento, California	29.86	758.4	29.93	760.2	56.6	13.7	75	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
St. Louis, Missouri	29.40	746.7	29.90	761.0	65.0	18.3	66	N	4	1 8	.....	5c	0	NW	.....	0	0	Fair	
St. Paul, Minnesota	29.24	742.7	30.05	763.5	53	11.7	73	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Salt Lake City, Utah	25.72	653.3	30.05	763.3	48	8.9	43	SE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
San Antonio, Texas	29.24	742.7	29.93	760.2	59.7	15.4	88	Calm	0	0	.....	0	1s	.....	Calm	0.19	4.8	Clear	
San Diego, California	29.82	757.4	29.89	759.2	57.3	14.1	94	NW	4	1.8	.....	.....	Fg	.....	.....	0	0	Dense fog	
Sandusky, Ohio	29.27	743.4	29.93	760.2	55	12.8	81	S	4	1.8	.....	.....	10s	.....	.....	0.05	1.3	Cloudy	
Sandy Hook, New Jersey	29.92	760.0	29.95	760.7	54.0	12.2	100	SE	11	4.9	.....	.....	10n	.....	.....	0.16	4.1	Light rain	
San Francisco, California	29.93	760.2	30.00	762.0	51	10.6	89	SW	7	3.1	.....	.....	Fg	.....	SW	.....	.....	Foggy	
Santa Fé, New Mexico	23.30	591.8	29.84	757.9	38	3.3	63	N	2	0.9	.....	8c	0	SE	.....	0.42	10.7	Fair	
Savannah, Georgia	29.85	758.2	29.94	760.5	69	20.6	75	W	3	1.3	.....	2cs	Fg	.....	.....	0	0	Fair	
Shreveport, Louisiana	29.68	753.9	29.91	759.7	67	19.4	95	E	3	1.3	.....	.....	10s	.....	.....	1.32	33.5	Cloudy	
Silver City, New Mexico	24.28	616.7	30.61	777.5	36	2.2	81	Calm	0	0	.....	0	2s	.....	Calm	0.51	13.0	Clear	
Sitka Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.26	6.6	.....	
Smithville, North Carolina	29.89	759.2	29.93	760.2	61	16.1	100	N	4	1.8	.....	0	Fg	.....	.....	0.83	21.1	Clear	
Socorro, New Mexico	25.50	647.7	29.57	751.1	50	10.0	58	NE	3	1.3	.....	.....	10s	.....	NE	0.16	4.1	Cloudy	
Spokane Falls, Wash. Ter.	27.95	709.9	29.78	756.4	48	8.9	56	SW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Springfield, Illinois	29.33	745.0	29.98	761.5	61.5	16.4	63	NE	2	0.9	.....	0	2s;hz	.....	N	0	0	Fair	
Springfield, Massachusetts	29.85	758.2	29.98	761.5	57	13.9	87	SE	2	0.9	.....	.....	10s;fg	.....	E	0.24	6.1	Cloudy	
Stockton, Texas	29.98	685.3	29.98	761.5	47.2	8.4	100	W	12	5.4	.....	.....	10n	.....	W	0.95	1.3	Light rain	
St. Vincent, Minnesota	29.19	741.4	29.98	761.5	49	9.4	85	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Thatcher's Island, Mass	29.94	760.5	30.00	762.0	47	8.3	100	NE	1	0.4	.....	.....	Fg	.....	.....	0.23	5.8	Dense fog	
Toledo, Ohio	29.26	743.2	29.93	760.2	58	14.4	82	NW	2	0.9	.....	5ck	Sk	NW	.....	0	0	Fair	
Tucson, Arizona	27.49	698.2	30.04	763.0	63	17.2	42	N	17	7.6	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.72	754.9	30.22	767.6	49.3	9.6	69	SE	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Uvalde, Texas	28.99	730.3	29.81	757.2	57	13.9	75	N	1	0.4	.....	0	0	.....	.....	0.70	17.8	Clear	
Vicksburg, Mississippi	29.04	752.8	29.89	759.2	68	20.0	55	E	6	2.7	.....	.....	10s	.....	W	0	0	Cloudy	
Visalia, California	29.53	750.0	29.89	759.2	62	16.7	61	N	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C.	29.81	757.2	29.92	760.0	57	13.9	87	NW	6	2.7	.....	0	1ks	.....	N	0.73	18.5	Clear	
Wickenburg, Arizona	.....	.....	.....	.....	59	15.0	43	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	29.89	759.2	29.95	760.7	62	16.7	88	W	4	1.8	.....	.....	10s	.....	.....	0.45	11.4	Cloudy	
Winnemucca, Nevada	25.66	651.8	30.02	762.5	43	6.1	51	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Wood's Holl, Mass	29.95	760.7	29.99	761.7	52	11.1	85	Calm	0	0	.....	.....	10s	.....	Calm	0.14	3.6	Cloudy	
Yankton, Dakota	28.82	732.0	30.11	764.8	56	13.3	57	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Yuma, Arizona	29.72	754.9	29.87	758.7	65.7	18.7	45	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.09	561.1	.....	.....	55.0	12.8	77	Calm	0	0	.....	2ck;cs	2ks	.....	.....	0	0	Fair	Thomas Herran
Bull Bay Town, Jamaica	29.74	755.4	30.06	763 5	77	25.0	69	E	.....	.....	.....	2c	2k	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.92	760.0	29.97	761.2	79	26.1	74	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	A. Van Caneghem, Ass't.
Jakobshavn, Greenland	29.94	760.5	29.99	761.8	26.6	—3	.....	N	.....	.....	4	.....	10	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I.	29.93	760.2	29.94	760.5	81.2	27.3	70	Calm	0	0	.....	5ck	0	S	.....	0	0	Fair	Robert Johnstone
Navassa, W. I.	29.85	758.2	29.93	760.2	79	26.1	82	SE	10	4.5	.....	5cs	5k	S	N	0.10	2.5	Fair	F. M. Everett.
Paramaribo, S. A.	30.03	762.7	30.01	763.0	80	26.7	87	E	.....	.....	2	.....	8ks	E	.....	0.130	3.3	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Colombia	29.44	747.8	30.00	762.0	77	25.0	94	Calm	.....	.....	0	.....	10ks	.....	Calm	0.13	3.3	Threatening	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	77.0	25	.....	SW	.....	.....	1	9ck	0	SE	.....	0.43	11.	.....	Earl Flint.
Santiago de Cuba, W. I.	29.93	760.2	29.95	760.7	79	26.1	82	Calm	0	0	.....	4k	2n	S	.....	0.06	1.5	Fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.91	759.7	29.95	760.7	28.0	— 2.2	94	NW	12	5.4	.....	.....	10s	.....	NW	0.62	15.7	Threatening	J. Fortescue & W Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r.	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross, N. 34° 30′, E. 124° 31′	30.04	763.0	54	12.2	.....	NE	.....	.....	1-2	.....	2	.....	.....	.....	.....	5	E	D. clouds.....	Comm. A. J. Errington.
H. M. S. Alert	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.99	761.7	71	21.7	71	N	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	Blue sky.....	Capt. Lord Walter Kerr.
H. M. S. Antelope	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Hon. W. H. Joliffe.
H. M. S. Arab	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Comm. R. W. Stopford.
H. M. S. Bacchante	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Lord C. Scott.
H. M. S. Beacon, N. 23° 38′, E. 58° 36′	29.62	752.3	87	30.6	84	ESE	.....	.....	1	.....	1	E	.....	.....	.....	.....	.....	Blue sky.....	Comm. G. W. Haud.
H. M. S Bittern, Constantinople, Turkey	.....	.....	56	13.3	.....	NNE	.....	.....	3	.....	8	NNE	.....	.....	.....	2	NNE	Drizzling.....	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	29.95	760.7	81	27.2	91	Calm	.....	.....	0	.....	4	.....	.....	.....	.....	.....	.....	D. clouds.....	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	30.06	763.5	66	18.9	68	E	.....	.....	1-3	.....	1	E	.....	.....	.....	.....	.....	Blue sky.....	Com. F. W. Richards.
H. M. S. Champion, Ascension I'ds, Africa	29.90	759.4	83	28.3	71	SE	.....	.....	2	.....	4	SSE	.....	.....	.....	2	SE	D. clouds....	Capt. G. R. Hope.
H. M. S Cockatrice	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. H. T. Gerfell.
H. M. S. Comus, Chusan Archipelago	29.91	759.7	62	16.7	100	N	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	Misty.....	Capt. J. W. East.
H. M. S. Condor	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Comm. F. W. Egerton.
H. M. S. Coquette	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lt. Comm. J. L. Barr
H. M. S. Cruizer, N. 36° 59′, E. 15° 28′	29.89	759.2	70	21.1	.....	NNW	.....	.....	1	.....	0	.....	.....	.....	.....	5	ENE	Blue sky.....	Capt. F. A. Wetherall.
H. M. S. Curacoa	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. S. Long.
H. M. S. Danae, S. 8° 28′, W. 120° 00′	29.97	761.2	80	26.7	82	E	.....	.....	2	.....	1	.....	.....	.....	.....	2	ESE	Blue sky.....	Capt. J. C. Parvis.
H. M. S. Daring, N. 5° 43′, E. 82° 56′	29.75	755.6	84	28.9	.....	SW	.....	.....	6	.....	2	SW	.....	.....	.....	3	SW	D. clouds ...	Capt. F. J. Elliott.
H. M. S. Dido	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.02	762.5	74	23.3	81	SE	.....	.....	1	.....	1	SE	.....	.....	.....	.....	.....	D. clouds.....	Capt. J. Barnardiston.
H. M. S. Dragon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Hulton.
H. M. S. Druid, N. 47° 34′, W. 52° 41′	30.28	769.1	36	2.2	80	N	.....	.....	3-4	.....	10	.....	.....	.....	.....	1	NE	Squally	Capt. W. R. Kennedy.
H. M. S. Dryad	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. John Hext.
H. M. S. Eclipse, N. 8° 34′, E. 81° 10′	29.67	753.6	90	32.2	.....	SW	.....	.....	1-3	.....	2	.....	.....	.....	.....	.....	.....	D. clouds.....	Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 1° 45′, E. 104° 30′	29.75	755.6	86	30.0	.....	S	.....	.....	3	.....	2	S	.....	.....	.....	3	S	Misty.....	Comm. C. Johnstone.
H. M. S. Emerald, S. 5° 53′, E. 176° 58′	29.81	757.2	84	28.9	.....	ESE	.....	.....	1-2	.....	6	ESE	.....	.....	.....	1	ESE	Showery....	Capt. W. H. Maxwell.
H. M. S. Encounter	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. L. Ching.
H. M. S. Euryalus, S. 2° 21′, E. 82° 56′	29.77	756.1	81	27.2	83	SSE	.....	.....	3-4	.....	9	SSE	.....	.....	.....	4-5	SE	Raining.....	Capt. R. D. King.
H. M. S. Falcon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Comm. W. H. C. Selby.
H. M. S. Fantome	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. W. C. Karslake.
H. M. S. Fawn, N. 14° 03′, E. 42° 44′	29.72	754.9	88	31.1	80	N	.....	.....	1	.....	2	N	.....	.....	.....	.....	.....	D. clouds....	Capt. P. Aldrich.
H. M. S. Flamingo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Comm. R. N. Custance.
H. M. S. Flying Fish	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 44° 00′, W. 135° 10′	30.49	774 4	50	10.0	72	ENE	.....	.....	4-6	.....	6	.....	.....	.....	.....	2	WNW	D. clouds.....	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.28	743.7	40	4.4	73	NNW	.....	.....	2	.....	9	.....	.....	.....	.....	.....	.....	Overcast.....	Capt. L. F. Jones.
H. M. S. Griffin, N. 22° 15′, W. 85° 05′	29.92	760.0	80	26.7	87	SE	.....	.....	2	.....	2	SE	.....	.....	.....	1	SE	D. clouds.....	Comm. J. Ingles.
H. M. S. Hecla	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. T. L. H. Ward.
H. M. S. Humber	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. J. L. Way.
H. M. S. Inconstant, S. 39° 00′, E. 143° 30′	30.33	770.4	58	14.4	82	WNW.	.....	.....	1	.....	5	WNW	.....	.....	.....	1	WSW	D*clouds.....	Capt. C. C.P. Fitzgerald.
H. M. S. Iris, Alexandria, Egypt	29.75	755.6	75	23.9	81	WSW	.....	.....	3	.....	4	.....	.....	.....	.....	2	WSW	D. clouds.....	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 27° 07′, E. 122° 12′	29.89	759.2	76	24.4	91	N	.....	.....	1	.....	4	.....	.....	.....	.....	.....	.....	D. clouds....	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.00	762.0	66	18.9	.....	Calm	.....	.....	0	.....	6	Calm	.....	.....	.....	.....	.....	D. clouds.....	Comm. R. H. Thornton.
H. M. S. Lapwing	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	29.90	759.4	59?	15.0?	.....	N	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	Raining.....	Capt. S. Grove.
H. M. S. London	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. C. J. Brownrigg.
H. M. S. Magpie, Now Chow, China	29.84	757.9	82.7	28.2	82	E	.....	.....	2	.....	3	.....	.....	.....	.....	.....	.....	D. clouds.....	Capt. A. Carpenter.
H. M. S. Midge, N. 23° 36′, E. 118° 33′	29.92	760.0	.....	.....	.....	S	.....	.....	3	.....	4	SW	.....	.....	.....	2	SW	D. clouds.....	Capt. W. N. Lang.
H. M. S. Minotaur, N. 36° 07′, W. 5° 21	29.96	761.0	69	20.6	85	SSW	.....	.....	4	.....	2	SSW	.....	.....	.....	.....	.....	D. clouds....	Capt. H. H. Rawson.
H. M. S. Modeste, N. 1° 20′, E. 105° 56′	29.76	755.9	84	28.9	87	Calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	Blue sky.....	Capt. J. G. Mead.
H. M. S. Monarch Goletta, Tunis, N. Africa	30.06	763.5	64	17.5	69	NNE	.....	.....	1	.....	1	NNW	.....	.....	.....	.....	.....	Blue sky.....	Capt. G. C. Tryon.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. hr	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	30.13	765.3	50	10.0	96	SSE			1									Foggy	Capt. E. B Drummond.
H. M. S. Orontes, S. 28° 18′, E. 40° 25′ †.	30.03	762.7	68.5	20.3	90	S			4-5		6	SSW				4	SSW	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.87	758.7	77	25.0		NW			1		8					2	NW	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin, S. 53° 04′, W. 73° 56′	29.21	741.9	40	4.4		N			2-5		10							Raining	Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler, N. 2° 19′, E. 8° 50′	29.87	758.7	82	27.8		SSW			3		10	S				4	SSW	D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	30.18	766.6	41	5.0		Calm			0									Blue sky	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.88	758.9	82.4	28.0	85	SE			2		9							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis.																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis, N. 48° 16′, W. 5° 20′	30.06	763.5	56	13.3	80	W			2		0					3	NW	Blue sky	Capt. G. O. Twiss.
H. M. S. Shannon, N. 7° 00′, W. 25° 01′	30.00	762.0	80.5	26.9	85	NNE			4		3	NNE				5	NNE	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 8° 55′, W. 146° 18′	29.85	758.2	83	28.3	83	N			3		4					3	SE	D. clouds	Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A.	30.00	762.0	56	13.3	87	S			1-2		10	Calm						Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 32° 42′ E. 29° 00′	29.71	754.6	67	19.4	79	E			4		2	W				1	WSW	D. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.			80	26.7		ENE			1		3							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, S. 34° 33′, E. 156° 49′	30.24	768.1	64	17.8	83	SSW			2-3		7	SSW				2	S	Showery	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, Abu Shehr Roads, Persia.	29.60	751.8	88.5	31.4	67	NW			4-5		0					Sm'h		Misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollar
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, Mossamedes, Benguela	30.03	762.7	62.2	16.8	81	NNW			3		4					1		D. clouds	Carlos Candid dos Reis, Comd't.
Quanza, N. 18° 05′, W. 25° 01′	30.16	766.1	76.1	24.5	67	NE			4		2		NE			3	NE	D. clouds	Carlos M. de Silva Costa, Comd't.
Rio Lima																			S. C da Silva Costa, Comd't.
Sado																			G. A de Brito Capello, Comd't.
Tamega, Macao, China	29.87	758.7	81.1	27.3	88	SSW			3		1		SSW					Blue sky	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

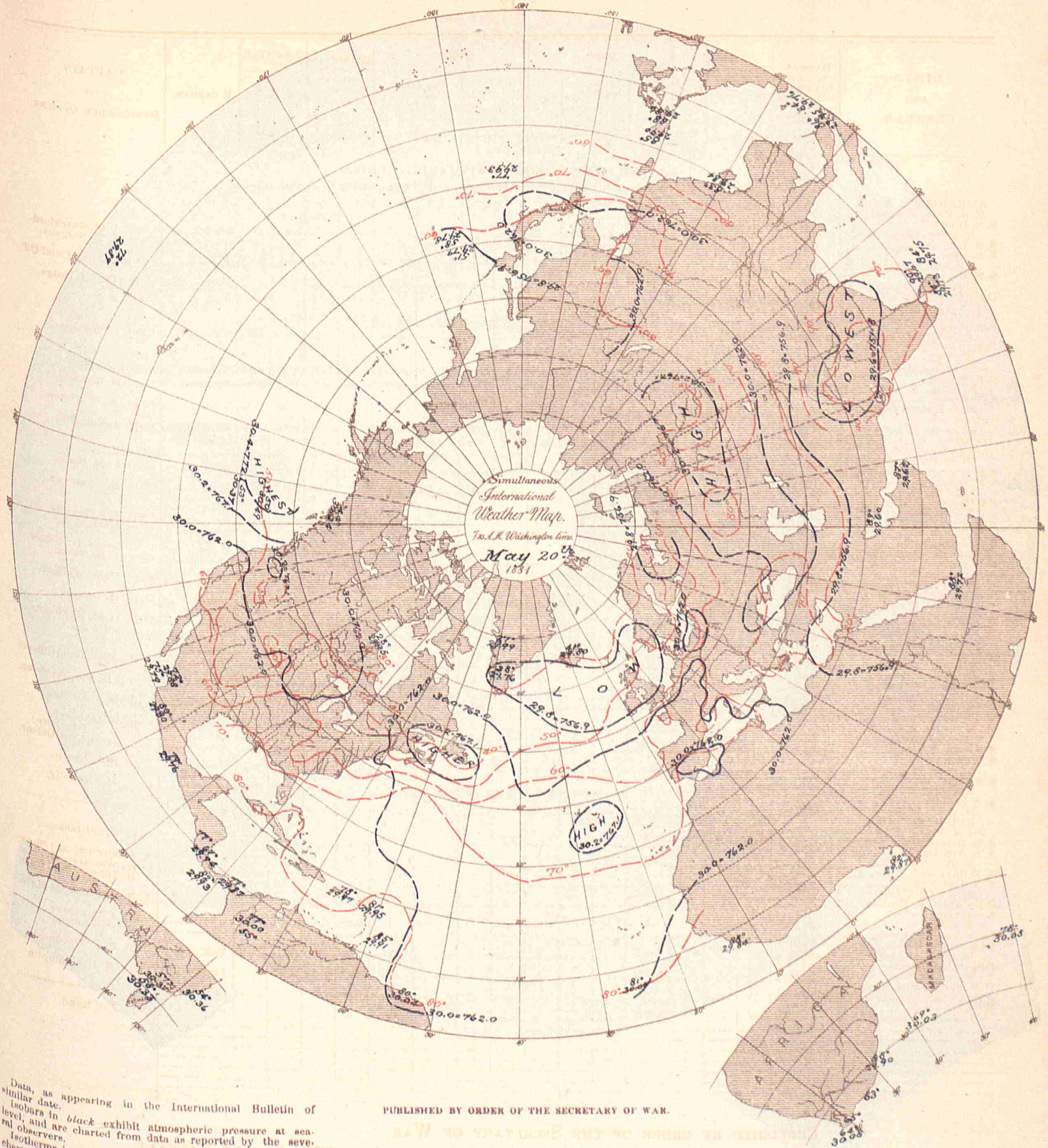
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.	Force	Amount and kind.		Direction				Character.	Dir'n from.		
									Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	29.99	761.7	68	20.0	84	NW	3	1.3		8		NE	0	0			Fair	
N. Yard, Portsmouth, N. H.	29.99	761.7	49	9.4	100	NE	2	0.9	10c	0	NE		0.09	2.3			Foggy	
Naval Hospital, Yokahama, Japan	29.89	759.2	59.5	15.3	73	N			3	0			Slight				Hazy	
Adams, Payta, Peru	29.80	756.9	69	20.6	85	ESE			2	5		E			Sm'h		Fair	
Alaska, Callao, Peru	29.93	760.2	64	17.8	89	Calm			0	5		E	0	0	Sm'h		Fair	
Alert, Port Lloyd, Bonin Id.*	29.93	760.2	77	25.0	82	NNW			1	2		Calm			Sm'h		Clear	
Alliance, Norfolk, Va	29.93	760.2	63	17.2	89	W			1	2			Light				Clear	
Ashuelot, Kobe, Japan	30.11	764.8	56	13.3	63	W			1	10		Calm					Cloudy	
Colorado, New York, N. Y	29.93	760.2	54	12.2	100	E	1	0.4		10			0.01	0.3			Raining	
Constitution, Norfolk, Va	29.85	758.2	62	16.7	83	NW	2	0.9		2							Fair	
Franklin, Norfolk, Va	29.86	758.4	59	15.0	88	WNW	6	2.7		0			0.04	1.0			Clear	
Galena, Villafranca, France	30.01	762.2	68	20.0	79	SW			2	0					Sm'h		Clear	
Independence, N. Yard, Mare I'd, Cal	29.99	761.7	56	13.3	81	SW	2.4	1.1		8		SW					Fair	
Jamestown, Sitka, Alaska*	30.34	770.6	44	6.7	92	N			2	10			0.10	2.5			Cloudy	
Kearsarge, Port Royal, S. C	29.96	761.0	71	21.7	80	N			1	2					Sm'h		Fair	
Lackawanna, S. 17° 40′, W. 110° 12′.†	30.18	766.6	75	23.9	100	N			2-3	10		N			Sm'h	NE	Fair	
Marion, Montevideo, Uruguay	30.15	765.8	53	11.7	86	N			2	10		Calm	0	0	Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	29.89	759.2	52	11.1		W	2	0.9		10		W					Cloudy	
Minnesota, Newport, R. I	30.00	762.0	56	13.3	94	N			0-1	10					Sm'h		Foggy	
Monocacy, Yokohama, Japan	30.06	763.5	61	16.1	71	E			2	5		NE					Fair	
New Hampshire, Port Royal, S. C	29.92	760.0	71	21.7	80	NNE	7	3.1		5		NW	0	0			Fair	
Nipsic, Villafranca, France	30.03	762.7	73	22.8	63	S			1	0					Sm'h		Blue sky	
Onward, Callao, Peru.†	29.99	761.7	64	17.8	94	Calm			0	2					Long	W	Clear	
Palos, N. 35° —′, E. 135° —′	30.01	762.2	53	11.7	86	N			1	10					Short	N	Squally	
Passaic, Washington, D. C	29.93	760.2	57	13.9	100	SW			2	8		SW					Cloudy	
Pensacola, N. 39° 55′, W. 138° —′	30.37	771.4	53	11.7	93	NE			4-5	10			0	0	R'gh	NE	Cloudy	
Portsmouth, Elizabeth River, Va	29.93	760.2	62	16.7	100	SW			2	5?		SW			Sm'h		Clear?	
Powhatan, Port Royal, S. C	29.93	760.2	74	23.3	81	NE			3	2		SE					Fair	
Quinnebaug, N. 22° 56′, W. 32° 49′	30.14	765.5	74	23.3	68	SSE			2	5		E			Sm'h		Fair	
Ranger, N. 15° 44′, W. 96° 08′.*	29.76	755.9	79	26.1	78	NW			1	2		Calm	0.3	8.	Sm'h		Fair	
Richmond, Yokohama, Japan	30.06	763.5	62	16.7	61	ESE			3	10			0	0			Hazy	
Saratoga, Norfolk, Va	29.91	759.7	62	16.7	83	W			1	2		W	Moderate				Fair	
Shenandoah, Montevideo, Uruguay.*	30.15	765.8	51	10.6	93	NNW			3	8					Sm'h		Fair	
St. Louis, League Island, Pa	29.47	748.5	56	13.3	87	NE	4	1.8		10			0.33	8.4			Raining	
Swatara, Shanghai, China.†*	29.93	760.2	62	16.7	94	NNE			2	10		Calm					Drizzling	
Tennessee, Hampton Roads, Va	29.94	760.5	60	15.6	94	NW	18	8.0		0			0.10	2.5	Sm'h		Clear	
Ticonderoga, S. 46° 03′, W. 99° 02′	29.95	760.7	50	10.0	100	NE			3	10		NE	0	0	Long	SW	Cloudy	
Trenton, Villafranca, France.*	30.00	762.0	71	21.7	71	SSW			1	0			0	0	Sm'h		Clear	
Vandalia, Boston Mass	29.97	761.2	50	10.0	93	NE			1	Fg							Foggy	
Wabash, Boston, Massachusetts	30.04	763.0	48	8.9	93	ENE	1	0.4		10		NE	0.26	6.6			Foggy	
Wachusetts, San Francisco, Cal	29.99	761.7	55	12.8	93	SW			2	8		S			Sm'h		Fair	
Wyoming, N. 35° 18′, W. 73° 13′	29.95	760.7	67	19.4	79	WNW			1	10		WNW			Sm'h	SSE	Cloudy	

LINES AND VESSELS.	BAROMETER REDUCED TO SEA-LEVEL.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND.				CLOUDS.				RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		SEA-SWELL.		WEATHER.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 23° 10′, W. 49° 00′	30.03	762.7	76	24.4	86	ESE			4		5					4	ESE	D. clouds	W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 47° 33′, W. 17° 06′	30.04	763.0	54.5	12.5	74	WNW			4		4							D. clouds	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow ‡																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee, ‡ N. 28° 12′, W. 39° 12′	30.03	762.7	70.3	21.3	80	E			5		4							D. clouds	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ S. 3° 40′, W. 19° 23′	29.94	760.5	84	28.9	75	E			4		5							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 6° 07′, E. 79° 41′	29.73	755.1	83.5	28.6	91	WSW			4		5							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, ‡ N. 40° 42′, E. 2° 35′	30.12	765.0	65.5	18.6	92	ESE			2		3							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 54° 41′, W. 18° 01′	29.69	754.1				SSW			4		8		W			Cross	SW; NE	Fair	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Scythia, N. 40° 32′, W 62° 41′	29.93	760.2	71	21.7	90	E			2		8			Showers		Mod.	S	Showery	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 50° 33′, W. 18° 35′ †	29.81	757.2	52	11.1		WSW			4		8		W					D. clouds	Capt. J. W. Jennings.
S. S. Baltic. Sandy Hook, N. J.	29.90	759.4	50	10.0	100	Calm			0		10						S	Foggy	Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 50° 51′, W. 16° 34′ †	29.85	758.2	57	13.9		W			4		8		WNW	0	0	Mod.	WNW	Fair	Capt. Benj. Gleadell.
S. S. Germanic, Queenstown, Ireland †	29.97	761.2	52	11.1		NW			4		5?		NW	Showers				Clear?	Capt. Ch. W. Kennedy
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. O. Thol.
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, ‡ N. 44° 53′, W. 36° 05′	29.93	760.2	62.4	16.9		SW			5		5		WSW	0	0	Mod.	WSW	Cloudy	Capt. Th. Jüngst.
S. S. Köln																			Capt. F. Pfeiffer.
S. S. Leipzig																			Capt. G. Meyer.
S. S. Ohio																			Capt. C. Heimbourh.
S. S. Strassburg																			
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 39° 15′, W. 59° 16′	30.11	764.8	74	23.3	95	S			3		2		S			Sm'h	S	Clear	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio, N. 50° 07′, W. 14° 20′ †*	30.05	763.3	59	15.0	100	SW			2		5		WSW	Showers		Mod.	NNE	Fair	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, Liverpool, England *†‡	29.76	755.9	55	12.8	87	W			3		5		W					Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 23° 04′, W. 107° 34′ †‡	29.74	755.4	75	23.9	90	NW			3		2		NW	0	0	Sm'll	SW	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 39° 39′, E. 154° 21′ †‡	29.78	756.4	58	14.4	82	W			5		10		SW	Rain		Mod.	SW	Overcast	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China *†‡	29.99	761.7	86	30.0	84	SW			3		2		SW					Clear	Capt. W. H. Kidley.
S. S. Oceanic, N. 40° 03′, E. 152° 53′	29.79	756.7	51	10.6	65	W			5		2		WNW			Mod.	W	Blue sky	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, N. 38° 55′, W. 123° 55′ †‡	29.93	760.2	52	11.1	73	SSE			2		10		SE			Sm'h	NW	Hazy	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, Esquimalt, Vancouver I'd †	30.20	767.1	48	8.9	100	WSW			3		0							Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, N. 34° 02′, W. 119° 06′ †‡	29.88	758.8	57	13.9	94	NE			2		0					Sm'h		Clear	Capt. Thos. Wallace.
S. S. State of California, N. 38° 00′, W. 123° 05′ †‡	29.93	760.2	52	11.1	93	Calm			0		10					Sm'h	NW	Foggy	Capt. G. Debney.
S. S. Victoria, New Westminster, Brit. Col †	30.15	765.7	49	9.4	93	Calm			0		2					Sm'h		Clear	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 33° 51′ E. 158° 02′	30.22	767.6	60	15.6	76	ESE			4		8		SE			Mod.	SE	Cloudy	A. Bannerman, 2d Officer.
S. S. City of New York, Sydney, N. S. W †	30.36	771.1	54	12.2	100	W			2		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama N. 35° 58′, W. 122° 10′ †‡	29.97	761.2	55	12.8	87	NW			4		10ks		NE	0	0	Sm'h	W	Overcast	Capt. D. S. Austin.
S. S. City of Peking, N 31° 22′, E. 132° 49′ †‡	29.99	761.7	65	18.3	78	S			4		8		S			Sm'h		Cloudy	Capt. G. G. Berry.
S. S. City of Sidney																			Capt. H. C. Dearborn.
S. S. City of Tokio																			A. L. Ritchie, 2d Officer.
S. S. Colima, N. 7° 14′, W. 81° 55′ †‡	29.93	760.2	82	27.8	83	SE			2		10		SE	0.05	1.3	Sm'll	SSE	Cloudy	Capt. R. R. Searle.
S. S. Granada, N. 18° 40′, W. 104° 00′ †‡	29.80	756.9	80	26.7	91	W			2		5?		W	0	0	Sm'll	SW	Clear?	Capt. M. Connolly.
S. S. Zealandia, N. 4° 44′, W. 163° 55′	29.89	759.2	72	22.2	76	Var.			1		1		N	0	0	Sm'h	E	Clear	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, N. 42° 05′, W. 45° 44′ †‡	30.08	764.0	63	17.2	?	NW			1		10		W	0	0	Mod.	NW	Cloudy	A. Feddersen, 2d Officer.
S. S. Rhynland																			Capt. Wm. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, N. 39° 02′, W. 73° 23′	29.92	760.0	59	15.0	82	S	6	2.7			8k		S	0.08	2.0	Swell	S	Cloudy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, N. 21° 20′, W. 59° 57′ †‡	30.08	764.0	81	27.2		ENE			2		8		ENE	0	0	Sm'h	ENE	Fair	Capt. B. F. Woodbury.
Brigantine George, N. 34° 42′, W. 67° 05′ †‡	30.09	764.3	74	23.3		SSW			3		2		SW	Showers		Sm'h		Fine	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Chesapeake bay, Md †	30.01	762.2	58	14.4	94	N	2	0.9			5n			0.18	4.6			Cloudy	
Bark Sunbeam, Lisbon, Portugal †‡	30.12	765.0	68	20.0	60	NNE			6		2		NE	0	0			Fair	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

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W. B. Hazen

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

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 21, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS		WEATHER	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco	‡		30.09	764.3	70.9	21.6	79	NE			1		0			0	0	Clear	Dr. Ollive.
Nemours	‡		29.99	761.8	70.5	21.4	98	E			1		3			0	0	Pretty fair	Reynard.
Algiers	‡		30.09	764.2	68.4	20.2	80	NNE			1		10			0	0	Covered	Nicolas.
La Calle	‡		30.10	764.6	72.7	22.6	43	WNW			1		2			0	0	Fair	Fonfrède.
Tunis	‡		30.08	764.0															Jacques.
Sfax	‡		30.19	766.8															Gau.
Saida	‡		30.05	763.5	61.2	16.2	87	E			2		10			0.157	4.0	Covered	Dumas.
Tebessa	‡		30.10	764.0	75.9	24.4	27	Calm			0		7			0	0	Cloudy	Watrin.
Geriville	‡																		Lonchamp.
Laghouat	‡		30.08	764.1	64.8	18.2	55	NNE			1		5			0.071	1.8	Cloudy	Herbin.
Biskra	‡		30.08	764.1															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.17	766.3	30.26	768.6	54.3	12.4	82	N	7	3.1			8			0	0	Fine	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.51	749.5	30.03	762.8	78.4	25.8	39	E			2		0			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.32	744.6	30.05	763.3	77.0	25.0	46	ESE	2.5	1.1			2			0	0		Dr. Wierzbicki.
Eperies	29.16	740.7	30.00	761.9	79.0	26.1	33	Calm			0	Ics	0		W	0	0		Julius Mikolik.
Gratz	28.84	732.6	30.05	763.4	72.1	22.3	53	S			1		0			0	0		Andreas Rospini.
Hermannstadt	28.63	727.1	29.99	761.8	75.2	24.0	46	N			2		5			0.811	20.6		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.71	729.1	29.99	761.8	74.1	23.4	65	NE			1		0			0.053	1.6		The Staff.
Lemberg	29.08	738.7	30.03	762.7	74.1	23.4	46	SE			2		2			0	0		Dr. T. Stanecki.
Pola	29.91	759.8	30.02	762.6	75.4	24.1	50	NW			2		0			0	0		I. R. HydrographicOffice.
Szathmar	29.58	751.2	30.02	762.5	77.7	25.4	39	NW			2		0			0	0		Beicht Peter, S. J.
Szegedin	29.72	755.0	29.99	761.8	74.8	23.8	46	NW			1		0			0	0		Karl Stancel.
Trieste	29.93	760.3	30.04	762.9	71.1	21.7	44	Calm			0		3			0	0	Clear	Secco.
Vienna	29.37	746.1	30.05	763.6	74.8	23.8	52	S			2		1			0	0		I. R. Central Met.' Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.03	762.7	30.13	765.3	57.5	14.2	62	S	13	5.8			5			0	0	Blue sky	W. Boswell.
Armagh, Observatory	29.95	760.7	30.17	766.3	58.0	14.4	60	SW	13	5.8			7					D. clouds	S. Call.
Bidston, Liverpool Obs'y			30.26	768.6	59.4	15.2	57	WNW	7	3.1			1					Blue sky	John Hartnup.
Bolton, Sharples	29.72	754.9	30.26	768.6	58.2	14.6	59	SSW	6	2.7			7					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.84	757.9	30.24	768.1	57.0	13.9	58	W			1		2			0	0	Blue sky	J. McLandsbo ough, F.R.S
Bridgetown, Barbadoes	29.90	759.4	29.93	760.2	83	27.3	79	NE			2		8					Overcast	Corpl. J. Surgener, A.H.C.
Cardington			30.29	769.4	63.0	17.2	59	W			1.0		1					*Blue sky*	*John McLaren.*
Chatham, School M. E	30.18	766.6	30.31	769.9	65.0	18.3	46	W			1		3					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	30.10	764.5	30.33	770.4	56.7	13.7	80	SSE			3		2					D. clouds	The Staff.
Fort Napier, Natal	27.64	702.0	29.86	758.4	74.3	23.5	89	SW			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.61	752.1	29.84	757.9	88	31.1	84	W			1		2					D. clouds	Sgt. C. E. Kenne.
Galway, Queen's College			29.31	744.5	64	17.8	83	N			4		6			0	0	D. clouds	J. O'Donaghue.
Gibraltar, Mediterranean	30.00	762.0	30.06	763.5	71.6	22.0	89	ENE			3		4					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.96	761.0	30.17	766.3	58.0	14.4	54	SSW			0		10k					Gloomy	*Harry Urquhart.*
Greenwich, Royal Obs'y	30.14	765.5	30.32	770.1	62.5	16.9	53	WSW			1		3					Blue sky	The Staff.
Guernsey	30.08	764.0	30.29	769.4	59.5	15.3	67	SSE			2		3					Blue sky	Dr. S. E. Hoskins, F.R.S.
Kew, Observatory	30.28	769.1	30.32	770.1	61.3	16.3	49	SW	6	2.7			3					Blue sky	The Staff.
Leicester, Museum	30.05	763.3	30.30	769.6	62.1	16.7	48	SW			1		2					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.92	760.0	30.00	762.0	70.0	21.1	66	N			1		0			0	0	Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.94	760.5	29.98	761.5	82.2	27.9	80	S			2		8					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.75	755.9	30.28	769.1	64.1	17.8	50	SSW			2		6					D. clouds	John Mac Emall.
Oxford, Radcliffe Obs'y	30.08	764.0	30.31	769.9	59.4	15.2	63	WSW			1		4					D. clouds	The Staff.
Plymouth	30.26	768.6	30.33	770.4	58.0	14.4	78	SSE			2		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			30.09	764.3	52.5	11.4	76	S	15	6.7			10					Overcast	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.82	757.4	29.88	758.9	66.0	18.9	80	NE			2		9			Blank		Gloomy	Serg't W. H. Lyne.
Sheffield	30.02	762.5	30.30	769.6	62.9	17.2	66	SW			2		5			0	0	D. clouds	W. F. Cooper.
Silloth Rectory	30.20	767.1	30.23	767.8	59.0	15.0	69	W			4		2			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.28	769.1	58.0	14.4	54	WSW	11	4.9			6					D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	30.10	764.1	30.32	770.1	62.9	17.2	56	W			1		2					Blue sky	Rev C.H.Griffiths, F.M.S.
Truro, Royal Institution	30.31	769.9	30.33	770.4	64	17.8	62	SW			4		5					D. clouds	W. Newcombe.
Valencia, Observatory	30.13	765.3	30.16	766.1	57.2	14.0	77	S	30	13.4			6					D. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.24	768.1	30.28	769.1	43	6.1	78	E	10	4.5			10s			0.055	1.4	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	30.25	768.3	30.31	769.9	40	4.4	95	NE	8	3.6			10n		NE	1.67	42.4	Heavy rain	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	30.19	766.8	30.22	767.6	38	3.3	88	NE	10	4.5			10u			0.92	23.4	Light rain	J. McWilliams.
Fort Garry, Manitoba*	29.11	739.4	29.94	760.5	46	7.8	84	N	2	0.9		0	0			0.010	0.3	Clear	James Stewart.
Fredericton, N. B																			Prof. Harrison
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.11	764.8	30.24	768.1	40	4.4	99	E	12	5.4			10n			0.248	6.3	Light rain	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.64	752.8	29.97	761.2	57	13.9	94	NE	2	0.9		2c	8s	E	Calm	0	0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S																			C. H Rigby.
Montreal, Quebec*	30.03?	762.7?	30.03?	762.7?	50	10.0	91	NE	11	4.9			10s			0	0	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.26	743.2	29.95	760.7	52	11.1	99	Calm	0	0			Fg			0.32	8.1	Foggy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.29	744.0	29.98	761.5	54	12.2	87	W	2	0.9		8c	0	NW		0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.35	745.5	29.97	761.2	55	12.8	69	N	6	2.7		5ck	0	NW		0	0	Fair	M. Payne.
Quebec, Quebec*	29.80	756.9	30.13	765.3	47	8.3	85	NE			5		8n		NE	0.05	1.3	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.52	749.8	29.97	761.2	53	11.7	96	Calm	0	0			10s		SE	1.02	25.9	Heavy rain	W. H. McIntyre.
Saugeen, Ontario*	29.28	743.7	30.00	762.0	46	7.8	91	SW	3	1.3		5cs	0			0.01	0.3	Fair	K. Stewart.
St. Andrews, N. B	30.06	763.5	30.11	764.8	45	7.2	97	E	1	0.4			Fg			2.52	64.0	Foggy	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.40	772.1	30.44	773.2	47	8.3	61	SE	9	4.0		5c	0	SE		0	0	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.59	751.6	29.97	761.2	55	12.8	96	Calm	0	0			Fg			0.27	6.9	Foggy	Magnetic Observatory
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	29.99	761.7	30.05	763.5	45	7.2	98	E	15	6.7			10s		E	2.52	64.0	Light rain	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	30.25	768.3	30.50	774.7	43	6.1	36	NW	2	0.9		0	0			0	0	Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.88	758.9			64.3	17.9	81	E	12.3	5.5			0			0	0	Blue sky	John Duthie.
Cape Town, C. G. H. Obs'y	29.89	759.2	29.93	760.2	63.3	17.4		NNW	13.7	6.1		4	6cs;k			0	0		The Staff, for D. Gill.
Worcester*†	28.80	731.5			70.9	21.6	44	NW			1	1	3			0	0	Fine	C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Deschevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.93	760.2	29.95	760.8	61.0	16.1	92	SE	2.7	1.2			10			0.035	0.9	Covered	M. Marc Deschevrens, S. J.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	25.21	655.7	29.93	760.2	68.0	20.0	95	.....	.....	.....	.....	8cs	0	.....	.....	0	0	Cloudy	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.20	767.0	30.24	768.2	60.1	15.6	60	S	11	5	.....	.....	9	.....	.....	.....	.....	Raining	Oversergent Fischer.
Fanöe	30.28	769.2	30.30	769.7	52.7	11.5	82	W	.....	.....	4	.....	1	.....	.....	.....	.....	.....	Overloerer Lauridsen.
Godthaab, Greenland	29.80	756.8	29.84	757.9	39.2	4.0	70	N	.....	.....	2	.....	0	.....	.....	.....	.....	.....	S. Kleinschmidt.
Styklsholm, Iceland	29.55	750.5	29.59	751.6	45.3	7.4	.....	SE	.....	.....	7	.....	2	.....	.....	.....	.....	.....	A. O. Thorlacius.
Thorshavn	29.97	761.3	30.01	762.2	49.3	9.6	75	SE	16	7	.....	.....	10	.....	.....	.....	.....	.....	Overloerer Bergh.
Vestervig	30.11	764.9	30.21	767.3	51.8	11.0	90	SW	.....	.....	2	.....	0	.....	.....	.....	.....	.....	Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.60	751.8	30.24	768.0	65.1	18.4	56	N	.....	.....	2	.....	nkc	W	E	0	0	.....	M. Labroue, Director.
Alençon Normal School	29.77	756.2	30.32	770.2	59.7	15.4	64	N	.....	.....	1	.....	2k	.....	N	0.04	1.	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. Klein. Commandant.
Avignon, Normal School	30.06	763.4	30.13	765.4	67.3	19.6	50	N	.....	.....	4	.. ..	c	.....	.....	0.047	1.2	Clear	M. Giraud, Director.
Bar-sur-Seine	29.71	754.7	30.20	768.7	64.2	17.9	45	ESE	.....	.....	2	.. ..	8km	.....	NE	0	0	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	30.08	763.9	30.34	770.6	61.5	16.4	40	NE	.....	.....	2	.....	2	.....	N	0	0	Slightly cl'dy	M. Frère Eugene Marie.
Besançon, Normal School	29.36	745.8	30.24	768.2	55.4	13	80	NNW	.....	.....	1	.....	n	.....	SE	1.10	28.	.....	M. Gobin, Director.
Bordeaux, Observatory	30.00	762.1	30.25	768.7	63.5	17.5	64	E	.....	.....	1	.....	8	.....	E	0.201	5.1	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.75	755.6	30.30	769.5	63.5	17.5	56	NE	.....	.....	1	ck	0	NE	.....	0	0	.....	M. Postel, Director.
Brest, Naval Observatory	30.10	764.6	30.35	770.8	68.0	20.0	65	SSW	.....	.....	1	.....	5k	.....	S	0	0	.....	M. de Rermarec, Dir.
Caen, Normal School	30.24	768.2	30.32	770.0	61.0	16.1	53	NNW	.....	.....	2	.....	0	.....	.....	0	0	Clear	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.93	760.1	30.24	768.1	69.8	21.0	44	N	.....	.....	2	.....	2	.....	SW	0	0	Slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.70	755.9	30.20	768.7	68.4	20.2	39	E	.....	.....	2	.....	0	.....	.....	0	0	Clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.90	734.0	30.25	768.3	61.5	16.4	69	NNE	.....	.....	1	.....	8	.....	N	0.661	16.8	¾ covered	M. Allnard, Director.
Cluny, Normal School	29.40	746.8	30.24	768.0	53.6	12	83	WNW	.....	.....	1	.....	8	.....	N	0.024	0.6	.....	M. de Villemontée, Dir.
Commercy, Normal School	29.42	747.2	30.28	769.1	66.2	19	43	W	.....	.....	1	.....	8km	W	W	0	0	Very cloudy	Dr. Coulet, Director.
Gap, Normal School	27 71	703.8	30.17	766.2	69.8	21	70	S	.....	.....	6	c	0	.....	.....	0	0	.....	M. Jeangirard, Director.
Grénsque, du. Rhone	29.00	736.7	30.15	765.7	68.7	20.4	53	W	.....	.....	3	.....	2	.....	SW	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.43	747.4	30.20	767.1	52.5	11.4	79	WNW	.....	.....	3	.....	kn	SW	NW	0.378	9.6	.....	M. Ablard, Director.
Guéret, Normal School	28.69	728.0	30.23	768.7	58.3	14.6	55	N	.....	.....	2	.....	5kn	.....	S	0.150	3.8	Cloudy	M. Rivoire, Director.
Lamballe, Normal School	30.13	765.2	30.41	772.4	43.7	6.5	97	NW	.....	.....	1	.....	.....	.....	NW	0.04	1.	.....	M. Ollitrault, Director.
Lescar, Normal School	29.67	753.6	30.34	770.5	62.2	16.8	87	E	.....	.....	1	.....	k	.....	.....	0.280	7.1	.....	M. Chauvin, Director.
Lorient, Naval Observatory	30.28	769.0	30.38	771.6	64.4	18.0	53	S	.....	.....	2	.....	0	.....	.....	0	0	Clear	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.19	741.4	30.26	768.5	53.6	12.0	70	NNW	..	.....	1	.....	10	.....	NNW	0.307	7.8	Covered	M. André, Director.
Mans, Normal School	30.03	762.7	30.34	770.0	60.4	15.8	43	NNE	.....	.....	1	.....	2	.....	NE	0	0	Slightly cl'dy	M Piboon, Director.
Marseille, Observatory	29.82	757.3	30.08	734.0	70.7	21.5	46	NW	.....	.....	2	.....	3	.....	WNW	0	0	.....	M. Stephan, Director.
Montlouis l'Instituteur	24.95	633.8	30.19	766.8	46.9	8.3	82	NW	16.8	7.5	.....	.....	7	.....	N	0.071	1.8	.....	M. Cave, for Dr. Fines.
Montpellier, Normal School	30.00	762.1	30.11	764.8	71.2	21.8	54	SE	.....	.....	2	.....	5	NW	.....	0	0	Cloudy	M. P. Galzin, Director.
Nancy, Normal School	29.50	749.4	30.28	769.0	55.4	13	83	NW	.....	.....	1	.....	10n	.....	.....	0.008	0.2	Covered	M. Hasse.
Nantes, Observatory	30.18	766.5	30.34	770.6	64.4	18	44	ENE	.....	.....	0–1	.....	8k	.....	E	0	0	.....	M. Larocque, Director.
Nice	29.92	761.8	30.03	762.7	66.2	19.0	74	SE	.....	.....	2	.....	10	E	SE	0	0	Covered	Capt. Boissière, Director.
Perpignan, Observatory	30.05	763.2	30.15	765.9	68.5	20.3	39	N	22.4	10.0	.....	.....	7	NW	SSW	0	0	.....	Dr. Fines.
Pic-du-Midi, Plantade	22.65	575.3	.....	.....	38.7	3.7	.....	.....	.....	.....	.....	.....	5	.....	SW	0.295	7.5	Cloudy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.10	739.1	30.17	766.3	56.1	13.4	66	SW	.....	.....	1	.....	0	.....	.....	0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.31	643.6	.....	.....	37.2	2.9	100	NE	.....	.....	2	.....	10	.....	.....	0.701	17.8	Foggy	M. Allnard, Director
Rochefort, Naval Obs'y	30.32	771.F	30.39	771.9	71.4	21.9	45	N	.....	.....	1	.....	2	.....	NW	0	0	¼ covered	Lt. E. Decaire, Director
Roche-sur-Yon, N. School	30.08	764.0	30.29	769.3	67.6	19.8	50	SW	.....	.....	1	.....	2	.....	NNE	0	0	Slightly cl'dy	M. Mouillot, Director.
Rodez, Normal School	28.06	712.8	30.20	767.1	59.4	15.2	44	NW	.....	.....	2	.....	5	.....	S	0.110	2.8	Cloudy	M. Richard, Director.
Rouen, Normal School	30.21	767.3	30.30	769.5	63.3	17.4	54	NNE	.....	.....	2	.....	5	.....	NNE	0	0	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	30.19	766.7	30.34	770.7	61.0	16.1	68	W	.....	.....	1	.....	2	.....	W	0	0	Slightly cl'dy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.15	765.7	30.31	769.9	66.4	19.1	36	NNW	.....	.....	1	.....	1	.....	N	0	0	.....	M. Renou, Director.
Toulouse, Observatory	29.55	750.6	30.28	769.1	67.6	19.8	51	NW	.....	.....	1	.....	.....	.....	NW	0.217	5.5	.....	M. Baillaud, Director.
Tours	30.10	764.6	30.30	769.6	66.2	19.0	45	NE	.....	.....	1	.....	5	.....	NNE	0	0	½ covered	M. de Tastes.
Versailles, Observatory	29.82	757.5	30.32	770.0	63.3	17.4	30	N	.....	.....	1	.....	.....	.....	.....	0	0	.....	Dr. A. Bérigny, Director.
Sub-Series.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.34	745.1	30.21	767.2	68.0	20.0	44	NE	.....	.....	3	.....	7k	NNE	.....	0.043	1.1	.....	Prof. Dr. Hoh.
Berlin	30.7	763.8	30.24	768.1	64.8	18.2	54	E	.....	.....	1	.....	10	.....	.....	0	0	.....	Prof. Dr. Arndt.
Breslau	29.3	752.5	30.16	766.1	71.8	22.1	57	E	.....	.....	1	.....	6	.....	.....	0.079	2.0	.....	Royal University Obs'y.
Carlsruhe	29.78	759.5	30.21	767.3	60.4	15.8	79	N	.....	.....	1	.....	10	NE	.....	0	0	.....	Albert Senx.
Cassel	29.53	750.1	30.24	768.2	65.5	18.6	38	N	.....	.....	4	.....	6	N	.....	0	0	.....	Dr. H. Möhl.
Frankfort on the Main	29.89	759.3	30.25	768.4	67.1	19.5	41	N	.....	.....	1	.....	10	.....	.....	0	0	.....	Physikal Society.
Friedrichshafen	28.73	729.7	30.10	766.1	57.7	14.3	79	NE	.....	.....	4	.....	10	ENE	.....	0.118	3.0	Foggy	Wilhelm, Chief Tel.
Hamburg	30.22	767.7	30.30	769.5	62.2	16.8	51	NW	.....	.....	3	.....	3	.....	.....	0	0	.....	Dr. R. Kleeman.
Kiel	30.14	765.5	30.15	765.9	52.0	11.1	55	NW	.....	.....	3	.....	4	.....	.....	0	0	.....	Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.82	757.4	30.23	767.9	66.4	19.1	56	ENE	.....	.....	2	.....	9	E	.....	0.020	0.5	.....	Prof. Dr. Bruhns.
Magdeburg	29.95	760.7	30.23	767.9	66.2	19.0	53	NNE	.....	.....	2	.....	9ks	NW	.....	0	0	.....	Dr. Assmann.
Memel	30.20	767.0	30.24	768.2	55.2	12.9	61	N	.....	.....	4–5	.....	10k	.....	.....	.....	.....	.....	Reinbrecht & Issermann.
Munich	28.31	719.1	30.18	766.6	65.1	18.4	61	N	.....	.....	3	.....	9	NE	.....	0.020	0.5	.....	Central Station.
Neufahrwasser	30.29	769.4	30.31	769.8	55.2	12.9	74	NNW	.....	.....	2	.....	10	.....	.....	0.105	2.7	Sprinkling	A. Lothes.
Neustadt, Palatinate	29.68	753.8	30.21	767.3	61.5	16.4	67	NW	.....	.....	2	.....	10	.....	.....	.....	.....	.....	Dieknether.
Stuttgart	29.22	742.2	30.10	764.5	63.9	17.7	60	N	.....	.....	2	.....	10	.....	.....	0	0	.....	Prof. Dr. Schoder.
Thorn	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. O. Ounerth.
Weissenburg, Bavaria	28.67	728.3	30.13	765.2	65.7	18.7	59	NE	.....	.....	4	.....	9	NE	.....	0 720	18 3	.....	Prof. Kemlein.
Wustrow	30.28	769.0	30.30	769.6	55.2	12.9	85	W	.....	.....	2	.....	3s	.....	.....	0	0	.....	Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.57	751.1	29.96	760.9	67.6	19.8		NE			4.0		5					½ Clear	A. Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.63	752.6	29.68	753.9	86.9	30.5	83	SW	36.0	16.1			5			0	0	Misty	
Deesa	29.18	741.0	29.63	752.5	101.8	38.8	24	W	19.8	8.8			3		SW	0	0	D. clouds	
Bombay	29.77	756.0	29.80	757.0	88.2	31.2	71	WNW	14.0	6.3			2		SW	0	0	D. clouds	
Poona, Yarrowda	27 91	709.0	29.71	754.6	94.5	34.7	34	W	25.0	11.2			0			0	0	Blue sky	
Belgaum	27.25	692.2	29.74	755.3	85.2	29.6	61	W	11.0	4.9			2	SE		0	0	D. clouds	
Lahore	28.78	731.1	29.48	748.8	106.1	41.2	26	E	5.3	2.4			0			0	0	Misty	
Roorkee	28.70	729.0	29.57	751.0	95.2	35.1	40	S	3.5	1.6			0			0	0		
Agra	29.01	736.9	29.54	750.4	107.1	41.7	21	E	5.6	2.5			0			0	0		
Nagpur	28.58	726.0	29.57	751.0	106.1	41.2	17	NNW	9.0	4.0			8		NW	0	0	D. clouds	
Jubbulpore	28.29	718.6	29.58	751.3	104.7	40.4	12	NW	6.4	2.9			4		E	0	0	D. clouds	
Lucknow	29.20	742.0	29.56	750.8	102.6	39.2	34	NNE	2.1	0.9			0			0	0	Blue sky	
Allahabad	29.25	742.9	29.54	750.4	102.0	38.9	36	NE	2.1	0.9			0			0	0	Blue sky	
Patna	29.39	746.4	29.56	750.8	96.3	35.7	50	N	3.7	1.6			0			0	0	Blue sky	
Hazaribagh	27.03	701.9	29.57	751.0	94.8	34.9	33	NW	7.1	3.2			1			0	0	Misty	
Cuttack	29.51	749.6	29.59	751.6	84.0	28.9	56	W	1.0	0.4			10					Showery	
Calcutta, Alipore	29.57	751.0	29.59	751.5	90.2	32.3	62	SSW	3.0	1.3			1	SW		0	0	D. clouds	
Dhubri	29.49	749.1	29.61	752.1	85.2	29.6	76	Calm	3.0	1.3			1			0.05	1.3	D. clouds	
Chittagong	29.56	750.8	29.65	753.0	85.9	29.9	80	WSW	2.6	1.2			3			0	0	Blue sky	
Sibsagar	29.28	743.8	29.61	752.1	89.8	32.1	70	NE	0.9	0.4			6	W	W	0.01	0.3	D. clouds	
Zanzibar, Africa			29.95	760.7	80.6	27.0	80	S	8	3.6			10		S	0.17	4.3	Overcast	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.63	752.7	30.03	762.8	81.3	27.4	31	N	0.7	0.3			1			0	0		Prof. Giovanni Clodig.
Milan	29.48	748.8	29.98	761.6	80.8	27.1	37	SE	7.4	3.3			4			0	0		Prof. Schiaparelli.
Padua	29.93	760.2	30.04	762.9	77.5	25.3	41	ESE	8.1	3.6			1	SE		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.13	740.0	30.02	762.5	62.1	16.7	71	N	6.9	3.1			10			0.508	12.9		Prof. P. F. Denza.
Genoa	29.87	758.6	30.05	763.5	66.2	19.0	74	SW	4.3	1.9			4	W		0	0		Prof. G. M. Garibaldi.
Mondovi	28.14	714.8	30.02	762.4	70.0	21.1	54	WNW			6		8			0	0		Prof. D. C. Bruno.
Pesaro	29.98	761.5	30.03	762.7	68.4	20.2	71	NW	11.2	5.0			0			0	0		Prof. Luigi Guidi.
Florence	29.74	755.4	29.99	761.7	73.0	22.8	50	WNW			2		1	SSW		0	0		Prof. Costantino Pitter.
Leghorn	29.96	760.9	30.04	763.0	69.1	20.6	66						3			0	0		Prof. P. Monte.
Rome	29.84	758.0	30.01	762.3	78.1	25.6	38	SW	8.7	3.9			0			0	0		Prof. P. S. Ferrari.
Lecce	29.77	756.1	30.01	762.3	73.6	23.1	66	NNW	12.5	5.6			0			0	0		Prof. C. de Giorgi.
Cosenza	29.11	739.5	29.98	761.6	74.8	23.8	70	WSW	2.5	1.1			3	SW		0	0		Prof. D. Conti.
Cagliari	29.84	757.8	30.02	762.6	70.2	21.2	57	SE			2		0			0	0		Prof. A. Pacinotti.
Palermo	29.72	755.0	29.97	761.3	72.1	22.3	54	ENE	6.9	3.1			0			0	0		Prof. G. Ciacciatore.
Syracuse	29.94	760.4	29.98	761.5	70.5	21.4	64	E	4.3	1.9			2	WSW		0	0		Prof. Vincenzo Gulliano.
Sub-Series.																			
Naples, S. R	29.48	748.7	29.98	761.6	76.5	24.7	65	SW	1.8	0.8			5	SE		0	0		Prof. F. Brioschi.
Stelvio	22.32	567.0			47.8	8.8	43	SE			1	5ck	0	S		0.031	0.8	Cloudy	Prof. P. F. Denza.
Valdobbia	22.33	567.2			41.7	5.4	82	E			6		10cn	SW		0.591	15.0	Covered	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.92	759.9	29.94	760.5	61.8	16.6	81	WNW	2.4	1.1		ck	6s			0.013	0.4	Cloudy	K. Sasaki.
Kioto	29.83	757.7	30.01	762.2	60.9	16.1	80	N	2.6	1.2			0			0	0	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.67	753.0	29.87	758.7	70.2	21.2	84	NE	1.4	0.6			10s			0.015	0.4	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	29.98	701.5	30.05	703.3	57.5	14.2	80	SSW	3.0	1.3		0	0			0	0	Clear	The Staff.
Wakayama	29.93	760.2	29.99	761.7	64.0	17.8	85	Calm	0	0		0	0			0.00(	0.2	Clear	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.86	758.4	30.05	763.2	79.4	26.3	71	WNW	6.0	2.7		0	4		WNW	0	0	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.58	751.2	29.83	757.7	71.5	21.9	78	N	0.9	0.4			18			0	0	Clear	F. Quijano, U. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.35	770.9	30.35	770.9	55.9	13.3		WNW			3					0	0		
Groningen	30.25	768.3	30.30	769.7	60.4	15.8		NW			2					0	0		
Helder	30.30	769.5	30.30	769.5	54.0	12.2		WSW			2					0	0		
Hellevoetsluis	30.32	770.2	30.32	770.2	58.8	14.9	72	WNW			1					0	0		
Utrecht	30.28	769.0	30.32	770.2	62.6	17.0	50	WSW			2		5			0	0	Cloudy	H. van der Broek

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.06	763.6	30.13	765.2	47.1	8.4	94	S	3.6	1.6	.....	.....	10	.....	.....	0.020	0.5	Foggy	
Christiania	29.98	761.5	30.13	765.2	52.2	11.2	78	SSW	9	4	.....	.....	7	.....	.....	0.181	4.6	.....	
Gjæsvær	30.19	756.7	30.21	757.3	25.7	— 3.5	.....	Calm	0	0	.....	.....	7	.....	.....	.....	.....	.....	
Lodingen	30.10	764.4	30.14	765.6	37.6	3.1	50	NE	.....	.....	4	.....	0	.....	.....	0	0	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.93	760.2	30.08	764.1	64.0	17.8	86	WSW	4.9	2.2	.....	.....	3	.....	.....	0.059	1.5	.....	Dr. J. A. Sampaio.
Campo Major	29.04	737.7	30.02	762.4	73.4	23.0	54	Calm	0	0	.....	.....	2	WNW	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.10	764.5	30.19	766.8	67.5	19.7	66	ESE	4.9	2.2	.....	.....	10	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.74	755.3	30.09	764.2	71.4	21.9	44	NE	8.1	3.6	.....	.....	0	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.10	764.4	30.17	766.2	66.2	19.0	81	SSW	4.9	2.2	.....	.....	3	.....	.....	0	0	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	30.28	769.1	30.30	769.6	39.7	4.3	66	NW	13	6	.....	.....	5ks	.....	.....	.....	.....	.....	Capt. Saeliwerstow.
Astrakhan	30.16	766.0	30.08	763.9	76.1	24.5	35	E	11	5	.....	.....	0	.....	.....	.....	.....	.....	Capt. Wisganow.
Barnaul	29.71	754.5	30.19	766.8	67.1	19.5	57	Calm	0	0	.....	.....	1	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat ‡	30.02	762.4	30.26	768.5	60.8	16.0	46	NE	7	3	.....	9ck	0	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	29.16	740.6	30.06	763.4	79.5	26.4	17	SW	27	12	.....	9c	0	.....	.....	.....	.....	Solar halo...	Meteorological Obs'y.
Kasan	29.82	757.4	30.08	763.9	73.9	23.3	43	W	7	3	.....	5ck	0	.....	.....	.....	.....	.....	Observatory.
Kertch	29.91	759.7	29.93	760.2	68.4	20.2	79	NE	4	2	.....	.....	8	.....	.....	.....	.....	.....	Lagodio & Sastyrez.
Kieff	29.46	748.2	30.07	763.7	72.9	22.7	39	E	9	4	.....	ck	7ks	.....	.....	.....	.....	.....	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Kurdakow.
Lugan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Moscow	29.83	757.6	30.02	762.6	76.5	24.7	34	ESE	18	8	.....	.....	8	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	29.57	751.0	30.09	764.2	78.3	25.7	31	NNW	7.8	3.5	.....	.....	4ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaiev	27.53	699.2	29.78	756.3	51.6	10.9	30	E	2	1	.....	...	8	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaievsk, on the Amoor	29.97	761.3	30.04	763.1	74.7	23.7	56	NE	9	4	.....	5ck	0	.....	.....	.....	.....	.....	Capt. Iwanow.
Pekin, China	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lieut. Iwanow.
St. Petersburg	29.71	754.5	29.85	758.1	61.2	16.2	78	S	4	2	.....	.....	5ks	.....	.....	.....	.....	.....	Physical Observatory.
Tashkend, Laboratory	30.25	768.3	30.26	768.7	50.5	10.3	64	W	4	2	.....	c;cs	5ks	.....	.....	.....	.....	Light clouds	Central Physical Obs'y.
Tiflis	28.36	720.3	29.85	758.1	80.8	27.1	47	SE	2	1	.....	10	.....	.....	.....	.....	.....	Light clouds	Teich, A. M.
Warsaw	28.56	725.4	29.90	759.4	82.6	28.1	44	SW	9	4	.....	7cs	0	.....	.....	.....	.....	.....	Physical Observatory.
Wilna	29.68	753 9	30.09	764.2	75.1	24.5	43	NE	7	3	.....	.....	0	.....	.....	.....	.....	.....	Astronomical Obs'y.
Yeniseisk	29.75	755.6	30.15	765.9	72.1	22.3	59	Calm	0	0	.....	.....	10	.....	.....	.....	.....	Light clouds	Berg, Assistant.
.....	29.93	700.2	30.22	767.5	48.7	9.3	70	N	4	2	.....	.....	0	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	30.20	767.1	59.8	15.4	64	W	.....	.....	3	.....	10k	.....	.....	0	0	Cloudy.....	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	30.03	762.7	52	11.1	93	S	.....	.....	8	.....	10	.....	.....	0	0	Gloomy	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	30.09	764.3	.....	.....	.....	SE	.....	.....	4	4	7	SW	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.04	763.0	30.14	765.6	73.4	23.	59	SSW	3.6	1.6	.....	.....	0	.....	.....	0	0	Clear.	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.22	767.7	30.28	769.1	66.9	19.4	57	SE	0.9	0.4	.....	3	2	N	.....	0.472	12.0	Cloudy.....	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.24	692.0	.....	.....	58.6	14.8	84	NE	9.4	4.2	.....	0	0	.....	.....	0	0	Clear.....	Domingo Martin.
Madrid, Royal Obs'y	27.87	707.8	30.01	762.2	77.4	25.2	42	E	6.7	3.0	.....	0	3	.....	.....	0	0	Clouds.....	The Staff.
Murcia, Met. Obs'y ‡	29.94	760.5	30.09	764.2	76.3	24.6	47	SE	6.5	2.9	.....	0	2	.....	.....	0	0	Almost clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.21	741.8	30.08	764.1	67.1	19.5	51	NE	4.9	2.2	.....	.....	1	.....	.....	0	0	Almost clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.85	758.2	29.91	759.8	78.1	25.6	74	ESE	5.6	2.5	.....	8ck	2s	WSW	.....	0.035	0.9	Cloudy.....	Benito Vines, S. J.
Manilla, Philippine Islands	29.78	756.5	29.84	757.8	87.1	30.6	64	E	3.7	1.7	.....	0	0	.....	.....	0	0	Clear.....	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.98	761.5	30.08	763.9	71.9	22.7	61	SW	6.3	2.8	.....	0	1	.....	.....	.....	.....	.....	Capt. C. Pulazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.89	759.2	29.98	761.5	80.2	26.8	86	SE	0	0	.....	5cs	3k	SE	.....	0	0	D clouds.....	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.75	755.6	29.89	759.3	88.2	31.2	61	SE	1.9	1.0	.....	.....	5ks	SSE	.....	0	0	Partly cld'y	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.28	769.0	30.32	770.0	44.2	6.8	36	S	.....	.....	2	.....	2	.....	.....	0	0	.....	
Umea	30.21	7 7.3	30.26	768.6	45.0	7.2	58	S	.....	.....	2	.....	10	.....	.....	0	0	.....	
Hernosand	30.10	7 4.4	30.15	765.7	30.9	2.7	94	ENE	.....	.....	2	.....	10	.....	.....	0.126	3.2	.....	
Stockholm	30.00	762.0	30.18	766.5	58.3	14.6	53	W	.....	.....	2	.....	10	.....	.....	0.020	0.5	.....	
Wisby	30.10	764.5	30.16	766.0	49.6	9.8	82	W	.....	.....	2	.....	5	.....	.....	0	0	.....	
Sub-Series.																			
Upsala	30.06	763.6	30.15	765.8	55.5	13.6	68	WSW	6.9	3.1	.....	.....	7	.....	SW	Inap.	Inap.	.....	Nils Ekholm
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.76	730.6	30.19	766.7	55.6	13.1	84	SSW	.....	.....	2	.....	10	.....	.....	0.811	20.6	Covered.....	The Observatory.
Zurich ‡	28.56	725.4	30.19	766.8	56.1	13.4	87	E	.....	.....	2	.....	10	.....	.....	0.039	1.0	Covered.....	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.95	760.6	61.5	16.4	81	NNE	10	4.5	.....	.....	10	.....	NE	0	0	.....	The Observatory.
Valona	.....	.....	30.07	763.7	71.2	21.8	.....	SW	.....	.....	1	.....	2	.....	.....	0.63	16.	Slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.83	757.7	84.7	29.3	51	SW	.....	.....	2	6ck	0	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrumental error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.96	761.0	30.05	763.3	57.5	14.2	87	S	2	0.9	.....	.....	10s;fg	.....	S	Inap.	Inap.	Cloudy	
Alpena, Michigan	29.40	746.7	30.04	763.0	53	11.7	61	NW	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Atlanta, Georgia	28.81	731.8	29.92	760.0	67.0	19.4	68	NE	10	4.5	.....	5k	5s	Calm	Calm	0	0	Cloudy	
Atlantic City, New Jersey	30.05	763.3	30.07	763.8	53	11.7	100	E	7	3.1	.....	.....	Fg	.....	Calm	0	0	Dense fog	
Augusta, Georgia	29.82	757.4	30.02	762.5	67.8	19.9	79	E	2	0.9	.....	5cs	0	SE	.....	0	0	Fair	
Baltimore, Maryland	30.03	762.7	30.08	764.0	58	14.4	88	NW	3	1.3	.....	.....	10s	.....	.....	Inap.	Inap.	Cloudy	
Barnegat, New Jersey	30.03	762.7	30.05	763.3	52	11.1	93	NE	6	2.7	.....	.....	Fg	.....	Calm	0	0	Dense fog	
Bismarck, Dakota	28.08	713.2	29.64	760.5	60	15.6	55	SE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Boise City, Idaho	27.02	686.3	29.98	761.5	51.3	10.7	79	W	2	0.9	.....	8cs	0	W	.....	Inap.	Inap.	Fair	
Boston, Massachusetts	29.92	760.0	30.08	764.0	46.2	7.9	93	E	5	2.2	.....	.....	10s	.....	.....	0.02	0.5	Cloudy	
Brackettville, Texas	28.74	730.0	29.79	756.7	57	13.9	87	W	2	0.9	.....	0	5s	.....	Calm	Inap	Inap.	Fair	
Brownsville, Texas	29.80	756.9	29.84	757.9	70	21.1	90	NE	1	0.4	.....	.....	8s	.....	E	0	0	Cloudy	
Buffalo, New York	29.27	743.4	29.96	761.0	45.9	7.7	88	SW	6	2.7	.....	10ck;cs	0	N	.....	Inap.	Inap.	Cloudy	
Burlington, Vermont	29.74	755.4	30.02	762.5	55.0	12.8	93	W	1	0.4	.....	.....	10n	.....	SE	0.04	1.0	Light rain	
Cairo, Illinois	29.60	751.8	29.98	761.5	67	19.4	74	N	3	1.3	.....	8cs	0	Calm	.....	0	0	Fair	
Campo, California	27.32	693.9	29.89	759.2	44	6.7	60	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Camp Thomas, Arizona	27.11	688.6	.....	.....	55	12.8	62	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Cape Henry, Virginia	30.03	762.7	30.04	763.0	62	16.7	77	W	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Cape May, New Jersey	30.03	762.7	30.06	763.5	55	12.8	93	NE	5	2.2	.....	.....	Fg	.....	Calm	0.03	0.8	Dense fog	
Castroville, Texas	29.08	738.6	29.77	756.1	63	17.2	89	Calm	0	0	.....	0	2s	.....	.....	0.18	4.6	Fair	
Cedar Keys, Florida	29.92	760.0	29.94	760.5	76	24.4	77	NW	2	0.9	.....	2ck	5ks	.....	.....	0	0	Fair	
Champaign, Illinois	29.22	742.2	30.00	762.0	60.1	15.6	55	NE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Charleston, S. Carolina	29.96	761.0	30.01	762.2	74	23.3	76	E	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Charlotte, N. Carolina	29.17	740.9	29.95	760.7	68.8	20.4	52	E	1	0.4	.....	5c	5k	.....	.....	0	0	Fair	
Chattanooga, Tennessee	29.19	741.4	29.98	761.5	59	15.0	82	Calm	0	0	.....	5cs	Sk;fg	S	Calm	0	0	Fair	
Cheyenne, Wyoming	24.04	610.6	29.98	761.5	36	2.2	71	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Chicago, Illinois	29.36	745.7	30.05	763.3	53.4	11.9	67	N	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Chincoteague, Virginia	30.02	762.5	30.04	763.0	58	14.4	88	NE	11	4.9	.....	1k	0	NE	.....	0	0	Clear	
Cincinnati, Ohio	29.38	746.2	30.02	762.5	61	16.1	82	SE	1	0.4	.....	0	Sk	.....	.....	0	0	Dense smoke	
Cleveland, Ohio	29.30	744.2	30.02	762.5	56.6	13.7	85	S	3	1.3	.....	1cs	Fg	.....	.....	0	0	Clear	
Coleman City, Texas	28.08	713.2	29.73	755.1	52	11.1	86	SW	2	0.9	.....	5k	0	SW	.....	0	0	Fair	
Columbus, Ohio	29.18	741.2	30.01	762.2	53	12.8	81	NE	1	0.4	.....	0	Fg	.....	.....	0	0	Clear	
Concho, Texas	27.99	710.9	29.65	753.1	53	11.7	83	SW	14	6.3	.....	0	8s	.....	SW	0	0	Cloudy	
Corsicana, Texas	29.42	747.3	29.88	758.9	65	18.3	89	Calm	0	0	.....	.....	10n	.....	.....	0.41	10.4	Light rain	
Davenport, Iowa	29.41	747.0	30.03	762.7	62	16.7	51	Calm	0	0	.....	1cs	0	Calm	.....	0	0	Clear	
Dayton, Washington T'y	28.32	719.3	30.00	762.0	44.3	6.8	59	W	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Deadwood, Dakota	25.28	642.1	.....	.....	54	12.2	38	SW	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Decatur, Texas	28.68	728.5	29.82	757.4	63	17.2	83	SE	10	4.5	.....	.....	10s	.....	.....	0	0	Cloudy	
Delaware Breakwater, Del.	30.04	763.0	30.06	763.5	54	12.2	100	NE	4	1.8	.....	.....	Fg	.....	.....	0.09	2.3	Dense fog	
Denison, Texas	29.09	738.9	29.85	758.2	67	19.4	89	E	4	1.8	.....	.....	10n	.....	Calm	0.07	1.8	Light rain	
Denver, Colorado	24.78	629.4	30.00	762.0	43.2	6.2	75	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Des Moines, Iowa	29.15	740.4	30.02	762.5	53	11.7	86	Calm	0	0	.....	5c	Sk	.....	.....	0	0	Fair	
Detroit, Michigan	29.31	744.5	30.00	762.0	54.6	12.6	87	N	6	2.7	.....	0	Hz	.....	.....	0	0	Clear	
Dodge City, Kansas	27.41	696.2	29.67	753.6	52	11.1	93	NE	10	4.5	.....	.....	10n	.....	.....	1.17	29.7	Light rain	
Dubuque, Iowa	29.36	745.7	30.04	763.0	58	14.4	58	E	1	0.4	.....	0	Hz	.....	Calm	0	0	Clear	
Duluth, Minnesota	29.40	746.7	30.08	764.0	49	9.4	78	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Eagle Pass, Texas	29.16	740.7	29.88	758.9	58	14.4	88	NW	4	1.8	.....	0	0	.....	.....	0.06	1.5	Clear	
Eagle Rock, Idaho	25.12	638.0	29.77	756.1	46	7.8	54	SW	10	4.5	.....	2cs	0	.....	.....	0	0	Fair	
Eastport, Maine	30.06	763.5	30.12	765.0	42	5.6	95	NE	20	8.9	.....	.....	Fg	.....	NE	3.66	93.0	Dense fog	
El Paso, Texas	26.19	665.2	.....	.....	48	8.9	78	NE	4	1.8	.....	0	1ks	.....	.....	0	0	Clear	
Erie, Pennsylvania	29.28	743.7	29.99	761.7	58	14.4	76	SW	6	2.7	.....	5k	0	NW	.....	0	0	Fair	
Escanaba, Michigan	29.44	747.8	30.08	764.0	56	13.3	57	NE	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Florence, Arizona	28.29	718.6	29.89	759.2	60	15.6	44	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Apache, Arizona	24.94	633.5	30.39	771.9	45	7.2	61	NE	4	1.8	.....	0	2s	.....	Calm	0	0	Fair	
Fort Assinnaboine, Montana	27.07	687.6	.....	.....	50	10.0	45	W	12	5.4	.....	10c	0	Calm	.....	0	0	Cloudy	
Fort Bennett, Dakota	28.36	720.3	.....	.....	57	13.9	69	S	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Fort Benton, Montana	27.04	686.8	.....	.....	38	3.3	54	NW	5	2.2	.....	0	5ks	.....	NW	0	0	Fair	
Fort Buford, Dakota	27.76	705.1	29.53	750.0	55	12.8	68	NE	2	0.9	.....	2cs	0	W	.....	0	0	Clear	
Fort Custer, Montana	26.72	678.7	.....	.....	50	10.0	71	N	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Fort Davis, Texas	25.13	638.3	30.09	764.3	50	10.0	57	NE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Fort Elliott, Texas	27.16	689.8	29.40	746.7	53	11.7	86	NE	12	5.4	.....	.....	10s	.....	NE	0.98	24.9	Cloudy	
Fort Gibson, Indian T'y	29.38	746.2	29.90	759.4	62	16.7	88	E	6	2.7	.....	.....	10s	.....	E	0.28	7.1	Cloudy	
Fort Grant, Arizona	25.15	638.8	29.95	760.7	54	12.2	43	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Griffin, Texas	28.50	723.9	29.74	755.4	58.6	14.8	88	Calm	0	0	.....	0	5s	.....	.....	0	0	Fair	
Fort Keogh, Montana	27.23	691.6	.....	.....	58	14.4	41	SE	14	6.3	.....	0	0	.....	.....	0	0	Clear	
Fort Macon, North Carolina	30.03	762.7	30.04	763.0	67	19.4	79	NE	6	2.7	.....	5c	Hz	Calm	Calm	0	0	Fair	
Fort McKavett, Texas	27.64	702.0	29.54	750.3	52.2	11.2	66	SW	7	3.1	.....	4k	0	SW	.....	0	0	Fair	
Fort Missoula, Montana	26.58	675.1	.....	.....	54	12.2	55	NW	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Fort St. Michaels																			
Fort Shaw, Montana	26.29	667.8	.....	.....	42	5.6	66	N	9	4.0	.....	8k	0	W	.....	0	0	Cloudy	
Fort Sill, Indian Territory	28.66	728.0	29.74	755.4	61	16.1	94	E	5	2.2	.....	.....	10s	.....	SE	0	0	Cloudy	
Fort Stevenson, Dakota	27.96	710.2	.....	.....	59	15.0	65	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Verde, Arizona					54	12.2	55	SW			1	0	0	.....	.....	0	0	Clear	
Fredericksburg, Texas	28.16	715.3	29.69	754.1	58	14.4	82	W	6	2.7	.....	1ck	0	.....	.....	0	0	Fair	
Galveston, Texas	29.83	757.7	29.87	758.7	74	23.3	81	W	2	0.9	.....	5ck	1s	W	.....	0.06	1.5	Fair	
Grand Haven, Michigan	29.40	746.7	30.05	763.3	56	13.3	51	N	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Hatteras, North Carolina	30.04	763.0	30.06	763.5	68	20.0	65	NE	6	2.7	.....	5c	0	.....	.....	0	0	Fair	
Helena, Montana	25.65	651.5	.....	.....	55	12.8	50	N	16	7.2	.....	0	8s	.....	N	0	0	Cloudy	
Henrietta, Texas	28.87	733.3	29.77	756.1	60	15.6	84	SE	4	1.8	.....	.....	10s	.....	.....	Inap.	Inap.	Cloudy	
Indianapolis, Indiana	29.22	742.2	29.99	761.7	60	15.6	47	N	4	1.8	.....	0	Hz	.....	Calm	0	0	Clear	
Indianola, Texas	29.82	757.4	29.85	758.2	71.8	22.1	85	NW	8	3.6	.....	0	1s	.....	Calm	0	0	Clear	
Jacksboro, Texas	28.71	729.2	29.82	757.4	59	15.0	94	SE	1	0.4	.....	.....	10ks	.....	SE	0	0	Cloudy	
Jacksonville, Florida	29.90	759.4	29.95	760.7	74	23.3	86	E	1	0.4	.....	.....	10s	.....	.....	0	0	Cloudy	
Keokuk, Iowa	29.36	745.7	29.99	761.7	63.0	17.2	65	E	12	5.4	.....	10c	0	N	.....	0	0	Cloudy	
Key West, Florida	29.92	760.0	29.95	760.7	81.2	27.3	74	SE	8	3.6	.....	2k	0	.....	.....	0	0	Fair	
Kittyhawk, North Carolina	30.05	763.3	30.07	763.8	64	17.8	73	NE	6	2.7	.....	Hz	0	.....	.....	0	0	Clear	
Knoxville, Tennessee	29.01	736.8	29.99	761.7	60.5	15.6	80	E	3	1.3	.....	1c	0	Calm	.....	0	0	Clear	
La Crosse, Wisconsin	29.28	745.7	30.03	762.7	58	14.4	64	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
La Mesilla, New Mexico	26.05	661.7	30.20	767.1	50	10.0	79	Calm	0	0	.....	1c	0	.....	.....	0	0	Clear	
Laredo, Texas	29.46	748.3	29.80	756.9	64	17.8	89	N	1	0.4	.....	8ck	0	SE	.....	0.30	7.6	Fair	
Leavenworth, Kansas	29.13	739.9	29.95	760.7	63	17.2	83	N	4	1.8	.....	.....	10s	.....	.....	0.01	0.3	Cloudy	
Lewiston, Idaho	29.16	740.7	29.81	757.2	51	10.6	46	NW	10	4.5	.....	.....	10s	.....	NW	0	0	Cloudy	
Little Rock, Arkansas	29.62	752.3	29.93	760.2	66	18.9	74	E	4	1.8	.....	.....	10s	.....	.....	0.01	0.3	Cloudy	
Los Angeles, California	29.52	749.8	29.88	758.9	53.4	11.9	93	S	3	1.3	.....	.....	Fg	.....	Calm	0	0	Dense fog	
Louisville, Kentucky	29.42	747.3	29.95	761.0	62.0	16.7	67	N	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Lynchburg, Virginia	29.38	746.2	30.05	763.3	60	15.6	77	SE	1	0.4	.....	10k	0	SW	.....	0	0	Cloudy	
Madison, Wisconsin	29.05	737.9	30.02	762.5	57	13.9	69	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Marquette, Michigan	29.40	746.7	30.11	764.8	52	11.1	66	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Mason, Texas	28.26	717.8	29.99	761.7	57	13.9	75	Calm	0	0	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Memphis, Tennessee	29.64	752.8	29.98	761.5	68	20.0	84	Calm	0	0	.....	.....	10s	.....	SW	Inap.	Inap.	Threatening	
Milwaukee, Wisconsin	29.36	745.7	30.08	764.0	54	12.2	43	N	3	1.3	.....	0	0	.....	.....	0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0→10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.86	758.4	29.93	760.2	69	20.6	85	NE	2	0.9	.....	5ck	Hz	W	.....	0	0	Fair	
Montgomery, Alabama	29.71	754.6	29.94	760.5	67	19.4	74	NE	3	1.3	.....	.....	10s	.....	.....	0	0	Cloudy	
Moorhead, Minnesota	28.99	736.3	29.93	760.2	58	14.4	76	3	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Morgantown, W. Virginia	29.06	738.1	30.05	763.3	50	10.0	93	Calm	0	0	.....	.....	Fg	.....	.....	0	0	Dense fog	
Mt. Washington, N. H.	23.84	605.5	30.20	767.1	40	4.4	91	SE	12	5.4	.....	8k	8k	SE	SE	0.18	4.6	Cloudy	
Nashville, Tennessee	29.44	747.8	29.97	761.2	64.3	17.9	78	NW	1	0.4	.....	2ck	Sk	W	.....	0	0	Dense smoke	
New Haven, Connecticut	29.92	760.0	30.04	763.0	60	15.6	77	N	4	1.8	.....	2k	Hz	.....	.....	0.05	1.3	Fair	
New London, Connecticut	30.02	762 5	30.07	763.8	54	12.2	87	SW	2	0.9	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
New Orleans, Louisiana	29.85	758.2	29.91	759.7	69.7	20.9	83	E	6	2.7	.....	0	2s	.....	E	0	0	Fair	
Newport, Rhode Island	30.00	762.0	30.05	763.3	52?2	11.2	92	N	7	3.1	.....	.....	Fg	.....	.....	Inap	Inap.	Dense fog	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	30.04	763.0	30.07	763.8	50.0	10.0	100	NE	6	2.7	.....	.....	Fg	.....	Calm	0	0	Dense fog	
New York, New York	29.88	758.9	30.06	763.5	54	12 2	93	E	1	0.4	.....	.....	10s;fg	.....	.....	0.10	2.5	Cloudy	
Norfolk, Virginia	30.01	762.2	30.07	763.8	65	18.3	73	W	4	1.8	.....	0	0	.....	.....	0	0	Clear	
North Platte, Nebraska	27.14	689.3	29.71	754.6	48	8.9	85	NW	5	2.2	.....	10ok	0	.....	.....	0	0	Cloudy	
Olympia, Washington T'y	30.09	764.3	30.13	765.3	36.5	2.5	86	S	2	0.9	.....	0	Fg	.....	S	0	0	Clear	
Omaha, Nebraska	28.91	734.3	29.99	761.7	57.8	14.3	80	NE	3	1.3	.....	2c	2s	.....	.....	0	0	Fair	
Oswego, New York	29.64	752.8	29.96	761.0	60.8	16.0	83	S	3	1.3	.....	5ck	5s	SE	S	0.02	0.5	Cloudy	
Pensacola, Florida	29.89	759.2	29.92	760.0	71	21.7	85	S	4	1.8	.....	0	Hz	.....	Calm	0	0	Clear	
Philadelphia, Pa	30.02	762 5	30.07	763.8	53	11.7	93	E	5	2.2	.....	.....	10s;fg	.....	.....	0.39	9.9	Cloudy	
Phœnix, Arizona	28.64	727 4	29.40	772.1	60	15.6	65	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.78	451.6	29.99	761.7	18	— 7.8	7	NE	12	5.4	.....	2ck	9	.....	.....	0	0	Clear	
Pioche, Nevada	23.92	607.6	29.69	754.1	50	10.0	32	S	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Pittsburg, Pennsylvania	29.22	742 2	30.03	762.7	55	12.8	87	NW	1	0.4	.....	2c	Fg	NW	Calm	Inap	Inap.	Fair	
Port Eads, Louisiana	29.89	759 2	29.90	759.4	72.7	22.6	90	E	8	3.6	.....	5k	0	E	.....	0.31	7.9	Fair	
Port Huron, Michigan	29.35	745.5	30.01	762.2	53.7	12.1	74	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Portland, Maine	30.04	763.0	30.09	764.3	48	8.9	93	NE	5	2.2	.....	.....	10n	.....	Calm	0.08	2.0	Light rain	
Portland, Oregon	30.00	763.5	30.14	765.5	40.3	4.6	82	N	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Portsmouth, N. Carolina	.....	.....	.....	.....	70	21.1	80	E	4	1.8	.....	5c	0	W	.....	0	0	Fair	
Prescott, Arizona	24.67	626.6	30.03	762.7	48	8.9	43	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	29.92	760.0	29.94	760.5	73	22.8	63	NE	6	2.7	.....	10os	0	W	.....	0	0	Cloudy	
Red Bluff, California	29.41	747.0	29.75	755.6	57.0	13.9	69	S	4	1.8	.....	5cs	2s	SW	Calm	0	0	Cloudy	
Rio Grande City, Texas	29.73	755.1	29.94	760.5	69	20.6	90	NW	1	.....	.....	.....	10s	.....	NW	0.81	20.6	Cloudy	
Rochester, New York	29.35	745.5	29.95	760.7	56	13.3	94	W	2	0.9	.....	.....	10n	.....	Calm	0.53	13.5	Light rain	
Roseburg, Oregon	29.48	748.8	30.05	763.3	44.2	6.8	84	N	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Sacramento, California	29.72	754 9	29.79	756.7	54.2	12.3	80	SW	17	7.6	.....	0	5s	.....	.....	0	0	Fair	
St. Louis, Missouri	29.44	747.8	30.00	762.0	63.5	17.5	65	E	10	4.5	.....	8c	0	.....	.....	0	0	Fair	
St. Paul, Minnesota	29.20	741.7	30.02	762.5	56	13.3	81	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Salt Lake City, Utah	25.48	647.2	29.81	757.2	54	12 2	43	SE	3	1.3	.....	1c	0	Calm	.....	0	0	Clear	
San Antonio, Texas	29.20	741.7	29.89	759.2	62.4	16.9	94	Calm	0	0	.....	4cs	0	Calm	.....	0.26	6.6	Fair	
San Diego, California	29.78	756.4	29.85	758.2	60.5	15.8	82	SW	4	1.8	.....	.....	10s	.....	.....	0	0	Cloudy	
Sandusky, Ohio	29.33	745.0	29.99	761.7	59	15.0	82	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Sandy Hook, New Jersey	30.02	702.5	30.75	763.3	55.0	12.8	93	NE	1	0.4	.....	.....	10s;fg	.....	.....	0.08	2.0	Cloudy	
San Francisco, California	29.78	756.4	29.84	757.9	56	13.3	78	S	9	4.0	.....	.....	10s	.....	SW	0	0	Cloudy	
Santa Fé, New Mexico	23.23	590.0	29.77	756.1	40	4.4	82	SE	1	0.4	.....	0	5s	.....	NE	0	0	Fair	
Savannah, Georgia	29.90	759.4	29.99	761.7	76	24.4	82	E	2	0.9	.....	2cs	0	.....	.....	0	0	Fair	
Shreveport, Louisiana	29.69	754.1	29.93	760.2	67.4	19.7	84	E	4	1.8	.....	2k	0	.....	.....	0.08	2.0	Fair	
Silver City, New Mexico	24.20	614.7	30.38	771.6	45	7.2	76	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Sitka, Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Inap.	Inap.	.....	
Smithville, North Carolina	30.00	762.0	30.04	763.0	67	19.4	95	Calm	0	0	.....	5c	Hz	.....	.....	0	0	Fair	
Socorro, New Mexico	25.35	643.9	29.42	747.3	48	8.9	36	SE	2	0.9	.....	50k	0	SE	.....	0	0	Fair	
Spokane Falls, Wash. Ter.	27.90	710.2	29.82	757.4	39	3.9	47	S	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Springfield, Illinois	29.37	746.0	30.02	762 5	64	17.8	53	E	4	1.8	.....	0	2s;hz	.....	N	0	0	Fair	
Springfield, Massachusetts	29.92	760.0	30.04	763.0	57	13.9	87	E	3	1.3	.....	.....	10s	.....	E	0.45	11.4	Cloudy	
Stockton, Texas	29.89	683.0	29.89	759.2	51.5	10.8	86	NW	12	5.4	.....	.....	10s	.....	NW	0	0	Cloudy	
St. Vincent, Minnesota	29.68	738.6	29.86	758.4	52	11.1	79	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Thatcher's Island, Mass.	30.02	762.5	30.07	763.8	45	7.2	100	NE	13	5.8	.....	.....	10n	.....	NE	0.16	4.1	Light rain	
Toledo, Ohio	29.42	744.7	29.99	761.7	58	14.4	70	W	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Tucson, Arizona	27.38	695.4	29.93	760.2	60	15.6	39	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.73	755.1	30.23	767.8	47.0	8.3	55	W	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Uvalde, Texas	28.94	735.1	29.75	755.6	59	15.0	82	N	4	1.8	.....	5k	0	W	.....	0.10	2.5	Fair	
Vicksburg, Mississippi	29.09	754.1	29.94	760.5	68	20.0	79	Calm	0	0	.....	.....	10s	.....	S	0.02	0.5	Cloudy	
Visalia, California	29.41	747.0	29.77	756.1	58	14.4	70	W	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C.	29.97	761.2	30.08	764.0	52	11.1	93	NE	2	0.9	.....	.....	Fg	.....	.....	0.02	0.5	Dense fog	
Wickenburg, Arizona	.....	.....	.....	.....	55	12.8	33	S	.....	.....	1	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	29.98	761.5	30.03	762.7	66	18.9	89	Calm	0	0	.....	2c	Hz	Calm	Calm	0	0	Clear	
Winnemucca, Nevada	25.46	646.7	29.82	757.4	54	12.2	49	SW	1	0.4	.....	0	5ks	.....	SW	0	0	Fair	
Wood's Holl, Mass.	30.01	762.2	30.04	763.0	50	10.0	93	N	8	3.6	.....	.....	10s	.....	Calm	0.03	0.8	Cloudy	
Yankton, Dakota	28.79	731.3	30.06	763.5	60	15.6	65	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Yuma, Arizona	29.55	750.9	29.70	754.4	65.2	18.4	78	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.09	561.1	.....	.....	54.8	12.7	80	Calm	0	0	.....	.....	10n	.....	.....	0.16	4.1	Cloudy	Thomas Herran
Buff Bay Town, Jamaica	29.72	754.9	30.03	762.7	75	23.9	81	W	.....	.....	.....	2c	5c	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.91	759.7	29.95	761.0	79	26.1	69	Calm	0	0	.....	8cs	0	Calm	.....	0.02	0.5	Cloudy	A. Van Caneghem, Ass't.
Jakobshavn, Greenland	29.93	760.1	29.98	761.4	28.4	—2	.....	NW	.....	.....	4	.....	10	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I.	29.93	760.2	29.94	760.5	81.5	27.5	70	Calm	0	0	.....	80s	0	N	.....	0	0	Fair	Robert Johnstone
Navassa, W. I.	29.87	758.7	29.95	760.7	81	27.2	83	E	12	5.4	.....	2cs	8k	NW	E	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	80	26.7	87	SE	.....	.....	2	5k	7ks	E	.....	0	0	½ cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.43	747.5	29.99	761.7	78	25.6	84	Calm	.....	.....	0	.....	10ks	.....	Calm	0	0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	77.0	25.	.....	SW	.....	.....	1	ck	10ks	.....	SW	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	29.91	759.7	29.94	760.5	80	26.7	78	Calm	0	0	.....	4cs	0	.....	.....	0	0	Fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	30.04	763.0	30.09	764.3	31.0	— 0.6	95	NE	14	6.3	.....	4k	3s	NE	NE	0.01	0.3	Cloudy	J. Fortescue & W Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross, N. 34° 59′, E. 124° 05′	29.96	761.0	55	12.8	...	NNW			1							1	S	D. clouds	Comm. A. J. Errington.
H M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.03	762.7	69.5	20.8	80	NNE			1		0							Blue sky	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 23° 38′, E. 58° 36′	29.64	752.8	88	31.1	80	SSW			1		3	S						D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			57	13.9		NNE			2-3		8	NNE				2	NNE	Drizzling	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	29.97	761.2	81	27.2	87	Calm			0		4							D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 11′, E 18° 26′	29.89	759.2	67	19.4	64	ESE			1		5	E						D. clouds	Com. F. W. Richards.
H. M. S. Champion, Ascension I'ds, Africa	29.89	759.2	83	28.3	67	NE			3		4	Calm				3	SE	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 30° 57′, E. 122° 34′	30.16	765.1	60	15.6	88	NE			1		10					4	E	Overcast	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 37° 00′, E. 15° 27′	29.98	761.5	74	23.3		NNE			1		0					2	NNE	Blue sky	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, S. 7° 09′, W. 12° 59	29.99	761.7	80	26.7	87	E			3		3					3	E	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring, N. 5° 52′, E. 86° 14′	29.74	755.4	84	28.9		SW			6		2	SW				3	SW	D. clouds	Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.03	762.7	75.5	24.2	84	NNW			1		3	NNW						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 34′, W. 52° 41′	30.32	771.1	36	2.2	95	W			2-3		4					1	NE	D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, N. 8° 34′, E. 81° 10′	29.74	755.4	91	32.8		SW			1		3					1		D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, Singapore Roads, India	29.66	753.4	81	27.2		E			1		3	S				3	S	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, S. 5° 37′, E. 176° 05′	29.82	757.4	83	23.3	87	E			3		1					2	N	Blue sky	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, S. 5° 16′, E. 82° 09′	29.79	756.7	83	28.3	75	SSE			3		2	SSE				5	SE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Kurslake.
H. M. S. Fawn, N. 14° 03′, E. 42° 44′	29.70	754.4	87.5	30.8	82	NNE			1		4	S						D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo N. 17° 40′, W. 77° 46′	29.93	760.2	83	28.3	83	E			2-3		2	E				2	E	D. clouds	Comm. R. N. Custance.
H M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 45° 20′, W. 137° 00′	30.53	775.4	48	8.9	63	ENE			4		10					1	WNW	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.28	743.7	45	7.2	75	NNW			2		6							D. clouds	Capt. L. F. Jones.
H. M. S. Griffon, N. 22° 21′, W. 84° 51′	29.93	760.2	80	26.7	82	ESE			2		1	E						Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant, S. 39° 00′, E. 143° 30′	30.25	768.3	57	13.9	84	N			1		5	NW				1	SW	D. clouds	Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Alexandria, Egypt	29.89	759.2	69	20.6	85	WNW			3		0					1	WNW	Blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 25° 40′, E. 123° 04′	29.87	758.7	73	22.8	85	NE			1		8	SW				3-4	NNE	D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.99	761.7	65	18.3		Calm			0		7	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	29.65	753.1	73	22.8		Calm			0		6							D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Now Chow I'd, China Sea	29.84	757.9	83.1	28.4	77	SE			3		3							Misty	Capt. A. Carpenter.
H. M. S. Midge, Amoy, China	29.86	758.4				SE			1		3	SE						D clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 36° 07′, W. 5° 21′	30.01	762.2	68.5	20.3	87	Calm			0		10?							Blue sky	Capt. H. H. Rawson.
H. M. S. Modeste, N. 0° 43′ E. 104° 24′	29.75	755.6	83	28.3	91	Calm			0		2							D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Goletta, Tunis, N. Africa	30.07	763.8	66	18.9	89	Calm			0		5	ENE						D. clouds	Capt. G. Tryon, C. B

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper.	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	30.19	766.8	43.5	6.4	96	SSE			5									Foggy	Capt. E. B. Drummond.
H. M. S. Orontes, S. 30° 17′, E. 36° 02′ †	30.10	764.5	67.5	19.7	92	W			3		3	W				3	SSW	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.88	758.9	80	26.7		NW			1		4					2	SE	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin, S. 53° 14′, W. 73° 21′	29.28	743.7	45	7.2		SW			1–6		10							Raining	Capt. A. C. Paget.
H. M. S. Phœnix, N. 17° 46′, W. 75° 11′	29.95	760.7	82	27.8	79	ESE			2–3		4	ESE				1	ESE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler, N. 6° 41′, E. 8° 25′	29.93	760.2	80	26.7		S			4		10	S				4	SSW	D. clouds	Capt. Hon. A.C.Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	30.12	765.0	38	3.3		Calm			0		2							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.88	758.9	82.4	28.0	85	SE			2		9							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 9° 04′, W. 25° 11′	30.04	763.0	79	26.1	86	NNE			3		2	NNE				4	NNE	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos, N. 33° 47′, W. 64° 31′	30.07	763.8	71	21.7	90	Calm			0		1					3	NNE	Blue sky	Capt. C. G. Fane.
H. M. S. Thetis, S. 8° 23′, W. 146° 25′	29.84	757.9	82	27.8	87	ESE			1		8					3	SE	D. clouds	Capt. P. W. Stephens.
H. M. S. Thunderer, Naples, Italy	30.03	762.7	71	21.7	78	SSW			3		5					3		D. clouds	Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A	30.08	764.0	56	13.3	81	NE			1		10	Calm						Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 33° 20′, E. 26° 30′	29.88	758.9	68	20.0	74	W			4							1	W		Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I			79	26.1		NE			1		3							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, S. 33° 57′, E. 153° 30′	30.30	769.6	65	18.3	84	S			4–6		7	S				1	S	D. clouds	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Abu Shehr Roads, Persia	29.70	754.4	86.5	30.3	74	NW			3–4		0					Sm'h		Misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, Mossamedes, Benguela	30.02	762.6	62.6	17.0	83	NW			4		1					1		Blue sky	Carlos Candido dos Reis, Comd't.
Quanza, St. Vincent, Cape Verde, P'd	30.11	764.8	77.0	25.0	61	NE			3		3		NE			2	NE	D. clouds	Carlos M. da Silva Costa, Comd't
RioLima, Sado, Tamega,																			S. C. da Silva Costa, Comd't.
Macao, Ch'na	29.85	758.3	82.8	28.2	82	SSW			2		4		S					D. clouds	G. A. de Brito Capello, Comd't.
																			P. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla.	29.99	761.7	71	21.7	90	NE	1	0.4			8		NE	0	0			Fair.	
N. Yard, Portsmouth, N. H.	30.12	765.0	46	7.8	92	NE	14	6.3		10c	0	NE		0	0			Rainy	
Naval Hospital, Yokahama, Japan	29.91	759.7	60.5	15.8	82	Calm			0		0			0	0			Clear	
Adams, Payta, Peru	29.77	756.1	68	20.0	90	SE			3		0					Sm'h		Clear.	
Alaska, Callao, Peru	29.93	760.2	63	17.2	83	Calm			0		0			0	0	Sm'h		Clear.	
Alert, Port Lloyd, Bonin Id..*	29.97	761.2	79	26.1	78	Calm			0		10		Calm			Sm'h		Drizzling	
Alliance, Norfolk, Va	30.05	763.3	63	17.2	83	Calm			0		0			0	0			Clear	
Ashuelot, Kobe, Japan	30.00	762.0	66	18.9	79	NW			1		5		Calm					Cloudy	
Colorado, New York, N. Y.	30.04	763.0	56	13.3	87	SE	1	0.4			10			0.01	0.3			Foggy	
Constitution, Norfolk, Va	30.01	762.2	60	15.6	88	W	2	0.9			0							Clear	
Franklin, Norfolk, Va	29.96	761.0	62	16.7	77	SSW	4	1.8			0			0	0			Clear.	
Galena, Villafranca, France	29.93	760.2	65	18.3	94	SE			1		10					Sm'h		Cloudy	
Independence, N. Yard, Mare I'd, Cal.	29.84	757.9	55	12.8	87	SW	1.2	0.5			5		SW					Fair	
Jamestown, Sitka, Alaska *†	30.43	772.9	46	7.8	92	E			1		10			0.12	3.0			Cloudy	
Kearsarge, Port Royal, S. C.	30.02	762.5	74	23.3	86	SE			1		5		SW			Sm'h		Fair	
Lackawanna, S. 17° 19′, W. 112° 05′.. †	30.12	765.0	76	24.4	100	NE			1-2		2		NE			Sm'h	NE	Fair	
Marion, Montevideo, Uruguay	30.17	766.3	57	13.9	94	NW			2		10		Calm	0	0	Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	29.95	760.7	72	22.2		W	3	1.3			0							Clear	
Minnesota, Newport, R. I.	30.06	763.5	56	13.3	94	NNE			1		10					Sm'h		Foggy	
Monocacy, Yokohama, Japan	30.04	763.0	63	17.2	78	S			1		2		S					Fair	
New Hampshire, Port Royal, S. C.	29.97	761.2	75	23.9	81	E	4	1.8			5		E	0	0			Fair	
Nipsic, Villafranca, France	30.05	763.3	66	18.9	84	ESE			1		10					Sm'h		Overcast	
Onward, Callao, Peru †	29.98	761.5	64	17.8	78	Calm			0		2					Long	W	Clear	
Palos, N. 34° 35′, E. 135°—′	30.02	762.5	65	18.3	73	WSW			1		5					Sm'h		Fair	
Passaic, Washington, D. C.	30.11	764.8	56	13.3	87	NE			1		10							Cloudy	
Pensacola, N. 41° 34′, W. 139° 55′	30.43	772.9	52	11.1	86	ENE			2-5		10			0	0	R'gh		Cloudy	
Portsmouth, Elizabeth River, Va.	30.05	763.3	66	18.9	89	Var.			0-1		2		NW			Sm'h		Clear	
Powhatan, Port Royal, S. C.	29.98	761.5	81	27.2	74	NNW			1		2					Sm'h		Clear	
Quinnebaug, N. 22° 36′, W. 34° 33′	30.17	766.3	74	23.3	76	E			3		8		NE			Long	ENE	Fair	
Ranger, N. 15° 44′, W. 95° 08′	29.77	756.1	77	25.0	85	NW			1		2		NW	0.4	10.	Long	SE	Fair	
Richmond, Yokohama, Japan	30.05	763.3	64	17.8	73	SSE			1		0			0	0			Clear	
Saratoga, Norfolk, Va	30.01	762.2	60	15.6	88	NW			2		2		Calm	0	0			Fair	
Shenandoah, Montevideo, Uruguay *	30.14	765.5	57	13.9	87	WNW			2		10					Sm'h		Cloudy	
St. Louis, League Island, Pa.	29.66	753.4	54	12.2	32	NE	4	1.8			10			0 03	0.8			Cloudy	
Swatara, Shanghai, China † *	29.89	759.2	63	17.2	89	NE			1		8		Calm					D. clouds	
Tennessee, Hampton Roads, Va.	30.06	763.5	66	18.9	84	W	5	2.2			2			0	0	Sm'h		Clear	
Ticonderoga, S. 46° 48′, W. 99° 21′	29.71	754.6	45	7.2	75	ESE			6		8		ESE	0.15	3.8	R'gh	SE	Cloudy	
Trenton, Villafranca, France. *	30.00	762.0	68	20.0	79	SE			2		8			0	0	Sm'h		Cloudy	
Vandalia, N. 41° 08′, W. 69° 02′	29.99	761.7	53	11.7	86	Calm			0		5		Calm			Long	NE	Fair	
Wabash, Boston, Massachusetts	30.09	764.3	53	11.7	80	N	6	2.7			10		Calm	0	0			Cloudy	
Wachusetts, San Francisco, Cal.	29.85	758.2	57	13.9	87	SW			3		10					Sm'h		Cloudy	
Wyoming, N. 36° 50′, W. 75° 58′	30.05	763.3	62	16.7	77	NW			2		2		NW			Sm'h	SSE	Clear	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
Britl h Merchant. ‡																			Capt. E. J. Molony.
Ohin Yang																			Capt. H. Youlden.
S. S. Olpero, N. 25° 56′, W. 47° 02′	30.14	765.5	74	23.3	86	ENE			4		3					4	ESE	D. clouds	Capt. W. N. Lalley.
City of Agra																			Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbighshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart, ‡ N. 48° 36′, W. 13° 34′	30.18	766.6	56.5	13.6	87	SSE			5		2							Blue sky.	Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow ‡																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope ‡																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamberts																			Capt. G. H. Jones.
Lnomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ N. 30° 07′, W. 39° 08′	30.27	768.8	71.2	21.8	80	SE			2	10cs	0		SW					D. clouds	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland ‡																			Capt. H. W. Dyke.
Barque Merlola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ S. 2° 28′, W. 21° 51′	29.99	761.7	84	28.9	71	ENE			4		4							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 60° 47′, E. 7° 14′	29.76	755.9	84.0	28.9	94	WNW			4		7							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyburton, N. 37° 35′, W. 0° 34′ ‡	30.17	766.3	70	21.1	85	NNE			3		4							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 55° 11′, W. 10° 58′	30.01	752.2				S			5		8		S			Mod.	S	Cloudy	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Algeria																			Capt. W. Watson.
S. S. Scythia, N. 41° 12′, W. 56° 22′	30.12	765.0	63	17.2	89	E			6		10			0	0	R'gh	SE	Overcast	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 49° 42′, W. 26° 20′ †	29.57	751.1	49	9.4		WSW			5		5		W			R'gh	Con.	D. clouds	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Glendell.
S. S. Germanic, N. 51° 08′, W. 15° 00′ †	30.06	763.5	54	12.2		S			6		8?		S	Sho	wers	Mod.	SW	Clear!	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, N. 46° 19′, W. 29° 29′ ‡	29.76	755.9	53.4	11.9		NW			4		8		WNW	10 ho	urs	Mod.	NW	Cloudy	
S. S. Köln																			Capt. Th. Jüngst
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. C. F. Stöldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, N. 39° 12′, W. 66° 05′	29.98	761.5	69	20.6	95	S			3		10		S			Sm'h	S	Overcast	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio, N. 51° 55′, W. 7° 35′ *†	30.28	769.1	54	12.2	87	SW			3		5		SW	0	0	Sm'h		Fair	W. Shackford, Chief Off'r
S. S. Pennsylvania, Liverpool, England *†	30.25	768.3	60	15.6	94	W			2		2		W					Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 23° 33′, W. 110° 51′ ††	29.84	757.9	62	16.7	88	NW			2		10		NW	0	0	G'tl	WNW	Cloudy	Capt W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 41° 25′, E. 159° 31′ †	30.07	763.8	55	12.8	68	S			4		2		SW	0	0	High	W	Clear	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China *†	30.02	762.5	87	30.6	84	Calm			0		2		SW					Clear	Capt. W. H. Kidley.
S. S. Oceanic, N. 38° 41′, W. 148° 48′	30.10	764.5	56	13.3	75	SW			3		0			0	0	Mod.	W	Blue sky	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Otterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon																			Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota, N. 40° 00′, W. 124° 20′ *†	29.80	756.9	55	12.8	93	N			2		10		NW			R'gh	NW	Hazy	Capt. H. G. Morse.
S. S. Idaho, N. 46° 50′, W. 125° 00′ †	30.14	765.5	50	10.0	100	W			2		0					H'vy	NW	Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, N. 32° 40′, W. 117° 15′ †	29.82	757.4	60	15.6	94	S			1		10					Sm'h		Hazy	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal. †	29.81	757.2	53	11.7	86	W			2		5		NW					Rain & fog	Capt. G. Debney.
S. S. Victoria, New Westminster, Brit. Col †	30.12	765.0	49	9.4	78	NW			4		2					Sm'h		Clear	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 34° 03′, E. 163° 03′	30.25	768.3	62	16.7	66	ESE			5		8		E			R'gh	ESE	Showery	A. Bannerman, 2d Officer
S. S. City of New York, Sydney, N. S. W. †	30.40	772.1	57	13.9	100	W			2		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 32° 15′ W 119° 30′ †	29.91	759.7	59	15.0	70	NW			4		10ks		NE	0	0	Mod.	NW	Overcast	Capt. D. S. Austin.
S. S. City of Peking, N. 34° 17′, E. 137° 31′ †	30.02	762.5	63	17.2	78	ENE			6		10		E	0	0	Sm'h		Cloudy	Capt. G. G. Berry.
S. S. City of Sidney																			Capt. H. C. Dearborn.
S. S. City of Tokio																			A. L. Ritchie, 2d Officer
S. S. Colima, Panama, Panama †	29.91	759.7	80	26.7	87	NW			2		5		N	0	0			Fair	Capt. R. R. Searle.
S. S. Granada, N. 20° 25′, W. 105° 45′ †	29.74	755.4	79	26.1	91	NW			3		2		NW	0	0	Sm'll	W	Clear	Capt. M. Connolly.
S. S. Zealandia, N. 0° 02′, W. 165° 18° †	29.93	760.2	72	22.2	71	E			1		1		E	0	0	Sm'h	E	Clear	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, N. 43° 34′, W. 39° 40′ †	30.25	768.3	48	8.9	?	NNW					5		N	0	0	High	N	Squally	A. Feddersen, 2d Officer.
S. S. Rhynland, Flushing, Netherlands †	30.55	776.0	64	17 8	78	W			4		2		WNW	0	0			Clear	Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 39° 55′, W. 72° 50′	30.01	762.2	57	13.9	81	NE	3	1.3			2k		NE	0	0	Sw'll	SE	Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis,																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 21° 00′, W. 60° 30′ *†	30.08	764.0	78	25.6		ENE			4		2		ENE	0	0	Sm'h	ENE	Fair	Capt B. F. Woodbury.
Brigantine George, N. 34° 15′, W. 65° 35′ †	30.08	764.0	74	23.3		S			5		2		S	0	0	Sm'h		Fine	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Md. †	30.14	765.5	61	16.1	88	ENE	1	0.4		10ck	0			0	0			Cloudy	
Bark Sunbeam, Lisbon, Portugal †	30.12	765.0	74	23.3	60	ENE			1		0			0	0			Clear	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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W. B. Hazen

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

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 22, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco	‡		30.03	762.8	70.5	21.4	80	NE		2		0				0	0	Clear	Dr. Ollive.
Nemours	‡		29.93	760.3	69.8	21.0	82	N		1		1				0	0	Very fair	Reynard.
Algiers	‡		29.99	761.8	69.4	20.8	72	NE		3		3				0	0	Cloudy	Nicolas.
La Calle	‡		30.03	762.8	70.9	21.6	49	WSW		9		5				Inap.	Inap.	Cloudy	Fonfrède.
Tunis	‡		30.02	762.6															Jacques.
Sfax	‡		30.15	765.9															Gau.
Saida	‡		30.00	762.1	75.6	24.2	39	NE		5		5				0	0	Cloudy	Dumas.
Tebessa	‡		30.07	763.8	57.6	14.2	98	Calm		0		10				0.492	12.5	Covered	Watrin.
Geriville	‡																		Lonchamp.
Laghouat	‡																		Herbin.
Biskra	‡		30.04	763.0	74.8	23.8	22	E		1		2				Inap.	Inap.	Fair	Baudassé.
	‡		30.05	763.2															
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria		29.92	759.9	30.01	762.2	62.8	17.1	55	N	24	10.7		10			0	0	Squally	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram		29.56	750.8	30.09	764.3	74.8	23.8	45	NE		4		3			0	0		Prof. Ivan Stoxir.
Cracow, I. R. Obs'y		29.51	749.6	30.29	769.4	51.4	10.8	89	NNW	8.7	3.9		10			0.173	4.4		Dr. Wierzbicki.
Eperies		29.25	743.9	30.11	765.0	65.7	18.7	60	N		3		8ks			0	0		Julius Mikolik.
Gratz	‡	28.92	734.6	30.14	765.5	69.4	20.8	55	NW		3		3			0	0		Andreas Rospini.
Hermannstadt		28.53	724.6	29.91	759.7	69.4	20.8	55	S		3		10			0.020	0.5	Rainy	Prof. A. Gottschling.
Kremsmunster, Obs'y		28.98	735.2	30.34	770.6	51.5	12.5	90	NE		1		10			0.075	1.9		The Staff.
Lemberg		29.06	738.0	30.01	762.3	69.8	21.0	67	NW		1		8			0.287	7.3		Dr. T. Stanecki.
Pola		29.95	760.9	30.05	763.6	81.0	27.2	36	ENE		4		2			0.213	5.4		I. R. Hydrographic Office.
Szathmar		29.51	749.5	29.95	760.7	79.5	26.4	34	NE		2		2			0	0		Beicht Peter, S. J.
Szegedin		29.70	754.3	29.97	761.1	75.3	24.6	42	Calm		0		3			0	0		Karl Stancel.
Trieste		29.98	761.5	30.08	764.1	77.0	25.0	39	ENE		2		1			0.067	1.7		Secco.
Vienna		29.61	752.0	30.32	770.2	57.6	14.2	65	NNW		2		9			0	0		I. R. Central Met.' Obs'y
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.33	770.4	30.43	772.9	57.6	14.2	72	SSE	18	8.0			3			0	0	Blue sky	W. Boswell.
Armagh, Observatory	30.16	766.1	30.38	771.6	60.2	15.7	71	SSE	14	6.3									S. Cull.
Bidston, Liverpool Obs'y			30.40	772.1	66.0	18.9	51	SE	15	6.7			1					Blue sky	John Hartnup.
Bolton, Sharples	29.88	758.9	30.41	772.4	64.9	18.3	88	SE	6	2.7			3					D. clouds	Thomas Mackereth.
Bradford, Yorkshire																0	0		J. McLandsbo ough, F.R.S
Bridgetown, Barbadoes	29.92	760.0	29.94	760.5	84	28.9	79	NE			1		7					Gloomy	Corpl. J. Surgener, AH.C.
Cardington			30.41	772.4	71.0	21.7	71	SE			1.0		1					Blue sky	John McLaren.
Chatham, School M. E.	30.32	770.1	30.45	773.4	61.5	16.4	65	NE			3		2					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	30.14	765.5	30.37	771.4	56.7	13.7	58	E			3		0					Blue sky	The Staff.
Fort Napier, Natal	27.61	701.3	29.82	757.4	70.1	21.2	71	SE			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.60	751.8	29.84	757.9	88	31.1	84	W			1		4					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			30.09	764.3	62	16.7	83	N			4		6			0	0	D. clouds	J. O'Donaghue.
Gibraltar, Mediterranean	29.97	761.2	30.02	762.5	70.5	21.4	85	NE			2		5					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.96	761.0	30.17	766.3	57.0	13.9	57	SSW			5		10k					D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	30.26	768.6	30.43	772.9	67.6	19.8	54	E			1		0					Blue sky	The Staff.
Guernsey	30.06	763.5	30.27	768.8	58	14.4	72	NE			3		0					Blue sky	Dr. S. E. Hoskins, F.R.S.
Kew, Observatory	30.39	771.9	30.42	772.7	66.7	19.3	33	E	25	11.2			2					Blue sky	The Staff.
Leicester, Museum	30.20	767.1	30.45	773.4	65.0	18.8	42	SE			1		0					Blue sky	J. E. Carryer.
Malta, Mediterranean	29.98	761.5	30.05	763.3	72.8	22.7	73	NE			1		3			0	0	Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.98	761.5	30.03	762.7	81.0	27.2	78	SE			1		8					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.91	759.7	30.42	772.7	67.5	19.7	40	SE			2		0					Blue sky	John Mac Email.
Oxford, Radcliffe Obs'y	30.18	766.6	30.41	772.4	66.4	19.1	52	SE			3		3					Misty	The Staff.
Plymouth	30.29	769.4	30.36	771.1	63.7	17.6	45	E			4		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			30.28	769.1	62.5	16.9	69	S	17	7.6			0					Blue sky	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.79	756.7	29.86	758.4	62.8	17.1	92	NE			1		10					Overcast	Serg't W. H. Lyne.
Sheffield	30.18	766.6	30.46	773.7	67.5	19.7	42	SW			1		1			0	0	Blue sky	W. F. Cooper.
Silloth Rectory	30.40	772.1	30.43	772.9	67.0	19.4	60	W			1		2			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.44	773.2	65.7	18.7	47	S	15	6.7			6					D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	30.17	766.3	30.38	771.6	70.5	21.4	33	NE			3		3					Squally	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.31	769.9	30.32	770.1	68	20.0	42	E			4		0					Blue sky	W. Newcombe.
Valencia, Observatory	30.25	768.3	30.27	768.8	59.9	15.5	70	SE	27	12.1			7					D. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.05	763.3	30.09	764.3	48	8.9	95	SE	7	3.1			10n			0.520	23.4	Light rain	H. J. Cundall, C. E.
Chatham, N. B.*	30.06	763.5	30.12	765.0	45	7.2	96	N	4	1.8			10n		N	0.47	11.9	Cloudy	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.16	766.1	30.18	766.6	41	5.0	78	NE	5	2.2			Fg		Calm	0.08	2.0	Foggy	J. McWilliams.
Fort Garry, Manitoba*	29.08	738.6	29.88	758.9	59	15.0	85	S	12	5.4		0	2s		SW	0	0	Fair	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.90	759.4	30.03	762.7	50	10.0	10	E	6	2.7			Fg			0.580	14.7	Foggy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.78	756.4	30.12	765.0	54	12.2	98	NE	1	0.4			10s		Calm	0.08	2.0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.92	760.0	30.12	765.0	49	9.4	94	N	9	4.0			10s			0.51	13.0	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.49	749.0	30.18	766.6	51	10.6	10	Calm	0	0			Fg			0	0	Foggy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.46	748.3	30.15	765.8	54	12.2	93	NE	10	4.5			10n			0.02	0.5	Hazy	H. Morgan.
Port Stanley, Ontario	29.48	748.8	30.12	765.0	56	13.3	94	NE	4	1.8			10ks		NE	0	0	Cloudy	M. Payne.
Quebec, Quebec*	29.85	758.2	30.18	766.6	44	6.7	92	E			1		8n		E	0.05	1.3	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.69	754.1	30.15	765.8	52	12.2	96	W	2	0.9			Fg			0	0	Foggy	W. H. McIntyre.
Saugeen, Ontario*	29.46	748.3	30.17	766.3	55	12.8	92	E	2	0.9		0	0			0	0	Clear	K. Stewart.
St. Andrews, N. B.	29.96	761.0	30.02	762.5	48	8.9	94	N	3	1.3			10n		N	0.49	12.4	Cloudy	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.20	767.1	30.24	768.1	42	5.6	98	NE	2	0.9			10n			0.36	9.1	Light rain	T. C. Hill, C. E.
Toronto, Ontario*	29.80	756.9	30.18	766.6	55	12.8	90	N	2	0.9		0	0			0.02	0.5	Clear	Magnetic Observatory
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	29.87	758.7	29.93	760.2	58	14.4	91	E	4	1.8		0	5s		E	1.56	39.6	Fair	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	30.25	768.3	30.50	774.7	57	13.9	100	W				0	0			0	0	Fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.83	757.7			62.6	17.0	79	W	12.3	5.5		3c	0			0	0	Light haze	John Duthie.
Cape Town, C. G. H. Obs'y	29.89	759.2	29.93	760.2	69.0	20.6		NNW	13.6	6.1		5	5ks;n			1.238	31.4		The Staff, for D. Gill.
Worcester*†	28.77	730.7			61.9	16.6	55	NW			1	5	4			0	0	Overcast	C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.85	758.3	29.88	759.0	62.6	17.0	96	NW	1.1	0.5			10n			0.256	6.5	Raining	M. Marc Dechevrens, S. J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	25.20	665.5	29.92	760.0	66.2	19.0	92	SE			1	2d	0	E		0	0	Clear	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.48	774.2	30.53	775.4	52.2	11.2	89	NNE	11	5			3						Oversergent Fischer.
Farö	30.53	775.5	30.53	776.0	57.9	14.4	72	NW			4		5						Overlœrer Lauridsen.
Godthaab, Greenland	29.50	749.2	29.54	750.3	32.2	0.1	98	S			7		10					Snowing	S. Kleinschmidt.
Stykkisholm, Iceland	29.58	751.2	29.62	752.3	45.7	7.6		S			7		8					Raining	A. O. Thorlacius.
Thorshavn	30.05	763.4	30.09	764.3	53.6	12.0	85	SW	27	12			10					Raining	Overlœrer Bergh.
Vestervig	30.48	774.3	30.58	770.7	48.2	9.0	89	W			2		5						Lœarer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.47	748.4	30.10	764.6	69.1	20.6	30	E			1	5ck	0		E	0	0	Cloudy	M. Labroue, Director.
Alençon Normal School	29.73	755.1	30.28	769.1	66.2	19	46	N			1		2k		N	0	0	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	30.05	763 2	30.30	769.6	68.0	20.0	52	E			3		0			0	0		M. Klein, Commandant.
Avignon, Normal School	30.06	763.4	30.13	765.4	75.2	24	42	W			1		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.65	753.2	30.20	767.0	70.7	21.5	42	E			3		2kn			0	0	Slightly cl'dy	M. Saillard, Director.
Beauvais, Normal School	30.05	763.3	30.31	769.9	69.3	20.7	26	E			3		0			0	0	Clear	M. Frère Eugene Marie.
Besançon, Normal School	29.33	745.0	30.20	767.0	65.8	18.8	64	NE			3	0	0		N	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.84	757.8	30.09	764.3	62.8	17.1	64	ESE			1		8		E	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal Sch ol	29.62	752.3	30.16	766.0	70.7	21.5	49	ENE			2		k		ENE	0.031	0.8		M. Postel, Director.
Brest, Naval Observatory	30.03	762.7	30.27	768.9	67.3	19.6	39	NE			2		0			0	0		M. de Rermarec, Dir.
Caen, Normal School	30.21	767.2	30.28	769.0	66.4	19.1	74	NE			2		0			0	0	Clear	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.91	759.7	30.23	767.8	77.0	25.0	61	E			4		2			0	0	Slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.84	757.9	30.34	770.7	72.0	22.2	59	ESE			3		0			0	0	Clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.82	732.1	30.16	766.0	64.9	18.3	64	NNW			1		5		SE	0.098	2.5	¼ covered	M. Alluard, Director.
Cluny, Normal School	29.32	744.8	30.16	766.0	71.6	22	62	NE			1		3		NE	0.051	1.3		M. de Villemontée, Dir.
Commercy, Normal School	29.41	747.1	30.27	768.9	70.9	21.6	44	NE			6	2c	0	NE	NE	0	0	Clear	Dr. Coulet, Director.
Gap, Normal School	27.57	700.3	30.07	763 8	60.8	16	89	S			6		2nk		S	0	0	¼ covered	M. Jeangirard, Director.
Grenesque, du. Rhone	29.00	738.1	30.20	767.1	75.6	24.2	46	SW			2		2		S	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.37	746.0	30.12	765.0	69.1	20.6	65	NW			1	ck	0			0	0		M. Ablard, Director.
Guéret, Normal School	28.50	725.4	30.13	765.2	63.0	17.2	68	E			2	ck	0		W	0.35	9.		M. Rivoire, Director.
Lamballe, Normal School	30.10	764.6	30.37	771.4	63.5	17.5	63	WNW			1				WNW	0	0		M. Olliltrault, Director.
Lesear, Normal School	29.53	750.1	30.19	766.8	65.5	18.6	69	NW			1	ck	0			0	0		M Chauvin, Director.
Lorient, Naval Observatory	30.15	765.9	30.20	768.5	71.6	22.0	36	NE			1		0			0	0	Clear	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.12	739.7	30.17	766.3	64.2	17.9	64	NNE			1		2		E	0	0	Slightly cl'dy	M. André, Director.
Mans, Normal School	29.92	759.9	30.22	767.6	69.8	21	40	NE			4		2		E	0	0	Slightly cl'dy	M Piboen, Director.
Marseille, Observatory	29.87	758.8	30.14	765.6	68.2	20.1	60	WSW			2		1		NE	0	0		M. Stephan, Director.
Montlouis Pinstituteur	24.93	633.2	30.17	765.2	50.9	10.5	71	S	22.4	10.0			10		NW	0.275	7.0		M. Cave, for Dr. Fines.
Montpellier, Normal School	30.03	762.7	30.13	765.4	72.0	22.2	56	S			2		0			0	0	Clear	M. P. Galzin, Director.
Nancy, Normal School	29.47	748.4	30.22	767.5	69.4	20.8	32	NE			2		0			0.031	0.8	Clear	M. Hasse.
Nantes, Observatory	30.04	763.1	30.21	767.2	70.2	21.2	48	NE			1-3	ck	7k	ENE	NE	0	0		M. Larocque, Director.
Nice	30.04	763.1	30.10	764.5	73.0	22.8	71	SW			1		10	SW	SW	0	0	Covered	Capt. Boissière, Director.
Perpignan, Observatory	30.00	761.9	30.10	764.6	68.2	20.1	50	SW	15.0	6.7			1		SE	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.59	573.7			38.7	3.7							1		SW	0	0	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.09	738.8	30.12	765.1	71.6	22	54	S			1		0			0	0	Clear	M. Taillen.
Puy de Dôme Obs'y, Summit	25.28	642.1			45.0	7.8	99	ESE			3		10			0.335	8.5	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	30.22	767.6	30.25	768.4	66.2	19.0	54	ENE			2		8		NE	0.28	7.	¾ cover d	Lt. E. Decante, Director
Roche-sur-Yon, N. School	29.94	760.4	30.15	765.7	65.8	18.8	61	NE			3		5		NE	0	0	Cloudy	M. Mouillot, Director.
Rodez, Normal School	28.00	711.1	30.09	764.2	68.0	20.0	34	NE			1		1		NE	0	0	Clear	M. Richard, Director.
Rouen, Normal School	30.22	767.7	30.31	769.9	73.0	22.8	34	E			2		0			0	0	Clear	M. Platrier, Director.
Saint Lô, Normal School	30.21	767.4	30.37	771.4	65.3	18.5	52	ENE			1		0			0	0	Clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.10	764.4	30.25	768.6	73.4	23.0	27	ENE			3		1		E	0	0		M. Renou, Director.
Toulouse, Observatory	29.42	747.3	30.15	765.7	70.7	21.5	46	NW			1					0	0		M. Bailland, Director.
Tours	29.95	761.0	30.16	766.0	70.5	21.4	45	ENE			3		8		E	0	0	¾ covered	M. de Tastes.
Versailles, Observatory	29.77	756.1	30.26	768.6	68.4	20.2	33	NE			8					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.51	749.6	30.39	771.8	66.4	19.1	36	NNE			5		2k	NNE		0	0		Prof. Dr. Hoh.
Berlin	30.29	769.3	30.40	773.6	68.0	20.0	32	NE			2		5			0.098	2.5		Prof. Dr. Arndt.
Breslau	29.85	758.3	30.39	772.0	56.1	13.4	73	NE			2		9			0.189	4.8		Royal University Obs'y.
Carlsruhe	29.86	758.5	30.29	769.3	69.8	21.0	51	NE			3		0			0	0		Albert Sens.
Cassel	29.69	754.0	30.41	772.4	70.2	21.2	36	NNE			6		2	NE		0	0		Dr. H. Möhl.
Frankfort on the Main	30.04	762.9	30.39	772.0	69.8	21.0	29	ENE			3		1			0	0		Physical Society.
Friedrichshafen	29.78	731.1	30.19	766.7	67.6	19.8	60	NE			8		5	NE		0	0		Wilhelm, Chief Tel.
Hamburg	30.47	773.8	30.54	775.6	60.8	10.0	60	NNE			3		3			0	0		Dr. R. Kleeman.
Kiel	30.54	775.6	30.55	775.0	46.4	8.0	78	NE			2		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	30.04	762.9	30.45	773.5	65.3	18.5	42	NE			3		5	N		0	0		Prof. Dr. Bruhns.
Magdeburg	30.16	766.1	30.45	773.4	67.3	19.6	52	N			3		3ks	NNE		0	0		Dr. Asamann.
Memel	30.34	770 7	30.39	771.9	57.2	14.0	58	NNW			4	2cs	0						Reinbrecht & Issermann.
Munich	28.51	724.2	30.40	772.1	56.3	13.5	79	NE			2		9	NE		0.016	0.4		Central Station.
Neufahrwasser	30.45	773.4	30.47	773.8	52.2	11.2	78	NNW			3		0			0.012	0.3		A. Lothes.
Neustadt, Palatinate	29.70	755.9	30.29	769 4	70.3	21.3	31	NE			4		5			0	0		Dickmether.
Stuttgart	29.34	745.1	30.21	767.3	69.8	21.0	38	NE			5		1	SE		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.84	732.5	30.34	770.7	64.2	17.9	38	E			8		3	E		0	0		Prof. Kemlein.
Wustrow	30.53	775.5	30.56	776.1	56.5	13.0	81	N			1		0			Inap.	Inap.		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.57	751.0	29.95	760.7	77.2	25.1		NE			3.0		0					Clear	A. Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.63	752.6	29.68	753.8	87.5	30.8	82	SW	19.0	8.5			6			0	0	D. clouds	
Deesa	29.16	740.6	29.61	752.1	100.3	37.9	24	W	17.4	7.8			4	W		0	0	D. clouds	
Bombay	29.73	755.1	29.77	756.0	88.0	31.1	70	WNW	16.0	7.2			0			0	0	Blue sky	
Poona, Yarrowda	27.88	708.2	29.68	753.9	93.3	34.1	36	WNW	24.0	10.7			0			0	0	Blue sky	
Belgaum	27.21	691.2	29.68	753.9	88.4	31.3	55	SW	14.0	6.3			0			0	0	Blue sky	
Lahore	28.82	732.0	29.53	750.0	100.2	37.9	30	NE	5.0	2.2			0			0	0	Misty	
Roorkee	28.66	727.8	29.52	749.7	97.7	36.5	21	NW	2.5	1.1			0			0	0		
Agra	28.96	735.6	29.49	749.1	105.1	40.6	27	NE	4.8	2.2			0			0	0		
Nagpur	28.56	725.3	29.54	750.4	105.4	40.8	20	NW	9.9	4.4			2	W		0	0	D. clouds	
Jubbulpore	28.25	717.7	29.54	750.4	103.9	39.9	11	NW	5.3	2.4			0			0	0	Blue sky	
Lucknow	29.17	741.0	29.53	750.0	107.4	41.9	21	NNW	1.6	0.7			0			0	0	Blue sky	
Allahabad	29.20	741.8	29.50	749.3	105.0	40.6	27	Calm	1.5	0.7			0			0	0	Blue sky	
Patna	29.37	746.0	29.54	750.4	97.7	36.5	49	NE	3.4	1.5			0			0	0	Blue sky	
Hazaribagh	27.59	700.8	29.53	750.0	96.0	35.6	24	NNE	5.5	2.5			2			0	0		
Cuttack	29.48	748.9	29.56	750.9	95.1	35.1	54	S	2.0	0.9			4			0	0	D. clouds	
Calcutta, Alipore	29.57	751.0	29.59	751.5	89.5	31.9	71	SSW	9.0	4.0			10	SW	SW	0	0	Overcast	
Dhubri	29.51	749.5	29.63	752.3	84.1	28.9	74	SE	0.2	0.1			0			0	0	Blue sky	
Chittagong	29.59	751.6	29.68	753.9	85.9	29.9	76	SSE	3.4	1.5			8			0	0	D. clouds	
Sibsagar	29.27	743.5	29.60	751.9	87.2	30.7	72	NE	1.7	0.8			5	SW	SW	0	0	D. clouds	
Zanzibar, Africa			29.94	760.5	78.7	25.9	83	SSE	9	4.0			10			1.10	27.9	Raining	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.66	753.4	30.06	763.5	78.3	25.7	40	Calm	0	0			6			0	0		Prof. Giovanni Clodig.
Milan	29.60	751.8	30.10	764.0	77.4	25.2	52	SW	2.5	1.1			5			0	0		Prof. Schiaparelli.
Padua	29.99	761.7	30.10	764.4	79.0	26.1	35	SE	0.7	0.3			1			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.23	742.5	30.12	765.0	73.6	23.1	47	N	1.8	0.8			5	NE		0	0		Prof. P. F. Denza.
Genoa	29.92	760.0	30.11	764.9	73.0	22.8	58	W	3.1	1.4			4	E		0	0		Prof. G. M. Garibaldi.
Mondovi	28 25	717.7	30.13	765.3	70.3	21.3	49	WNW			6		4	SSE		0.213	5.4		Prof. D. C. Bruno.
Pesaro	30.04	762.9	30.08	764.1	70.7	21.5	68	NW	14.3	6.4			1	S		0	0		Prof. Luigi Guidi.
Florence	29.79	756.7	30.04	763.0	81.5	27.5	25	NNE			2		1			0	0		Prof. Costantino Pitter.
Leghorn	29.96	761.0	30.04	763.1	69.4	20.8	75						5			0	0		Prof. P. Monte.
Rome	29.89	759.2	30.05	763.5	79.0	26.1	49	SW	7.4	3.3			2			0	0		Prof. P. S. Ferrari.
Lecce	29.78	756.4	30.02	762.6	78.4	25.8	42	WNW	14.3	6.4			1			0	0		Prof. C. de Giorgi.
Cosenza	29.15	740.5	30.02	762.6	77.0	25.0	73	ESE	3.8	1.7			5	SE		0	0		Prof. D. Conti.
Cagliari	29.86	758.5	30.05	763.3	71.6	22.0	66	SE			2		5	W		0	0		Prof. A. Pacinotti.
Palermo	29.85	758.3	30.10	764.6	69.8	21.0	65	NE	4.3	1.9			2			0	0		Prof. G. Ciacciatore.
Syracuse	29.96	760.9	30.00	762.0	77.4	25.2	43	S	1.8	0.8			3	SW		0	0		Prof. Vincenzo Gulliano.
Sub-Series.																			
Naples, S. R	29.52	749.7	29.98	761.6	77.2	25.1	65	SW	6.3	2.8			0			0	0		Prof. F. Brioschi.
Stelvio	22.40	569.0			40.2	7.9	41	SE			2	4ck	0	S		0	0	Fair	Prof. P. F. Denza.
Valdobbia	22.43	569.8			49.5	9.7	73	SE			2		8k	NE		0	0	Cloudy	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y †	29.73	755.1	29.74	755.4	63.6	17.6	97	SW	2.8	1.2			10n			0.503	12.8	Raining	K. Sasaki.
Kioto	29.64	752.8	29.82	757.4	62.0	16.7	89	NE	2.8	1.2			10s;ks			0.140	3.6	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.59	751.6	29.79	759.6	67.4	19.7	93	SW	4.4	2.0			10n			0.580	14.7	Raining	S. Takehayashi.
Tokei Obs'y, Yeddo	29.81	757.2	29.87	758.7	66.2	19.0	80	SSW	11.7	5.2			10ks;s			0.038	1.0	Cloudy	The Staff.
Wakayama	29.73	755.1	29.78	756.4	65.6	18.7	90	S	1.3	0.6			10n		SSE	0.003	0.1	Cloudy	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.86	758.4	30.05	763.2	75.9	24.4	64	SE	17.0	7.6		0	2			0.06	1.5	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.61	752.0	29.87	758.6	72.0	22.2	80	E	0.9	0.4		0	18			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.45	773.5	30.45	773.5	64.2	17.9		ENE			4					0	0		
Groningen	30.47	774.0	30.53	775.4	59.9	15.5		NE			3					0	0		
Helder	30.51	775.0	30.51	775.0	55.9	13.3		NE			2					0	0		
Hellevoetsluis	30.46	773.7	30.46	773.7	63.0	17.2	56	ENE			4					0	0		
Utrecht	30.45	773.3	30.49	774.5	63.5	17.5	49	ENE			3		0			0	0	Clear	H. van de Sand

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.45	773.3	30.51	774.9	59.0	15.0	62	S	16.1	7.2	.....	.....	0	.....	.....	0	0	.....	
Christiania	30.32	770.1	30.47	773.8	64.6	18.1	44	SSW	2	1	.....	.....	0	.....	.....	0.004	0.1	.....	
Gjæsvær	30.23	767.8	30.25	768.4	36.7	2.6	.....	SE	.....	.....	2	.....	10	.....	.....	.....	.....	.....	
Lodingen	30.25	768.3	30.30	769.5	41.9	5.5	84	W	.....	.....	7	.....	10	.....	.....	0	0	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.91	759.6	30.02	762.6	59.4	15.2	62	NNW	15.0	6.7	.....	.....	2	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.02	737.2	29.98	761.6	78.8	26.0	28	W	5.6	2.5	.....	.....	3	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.05	763.3	30.14	765.5	66.7	19.3	61	SW	4.9	2.2	.....	.....	8	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.72	755.0	30.08	763.9	70.9	21.6	53	SSE	3.1	1.4	.....	.....	0	.....	.....	0	0	.....	The Staff.
Ponth Delgada, Azores	29.98	761.4	30.05	763.2	58.6	14.8	70	NNE	11.9	5.3	.....	.....	3	.....	.....	0.669	17.0	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	30.56	776.2	30.58	776.7	47.3	8.5	47	Calm	0	0	.....	1cs	0	.....	.....	.....	.....	.....	Capt. Sseliwerstow.
Astrakhan	30.06	763.5	29.98	761.4	70.1	24.5	36	ESE	9	4	.....	.....	1cp	.....	.....	.....	.....	.....	Capt. Wisganow.
Barnaul	29.40	746.7	29.88	758.9	71.6	22.0	41	SW	2	1	.....	.....	2	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat ‡	30.17	766.3	30.41	772.4	58.5	14.7	51	N	7	3	.....	.....	10k	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	29.18	741.1	30.11	764.8	71.2	21.8	27	NW	18	8	.....	6ck	0	.....	.....	.....	.....	Hazy	Meteorological Obs'y.
Kasan	29.92	759.9	30.17	766.4	80.1	26.7	39	Calm	0	0	.....	.....	7k	.....	.....	.....	.....	.....	Observatory.
Kertch	29.82	757.5	29.84	758.0	68.7	20.4	88	SE	7	3	.....	.....	6	.....	.....	.....	.....	.....	Lagorio & Sastyrez.
Kieff	29.41	746.9	30.02	762.5	66.4	19.1	73	NE	7	3	.....	.....	9cks,n	.....	.....	.....	.....	.....	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.75	755.7	29.95	760.7	81.1	27.3	27	E	34	15	.....	.....	4	.....	.....	.....	.....	Light clouds	Meteorological Obs'y.
Moscow	29.05	753.2	30.18	766.5	77.2	25.1	36	SE	7.8	3.5	.....	.....	2ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.38	695.5	29.66	753.3	42.4	5.8	74	NW	2	1	.....	.....	10	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nikolaiev	29.82	757 3	29.89	759.1	75.7	24.3	70	ENE	9	4	.....	.....	7kn	.....	.....	.....	.....	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lieut. Iwanow.
Pekin, China	29.58	751.3	29.72	754.9	63.5	17.5	30	NW	27	12	.....	.....	5k	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	30.43	772.8	30.44	773.2	50.2	10.1	57	NE	7	3	.....	c;cs	10s	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.37	720.7	29.86	758.5	79.7	26.5	44	E	9	4	.....	.....	4	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.52	724.4	29.87	758.6	79.0	26.1	52	SE	4	2	.....	.....	2k	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	29.84	758.0	30.27	768.9	53.1	11.7	88	N	18	8	.....	.....	10ks	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.83	757.6	30.25	768.3	58.6	14.8	91	N	9	4	.....	.....	10	.....	.....	.....	.....	Heavy cl'ds	Berg, Assistant.
Yeniseisk	29.47	748.5	29.74	755.5	64.6	18.1	57	SW	18	8	.....	.....	10	.....	.....	.....	.....	Thunder s'm	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	30.44	773.2	66.0	18.9	63	SW	.....	.....	2	.....	6k	.....	.....	0	0	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	30.29	769.4	54	12.2	93	SSW	.....	.....	4	5	5	SSW	.....	0	0	D. clouds	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	30.38	771.6	.....	.....	.....	SW	.....	.....	1	1	0	SW	.....	0	0	.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.03	702.8	30.13	705.4	71.6	22	56	SE	3.8	1.7	.....	.....	6	.....	.....	0	0	Misty	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.00	7 3.5	30.11	704.9	75.0	23.9	56	NE	1.8	0.8	.....	0	0	.....	.....	0	0	Clear	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.12	688.8	.....	.....	58.6	14.8	80	NE	8.7	3.9	.....	0	1	.....	.....	0	0	Almost clear	Domingo Martin.
Madrid, Royal Obs'y	27.83	700.8	29.90	761.0	77.0	25.0	45	S	8.9	4.0	.....	0	1	.....	.....	0	0	Light clouds	The Staff.
Murcia, Met. Obs'y ‡	29.98	731.4	30.12	765.1	79.5	24.7	48	E	3.0	1.6	.....	3	4	SW	.....	0	0	Cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.07	738.4	29.93	760.2	74.8	23.8	51	SW	4.3	1.9	.....	.....	1	.....	.....	0	0	Almost clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.89	759.1	29.95	760.8	78.0	25.6	78	E	4.0	1.8	.....	3c;ck	1k;s	WNW	.....	0.504	12.8	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.79	750.7	29.84	758.0	83.9	28.8	69	NE	4.4	2.0	.....	0	3km	.....	E	0	0	Partly cov'd	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.90	751.1	30.03	763.5	74.3	23.5	53	SE	20.4	9.1	.....	0	1	.....	SE	0	0	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.94	760.4	30.03	762 7	82.0	27.8	79	S	0	0	.....	6cs	4k	.....	S	0	0	D. clouds	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.70	755.8	29.90	759.5	81.9	27.7	84	SW	0	0	.....	.....	3ks	.....	WSW	0.05	1.2	Slightly cld'y	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.43	772.9	30.47	773.9	46.0	7.8	72	S	.....	.....	2	.....	10	.....	.....	0	0	.....	
Umea	30.42	772.7	30.47	774.0	50.4	10.2	62	S	.....	.....	4	.....	2	.....	.....	0	0	.....	
Hernosand	30.49	774.4	30.51	775.7	47.3	8.5	71	SSW	.....	.....	2	.....	2	.....	.....	0.055	1.4	.....	
Stockholm	30.33	770.3	30.50	771.8	59.7	15.4	56	ENE	.....	.....	2	.....	7	.....	.....	0.031	0.8	.....	
Wisby	30.38	771.6	30.44	773.1	45.3	7.4	83	N	.....	.....	2	.....	0	.....	.....	0	0	.....	
Sub-Series.																			
Upsala	30.41	772.4	30.50	774.6	57.9	14.4	62	NNW	7.8	3.5	.....	.....	2	.....	NW	0	0	.....	Nils Ekholm
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.78	730.9	30.18	766.6	61.0	16.1	70	N	.....	.....	5	.....	5	.....	.....	0	0	Cloudy	The Observatory.
Zurich	28.61	726.7	30.22	767.0	63.0	17.2	74	E	.....	.....	2	.....	8	.....	.....	0	0	Covered	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.91	759.7	62.2	16.8	81	N	7	3.0	.....	.....	10	.....	NE	0.315	8.0	.....	The Observatory.
Valona	.....	.....	30.08	763.6	72.0	22.2	.....	W	.....	.....	1	.....	2	.....	.....	0	0	Slightly cld'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.93	760.2	77.0	25.0	63	W	.....	.....	1	.....	2k	.....	SW	0	0	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.03	762.7	30.11	764.8	59.2	15.1	88	NE	1	0.4			10s;fg			Inap.	Inap.	Cloudy	
Alpena, Michigan	29.54	750.3	30.18	766.6	56	13.3	81	W	1	0.4		0	0			0	0	Clear	
Atlanta, Georgia	28.91	734.3	30.03	762.7	62.0	10.7	90	NE	6	2.7		10k	0	Calm		0.02	0.5	Cloudy	
Atlantic City, New Jersey	30.12	765.0	30.14	765.5	56	13.3	94	S	2	0.9			Fg		Calm	0	0	Dense fog	
Augusta, Georgia	29.91	759.7	30.10	764.5	71	21.7	75	NE	1	0.4		5ck	0	NE		0.07	1.8	Fair	
Baltimore, Maryland	30.09	764.3	30.13	765.3	64	17.8	78	W	2	0.9		Hz	Hz			0.26	6.6	Dense haze	
Barnegat, New Jersey	30.10	764.5	30.13	765.3	57	13.9	94	SW	6	2.7			Fg		Calm	0	0	Dense fog	
Bismarck, Dakota	28.04	712.2	29.90	759.4	62	16.7	66	SE	8	3.6		2c	0	Calm		0	0	Clear	
Boise City, Idaho	26.88	682.7	29.84	757.9	47.3	8.5	62	W	6	2.7		2cs	0	Calm		0	0	Clear	
Boston, Massachusetts	29.96	761.0	30.12	765.0	53.8	12.1	83	N	1	0.4			10s		NW	0	0	Cloudy	
Brackettville, Texas																			
Brownsville, Texas	29.83	757.7	29.87	758.7	71	21.7	94	Calm	0	0		2c	0			0.10	2.5	Clear	
Buffalo, New York	29.44	747.8	30.14	765.5	56	13.3	90	NE	8	3.6			10s;hz		NE	Inap	Inap	Cloudy	
Burlington, Vermont	29.82	757.4	30.12	765.0	50.2	10.1	97	N	10	4.5			10s		N	0.06	1.5	Cloudy	
Cairo, Illinois	29.64	752.8	30.02	762.5	68	20.0	70	E	4	1.8		5cs	0	Calm		0	0	Fair	
Campo, California	27 31	693.7	29.88	758.9	51	10.6	72	W	4	1.8			10ks		W	0	0	Cloudy	
Camp Thomas, Arizona	27.07	687.6			57	13.9	58	Calm			0	c	0			0	0	Clear	
Cape Henry, Virginia	30.10	764.5	30.12	765.0	66	18.9	84	SE	7	3.1		0	0			0	0	Clear	
Cape May, New Jersey	30.10	764.5	30.18	766.6	57	13.9	94	S	9	4.0		4ck	1ks	SW	SW	0	0	Fair	
Castroville, Texas	29.10	739.1	29.80	756.9	60	15.6	88	W	2	0.9		0	0			0	0	Clear	
Cedar Keys, Florida	29.98	761.5	30.01	762.2	*75	23.9	81	E	9	4.0		8ck	0	SW		Inap.	Inap.	Fair	
Champaign, Illinois	29.25	742.9	30.03	762.7	62.1	16.7	56	Calm	0	0		0	0			0	0	Clear	
Charleston, S. Carolina	30.02	762.5	30.07	763.8	72	22.2	85	N	7	3.1		5c	0	Calm		0	0	Fair	
Charlotte, N. Carolina	29.25	742.9	30.03	762.7	65.8	18.8	78	S	3	1.3			10s			0	0	Cloudy	
Chattanooga, Tennessee	29.26	743.2	30.05	763.3	65	18.3	89	NE	7	3.1		8ck	2ks	S	S	Inap.	Inap.	Cloudy	
Cheyenne, Wyoming	23.91	607.3	29.85	758.2	42	5.6	100	S	6	2.7			Fg			0	0	Dense fog	
Chicago, Illinois	29.40	746.7	30.08	764.0	53.8	12.1	61	E	7	3.1		0	0			0	0	Clear	
Chincoteague, Virginia	30.12	765.0	30.14	765.5	54	12.2	100	SE	4	1.8			Fg		Calm	0	0	Dense fog	
Cincinnati, Ohio	29.43	747.5	30.07	763.8	63	17.2	78	SE	1	0.4		1k	0	SE		0	0	Clear	
Cleveland, Ohio	29.41	747.0	30.13	765.3	54.5	12.5	93	E	4	1.8		0	Fg			0	0	Clear	
Coleman City, Texas	28.09	713.5	29.73	755.1	56	13.3	87	Calm	0	0		0	0			0	0	Clear	
Columbus, Ohio	29.24	742.7	30.00	763.5	62	16.7	67	Calm	0	0		1k	Sk	SW		0	0	Clear	
Concho, Texas	27 99	710.9	29.64	752.8	56	13.3	94	Calm	0	0		0	0			0.03	0.8	Clear	
Corsicana, Texas	29.44	747.8	29.89	759.2	68	20.0	79	S	2	0.9			10s			0.27	6.9	Cloudy	
Davenport, Iowa	29.44	747.8	30.07	763.8	59	15.0	59	NE	5	2.2		2cs	0	Calm		0	0	Fair	
Dayton, Washington Ty	28.24	717.3	29.91	759.7	45	7.2	46	SW	2	0.9		0	0			0	0	Clear	
Deadwood, Dakota	25.23	640.8			57	13.9	69	SW	1	0.4		2cs	0			0	0	Fair	
Decatur, Texas	28.72	729.5	29.85	758.2	63	17.2	83	SE	4	1.8			10s			0.09	2.3	Cloudy	
Delaware Breakwater, Del.	30.10	764.5	30.12	765.0	56	13.3	100	Calm	0	0		2ck	5s	NW		0	0	Fair	
Denison, Texas	29.11	739 4	29.88	758.9	66	18.9	89	E	4	1.8			10s		Calm	0.26	6.6	Cloudy	
Denver, Colorado	24.66	626.4	29.88	758.9	45.5	7.5	77	S	3	1.3		0	0			0	0	Clear	
Des Moines, Iowa	29.16	740.7	30.01	762.2	62	16.7	72	SE	2	0.9		10k	0			0	0	Cloudy	
Detroit, Michigan	29.45	748.0	30.14	765.5	55.0	12.8	93	NE	9	4.0			10n		Calm	Inap	Insp.	Light rain	
Dodge City, Kansas	27.36	694.9	29.61	752.1	54	12.2	87	Calm	0	0			10s			0.34	8.6	Cloudy	
Dubuque, Iowa	29.41	747.0	30.10	764.5	57.1	13.9	69	SE	1	0.4		0	Hz		Calm	0	0	Clear	
Duluth, Minnesota	29.42	747.3	30.11	764.8	49	9 4	78	NE	1	0.4		0	0			0	0	Clear	
Eagle Pass, Texas	29.13	739.9	29.84	757.9	63	17.2	89	Calm	0	0		0	0			0	0	Clear	
Eagle Rock, Idaho	25.01	635 2	29.66	753.4	43	6.1	75	SW	24	10.7		2k	5ks	S	S	0	0	Fair	
Eastport, Maine	29.95	760.7	30.02	7-2.5	48	8.9	93	N	14	6.8			10s		N	0.77	19.6	Cloudy	
El Paso, Texas	26.14	663.9			54	12.2	80	E	1	0.4		0	0			0	0	Clear	
Erie, Pennsylvania	29.42	747.3	30.14	765.5	51	10.6	100	NE	7	3.1			Fg			0	0	Dense fog	
Escanaba, Michigan	29.51	749.5	30.16	766.1	55	12.8	74	N	5	2.2		0	0			0	0	Clear	
Florence, Arizona	28.24	717.3	29.84	757.9	60	15.6	34	NE	3	1.3		0	0			0	0	Clear	
Fort Apache, Arizona	24.92	633.0	30.37	771.4	42	5.6	50	E	3	1.3		0	0			0	0	Clear	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota	28.30	718.8			58	14.4	82	SE	8	3.6		2c	0	SE		0	0	Fair	
Fort Benton, Montana	27.19	690.6			33	0.6	100	W	18	8.0			10n		W	0.18	4.6	Light rain	
Fort Buford, Dakota	27.87	707.9	29.69	754.1	45	7.2	84	N	10	4.5		0	2s		NE	0	0	Clear	
Fort Custer, Montana	26.70	678.2			51	10.6	78	SE	8	3.6		10k	c	SW		0	0	Cloudy	
Fort Davis, Texas	25.16	639.1	30.12	765.0	52	11.1	66	SW	4	1.8		0	0			0	0	Clear	
Fort Elliott, Texas	27.18	690.4	29.44	747.8	55	12.8	68	NE	8	3.6			10s		NE	0.29	7.4	Cloudy	
Fort Gibson, Indian Ty	29.36	745.7	29.88	758.9	62	16.7	94	Calm	0	0			10s		E	0.52	13.2	Cloudy	
Fort Grant, Arizona	25.13	638.3	29.93	760.2	57	13.9	36	NE	5	2.2		0	0			0	0	Clear	
Fort Griffin, Texas	28.55	725.2	29.80	756.9	58.2	14 6	100	N	6	2.7			Fg			0	0	Foggy	
Fort Keogh, Montana	27.35	694.7			48	8.9	77	N	8	3.6		0	0			0	0	Clear	
Fort Macon, North Carolina	30.11	764.8	30.12	765.0	70	21.1	90	E	4	1.8		10cs	0	Calm		0	0	Cloudy	
Fort McKavett, Texas	27.66	702.6	29.53	750.0	58.8	14.9	56	SW	3	1.3		0	0			0	0	Clear	
Fort Missoula, Montana	25.60	675.6			47	8.3	77	NE	10	4.5			10s			0	0	Cloudy	
Fort St. Michaels																			
Fort Shaw, Montana	25.41	670.8			32	0.0	89	N	10	4.5			10n		N	0.25	6.3	Heavy snow	
Fort Sill, Indian Territory	28.67	728.2	29.75	755.6	61	16.1	94	NW	3	1.3			10s			0.51	13.0	Cloudy	
Fort Stevenson, Dakota	27.98	710.7			63	17.2	67	S	8	3.6		5cs	0	Calm		0	0	Fair	
Fort Verde, Arizona					56	13.3	63	N			1		Fg		Calm	0	0	Dense fog	
Fredericksburg, Texas	28.18	715.8	29.71	754.6	58	14.4	88	Calm	0	0		0	0			0	0	Clear	
Galveston, Texas	29.87	758.7	29.91	759.7	76	24.4	86	Ca'm	0	0		2k	Hz			0	0	Clear	
Grand Haven, Michigan	29.47	748.5	30.11	764.8	63	17.2	72	NE	4	1.8		0	0			0	0	Clear	
Hatteras, North Carolina	30.13	765.3	30.15	765.8	71	21.7	71	SE	8	3.6		8ck	0			0	0	Fair	
Helena, Montana	25.75	654.3			42	5.6	83	W	7	3.1			10n		Calm	0.20	5.1	Heavy snow	
Henrietta, Texas	28.88	733.5	29.78	756.4	64	17.8	89	SE	1	0.4		0	8s			0.42	10.7	Cloudy	
Indianapolis, Indiana	29.25	742.9	30.02	762.5	63	17.2	57	N	1	0.4		1c	Hz	Calm	Calm	0	0	Fair	
Indianola, Texas	29.87	758.7	29.90	759.4	72.3	22.4	90	S	2	0.9		1cs	0		NW	0	0	Clear	
Jacksboro, Texas	28.74	730.0	29.84	757.9	63	17.2	89	S	2	0.9			10s		Calm	0	0	Cloudy	
Jacksonville, Florida	29.99	701.7	30.03	762.7	76	24.4	82	SW	1	0.4		2k	Fg	SW		0	0	Fair	
Keokuk, Iowa	29.40	746.7	30.04	763.0	57.8	14.3	64	E	8	3.6		5ck	0	E		0	0	Fair	
Key West, Florida	29.95	760.7	29.98	761.5	81.2	27.3	78	SE	5	2.2		2k	0	SE		Inap.	Inap.	Fair	
Kittyhawk, North Carolina	30.14	765.5	30.17	766.3	65	18.3	84	SE	4	1.8		5c	Hz			0	0	Fair	
Knoxville, Tennessee	29.09	738.9	30.08	764.0	64	17.8	89	SW	1	0.4			10s		Calm	0.03	0.8	Cloudy	
La Crosse, Wisconsin	29.33	745.0	30.07	763.8	64	17.8	68	S	2	0.4		0	0			0	0	Clear	
La Mesilla, New Mexico	26.02	660.9	30.16	766.1	52	11.1	86	Calm	0	0		0	0			0	0	Clear	
Laredo, Texas	29.44	747.8	29.77	756.1	68	20.0	90	Calm	0	0		0	0			0	0	Clear	
Leavenworth, Kansas	29.11	739.4	29.93	760.2	65	18.3	73	Calm	0	0		0	0			0	0	Clear	
Lewiston, Idaho	29.12	739.6	29.78	756.4	40	4.4	50	W	1	0.4		5cs	0	SW		0.02	0.5	Fair	
Little Rock, Arkansas	29.64	752.8	29.95	760.7	63	17.2	94	E	4	1.8		0	0			0	0	Clear	
Los Angeles, California	29.54	750.3	29.89	759.2	57.3	14.1	81	Calm	0	0			10n			0.95	24.1	Light rain	
Louisville, Kentucky	29.46	748.3	30.00	762.0	65.0	18.3	73	N	3	1.3		5c;ck	0			0	0	Fair	
Lynchburg, Virginia	29.42	747.3	30.08	764.0	66	18.9	74	E	1	0.4		c	0			0	0	Clear	
Madison, Wisconsin	29.10	739.1	30.07	763.8	57	13.9	75	E	1	0.4		c	0			0	0	Clear	
Marquette, Michigan	29.43	747.5	30.12	765.0	66	18.9	50	SW	6	2.7		0	0			0	0	Clear	
Mason, Texas	28.26	717.8	29.98	761.5	59.8	15.4	82	NW	1	0.4		0	0			0	0	Clear	
Memphis, Tennessee	29.65	753.1	29.98	761.5	68	20.0	74	E	1	0.4			10s		E	0.04	1.0	Cloudy	
Milwaukee, Wisconsin	29.33	745.0	30.11	764.8	55	12.8	68	Calm	0	0		0	Hz			0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.86	758.4	29.94	760.5	72	22.2	85	SE	4	1.8	.....	10s	0	.....	.....	0	0	Clear.	
Montgomery, Alabama	29.79	756.7	30.02	762.5	70	21.1	79	E	6	2.7	.....	5k	0	W	.....	0	0	Fair	
Moorhead, Minnesota	28.99	736.3	29.92	760.0	58	14.4	76	SE	14	6.3	.....	5c	0	S	.....	0	0	Fair	
Morgantown, W. Virginia	29.10	739.1	30.09	764.3	55	12.8	93	Calm	0	0	.....	2k	Fg	W	.....	0	0	Fair	
Mt. Washington, N. H.	23.85	605.8	30.21	767.3	37	2.8	90	E	10	4.5	.....	.....	10s	.....	E	0.04	1.0	Cloudy	
Nashville, Tennessee	29.50	749.3	30.03	762.7	66.3	19.1	86	E	2	0.9	.....	8ck	0	SW	.....	0.02	0.5	Fair	
New Haven, Connecticut	30.01	762.2	30.13	765.3	52	11.1	93	SE	3	1.3	.....	.....	10s	.....	.....	0	0	Cloudy	
New London, Connecticut	30.10	764.5	30.15	765.8	53	11.7	80	SW	6	2.7	.....	.....	10s	.....	SW	0	0	Cloudy	
New Orleans, Louisiana	29.87	758.7	29.93	760.2	76.5	24.7	84	Calm	0	0	.....	1k	0	.....	.....	0.01	0.3	Clear	
Newport, Rhode Island	30.08	764.0	30.13	765.3	53.8	12.1	84	N	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd.	30.07	763.8	30.10	764.5	51.0	10.6	93	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
New York, New York	29.95	760.7	30.13	765.3	57	13.9	94	S	1	0.4	.....	.....	10s;fg	.....	.....	0	0	Cloudy	
Norfolk, Virginia	30.08	764.0	30.14	765.5	70	21.1	70	SW	6	2.7	.....	2k	0	NW	.....	0	0	Clear	
North Platte, Nebraska	27.06	687.3	29.59	751.6	51	10.6	90	SE	6	2.7	.....	2k	Fg	S	SE	0	0	Fair	
Olympia, Washington T'y	30.03	762.7	30.07	763.8	35.0	1.7	85	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Omaha, Nebraska	28.87	733.3	29.93	760.2	64	17.8	83	S	2	0.9	.....	.....	10s	.....	SE	0.05	1.3	Cloudy	
Oswego, New York	29.83	757.7	30.10	766.1	48.2	9.0	91	W	4	1.8	.....	.....	Fg	.....	.....	0	0	Light fog	
Pensacola, Florida	29.94	760.5	29.97	761.2	70	21.1	90	N	6	2.7	.....	.....	10n	.....	Calm	0.22	5.6	Light rain	
Philadelphia, Pa.	30.08	764.0	30.13	765.3	58	14.4	94	S	3	1.3	.....	.....	Fg	.....	.....	0.03	0.8	Dense fog	
Phœnix, Arizona	28.60	726.4	30.35	770.9	64	17.8	78	W	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.78	451.6	29.99	761.7	23	— 5.0	21	SW	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Pioche, Nevada	23.78	604.0	29.55	750.6	50	10.0	20	SW	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Pittsburg, Pennsylvania	29.29	744.0	30.08	764.0	60.5	15.8	85	Calm	0	0	.....	2k	0	N	.....	0.03	0.8	Clear	
Port Eads, Louisiana	29.92	760.0	29.93	760.2	73.8	23.2	95	SW	2	0.9	.....	2k	1ks	SW	SW	0	0	Fair	
Port Huron, Michigan	29.52	749.8	30.20	767.1	42.3	5.7	100	N	10	4.5	.....	.....	Fg	.....	.....	0	0	Dense fog	
Portland, Maine	30.02	762.5	30.07	763.8	54	12.2	80	N	9	4.0	.....	.....	10s	.....	Calm	0.03	0.8	Cloudy	
Portland, Oregon	29.98	761.5	30.00	763.5	51.0	10.6	46	NW	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Portsmouth, N. Carolina	.....	.....	.....	.....	71	21.7	80	NE	8	3.6	.....	5k	0	SW	.....	0	0	Fair	
Prescott, Arizona	24.02	625.3	29.98	761.5	47	8.3	48	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	29.95	760.7	29.97	761.2	76.5	24.7	82	E	10	4.5	.....	10c	0	.....	Calm	0.01	0.3	Cloudy	
Red Bluff, California	29.49	749.0	29.84	757.9	57.0	13.9	75	S	1	0.4	.....	Hz	2s	Calm	Calm	0	0	Fair	
Rio Grande City, Texas	29.72	754.9	29.93	760.2	70	21.1	90	Calm	0	0	.....	2cs	0	Calm	.....	0	0	Clear	
Rochester, New York	29.54	750.3	30.13	765.3	52	11.1	100	Calm	0	0	.....	.....	Fg	.....	.....	0.25	6.3	Dense fog	
Roseburg, Oregon	29.44	747.8	30.00	762.0	49.8	9.9	58	N	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Sacramento, California	29.78	756.4	29.86	758.4	54.6	12.6	74	S	5	2.2	.....	0	5s	.....	.....	0	0	Fair	
St. Louis, Missouri	29.45	748.0	30.01	762.2	63.0	17.2	67	NE	6	2.7	.....	7c;cs	0	.....	.....	0	0	Fair	
St. Paul, Minnesota	29.21	741.9	30.02	762.5	60	15.6	60	SE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Salt Lake City, Utah	25.31	642.9	29.64	752.8	60	15.6	44	SE	10	4.5	.....	4k	0	SW	.....	0	0	Fair	
San Antonio, Texas	29.21	741.9	29.90	759.4	62.5	16.9	94	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
San Diego, California	29.80	756.9	29.87	758.7	59.5	15.3	76	NW	6	2.7	.....	.....	10s	.....	.....	0	0	Cloudy	
Sandusky, Ohio	29.45	748.0	30.12	765.0	50	13.3	87	NE	13	5.8	.....	.....	10s	.....	.....	0	0	Cloudy	
Sandy Hook, New Jersey	30.09	764.3	30.12	765.0	58.0	14.4	100	Calm	0	0	.....	.....	Fg	.....	.....	0.08	2.0	Dense fog	
San Francisco, California	29.80	756.9	29.87	758.7	54	12.2	83	W	6	2.7	.....	.....	9s	.....	SW	Inap.	Inap.	Cloudy	
Santa Fé, New Mexico	23.21	589.5	29.75	755.6	44	6.7	76	Calm	0	0	.....	0	0	.....	.....	0.05	1.3	Clear	
Savannah, Georgia	29.97	761.2	30.00	762.5	72.5	22.5	88	NE	3	1.3	.....	8k	2ks	.....	.....	0	0	Cloudy	
Shreveport, Louisiana	29.09	754.1	29.93	760.2	66	18.9	95	E	4	1.8	.....	0	5s	.....	.....	0.53	13.5	Fair	
Silver City, New Mexico	24.18	614.2	30.32	770.1	48	8.9	63	Calm	0	0	.....	2k	0	Calm	.....	0	0	Clear	
Sitka Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.07	1.8	.....	
Smithville, North Carolina	30.09	764.3	30.12	765.0	73	22.8	85	N	5	2.2	.....	2c	Hz	.....	.....	0	0	Fair	
Socorro, New Mexico	25.28	642.1	29.35	745.5	52	11.1	34	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Spokane Falls, Wash. Ter.	27.94	709.7	29.81	757.2	40	4.4	73	S	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Springfield, Illinois	29.40	746.7	30.06	763.8	58	14.4	58	E	4	1.8	.....	2c	Hz	E	.....	0	0	Fair	
Springfield, Massachusetts	29.98	761.5	30.11	764.8	55	12.8	93	S	3	1.3	.....	.....	10s;fg	.....	S	0	0	Cloudy	
Stockton, Texas	29.90	683.2	29.90	759.4	47.0	8.3	100	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	29.00	736.1	29.83	757.7	57	13.9	81	S	8	3.6	.....	10cs	0	SW	.....	0	0	Cloudy	
Thatcher's Island, Mass.	30.05	763.3	30.11	764.8	59	15.0	76	NW	7	3.1	.....	5c	2s	N	E	0.08	2.0	Fair	
Toledo, Ohio	29.44	747.8	30.12	765.0	55	12.8	100	N	12	5.4	.....	.....	Fg	.....	.....	0	0	Dense fog	
Tucson, Arizona	27.37	695.2	29.92	760.0	61	16.1	40	SE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.07	753.6	30.17	766.3	47.0	8.3	50	W	6	2.7	.....	0	1s	.....	SW	0	0	Clear	
Uvalde, Texas	28.94	735.1	29.74	755.4	59	15.0	76	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Vicksburg, Mississippi	29.09	754.1	29.94	760.5	69	20.6	85	SE	2	0.9	.....	1cs	Fg	.....	.....	0.03	0.8	Clear	
Visalia, California	29.47	748.5	29.83	757.7	56	13.3	75	W	1	0.4	.....	.....	10s	.....	.....	0	0	Cloudy	
Washington, D. C.	30.02	762.5	30.13	765.3	61	16.1	94	S	6	2.7	.....	.....	10s	.....	SW	0	0	Cloudy	
Wickenburg, Arizona	.....	.....	.....	.....	57	13.9	47	NW	.....	.....	1	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	30.05	763.3	30.10	764.5	71.5	21.9	85	SE	2	0.9	.....	5c	0	Calm	.....	0	0	Fair	
Winnemucca, Nevada	25.42	645.7	29.78	756.4	45	7.2	76	NE	6	2.7	.....	.....	10n	.....	.....	0.46	11.7	Light rain	
Wood's Holl, Mass.	30.08	764.0	30.12	765.0	53	11.7	86	NW	7	3.1	.....	.....	10s	.....	Calm	0	0	Cloudy	
Yankton, Dakota	28.70	729.0	29.96	761.0	60	15.6	77	SE	9	4.0	.....	.....	10ks	.....	SE	0	0	Cloudy	
Yuma, Arizona	29.55	750.6	29.69	754.1	69.5	20.8	35	W	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.11	561.6	.....	.....	50.0	10.0	78	Calm	0	0	.....	0	0	.....	.....	0.06	1.5	Clear	Thomas Herran.
Buif Bay Town, Jamaica	29.75	755.6	30.06	763.5	77	25.0	69	E	.....	.....	.....	2c	5k	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.94	760.5	30.00	762.0	79	26.1	74	Calm	0	0	.....	8cs	0	Calm	.....	1.44	36.6	Fair	A. Van Caneghem, Ass't.
Jakobshavn, Greenland	29.47	748.5	29.52	749.8	40.1	4.5	.....	W	.....	.....	2	.....	1	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I.	29.98	761.5	29.99	761.7	81.7	27.6	73	Calm	0	0	.....	.....	10s	.....	E	0	0	.....	Robert Johnstone
Navassa, W. I.	29.92	760.0	30.00	762.0	81	27.2	83	SE	15	6.7	.....	2cs	8n;k	NW	E	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.04	763.0	82	27.8	79	E	.....	.....	2	3c	0	E	.....	0.020	0.5	Clear	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.38	740.2	29.93	760.2	82	27.8	68	Calm	.....	.....	0	5cs	5k	N	Calm	0	0	Hazy	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	77.0	25.	.....	SW	.....	.....	1	3ck	0	.....	.....	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	29.87	758.7	29.90	759.4	80	26.7	78	Calm	0	0	.....	2cs	0	.....	.....	0	0	Fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	30.12	765.0	30.17	766.3	31.0	— 0.6	95	NE	14	6.3	.....	3k	3s	NE	NE	0	0	Cloudy	J. Fortescue & W Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.	Force	Amount and kind.		Direction.							
									Up'er	Lo'er	Upper.	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross, N. 35° 40′, E. 123° 50′	29.80	756.9	54	12.2		WSW		3		10	W				1	SW	D. clouds	Comm A. J. Errington.
H. M. S. Alert																		Capt. J. P. Mac lear.
H. M. S. Alexandra, Malta, Mediterranean	30.10	764.5	71	21.7	71	NE		1		2							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																		Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																		Comm. R. W. Stopford.
H. M. S. Bacchante																		Capt. Lord C. Scott.
H. M. S. Beacon, N. 25° 21′, E. 57° 52′	29.65	753.1	90	32.2	73	W		1		1	W						Blue sky	Comm. G. W. Hand.
H. M. S Bittern, Constantinople, Turkey			60	15.6		Calm		0		10							Raining	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	30.01	762.2	82	27.8	83	NNE		2		3							D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.85	758.2	62.5	16.9	79	NW		5-6		10	NW						Squally	Com. F. W. Richards.
H. M. S. Champion, S. 8° 35′, W. 15° 02′	29.89	759.2	80	26.7	74	E		3		5	Calm				3	S	D. clouds	Capt. G. R. Hope.
H. M. S Cockatrice																		Capt. H. T. Gerfell.
H. M. S. Comus, N. 31° 45′, E. 123° 20′	29.81	757.2	59	15.0	94	Calm		0		10					2		Drizzling	Capt. J. W. East.
H. M. S. Condor																		Comm. F. W. Egerton.
H. M. S. Coquette																		Lt. Comm. J. L. Barr
H. M. S. Cruizer, Syracuse, Sicily	30.03	762.7	77	25.0		ESE		2		1	SSW						Blue sky	Capt. F. A. Wetherall.
H. M. S. Curacoa																		Capt. S. Long.
H. M. S. Danae, S. 5° 51′, W. 14° 06′	30.01	762 2	82	27.8	83	ESE		2		2					2	ESE	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring, N. 5° 50′, E. 89° 39′	29.75	755.6	86	30.0		SW		5		3	SW				3	wsw	D. clouds	Capt. F. J. Elliott.
H. M. S. Dido																		Capt C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.09	764.3	77	25.0	86	SSW		1		2	SSW						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																		Capt. Hulton.
H. M. S. Druid, N. 47° 34′, W. 52° 41′	30.37	771.4	48	8.9	49	SW		1-2		5							D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad																		Capt. John Hext.
N. 24° 35′, E. 58° 35′	29.64	752.8	89	31.7		SE		2		3	S				1	SE	D. clouds	
H. M. S. Eclipse, N. 8° 34′, E. 81° 10′	29.77	756.1	89	31.7		SW		2-3		2							D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, Singapore, Malay	29.76	755.9	84	28.9		E		2		6	W				2	E	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, S. 4° 32′, E. 176° 17′	29.81	757.2	83	28.3	91	N		2		4	N						D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																		Capt. L. Ching.
H. M. S. Euryalus, S. 7° 52′, E. 81° 40′	29.78	756.4	81	27.2	83	SSE		3-4		4	SSE				4-5	SE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																		Comm. W. H. C. Selby.
H. M. S. Fantome																		Capt. W. C. Karslake.
H. M. S. Fawn																		Capt. P. Aldrich.
H. M. S. Flamingo, N. 18° 28′, W. 79° 32′	29.98	761.5	82	27.8	91	SE		3-4		4	SE				3	SE	Showery	Comm. R. N. Custance.
H. M. S. Flying Fish																		Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 45° 40′, W. 136° 00′	30.42	772.7	48	8.9	78	NNE		3		10					3	NE	Drizzling	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.20	741.7	37	2.8	81	WNW		2		6					2	SSE	D. clouds	Capt. L. F. Jones.
H. M. S. Griffin, N. 23° 25′, W. 82° 45′	29.88	758.9	80	26.7	85	SE		3		1	E				1	SE	Blue sky	Comm. J. Ingles.
H. M. S. Hecla																		Capt. T. L. H. Ward.
H. M. S. Humber																		Capt. J. L. Way.
H. M. S. Inconstant, Melbourne, Australia	29.99	761.7	63	17.2	72	N		6		8	N				2		Squally	Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Alexandria, Egypt	29.96	761.0	70	21.1	90	WSW		1-2		0					1	wsw	Blue sky	Capt. E. H. Seymour.
H. M. S. IronDuke, N. 26° 45′, E. 123° 26′	29.81	757.2	78	25.6	82	SE		1		3	N				4	NNE	D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.00	762.0	66	18.9		Calm		0		2	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																		Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	29.52	749.8	68	20.0		SW		1		10							Overcast	Capt. S. Grove.
H. M. S. London																		Capt. C. J. Brownrigg.
H. M. S. Magpie, Now Chow, China	29.82	757.4	85.9	29.9	70	SE		2		2							D. clouds	Capt. A. Carpenter.
H. M. S. Midge, Amoy, China	29.79	756.7				SE		1		4	SE						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 36° 07′, W. 5° 21	30.04	763.0	69	20.6	85	WNW		3		6	WSW						D. clouds	Capt. H. H. Rawson.
H. M. S. Modeste, S. 1° 14′, E. 105° 05′	29.82	757.4	83	28.3	79	Calm		0		5							Showery	Capt. J. G. Mead.
H. M. S. Monarch																		Capt. G. C. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	30.03	762.7	51.5	10.8	89	E			2									Foggy	Capt. E. B Drummond.
H. M. S. Orontes, S. 32° 22′, E. 31° 45′ †	29.80	756.9	70.5	21.4	92	NNE			3		3	NNW				3	N;8SW	Misty	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 80 55′, W. 79° 30′	29.89	759.2	80	26.7		NW			1		3					2	SE	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin, S. 33° 49′, W. 71° 38′	29.09	738.9	38	3.3		W			4-6		10							Snowing	Capt. A. C. Paget.
H. M. S. Phœnix; N. 16° 47′, W. 73° 46′	29.98	761.5	82	27.8	83	ESE			3		3					1	ESE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler, S. 1° 11′, E. 7° 47′	30.00	762.0	78	25.6		S			3		7	S				4	S	D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	30.06	76305	37	2.8		Calm			0									Blue sky	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.88	758.9	82.4	28.0	85	S			1		5							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis.																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 18° 35′, E. 72° 32′	29.35	745.5	87	30.6	80	W			2-3		2	SW				3	SW	D. clouds	Comm. W. Ryles.
H. M. S. Seraphis.																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 11° 07′, W. 24° 58′	30.06	763.5	77.5	25.3	84	NNE			3-4		4	NNE				3	NNE	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos, N. 36° 57′, W. 64° 23′	30.08	764.0	70	21.1	80	WNW			2		1					2	WNW	Blue sky	Capt. C. G. Fane.
H. M. S. Thetis, S. 7° 34′, W. 146° 46′	29.56	750.8	81	27.2	83	NE			2		2					3	SE	D. clouds	Capt. P. W. Stephens.
H. M. S Thunderer, Naples, Italy	30.08	764.0	70	21.1	80	SSW			4		5					3		Misty	Capt. P. H. Colomb.
H. M. S Triumph, Coquimbo, Chili, S. A.	30.04	763.0	52	11.1	90	Calm			0		3	Calm						D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise, S. 30° 50′, W. 72° 00′	30.03	762.7	58	14.4	88	S			4		5					4	S	D. clouds	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 34° 00′ E. 24° 00′	29.97	761.2	67	19.4	74	W			3		0							Blue sky	Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.			81	27.2		SE			1		10							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	30.31	769.9	63	17.2	83	N			2		1	S						Blue sky	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, Abu Shehr Roads, Persia.	29.66	753.4	85.5	29.7	78	WNW			2-3		0					Sm'th		Misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollar
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, Mossamedes, Benguela	29.99	761.8	63.3	17.4	78	WNW			3		1					1		Blue sky	Carlos Candid dos Reis, Comd't.
Quanza, St. Vincent, Cape Verd, P'd.	30.05	763.3	76.6	24.8	72	NE			3		4		NE			3	NE	D. clouds	Carlos M. de Silva Costa, Comd't.
Rio Lima																			S. C da Silva Costa, Comd't.
Sado, Tamega,																			G. A de Brito Capello, Comd't.
Hong-Kong, China	29.84	758.0	82.4	28.0	85	S			2		0							Blue sky	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah	Cent.	Per Ct.	From.	Miles p h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	29.97	761.2	77	25.0	86	SE	7	3.1		10		SE		0	0			Cloudy	
N. Yard, Portsmouth, N. H	30.10	764.5	55	12.8	87	NW	2	0.9		10c	0	NW		0.1	3.			Cloudy	
Naval Hospital, Yokahama, Japan	29.77	756.1	67	19.4	89	SSE			1		10		S	Slight				Sprinkling	
Adams, Payta, Peru	29.78	756.4	68	20.0	90	SE			3		2					Sm'h		Fair	
Alaska, Callao, Peru	29.91	759.7	62	16.7	94	SE			1		8		E	0	0	Sm'h		Cloudy	
Alert, Port Lloyd, Bonin Id. *	29.96	761.0	79	26.1	82	Calm			0		10					Sm'h		Cloudy	
Alliance, Norfolk, Va	30.14	765.5	66	18.9	89	SSW			1		2			0	0			Clear	
Ashuelot, Kobe, Japan	29.79	756.7	64	17.8	89	NE			4		8		E					Cloudy	
Colorado, New York, N. Y	30.07	763.8	59	15.0	88						10			0	0			Overcast	
Constitution, Norfolk, Va	30.07	763.8	63	17.2	83	SSE			1		0							Fair	
Franklin, Norfolk, Va	30.09	764.3	66	18.9	79	SW	9	4.0			0			0	0			Clear	
Galena, Villafranca, France	30.10	764.5	69	20.6	85	SSW			1		5					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	29.97	761.2	55	12.8	80	Calm	0	0			5							Fair	
Jamestown, Sitka, Alaska *	30.26	768.6	46	7.8	92	ENE			1		10			0.313	8.0			Cloudy	
Kearsarge, Port Royal, S. C	30.09	764.3	73	22.8	90	NE			2		5		Calm			Sm'h		Fair	
Lackawanna, S. 16° 59′, W. 113° 53′ †	30.16	766.1	78	25.6	91	NNE			1-2		2		NNE			Cross	SW;E	Fair	
Marion, Montevideo, Uruguay	30.09	764.3	50	10.0	86	NW			2		0			0	0	Sm'h		Clear	
Michigan, Erie, Pennsylvania	30.04	763.0	51	10.6	100	W	3	1.3			10							Foggy	
Minnesota, Newport, R. I	30.13	765.3	53	11.7	93	NW			1		0					Sm'h		Overcast	
Monocacy, Yokohama, Japan	29.91	759.7	67	19.4	89	S			2		10		S					Rainy	
New Hampshire, Port Royal, S. C	30.07	763.8	73	22.8	90	NE	8	3.6			10		Calm	0	0			Overcast	
Nipsic, Villafranca, France	30.08	764.0	71	21.7	71	S			1		5					Sm'h		D. clouds	
Onward, Callao, Peru †	29.98	761.5	63	17.2	94	Calm			0		10					Long	W	Clear?	
Palos, N. 33° 46′, E. 131° 20′	29.77	756.1	66	18.9	94	S			3		10					Sm'h		Rainy	
Passaic, Washington, D. C	30.13	765.3	63	17.2	94	SE			1		8							Cloudy	
Pensacola, N. 43° 14′, W. 140° 01′	30.44	773.2	50	10.0	72	NE			3-4		10			0	0	Mod.		Cloudy	
Portsmouth, Elizabeth River, Va	30.13	765.3	69	20.6	90	S			2		2		SW			Sm'h		Clear	
Powhatan, Port Royal, S. C	30.07	763.8	74	23.3	90	ESE			2		8		E					Cloudy	
Quinnebaug, N. 22° 38′, W. 36° 40′	30.22	767.6	75	23.9	64	ENE			3		2		NE			Long	ENE	Fair	
Ranger, N. 15° 44′, W. 95° 08′ *	29.78	756.4	80	25.7	82	W			2		5		SE	0.6	15.	Sm'h		Fair	
Richmond, Yokohama, Japan	29.89	759.2	68	20.0	84	SSE			2		8		SE	0	0			Cloudy	
Saratoga, Norfolk, Va	30.10	764.5	63	17.2	94	S			1		2		S	Light				Fair	
Shenandoah, Montevideo, Uruguay *	30.19	766.8	48	8.9	85	NNW			3		2					Sm'h		Fair	
St. Louis, League Island, Pa	29.65	753.1	61	16.1	88	Calm	0	0			10			0.09	2.3			Misty	
Swatara, Shanghai, China † *	29.83	757.7	67	19.4	95	NNE			1		10		Calm					Raining	
Tennessee, Hampton Roads, Va	30.14	765.5	67	19.4	84	SSW	10	4.5			2		WSW	0	0	Sm'h		Clear	
Ticonderoga, S. 46° 50′, W. 99° 45′	30.17	766.3	44	6.7	76	ESE			1		10		ESE	0	0	Long	SE	Cloudy	
Trenton, Villafranca, France *	30.08	764.0	75	23.9	68	S			1		8			0	0	Sm'h		Fair	
Vandalia, N. 39° 59′, W. 71° 27′	30.15	765.8	51	10.6	100	NNW			1		10		Calm					Cloudy	
Wabash, Boston, Massachusetts	30.14	765.5	58	14.4	76	WSW	2	0.9			10		W	0	0			Cloudy	
Wachusetts, N. Yard, Mare I'd, Cal	29.83	757.7	58	14.4	88	SW			2		8		S			Sm'h		Fair	
Wyoming, Old Point, Va	30.09	754.3	65	18.3	89	SSW			1		2		Calm			Sm'h	SSE	Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Asturte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant ‡																			Capt. E. J. Molony.
Chin Yang																			Capt. N. Youlden.
S. S. Cipero, N. 28° 22′, W. 45° 02′	30.29	769.4	70	21.1	90	ENE			4		5					3	ESE	Misty	Capt. W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbighshire																			Capt. H. Y. Murdoch.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart ‡																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow ‡																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randell.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, N. 31° 03′, W. 40° 00′ ‡	30.37	771.4	67.9	19.9	90	NE			3	5cs								Misty	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland ‡																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria, S. 10° 16′, W. 22° 13′ ‡	30.00	762.0	82	27.8	79	ENE			3		2							Blue sky	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, N. 7° 34′, E. 72° 42′ ‡	29.74	755.4	84.7	29.3	92	NW			5		5							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton, N. 36° 10′, W. 5° 00′ ‡	30.12	765.0	69.5	20.8	79	E			4		5							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, Off Greenock, Scotland						S			3		8		S			Sm'h		Cloudy	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Scythia, N. 42° 01′, W. 50° 52′	30.33	770.4	52	11.1	93	E			2		0			0	0	Long	NE	Clear	Capt. M. Murphy.
WHITE STAR LINE. *Tamay, Imrie & Co.*																			
S. S. Adriatic, N. 48° 12′, W. 33° 46′ †	29.68	753.9	48	8.9		NW			6		2		NW			R'gh	NW	D. clouds	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic, N. 40° 37′, W. 68° 12′ †	30.04	763.0	47	8.3		N			4		2		N			Mod.	E	Misty	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, N. 50° 42′, W. 23° 08′ †	29.76	755.9	50	10.0		S			4		8?		S	Showers		Long	W	Clear?	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, N. 47° 42′, W. 22° 59′ ‡	29.74	755.4	53.4	11.9		SW			3		8		W	3 hours		Mod.	WNW; WSW	Cloudy	
S. S. Köln																			Capt. Th. Jüngst.
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohlo																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Helmbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. N. 39° 00′, W. 72° 55′....*†	30.15	765.8	53	11.7	93	WSW			2		5		WSW			Sm'h	WSW	Foggy	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio, Liverpool, England..*†	30.35	770.9	66	18.9	94	SSW			2		2		SW	0	0			Fair	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, Liverpool, England.....*†	30.38	771.6	69	20.6	70	W			2		2		W					Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 25° 50′, W. 113° 20′....†	29.88	758.9	62	16.7	88	WNW			5		10		NW	0	0	G'd	WNW	Cloudy	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 42° 44′, E. 164° 41′....†	30.18	766.6	53	11.7	73	SW			3		Fog			0	0	High	W	Overcast	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China....*†	29.99	761.7	86	30.0	76	E			3		2		SW					Clear	Capt. W. H. Kidley.
S. S. Oceanic, N. 36° 24′, W. 143° 40′.....	29.96	761.0	67	19.4	79	S			6		10		S			Mod.	SW	Overcast	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon																			Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota, N. 43° 36′, W. 124° 42′..*†	29.92	760.0	52	11.1	100	NNW			6		5		NNW			R'gh	NW	Fine	Capt. H. G. Morse.
S. S. Idaho, N. 43° 25′, W. 124° 45′....†	30.04	763.0	50	10.0	86	NNW			4		0					H'vy	NW	Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, San Pedro, Cal.....†	29.86	758.4	59	15.0	82	W			1		10					Sm'h		Cloudy	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal.....†	29.85	758.2	53	11.7	86	W			2		5		NW					Foggy	Capt. G. Debney.
S. S. Victoria, Nanaimo, Vancouver I'd...†	30.09	764.3	53	11.7	61	NW			4		2					Sm'h		Clear	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 34° 16′ E. 168° 19′	30.38	771.6	58	14.4	64	ESE			4		10		E			Mod.	ESE	Hazy	A. Bannerman, 2d Officer.
S. S. City of New York, Sydney, N. S. W.....†	30.30	769.6	64	17.8	83	N			2		8		W					Cloudy	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 28° 59′, W. 117° 03′....†	29.91	759.7	60	15.6	76	NW			4	2c	0	NW		0	0	Mod.	NW	Clear	Capt. D. S. Austin.
S. S. City of Peking, Yokohama, Japan.....†	29.89	759.2	67	19.4	89	ENE			4		0			0	0	Sm'h		Clear	Capt. G. G. Berry.
S. S. City of Sidney																			Capt. H. C. Dearborn.
S. S. City of Tokio																			A. L. Ritchie, 2d Officer.
S. S. Colima, Panama, Panama.....†	29.93	760.2	81	27.2	87	NE			3		5		N	0	0			Fair	Capt. R. R. Searle.
S. S. Granada, N. 22° 50′, W. 106° 10′....†	29.80	756.9	78	25.6	91	WSW			2		2		W	0	0	Sm'll	W	Clear	Capt. M. Connolly.
S. S. Zealandia, N. 4° 40′, W. 167° 07′.....	29.89	759.2	74	23.3	72	E			2		1		E	0	0	Sm'h	E	Clear	
RED STAR LINE. *Jas. A. Wright President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, N. 45° 03′, W. 33° 51′.....†	30.19	766.8	54	12.2	?	NNW					5		N	0	0	High	N	Squally	A. Feddersen, 2d Officer.
S. S. Rhynland, Start Point, Eng.....†	30.54	775.7	65	18.3	81	ENE			4		0			0	0	Light	W	Clear	Capt. Wm. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, N. 40° 07′, W. 72° 32′	30.12	765.0	55	12.8	74	SE	8	3.6			10s		SW	0	0	Sm'h		Overcast	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 20° 45′, W. 62° 40′...*†	30.15	765.8	79	25 1		NE			3		2		NE	0	0	Sm'h	ENE	Fair	Capt. B. F. Woodbury.
Brigantine George, N. 32° 55′, W. 64° 10′....†	30.21	767.3	73	22.8		SW			5		0			0	0	Sm'h		Fine	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E River Head Chesapeake bay, Md†	30.22	767.6	70	21.1	70	NNE	1	0.4		2c	2s			0.10	2.5			Clear	
Bark Sunbeam, Lisbon, Portugal.....†..	30.12	765.0	75	24.4	64	NNE			2		0			0	0			Clear	Capt. Jos. Hand.

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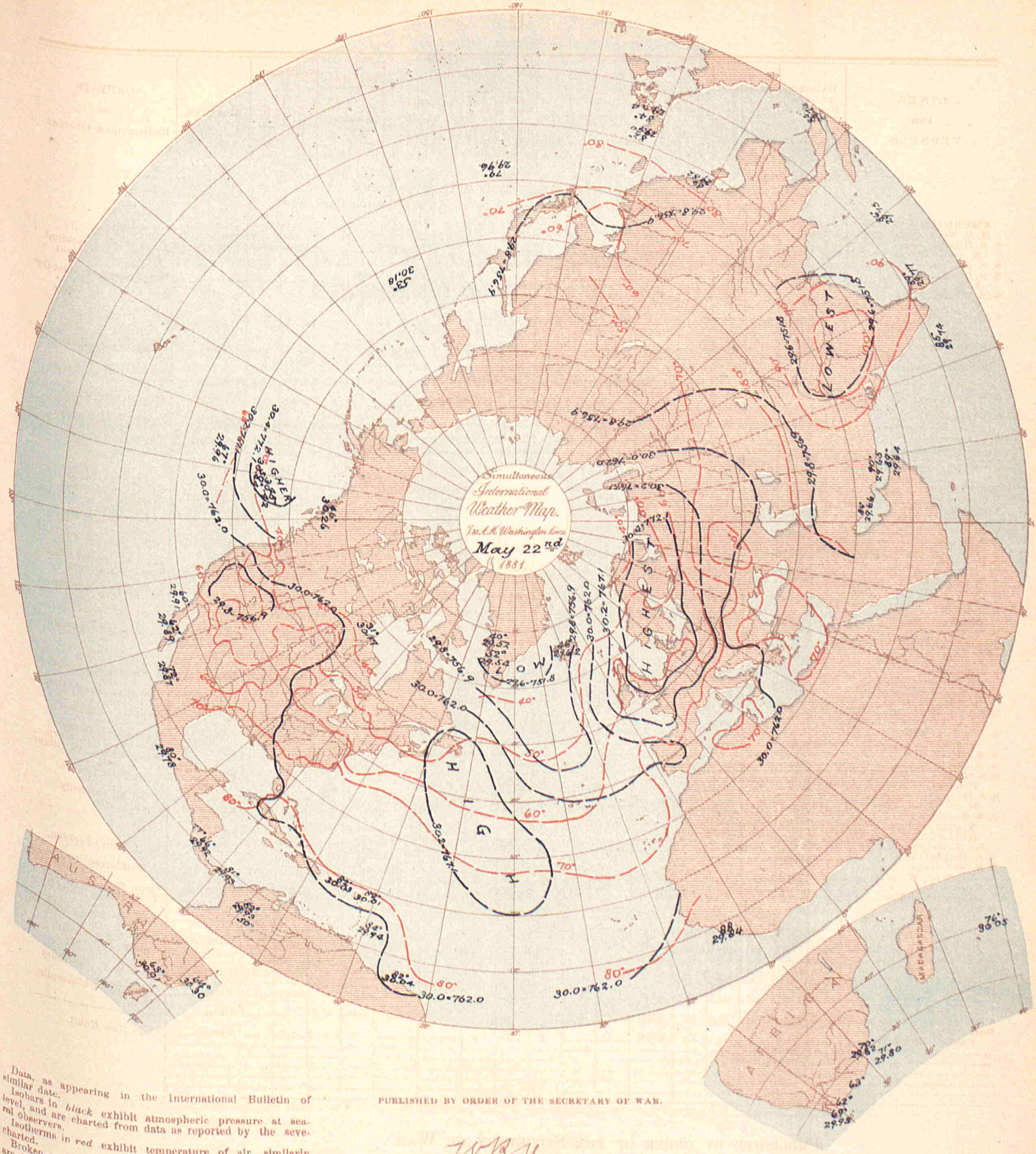
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

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W. B. Hazen

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

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 23, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours		Weather	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
‡Mogador, Morocco			29.97	761.3	70.9	21.6	80	SW			1		4			0	0	Cloudy	Dr. Ollive.
‡Nemours			29.93	760.3	71.6	22.0	81	NNW			2		1			0	0	Very fair	Reynard.
‡Algiers			29.99	761.7	70.2	21.2	70	NE			3		0			0	0	Clear	Nicolas.
‡La Calle			30.02	762.5	66.9	19.4	86	WNW			3		2			0	0	Fair	Fonfrède.
‡Tunis			30.02	762.5															Jacques.
‡Sfax			30.15	765.7															Gau.
‡Saida			30.00	762.0	84.2	29.0	24	SW			6		7			0	0	Cloudy	Dumas.
‡Tebessa			30.07	763.8	74.1	23.4	34	Calm			0		4			0	0	Cloudy	Watrin.
‡Geriville																			Lonchamp.
‡Laghouat			30.04	763.0	82.0	27.8	26	E			2		1			0	0	Very fair	Herbin.
‡Biskra			30.04	763.1															Baudasse.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.98	761.5	30.07	763.8	59.2	15.1	65	N	10	4.5			8			0.03	0.8	Fine	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.52	749.8	30.05	763.6	63.7	17.6	53	Calm			0		10			0.142	3.6		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.43	747.6	30.21	767.3	51.4	10.8	89	N	8.1	3.6			10			0.142	3.6		Dr. Wierzbicki.
Eperies	29.21	742.0	30.09	764.3	55.4	13.0	87	N			2		10ks		S	0.291	7.4		Julius Mikolik.
Gratz	28.92	734.6	30.14	765.5	69.4	20.8	55	NW			3		3			0	0		Andreas Rospini.
‡Hermannstadt	28.52	724.3	29.92	759.9	62.1	16.7	83	NNE			3		10			0.228	5.8	Rainy	Prof. A Gottschling.
Kremsmunster, Obs'y	28.84	732.6	30.21	767.2	48.2	9.0	93	W			2		10			0.848	21.5	Rainy	The Staff.
Lemberg	29.04	737.7	30.02	762.5	59.4	15.2	86	NE			2		10			Inap.	Inap.		Dr. T. Stanecki.
Pola	29.94	7.0.5	30.05	763.3	62.6	17.0	70	NW			1		6			0	0		R. Hydrographic Office.
Szathmar	29.49	749.0	29.94	760.4	69.6	20.9	64	NW			4		8			0	0		Belcht Peter, S. J.
Szegedin	29.70	754.3	29.97	761.2	70.3	21.3	64	N			3		5			0	0		Karl Stancel.
Trieste	29.95	760.7	30.05	763.3	73.0	22.8	47	ENE			1		7			0	0		Secco.
Vienna	29.45	748.0	30.18	766.5	50.7	10.4	93	NW			2		10			0.370	9.4		I. R. Central Met. Obs'y
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.42	772.7	30.52	775.2	52.7	11.5	70	SSE	16	7.2			0			0	0	Blue sky	W. Boswell.
Armagh, Observatory	30.10	704.5	30.32	770.1	62.9	17.2	52	SSE	13	5.8			0					Blue sky	S. Call.
Bidston, Liverpool Obs'y			30.28	709.1	67.4	19.7	44	E	27	12.1			0					Misty	John Hartnup.
Bolton, Sharples	29.77	756.1	30.31	769.9	65.0	18.3	52	E	30	13.4			0					Blue sky	Thomas Mackereth.
Bradford, Yorkshire	29.95	760.7	30.35	770.9	62.2	16.8	58	NE			1		0			0	0	Blue sky	J.McLandsbo ough,F.R.S
Bridgetown, Barbadoes	29.90	759.4	29.93	760.2	85.5	29.7	72	SE			1		8					Overcast	Corpl. J. Surgener,AH.C.
Cardington			30.27	768.8	73.2	22.9	61	SE			5.0		0					Blue sky	John McLaren.
Chatham, School M. E	30.14	765.5	30.27	768.8	63.5	17.5	66	NE			1		0					Blue sky	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.86	758.4	30.09	764.3	58.7	14.8	62	E			5		2					Gloomy	The Staff.
Fort Napier, Natal	27.49	698.2	29.72	754.9	86.2	30.1	14	Calm			0		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.61	752.1	29.84	757.0	88	31.1	84	SW			1							Raining	Sgt. C. E. Keane.
Galway, Queen's College			30.19	766.8	64	17.8	78	N			3		6			0	0	D. clouds	J. O'Donaghue.
Gibraltar, Mediterranean	29.95	760.7	30.00	762.0	66.4	19.1	84	ENE			2		8					D. clouds	2nd Cpl. C. Baldwin.
Glasgow, Observatory	29.17	740.9	29.38	746.2	64.0	17.8	42	NE			5		0					Blue sky	Harry Urquhart.
Greenwich, Royal Obs'y	30.08	764.0	30.25	768.3	69.0	20.6	41	E			2		0					Blue sky	The Staff.
Guernsey	29.84	757.9	30.05	763.3	59.5	15.3	73	NE			3		0					Blue sky	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.21	767.3	30.25	768.3	67.6	19.8	27	E	40	17.9			0					Blue sky	The Staff.
Leicester, Museum	30.03	762.7	30.28	769.1	71.2	21.8	44	NW			1		0					Blue sky	J. E. Carryer.
Malta, Mediterranean	29.92	760.0	29.99	761.7	77.0	25.0	51	W			1		0			0	0	Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.97	761.2	30.02	762.5	80.0	26.7	76	SE			2		10					Overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.76	755.9	30.28	769.1	67.1	19.5	58	ENE			3		3					D. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	30.02	702.5	30.25	768.3	69.1	20.6	48	E			5		0					Blue sky	The Staff.
Plymouth	30.01	762.2	30.09	764.3	66.0	18.9	45	E			6		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			30.45	773.4	59.8	15.4	69	S	23	10.3			0					Blue sky	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.77	756.1	29.83	757.7	66.4	19.1	88	SW			1		5			Blank		D. clouds	Serg't W. H. Lyne.
Sheffield	30.08	764.0	30.30	771.1	65.8	18.8	62	ENE			2		1			0	0	Blue sky	W. F. Cooper.
Silloth Rectory	30.33	770.4	30.35	771.1	69.8	21.0	46	W			4		0			0	0	Blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.34	770.6	65.0	18.3	53	E	18	8.0			0					Blue sky	Rev. S. J. Perry.
Stratfield Turgiss	30.01	762.2	30.22	767.6	72.8	22.7	35	E			3-5		0					Squally	Rev C.H.Griffiths, F.M.S
Truro, Royal Institution	30.07	763.8	30.08	764.0	70	21.1	94	NE			7		3					D. clouds	W. Newcombe.
Valencia, Observatory	30.11	764.8	30.14	765.5	68.4	20.2	44	E	12	5.4			2					Misty	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.11	764.8	30.16	766.1	46	7.8	93	N	11	4.9			10s			Inap.	Inap.	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	30.15	765.8	30.21	767.3	50	10.0	98	N	1	0.4			10n		N	0.02	0.5	Cloudy	G. A. Blair.
Chicontimi, Quebec																			Lev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	30.15	765.8	30.18	766.6	41	5.0	78	NW	2	0.9		0	0			0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.17	740.9	29.98	761.5	58	14.4	94	E	3	1.3		5k	5n	SW	SW	0.100	2.5	Threatening	James Stewart.
Fredericton, N. B																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.00	762.0	30.13	765.3	54	12.2	89	N	8	3.6		0	5ks			0.020	0.5	Fair	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.90	759.4	30.23	767.8	59	15.0	87	W	1	0.4		0	0			Inap.	Inap.	Clear	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	30.04	763.0	30.24	768.1	55	12.8	92	SW	1	0.4			Fg			0	0	Foggy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.57	751.1	30.26	768.6	58	14.4	87	Calm	0	0		0	0			0	0	Clear	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.55	750.6	30.23	767.8	62	16.7	83	N	5	2.2		0	0			0	0	Clear	H. Morgan.
Port Stanley, Ontario	29.59	751.6	30.23	767.8	58	14.4	90	NE	5	2.2		0	0			0	0	Clear	M. Payne.
Quebec, Quebec*	29.94	760.5	30.27	768.8	48	8.9	93	Calm			0		Fg			0	0	Foggy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.78	756.4	30.23	767.8	58	14.4	82	Calm	0	0		2c	0	NE		0	0	Fair	W. H. McIntyre.
Saugeen, Ontario*	29.55	750.6	30.25	768.3	60	15.6	85	N	3	1.3		0	0			0	0	Clear	K. Stewart.
St. Andrews, N .B	30.12	765.0	30.17	766.3	54	12.2	86	NE	2	0.9			10n			0.01	0.3	Cloudy	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.05	763.3	30.09	764.3	49	9.4	94	NW	4	1.8			10s		N	1.78	45.2	Clearing	T. C. Hill, C. E.
Toronto, Ontario*	29.88	758.9	30.25	768.6	59	15.0	85	Calm	0	0		2c	Hz			0	0	Clear	Magnetic Observatory
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.08	764.0	30.14	765.5	53	11.7	95	N	3	1.3			10s		N	0.02	0.5	Cloudy	Lt. F. E. Wilmot, R. N
Sub-Series. St. Johns, Newfoundland	29.74	755.4	29.99	761.7	58	14.4	100	NE					10n			0.19	4.8	Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.87	758.7			59.6	15.3	80	WSW	22.8	10.2			10n					Showery	John Duthie.
Cape Town, C. G. H. Obs'y	29.44	747.8	29.48	748.8	57.4	14.1		S	13.0	5.8		5	4ks;n			0.016	0.4		The Staff, for D. Gill.
Worcester*†	28.89	733.8			51.1	10.6	87	E			1	5	5			0.53	13.5		C. Stokes.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series. Zi-Ka-Wei, near Shanghai	29.87	758.6	29.89	759.1	63.5	17.5	90	W	1.3	0.6			0			0.059	1.5	Clear	M. Marc Dechevrens, S.

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

COSTA RICA SERIES.

By authority of the MINISTER OF FOREIGN AFFAIRS.

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

San José	26.19	665.2	29.91	759.7	65.3	18.5	93	NE			2	2c	0			Inap.	Inap.	Clear	Amand Maison.

DANISH SERIES.

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

Copenhagen	30.48	774.3	30.53	775.5	59.9	15.5	65	E	9	4			0						Oversergent Fischer.
Fanöe	30.49	774.5	30.51	775.0	66.0	18.9	57	W			4		5						Overloerer Lauridsen.
Godthaab, Greenland	29.66	753.4	29.71	754.5	36.9	2.7	91	SW			2		10					Foggy	S. Kleinschmidt.
Stykkisholm, Iceland	29.97	761.3	30.02	762.4	43.2	6.2		SE			2		8						A. O. Thorlacius.
Thorshavn	30.32	770.1	30.35	771.0	59.5	15.3	66	SE	13	6			2						Overloerer Bergh.
Vestervig	30.47	773.8	30.56	776.2	59.4	15.2	56	NNW			2		0						Loesrer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.39	746.4	30.05	763.2	78.1	25.6	34	SSE			1	2c	0			0	0	Slightly cl'dy	M. Labrone, Director.
Alençon Normal School	29.54	750.3	30.09	764.3	69.8	21	61	E			3		1		E	0	0	Clear	M. Nicot, Director.
Arras, Engineer School	29.93	760.2	30.18	766.6	72.0	22.2	22	SE			2		0			0	0		M. Klein, Commandant.
Avignon, Normal School	29.92	760.0	30.00	762.0	80.2	26.8	35	S			1		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.55	750.6	30.09	764.2	71.1	21.7	24	SE			3		0			0	0	Clear	M. Sallard, Director.
Beauvais, Normal School	29.91	759.6	30.16	766.1	70.3	21.3	26	E			4		0			0	0	Clear	M. Frère Eugene Marie.
Besançon, Normal School	29.20	741.7	30.07	763.7	69.8	21	46	NE			2					0	0		M. Gobin, Director.
Bordeaux, Observatory	29.71	754.5	29.96	760.9	77.5	25.3	46	S			1		2			0	0	Slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	29.47	748.0	30.00	762.1	77.0	25	46	E			2		k		E	0	0		M. Postel, Director.
Brest, Naval Observatory	29.77	756.2	30.02	762.4	75.2	24.0	62	S			1		6		S	0	0	Stormy	M. de Rermaree, Dir.
Caen, Normal School	29.98	761.6	30.03	763.4	73.6	23.1	58	E			2		0			0	0	Clear	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.84	758.0	30.15	765.9	74.5	23.6	37	E			3		0			0	0	Clear	M. Jadot, Director.
Charleville, Normal School	29.68	753.9	30.19	767.7	73.4	23	20	SE			2		0			0	0	Clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.66	727.9	29.95	760.7	76.6	24.8	48	NE			1		1k			0.008	0.2	Clear	M. Allnard, Director.
Cluny, Normal School	29.24	742.7	30.08	764.0	73.8	23.2	58	NNE			1		1		NNE	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.30	744.2	30.15	765.9	69.3	20.7	37	E			6		0			0	0	Clear	Dr. Coulet, Director.
Gap, Normal School	27.52	698.9	29.95	760.7	75.6	24.2	23	NE			1		2s		S	0	0	¼ covered	M. Jeangirard, Director.
Grénasque, du. Rhone	28.95	735.2	30.09	764.2	77.0	25.0	29	W			2		2		SW	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.24	742.8	29.98	761.6	73.6	23.1	48	ENE			1		k			0	0		M. Ablard, Director.
Guéret, Normal School	28.49	723.7	30.03	762.8	72.1	22.3	42	E			1		2k		W	0.409	10.4	Slightly cl'dy	M. Rivoire, Director.
Lamballe, Normal School	29.80	756.8	30.00	763.6	72.3	22.4	61	E			1				E	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.35	745.6	29.99	761.8	77.9	25.5	83	W			1				W	0	0		M. Chauvin, Director.
Lorient, Naval Observatory	29.99	761.7	30.09	764.3	73.4	23.0	52	SSE			1		2		SSE	0	0	¼ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.97	735.8	29.99	761.7	73 2	22.9	53	ENE			1		Fg			0	0	Light fog	M. André, Director.
Mans, Normal School	29.76	755.8	30.00	763.4	71 4	21.9	52	NE			4		0			0	0	Clear	M Piboen, Director.
Marseille, Observatory	29.75	756.0	30.03	762.8	73.2	22.9	39	WSW			2		1		SW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.89	632.1	30.12	765.1	59.0	15.0	56	NE	9.4	4.2			7		SE	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.89	759.1	29.99	761.8	74.1	23.4	55	S			3		0			0	0	Clear	M. P. Galzin, Director.
Nancy, Normal School	29.41	747.1	30.17	766.2	67.6	19.8	33	ENE			3		0			0	0	Clear	M. Hasse.
Nantes, Observatory	29.86	758.4	30.02	762.6	75.2	24	64	NE			1-2		5k;1cu		SE	0.138	3.5		M. Larocque, Director.
Nice	29.90	759.4	29.93	760.3	71.8	22.1	59	SE			3		10	SE	SE	0	0	Covered	Capt. Roissière, Director.
Perpignan, Observatory	29.89	759.1	29.99	761.8	70.3	21.3	60	S	9.4	4.2			2		NW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.60	574.1			46.8	8.2							10		SW	0.043	1.1	Rain & snow	Gen'l de Nansouty, Dir.
Privas, Normal School	28.95	735.2	29.95	760.8	80.1	26.7	39	N			1		0			0	0	Clear	M. Tallien.
Puy de Dôme Obs'y, Summit	25.23	640.9			50.5	10.3	88	SE			3		2k			0.004	0.1	Foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	29.99	761.8	30.02	762.6	77.2	25.1	54	SSE			1		0			0	0	Clear	Lt. E. Decarne, Director
Roche-sur-Yon, N. School	29.78	756.4	29.99	761.7	75.6	24.2	46	ESE			3		5		S	0.004	0.1	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.89	708.5	29.95	760.8	75.6	24.2	43	NW			1		2			0	0	Slightly cl'dy	M. Richard, Director.
Rouen, Normal School	30.03	762.7	30.11	764.9	75.2	24	32	NE			3		0			0	0	Clear	M. Platrier, Director.
Saint Lô, Normal School	29.89	759 1	30.04	763.1	71.2	21.8	44	SE			2		0			0	0	Clear	M. Delaplanche, Dir.
Saint Maur, Observatory	29.95	760.8	30.12	765.0	75.6	24.2	24	ENE			3		0			0	0		M. Renou, Director.
Toulouse, Observatory	29.31	744.4	30.03	762 8	81.3	27.4	46	SSE			1					0	0		M. Baillaud, Director.
Tours	29.80	757.0	30.00	762.0	76.6	24.8	47	E			3		2		SE	0	0	¼ covered	M. de Tastes.
Versailles, Observatory	29.62	752.4	30.11	764.9	71.6	22.0	24	E			6					0	0		Dr. A. Bérigny, Director.
SUB-SERIES.																			

GERMAN SERIES.

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

Bamberg	29.40	746.8	30.27	758.9	64.8	18.2	37	NE			4		3k	E		0	0		Prof. Dr. Hoh.
Berlin	30.20	767.0	30.37	771.3	69.8	21.0	27	NE			1		5			0	0		Prof. Dr. Arndt.
Breslau	29.75	759.0	30.30	769.0	60.6	15.9	50	NE			5		7			0	0		Royal University Obs'y.
Carlsruhe	29.79	756.7	30.21	767.4	67.3	19.6	50	NE			2		0			0	0		Albert Senx.
Cassel	29.01	752.1	30.33	770.3	68.4	20.2	24	ENE			7		0			0	0		Dr. H. Mohl.
Frankfort on the Main	29.93	760.3	30.29	769.4	68.9	20.5	20	NE			2		0			0	0		Physical Society.
Friedrichshafen	28.73	729.7	30.15	765.7	63.0	17.2	43	NE			8		2	ENE		0	0		Wilhelm, Chief Tel:
Hamburg	30.38	771.0	30.45	773.4	63.0	17.2	53	NE			4		1			0	0		Dr. R. Kleeman.
Kiel	30.39	774.4	30.50	774.8	50.7	10.4	53	ENE			4		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.94	760.4	30.35	771.0	65.5	18.6	42	NE			3		6	NE		0	0		Prof. Dr. Bruhns.
Magdeburg	30.08	764.0	30.30	771 2	68.5	20.3	50	E			2		0			0	0		Dr. Assmann.
Memel	30.35	770.9	30.40	772.1	64.0	18.1	32	ENE			5		2s					Squally	Reinbrecht & Issermann.
Munich	28.43	722.0	30.30	769.7	51.6	10.9	71	NE			3		10	NE		0	0		Central Station.
Neufahrwasser	30.41	772.4	30.43	772.8	53.2	11.8	61	NNW			3		5			0	0		A. Lothes.
Neustadt, Palatinate	29.68	753.8	30.21	767.2	64.2	17.9	52	E			1		0			0	0		Dicknether.
Stuttgart	29.26	743.2	30.14	765.6	64.9	18.3	43	E			7*		5	E		0	0		Prof. Dr. Schoder.
Thorn																0	0		Dr. O. Ouerth.
Weissenburg, Bavaria	28.75	730.3	30.24	768.2	57.2	14.0	54	SE			6		9	E		0	0		Prof. Kemlein.
Wustrow	30.50	774.8	30.53	775.4	58.1	14.5	72	NE			2		3s			0	0		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.55	750.5	29.93	760.2	75.9	24.4		NE			2.0		0					Clear.	A. Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.63	752.5	29.68	753.8	86.9	30.5	41	WSW	18.0	8.0			1			0	0	Blue sky.	
Deesa	29.15	740.4	29.60	751.9	100.8	38.2	28	WSW	14.1	6.3			5		WSW	0	0	D. clouds.	
Bombay	29.67	753.6	29.71	754.6	88.0	31.1	72	WNW	24.0	10.7			4		WNW	0	0	D. clouds.	
Poona, Yarrowda	27.84	707.2	29.64	752.7	94.1	34.5	29	W								0	0	Blue sky.	
Belgaum	27.16	690.0	29.61	752.1	92.1	33.4	46	W	11.0	4.9			4		N	0	0	Misty.	
Lahore	28.82	732.0	29.54	750.3	89.6	32.0	36	SE	3.7	1.6			10			0.31	7.9	Misty.	
Roorkee	28.65	727.7	29.51	749.6	97.9	36.6	27	Calm	1.8	0.8			4			0	0		
Agra	28.95	735.6	29.50	749.2	103.1	39.5	24	Calm	8.2	3.7			0			0	0		
Nagpur	28.50	723.9	29.49	748.9	105.7	40.9	19	N	8.6	3.8			3		W	0	0	D. clouds.	
Jubbulpore	28.22	716.9	29.51	749.5	103.5	39.7	17	Calm	4.8	2.2			6		E			D. clouds.	
Lucknow	29.12	739.6	29.48	748.6	104.4	40.2	23	NNW	2.1	0.9			0			0	0	Blue sky.	
Allahabad	29.20	741.7	29.50	749.3	96.7	35.9	44	NE	2.3	1.0			0			0	0	Blue sky.	
Patna	29.36	745.7	29.53	750.1	98.3	36.8	50	NE	3.3	1.5			5		NE	NE	0	0	D. clouds.
Hazaribagh	27.58	700.6	29.53	750.0	90.3	32.4	46	ESE	7.6	3.4			10				0	0	
Cuttack	29.49	749.1	29.57	751.1	93.1	33.9	53	SE	3.0	1.3			4				0	0	Thunder.
Calcutta, Alipore	29.57	751.0	29.59	751.6	85.5	29.7	76	WSW	5.0	2.2			7		W		0	0	D. clouds.
Dhubri	29.50	749.4	29.62	752.4	83.2	28.4	84	Calm	2.0	0.9			9				0	0	Blue sky.
Chittagong	29.59	751.6	29.68	753.9	85.2	29.6	75	S	4.2	1.9			8				0	0	D. clouds.
Sibsagar	29.33	744.9	29.66	753 4	84.6	29.2	77	NE	1.9	0.8			10		W	W	0.85	21.6	D. clouds.
Zanzibar, Africa			29.98	701.5	75.1	23.9	89	SSW	10	4.5			9			S	1.35	34.3	Gloomy.
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.64	752.9	30.04	763.0	70.9	21.6	52	N	1.8	0.8			6			0.488	12.4		Prof. Giovanni Clodig.
Milan	29.55	750.5	30.05	763.3	66.7	19.3	51	SE	11.9	5.3			6			0	0		Prof. Schiaparelli.
Padua	29.97	701.1	30.07	763.8	65.8	18.8	51	SSE	0.7	0.3			1			0.114	2.9		Prof. Dott. Lorenzoni.
Moncalieri	29.16	740.6	30.04	763.1	65.3	18.5	71	E	4.3	1.9			10		N		0	0	Prof. P. F. Denza.
Genoa	29.82	757.3	30.01	762.2	71.2	21.8	69	SE	6.3	2.8			0				0	0	Prof. G. M. Garibaldi.
Mondovi	28.15	715.1	30.03	762.7	61.7	16.5	83	N			4		9				0	0	Prof. D. C. Bruno.
Pesaro	30.04	762.9	30.08	764.1	60.4	15.8	75	N	13.0	5.8			10		NW		0	0	Prof. Luigi Guidi.
Florence	29.73	755.2	29.98	761.5	70.7	21.5	46	NE			4		10		WNW		0.008	0.2	Prof. Cosantino Pitter.
Leghorn	29.92	759.9	30.00	762.0	71.6	22.0	64						3				0	0	Prof. P. Monte.
Rome	29.82	757.5	29.99	761.8	76.1	24.5	48	SW	9.4	4.2			7				0.004	0.1	Prof. P. S. Ferrari.
Lecce	29.67	753.6	29.91	759.8	70.3	21.3	39	NNW	9.4	4.2			6				0	0	Prof. C. de Giorgi.
Cosenza	29.11	739.5	29.98	761.6	75.2	24.0	69	SSE	1.3	0.6			7		SE		0	0	Prof. D. Conti.
Cagliari	29.79	756.7	29.98	761.5	70.0	21.1	71	SE			4		1				0	0	Prof. A. Pacinotti.
Palermo	29.80	756.9	30.05	763.3	69.8	21.0	64	NE	6.3	2.8			5				0	0	Prof. G. Ciaccatore.
Syracuse	29.93	760.3	29.98	761.4	72.7	22.6	65	E	3.1	1.4			6		SW		0	0	Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.47	748.5	29.98	761.4	72.0	22.2	72	S	1.3	0.6			4		SE		0	0	Prof. F. Brioschi.
Stelvio	22.24	564.9			38.8	3.8	43	ESE			4	4ck	0		N		0	0	Fair. Prof. P. F. Denza.
Valdobbia	22.27	565.7			48.7	9.3	77	N			2		10kn		NW		0	0	Covered. Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y †	29.75	755.6	29.76	755.9	58.8	14.9	93	S	4.8	2.1		ck	10s;ks			0.297	7.5	Gloomy.	K. Sasaki.
Kioto	29.56	750.8	29.73	755.1	60.0	15.6	96	NE	0.2	0.1			10n			1.250	31.8	Raining	M. Tojima.
Nagasaki, I. M. Obs'y	29.67	753.6	29.87	758.7	56.5	13.6	93	ESE	0.9	0.4			10s			0.265	6.7	Overcast.	S. Takehayashi.
Tokei Obs'y, Yeddo	29.54	750.3	29.61	752.1	71.6	22.0	80	SSW	17.6	7.9			10s			0.360	9.1	Covered.	The Staff.
Wakayama	29.71	754.6	29.76	755.9	58.8	14.9	95	WNW	0.7	0.3			10n			1.060	26.9	Raining	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.87	758.7	30.06	763.4	73.6	23.1	57	ESE	12.0	5.4		0	2		SE	0	0	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.65	753.2	29.91	759.8	72.0	22.2	90	ENE	0.9	0.4		0	18			0	0	Clear.	F. Quijano, U. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.29	769.4	30.29	769.4	67.6	19.8		E			5					0	0		
Groningen	30.38	771.7	30.44	773.1	66.0	18.9		E			5					0	0		
Helder	30.41	772.3	30.41	772.3	61.0	16.1		ENE			4					0	0		
Hellevoetsluis	30.32	770.0	30.32	770.0	66.6	19.2	55	ENE			5					0	0		
Utrecht	30.30	769.7	30.35	770.9	69.4	20.8	31	ESE			4		0			0	0	Clear.	H. van de Brin

STATIONS.	Barometer. Corrected for instrumental error and temperature. Inch.	Barometer. Corrected for instrumental error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.50	774.8	30.57	776.4	63.7	17.6	61	W	7.4	3.3			0			0	0		
Christiania	30.39	771.8	30.53	775.5	58.3	14.6	63	SW	4	2			0			0	0		
Gjæsvær	29.87	758.8	29.90	759.4	33.3	0.7		WNW			7		10						
Lodingen	30.11	764.7	30.15	765.9	41.0	5.0	92	WSW			7		10			1.299	33.0	Rain & fog.	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.88	759.0	30.04	763.0	58.3	14.6	70	N	11.2	5.0			2			0.098	2.5		Dr. J. A. Sampaio.
Campo Major	28.89	733.9	29.85	758.2	79.2	26.2	43	SSW	4.9	2.2			7			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.87	758.7	29.95	760.9	68.4	20.2	69	SW	8.7	3.9			5			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.56	750.8	29.91	759.6	73.0	22.8	39	SSW	3.8	1.7			9	SW		0.181	4.6		The Staff.
Ponta Delgada, Azores	29.97	761.2	30.04	763.0	62.6	17.0	57	NW	9.8	4.4			3			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski																			Capt. Lasarew.
Archangel	30.43	772.8	30.45	773.3	52.3	11.3	60	SW	13	6			10					Light clouds	Capt. Saeliwerstow.
Astrakhan	29.95	760.8	29.87	758.7	81.7	27.6	47	SE	4	2			7s					Light clouds	Capt. Wisganow.
Barnaul	29.76	754.4	30.22	767.6	37.2	2.9	56	NW	18	8			2						Meteorological Obs'y.
Dorpat	30.27	768.8	30.51	774.9	61.5	16.4	38	NE	13	6			0						Observatory.
Ekaterinburg	29.32	744.6	30.28	769.2	54.0	12.2	32	SE	9	4			10					Solar halo	Meteorological Obs'y.
Kasan	29.86	758.5	30.12	765.0	76.8	24.9	48	N	2	1		2c	0						Observatory.
Kertch	29.81	757.2	29.83	757.7	67.1	19.5	95	Calm	0	0			3						Lagodio & Sastyrez.
Kieff	29.31	744.4	29.91	759.7	79.2	26.2	31	ENE	38	17		cs;ck	4cks						Observatory.
Krotkowo																			Cand. Farjanow.
Lugan	29.63	752.7	29.83	757.6	82.8	28.2	26	ENE	34	15			0						Meteorological Obs'y.
Moscow	29.63	752.6	30.15	765.9	73.9	23.3	56	N	7.8	3.5			3ks						Meteorological Obs'y.
Nertchinsk	27.45	697.3	29.73	755.1	44.6	7.0	31	Calm	0	0			4						Meteorological Obs'y.
Nikolaiev	29.78	759.4	29.85	758.2	70.3	24.6	73	E	13	6			8n						Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	29.00	751.8	29.74	755.4	69.6	20.9	30	NW	4	2			6ks						Physical Observatory.
St. Petersburg	30.48	774.3	30.59	774.7	59.7	15.4	32	ENE	7	3			0						Central Physical Obs'y.
Tashkend, Laboratory	28.31	719.1	29.78	756.3	85.3	29.6	36	Calm	0	0			0						Teich, A. M.
Tiflis	28.41	721.7	29.74	755.5	82.0	27.8	42	SE	4	2			5n						Physical Observatory.
Warsaw	29.83	757.7	30.20	768.6	51.4	10.8	83	NE	11	5			10ks						Astronomical Obs'y.
Wilna	29.92	760.0	30.35	770.9	51.8	11.0	83	NNE	7	3			10					Heavy cl'ds	Berg, Assistant.
Yeniseisk	29.62	752.4	29.92	759.9	32.5	0.3	64	N	16	7			10					Snowing	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.45	773.4	56.2	13.4	73	E			2		0			0	0	Very fine	Andrew Gibb.
Monach Lt. House, Hebrides			30.37	771.4	58	14.4	94	S			3	0	0			0	0	Clear	J. Youngclause.
North Unst, Shetland Isl'ds			30.38	771.6				S			1	0	0						Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.92	760.0	30.02	762.6	74.8	23.8	50	SW	4.5	2.0			2			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.88	759.0	29.94	760.4	74.1	23.4	60	NW	2.5	1.1		2	0	NW		0	0	Almost clear	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.05	687.0			75.6	24.2	87	S	7.6	3.4		0	6			0	0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.78	705.7	29.92	759.9	77.5	25.3	46	SE	8.3	3.7		0	1			0.098	2.5	Light clouds	The Staff.
Murcia, Met. Obs'y	29.88	759.0	30.03	762.7	78.4	25.8	41	E	6.0	2.7		0	3			0.004	0.1	Misty	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.98	736.2	29.85	758.3	67.8	19.9	64	NW	0	0			1			0	0	Almost clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.88	759.0	29.95	760.7	76.6	24.8	88	ESE	5.8	2.6		6c;ck	ks	WNW		1.500	38.1	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.78	754.0	29.74	755.3	84.1	28.9	62	N	5.5	2.5			9kn		E	0.01	0.3	Covered	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.83	757.7	29.93	760.1	74.5	23.6	55	NE	25.1	11.2		0	8		E	0.008	0.2		Capt. C. Pulanon, R. N., Dir.
San Juan de Porto Rico, W. I.	29.92	760.0	30.01	762.3	81.3	27.4	82	E	9.4	4.2		3cs	2k	E	E	0	0	Clear?	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.72	754.9	29.87	758.6	80.1	26.7	85	SSE	0	0			7ks		ENE	0.22	5.5	Cloudy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.22	767.6	30.25	768.6	50.4	10.2	58	SW			4		5			0	0		
Umea	30.38	771.7	30.43	773.0	58.6	14.8	45	SW			6		5			0	0		
Hernosand	30.45	773.4	30.50	774.7	61.3	16.3	48	SW			2		2			0	0		
Stockholm	30.39	771.8	30.56	779.3	63.3	17.4	49	S			2		1			0	0		
Wisby	30.44	773.2	30.50	774.7	53.2	11.8	60	NE			4		0			0	0		
Sub-Series.																			
Upsala	30.42	772.6	30.50	774.8	67.0	19.8	36	SW	8.1	3.6			0			0	0		Nils Ekholm
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.68	728.5	30.08	764.1	62.2	16.8	65	N			2		1			0.012	0.3	Clear	The Observatory.
Zurich	28.52	724.5	30.13	765.2	64.8	18.2	44	E			4-6		1			0	0	Clear	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.89	759.2	65.8	18.8	86	SW	3	1.5			8		SW	0.335	8.5		The Observatory.
Valona			30.01	762.3	70.8	24.9		W			1		2			0	0	Slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.93	760.2	75.2	24.0	62	W			2		7k		SW	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.17	766.3	30.25	768.3	59	15.0	76	N	4	1.8	.....	0	8ks	.....	.....	0.08	2.0	Fair	
Alpena, Michigan	29.64	752.8	30.28	769.1	58	14.4	82	W	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Atlanta, Georgia	28.93	734.8	30.04	763.0	66.2	19.0	88	E	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Atlantic City, New Jersey	30.18	766.6	30.19	766.8	56	13.3	100	N	8	3.6	.....	2c	Fg	Calm	Calm	0.05	1.3	Fair	
Augusta, Georgia	29.93	760.2	30.12	765.0	71.1	21.7	80	NE	7	3.1	.....	2ck	0	E	.....	0	0	Fair	
Baltimore, Maryland	30.17	766.3	30.21	767.3	67	19.4	64	N	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Barnegat, New Jersey	30.14	765.5	30.16	766.1	59	15.0	88	N	12	5.4	.....	5c	Hz	Calm	NE	0.51	13.0	Fair	
Bismarck, Dakota	28.10	713.7	29.96	761.0	63	17.2	77	SE	4	1.8	.....	5c	0	Calm	.....	0	0	Fair	
Boise City, Idaho	27 24	691.9	30.20	767.1	46.4	8.0	64	N	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Boston, Massachusetts	30.06	763.5	30.22	767.6	62.0	16.7	73	NE	3	1.3	.....	8k	0	NE	.....	0	0	Fair	
Brackettville, Texas	28.75	730.2	29.77	756.1	70	21.1	85	E	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Brownsville, Texas	29.87	758.7	29.91	759.7	75	23.9	68	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Buffalo, New York	29.54	750.3	30.23	767.8	57.5	14.2	85	N	1	0.4	.....	0	Sk	.....	.....	0	0	Dense smoke	
Burlington, Vermont	29.96	761.0	30.20	767.6	54.0	12.2	91	W	3	1.3	.....	0	5s;fg	.....	N	0.01	0.3	Fair	
Cairo, Illinois	29.67	753.6	30.05	763.3	65	18.3	84	E	8	3.6	.....	10ck	0	SE	.....	0	0	Cloudy	
Campo, California	27.36	694.9	29.93	760.2	45	7.2	76	W	2	0.9	.....	2k	0	W	.....	0	0	Fair	
Camp Thomas, Arizona	27.11	688.6	.....	.....	57	13.9	36	Calm	.....	.....	0	2cs	0	.....	.....	0	0	Clear	
Cape Henry, Virginia	30.14	765.5	30.16	766.1	66	18.9	84	NW	3	1.3	.....	2k	0	.....	.....	0.37	9.4	Clear	
Cape May, New Jersey	30.14	765.5	30.16	766.1	61	16.1	83	NE	8	3.6	.....	0	0	.....	.....	0.25	6.3	Clear	
Castroville, Texas	29.15	740.4	29.84	757.9	66	18.9	89	W	2	0.9	.....	0	5s	.....	SW	0	0	Fair	
Cedar Keys, Florida	29.99	761.7	30.02	762.5	75	23.9	81	E	8	3.6	.....	5c	0	.....	.....	0	0	Fair	
Champaign, Illinois	29.29	744.0	30.07	763.8	63	17.2	78	E	7	3.1	.....	.....	10s	.....	E	0	0	Cloudy	
Charleston, S. Carolina	30.03	762.7	30.09	764.3	78	22.8	85	NE	11	4.9	.....	5ck	0	NW	.....	0	0	Fair	
Charlotte, N. Carolina	29.28	743.7	30.08	764.0	69.4	20.8	80	SE	1	0.4	.....	5ck	0	W	.....	0	0	Fair	
Chattanooga, Tennessee	29.29	744.0	30.08	764.0	65	18.3	94	S	2	0.9	.....	.....	10n	.....	S	0.80	20.3	Light rain	
Cheyenne, Wyoming	23.96	608.6	29.90	759.4	49.2	9.6	100	SW	5	2.2	.....	.....	Fg	.....	.....	0	0	Dense fog	
Chicago, Illinois	29.47	748.5	30.15	765.8	55.9	13.3	81	NE	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Chincoteague, Virginia	30.14	765.5	30.16	766.1	63	17.2	89	N	9	4.0	.....	1k	0	NW	.....	0.23	5.8	Clear	
Cincinnati, Ohio	29.50	749.3	30.14	765.5	67	19.4	69	E	4	1.8	.....	1c	Sk	.....	.....	0	0	Clear	
Cleveland, Ohio	29.52	749.8	30.24	768.1	55.5	13.1	93	NE	2	0.9	.....	0	Fg	.....	.....	0	0	Clear	
Coleman City, Texas	28 15	715.0	29.78	756.4	61	16.1	82	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Columbus, Ohio	29.33	745.0	30.15	765.8	65	18.3	63	NE	5	2.2	.....	0	Hz	.....	.....	0	0	Clear	
Concho, Texas	28.01	711.4	29.65	753.1	61	16.1	94	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Corsicana, Texas	29.52	749.8	29.97	761.2	68	20.0	79	Calm	0	0	.....	0	1s	.....	.....	0	0	Clear	
Davenport, Iowa	29.48	748.8	30.11	764.8	63	17.2	72	E	12	5.4	.....	7k	0	E	.....	0	0	Fair	
Dayton, Washington T'y	28 32	719.3	30.03	762.7	36	2.2	62	SE	2	0 9	.....	0	2ks	.....	Calm	0.06	1.5	Clear	
Deadwood, Dakota	25.28	642.1	.....	.....	50	10.0	86	NE	1	0.4	.....	10k	0	.....	.....	0	0	Cloudy	
Decatur, Texas	28.70	729.0	29.83	757.7	66	18.9	69	SW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Delaware Breakwater, Del	30.17	766.3	30.19	766.8	56	13.3	100	NE	1	0.4	.....	.....	Fg	.....	.....	0.21	5.3	Dense fog	
Denison, Texas	29.17	740.9	29.94	760.5	65	18.3	89	SE	2	0.9	.....	.....	Fg	.....	.....	0.06	1.5	Dense fog	
Denver, Colorado	24.69	627.1	29.91	759.7	53.3	11.8	64	SW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Des Moines, Iowa	29.19	741.4	30.05	763.3	61	16.1	72	SE	3	1.3	.....	8k	0	.....	.....	0	0	Fair	
Detroit, Michigan	29.55	750.6	30.25	768.3	57.5	14.2	81	NE	4	1.8	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Dodge City, Kansas	27.40	695.9	29.67	753.6	53	11.7	93	SE	4	1.8	.....	0	Fg	.....	.....	0.02	0.5	Clear	
Dubuque, Iowa	29.44	747.8	30.14	765.5	60.4	15.8	77	E	4	1.8	.....	5c	Hz	SE	Calm	0	0	Fair	
Duluth, Minnesota	29.50	749.3	30.18	766.6	53	11.7	73	NE	2	0.9	.....	0	2s	.....	.....	0	0	Clear	
Eagle Pass, Texas	29.14	740.1	29.85	758.2	69	20.6	90	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Eagle Rock, Idaho	25.24	641.1	29.89	759.2	38	3.3	63	SW	16	7.2	.....	5cs	0	SW	.....	0	0	Fair	
Eastport, Maine	30.12	765.0	30.18	766.6	52.5	11.4	83	N	4	1.8	.....	.....	10s	.....	N	0	0	Cloudy	
El Paso, Texas	26.14	663.9	.....	.....	60	15.6	55	Calm	0	0	.....	1cs	0	.....	.....	0	0	Clear	
Erie, Pennsylvania	29.51	749.5	30.22	767.6	60	15.6	82	NE	1	0.4	.....	0	Sk	.....	.....	0	0	Clear	
Escanaba, Michigan	29.60	751.8	30.25	768.3	58	14.4	76	N	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Florence, Arizona	28.31	719.1	29.91	759.7	62	16.7	41	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Fort Apache, Arizona	24.95	633.7	30.40	772.1	42	5.6	42	NE	3	1.3	.....	0	5s	.....	Calm	0	0	Fair	
Fort Assinnaboine, Montana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Bennett, Dakota	28.32	719.3	.....	.....	60	15.6	82	SE	10	4.5	.....	1c	0	SE	.....	0	0	Clear	
Fort Benton, Montana	27.26	692.4	.....	.....	35	1.7	100	W	8	3.6	.....	.....	10n	.....	W	0.49	12.4	Light rain	
Fort Buford, Dakota	27.91	708.9	29.73	755.1	48	8.9	85	NW	4	1.8	.....	5cs	0	W	.....	0.02	0.5	Fair	
Fort Custer, Montana	26.81	681.0	.....	.....	42	5.6	91	NW	8	3.6	.....	.....	10s	.....	NW	0.40	10.2	Cloudy	
Fort Davis, Texas	25.17	639.3	30.13	765.3	57	13.9	63	W	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Elliott, Texas	27.25	692.1	29.51	749.5	53	11.7	80	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Gibson, Indian T'y	29.43	747.5	29.96	761.0	61	16.1	100	Calm	0	0	.....	.....	Fg	.....	.....	0.04	1.0	Dense fog	
Fort Grant, Arizona	25.10	639.1	29.96	761.0	61	16.1	21	NE	8	3.6	.....	5cs	0	.....	.....	0	0	Fair	
Fort Griffin, Texas	28.60	726.4	29.83	757.7	63.0	17.2	83	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Keogh, Montana	27.44	697.0	.....	.....	48	8.9	92	NW	9	4.0	.....	.....	10s	.....	.....	0.03	0.8	Cloudy	
Fort Macon, North Carolina	30.13	765.3	30.14	765.5	72	22.2	77	N	4	1.8	.....	2k	0	Calm	.....	0	0	Clear	
Fort McKavett, Texas	27.09	703.3	29.57	751.1	61.2	16.2	88	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Fort Missoula, Montana	26.70	679.7	.....	.....	39	3.9	91	Calm	0	0	.....	.....	10n	.....	.....	0.17	4.3	Light rain	
Fort St. Michaels	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Shaw, Montana	26.46	672.1	.....	.....	33	0.6	100	NW	4	1.8	.....	.....	10s	.....	NW	0.37	9.4	Cloudy	
Fort Sill, Indian Territory	28.74	730.0	29.83	757.7	60	15.6	94	N	6	2.7	.....	0	0	.....	.....	0.28	7.1	Clear	
Fort Stevenson, Dakota	28.06	712.7	.....	.....	61	16.1	88	S	2	0.9	.....	0	5ks	.....	S	0	0	Fair	
Fort Verde, Arizona	[illegible]	.....	.....	.....	51.4	10.8	40	W	.....	.....	2	0	0	.....	.....	0	0	Clear	
Fredericksburg, Texas	28.22	716.8	29.75	755.6	63	17.2	89	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Galveston, Texas	29.93	760 2	29.97	761.2	77	25.0	82	Calm	0	0	.....	2k	0	S	.....	0	0	Clear	
Grand Haven, Michigan	29.57	751.1	30.21	767.3	64	17.8	73	E	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Hatteras, North Carolina	30.13	765.3	30.15	765.8	72	22.2	80	NE	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Helena, Montana	25.84	656.3	.....	.....	36	2.2	80	Calm	0	0	.....	0	8s	.....	Calm	0.55	14.0	Cloudy	
Henrietta, Texas	28.95	735.3	29.84	757.9	65	18.3	84	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Indianapolis, Indiana	29.34	745.2	30.10	764.5	67	19.4	69	NE	3	1.3	.....	0	Hz	.....	Calm	0	0	Clear	
Indianola, Texas	29.94	760.5	29.96	761.0	76.2	24.6	86	S	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Jacksboro, Texas	28.81	731.8	29.92	760.0	60	15.6	82	SE	1	0.4	.....	2ck	0	NW	.....	0.02	0.5	Clear	
Jacksonville, Florida	30.01	762.2	30.06	763 5	76	24.4	77	SW	3	1.3	.....	2cs	0	W	.....	0.78	19.8	Clear	
Keokuk, Iowa	29.41	747.0	30.04	763.0	64.0	17.8	73	E	5	2.2	.....	5ck	Hz	SE	Calm	0	0	Fair	
Key West, Florida	29.95	760.7	29.99	761.7	80.2	26.8	79	SE	8	3.6	.....	2k	8ks	SE	SE	0	0	Cloudy	
Kittyhawk, North Carolina	30.10	766.1	30.19	766.8	66	18.9	89	Calm	0	0	.....	10k	0	NW	.....	0	0	Cloudy	
Knoxville, Tennessee	29.11	739.4	30.09	764.3	64	17.8	86	NE	3	1.3	.....	5k	0	S	.....	0	0	Fair	
La Crosse, Wisconsin	29.39	746.5	30.13	765.3	66	18.9	64	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
La Mesilla, New Mexico	29.01	660.6	30.16	766.1	56	13.3	46	Calm	0	0	.....	5c	0	.....	.....	0	0	Fair	
Laredo, Texas	29.47	748.5	29.80	756.9	72	22.2	90	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Leavenworth, Kansas	29.14	740.1	29.95	760.7	65	18.3	84	E	6	2.7	.....	.....	10s	.....	.....	0.69	2.3	Cloudy	
Lewiston, Idaho	29.24	742.7	29.90	759.4	42	5.6	48	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Little Rock, Arkansas	29.66	753.4	29.97	761.2	65	18.3	94	Calm	0	0	.....	.....	10s	.....	.....	0.44	11.2	Cloudy	
Los Angeles, California	29.60	751.8	29.98	761.5	43.2	6.2	75	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Louisville, Kentucky	29.53	750.0	30.07	763.8	69.2	20.7	75	NE	4	1.8	.....	2cs	Sk	.....	.....	0	0	Clear	
Lynchburg, Virginia	29.50	749.3	30.16	766.1	76	21.1	75	Calm	0	0	.....	0	Fg	.....	.....	0.15	3.8	Clear	
Madison, Wisconsin	29.17	740.9	30.15	765.8	58	14.4	76	E	3	1.3	.....	1c	0	Calm	.....	0	0	Clear	
Marquette, Michigan	29.52	749.8	30.22	767.6	60	15.6	65	SW	1	0.4	.....	Hz	0	.....	.....	0	0	Clear	
Mason, Texas	28.32	719.3	30.03	762.7	66	18.9	79	W	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Memphis, Tennessee	29.70	754.4	30.03	762.7	64	17.8	94	Calm	0	0	.....	5cs	2s	SW	S	0.35	8.9	Cloudy	
Milwaukee, Wisconsin	29.48	748.8	30.21	767.3	53	11.7	80	NE	1	0.4	.....	0	Hz	.....	.....	0	0	Clear	

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.	WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction,		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
											Up'er	Lo'er	Upper.	Lower.				
	Inch	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec 0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—CONTINUED.																		
Mobile, Alabama	29.94	760.5	30.01	762.2	73	22.8	95	SE	6	2.7			Fg			0	0	Dense fog.
Montgomery, Alabama	29.82	757.4	30.05	763.3	68	20.0	84	NW	10	4.5		0	9ks		SE	0.02	0.5	Threatening
Moorhead, Minnesota	29.04	737.6	29.90	761.0	62	16.7	77	S	12	5.4		5k	0	S		0.18	4.6	Fair
Morgantown, W. Virginia	29.20	741.7	30.18	766.6	64	17.8	83	Calm	0	0		Hz	0			0	0	Clear
Mt. Washington, N. H.	24.01	609.8	30.37	771.4	40	4.4	91	NE	20	8.9			Fg		NE	0	0	Light fog
Nashville, Tennessee	29.52	749.8	30.04	763.0	66.4	19.1	88	E	4	1.8		7ck;cs	0	SE		0.41	10.4	Fair
New Haven, Connecticut	30.07	763.8	30.19	766.8	59	15.0	94	NE	9	4.0			10s		NE	0.30	7.6	Cloudy
New London, Connecticut	30.17	766.3	30.22	767.6	58	14.4	94	SW	1	0.4			10s		Calm	0.03	0.8	Cloudy
New Orleans, Louisiana	29.91	759 7	29.97	761.2	73.5	23.1	83	SE	3	1 3		0	Sk			0.02	0.5	Clear
Newport, Rhode Island	30.15	765.8	30.20	767.1	55.1	12.8	89	E	2	0.9			10s		Calm	0	0	Cloudy
New River, N. Carolina																		
New Shoreham, Rhode I'd	30.17	766 3	30.20	767.1	52.0	11.1	93	Calm	0	0			10s;fg		Calm	0	0	Cloudy
New York, New York	30.02	762.5	30.20	767.1	58	14.4	88	N	10	4.5		5cs	2s	N		0.62	15.7	Fair
Norfolk, Virginia	30.11	764.8	30.10	766.1	67	19.4	84	N	6	2.7		0	8ks		NW	0.61	15.5	Fair
North Platte, Nebraska	27.09	688.1	29.61	752.1	50	13.3	90	S	18	8.0			10s		S	0	0	Cloudy
Olympia, Washington T'y	30.04	763.0	30.08	764.0	38.0	3.3	81	SW	1	0.4		0	0			0	0	Clear
Omaha, Nebraska	28.91	734.3	29.97	761.2	63.5	17.5	70	SE	6	2.7		0	8s		SE	0.09	2.3	Cloudy
Oswego, New York	29.92	760.0	30.25	768.3	50.8	10.4	80	NW	1	0.4		0	Fg			0	0	Clear
Pensacola, Florida	29.97	761.2	30.00	762.0	73	22.8	95	NE	6	2.7		0	5s		E	0.04	1.0	Fair
Philadelphia, Pa	30.14	765.5	30.19	766.8	61	16.1	77	NE	10	4.5		5c	0	NW		0.10	2.5	Fair
Phœnix, Arizona	28.70	729.0	30.47	773.9	60	15.6	60	E	2	0.9		5k	0			0	0	Fair
Pike's Peak, Colorado	17.80	452.1	30.01	762.2	23	— 5.0	34	SW	36	16.1		0	0			0.02	0.5	Clear
Pioche, Nevada	23.93	607.8	29.70	754.4	43	6.1	51	NW	6	2.7		0	0			0	0	Clear
Pittsburg, Pennsylvania	29.41	747.0	30.21	767.3	62.3	16.8	68	NE	3	1.3		0	0			0	0	Clear
Port Eads, Louisiana	29.98	761.5	29.99	761.7	73.0	22.8	90	SE	4	1.8		0	0			0	0	Clear
Port Huron, Michigan	29.59	751.6	30.27	768.8	48.0	8.9	93	N	7	3.1		0	Hz			0	0	Clear
Portland, Maine	30.17	766.3	30.22	767.6	59	15.0	70	NE	6	2.7		2k	5s	NE	Calm	0	0	Fair
Portland, Oregon	30.02	762.5	30.09	764.3	43.4	6.3	70	Calm	0	0		0	0			0	0	Clear
Portsmouth, N. Carolina					71	21.7	80	NE	6	2.7		0	Hz		Calm	0	0	Clear
Prescott, Arizona	24.67	626.6	30.03	762.7	40	4.4	39	S	2	0.9		0	0			0	0	Clear
Punta Rassa, Florida	29.94	760.5	29.90	761.0	75	23.9	80	E	10	4.5		8cs	0	Calm		Inap.	Inap	Fair
Red Bluff, California	29.58	751.3	29.92	760.0	53.5	11.9	77	NW	2	0.9		0	0			0	0	Clear
Rio Grande City, Texas	29.74	755.4	29.95	760.7	72	22.2	90	SE			1	0	5ks		Calm	0	0	Fair
Rochester, New York	29.62	752.3	30.23	767.8	59	15.0	88	Calm	0	0		0	Hz			0	0	Clear
Roseburg, Oregon	29.51	749.5	30.10	764.5	38.5	3.6	77	Calm	0	0		0	0			0	0	Clear
Sacramento, California	29.88	758.9	29.95	760.7	54.2	12.3	87	SE	8	3.6		0	0			Inap.	Inap.	Clear
St. Louis, Missouri	29.46	748.3	30.02	762.5	64.5	18.1	83	E	7	3.1		10c;ck	0	S		0	0	Cloudy
St. Paul, Minnesota	29.28	743.7	30.09	764.3	60	15.6	77	SE	7	3.1		1c	0	NW		0	0	Clear
Salt Lake City, Utah	25.59	650.0	29.92	760.0	48	8.9	43	Calm	0	0		4k	0	W		0	0	Fair
San Antonio, Texas	29.25	743 2	29.95	760.7	65.6	18.7	95	Calm	0	0		0	0			0	0	Clear
San Diego, California	29.85	758.2	29.93	760.2	57.2	14.0	93	NW	4	1.8			10s			0	0	Cloudy
Sandusky, Ohio	29.55	750.6	30.22	767.6	59	15.0	88	NE	10	4.5		0	0			0	0	Clear
Sandy Hook, New Jersey	30.10	765.1	30.19	766.8	59.0	15.0	88	NE	12	5.4		5k	Fg	W		0.40	10.2	Fair
San Francisco, California	29.92	760.0	29.99	761.7	52	11.1	89	W	7	3.1		0	Fg		SW	0	0	Clear
Santa Fé, New Mexico	23.24	590 3	29.78	756 4	51	10.6	79	E	5	2.2		0	0			Inap	Inap.	Clear
Savannah, Georgia	29.99	761.7	30.09	764.3	72.5	22.5	90	NE	8	3.6			10ks		E	Inap.	Inap.	Cloudy
Shreveport, Louisiana	29.75	755.0	29.99	761.7	67	19.4	84	E	3	1.3		0	5s			0 61	15.5	Fair
Silver City, New Mexico	24.23	615.4	30.32	770.1	53	11.7	36	N	3	1.3		0	0			0	0	Clear
Sitka, Alaska																		
Smithville, North Carolina	30.11	764.8	30.15	765.8	71	21.7	90	NE	8	3.6		2c	Hz			0	0	Clear
Socorro, New Mexico	25.34	643.6	29.40	746.7	53	11.7	35	Calm	0	0		0	0			0	0	Clear
Spokane Falls, Wash. Ter.	28.04	712.2	29.90	759.4	42	5.6	75	NE	3	1.3			10s		NE	0	0	Cloudy
Springfield, Illinois	29.40	746.7	30.05	763 3	65	18.3	80	E	6	2.7			10s;ks		SE	Inap.	Inap.	Cloudy
Springfield, Massachusetts	30.08	764.0	30.22	767.6	59	15.0	82	N	7	3.1		10cs	0	N		0.30	7.6	Cloudy
Stockton, Texas	29.86	682.2	29.80	758.4	50.2	13.4	94	S	4	1.8		0	0			0	0	Clear
St. Vincent, Minnesota	29.12	739.0	29.88	758.9	62	16.7	88	SE	8	3.6			10s		Calm	0.01	0.3	Cloudy
Thatcher's Island, Mass	30.06	763 5	30.11	764.8	57	13.9	87	NW	6	2.7		5cs	2s	W	E	0	0	Fair
Toledo, Ohio	29.52	749.8	30.19	766.8	63	17.2	83	NE	12	5.4		0	0			0	0	Clear
Tucson, Arizona	27.46	697.2	29.90	761.0	60	15.6	24	SE	4	1.8		2c	0			0	0	Clear
Umatilla, Oregon	29.75	755 0	30.24	768.1	50.5	10.3	65	E	8	3.6		0	5s		NW	0	0	Fair
Uvalde, Texas	28.98	736.1	29.78	756.4	66	18.9	79	Calm	0	0		0	0			0	0	Clear
Vicksburg, Mississippi	29.74	755.4	29.99	761.7	68	20.0	90	SE	1	0.4		0	0			0.39	9.9	Clear
Visalia, California	29.55	750.6	29.92	760.0	53	11.7	80	NW	1	0.4		0	0			0	0	Clear
Washington, D. C.	30.10	764.5	30.21	767.3	65	18.3	78	N	4	1.8		0	1ks;hs			0	0	Clear
Wickenburg, Arizona					52	11.1	86	Calm			0	0	0			0	0	Clear
Wilmington, N. Carolina	30.00	762.0	30.12	765.0	71	21.7	80	E	2	0.9		1c	Hz	Calm		0	0	Clear
Winnemucca, Nevada	25.62	650.7	29.98	761.5	36	2.2	61	NE	8	3.6		0	0			0.03	0.8	Clear
Wood's Holl, Mass	30.16	766.1	30.20	767.1	57	13.9	94	E	3	1.3			Fg		Calm	0	0	Dense fog
Yankton, Dakota	28.75	730.2	30.01	762.2	64	17.8	73	SE	1	0.4		0	0			0	0	Clear
Yuma, Arizona	29.04	752.8	29.79	756.7	63.2	17.3	62	W	1	0.4		0	0			0	0	Clear
SUB-SERIES.																		
Bogota, U. S. Columbia	22.10	561.3			54.5	12.5	77	Calm	0	0		2k	0			0	0	Cloudy — Thomas Heenan
Buff Bay Town, Jamaica	29.75	755.0	30.05	763.5	75	23.9	81	E				2c	0			0.28	7.1	Cloudy — A. Van Cangehem, Ass't
Havana, Cuba, W. I.	29.93	760.2	29.98	761.5	80	26.7	78	Calm	0	0		8cs	0					K. V. Möller.
Jakobshavn, Greenland	29.74	755.3	29.79	756.0	34.9	1.0		Calm			0		2			0	0	Robert Johnstone
Kingston, Jamaica, W. I.	29.90	761.0	29.97	761.2	81.7	27.6	70	Calm	0	0		10cs	0			0	0	F. M. Everett.
Navassa, W. I.	29.89	759.2	29.97	761.2	82	27.8	79	E	8	3.6		2s	8k	NW	E	0	0	Fair
Paramaribo, S. A.	30.03	762.7	30.03	762.7	81	27.2	83	NE			2	5k	5ks	E		0.160	4.1	½ cloudy — Dr. C. J. Hering.
Puerto Berrio, U. S. Colombia	29.37	746.0	29.92	760.0	81	27.2	72	S			2	5cs	2k	N	S	0	0	Clear — Francesco J. Cisneros.
Rivas, Nicaragua					75.2	24		SW			1	4cs	1ks		SW	0	0	Earl Flint.
Santiago de Cuba, W. I.	29.96	761.0	29.99	761.7	81	27.2	74	Calm	0	0		4ks	0	S		0.02	0.5	Fair — Robert Mason.
St. Thomas, W. I.																		G. O. Gyllich.
York Factory, B. A.	30.30	771.1	30.41	772.4	31.0	— 0.6	95	NE	15	6.7		4k	3s	NE	NE	Inap.	Inap.	Fair — J. Fortescue & W Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross, N. 37° 23′, E. 123° 11′	29.72	754.9	55	12.8		W			2		2					3	N	D. clouds	Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.04	763.0	73.5	23.1	59	WSW			1		1							Blue sky	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 25° 40′, E. 57° 47′	29.60	751.8	86	30.0	88	SW			2		Mist							Misty	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			66	18.9		Calm			0		5	SSE						D. clouds	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	29.97	761.2	82	27.8	78	E			1		3							D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	30.05	763.3	56	13.3	63	SE			2		10	SE						Overcast	Com. F. W. Richards.
H. M. S. Champion, S. 9° 11′, W. 160° 12′	29.88	758.9	78	25.6	73	ESE			1		3	Calm				1	ESE	D. clouds.	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 33° 19′, E. 123° 40′	29.83	757.7	56	13.3	94	W			1		2	SW						Misty	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, Syracuse, Sicily	29.98	761.5	77	25.0		E			1		0							Blue sky	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, S. 4° 19′, W. 15° 22	30.02	762.5	81	27.2	83	NE			3–4		5					2	ENE	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring, N. 5° 55′, E. 92° 31′	29.77	756.1	80	26.7		SSE			3		5	SW				3	SW	Showery	Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.12	765.0	77	25.0	77	NNE			1		3	NNE						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 34′, W. 52° 41′	29.94	760.5	54	12.2	87	WSW			2		10							Overcast	Capt. W. R. Kennedy.
H. M. S. Dryad, N. 22° 20′, E. 59° 40′	29.62	752.3	88	31.1		S			2–3		2	S				1	S	D. clouds	Capt. John Hext.
H. M. S. Eclipse, N. 8° 34′, E. 81° 10′	29.69	754.1	90	32.2		SW			4–5		3					2		D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 1° 17′, E. 103° 51′	29.69	754.1	84	28.9		E			1		3	W						D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, S. 2° 20′, E. 175° 56′	29.85	758.2	83	23.3		Calm			0		2							D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, S. 10° 11′, E. 80° 31′	29.85	758.2	80	26.7	82	SSE			2–3		6	SSE				2	SE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn, N. 13° 52′, E. 42° 45′	29.68	753.9	87	30.6	86	N			3		6					1	N		Capt. P. Aldrich.
H. M. S. Flamingo N. 19° 11′, W. 81° 20′	29.94	760.5	83	28.3	83	SSE			3		2	SE				2	SE	D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 45° 40′, W. 134° 15′	30.39	771.9	49	9.4	78	N			3		5					3	NNE	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.62	752.3	42	5.6	83	Var.			1		5	WSW						D. clouds	Capt. L. F. Jones.
H. M. S. Griffon, N. 23° 08′, W. 82° 22′	29.91	759.7	80	26.7	87	SE			1		1							Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant, Melbourne, Australia	30.09	754.3	63	17.2	78	NW			2		6	NW						D. clouds	Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Alexandria, Egypt	29.97	761.2	70	21.1	57	NW			3		1					1	NW	Blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 26° 55′, E. 123° 00′	29.90	759.4	69	20.6	85	NE			1–2		10	SW				3	NE	Overcast	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.00	762.0	64	17.8		Calm			0		6	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Nagasaki, Japan	29.67	753.6	61	16.1		Calm			0		10							Overcast	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Now Chow I'd, China Sea	29.84	757.9	82.9	28.3	77	WNW			3		6							D. clouds	Capt. A. Carpenter.
H. M. S. Midge, Amoy, China	29.85	758.2				ESE			3–5		4	SE						Squally	Capt. W. N. Lang.
H. M. S. Minotaur, N. 36° 07′, W. 5° 21′	29.96	761.0	67.5	19.7	74	ENE			6		8	ENE						Squally	Capt. H. H. Rawson.
H. M. S. Modeste, S. 2° 20′ E. 103° 36′	29.81	757.2	84	28.9	96	S			1		0							Blue sky	Capt. J. G. Mead.
H. M. S. Monarch, Goletta, Tunis, N. Africa	30.05	763.3	68	20.0	90	NE			2		2	ENE						D. clouds	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	30.06	763.5	55.5	13.1	84	NNW			2		3	NNW						D. clouds	Capt. E. B. Drummond.
H. M. S. Orontes, S. 33° 32′, E. 27° 00′ †	29.85	758.2	63.5	17.5	81	WSW			6		10	WSW				5	SW	Showery	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.85	758.2	80	26.7		Calm			0		9					2	SE	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, N. 15° 43′, W. 72° 28′	29.93	760.2	82	27.8	79	ESE			3-4		3					2	ESE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler, S. 2° 49′, E. 8° 50′	30.00	762.0	75	23.9		SE			2		5	SSE				3	SSE	D. clouds	Capt. Hon. A.C.Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	30.05	763.3	40	4.4		Calm			0									Blue sky	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.88	758.9	81.4	27.4	85	SSE			3		5							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 15° 44′, E. 72° 44′	29.29	744.0	88	31.1	80	NW			3		0					3	WNW	Blue sky	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 12° 58′, W. 25° 12′	30.09	764.3	78	25.6	82	NNE			2		8	NNE				2	N	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos, N. 39° 35′, W. 64° 23′	30.22	767.6	59.5	15.3	85	WNW			2		10					2	WNW	Overcast	Capt. C. G. Fane.
H. M. S. Thetis, S. 6° 20′, W. 147° 35′	29.50	749.3	81	27.2	83	ENE			3		2					3	SE	D. clouds	Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A	30.02	762.5	53	11.7	86	Calm			0		7	Calm						Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 34° 40′, E. 20° 10′	29.98	761.5	67	19.4	89	W			2										Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I			80	26.7		N			1		2							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	30.19	766.8	65	18 3	68	Calm			0		1	SW						Blue sky	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, N. 27° 13′, E. 50° 33′	29.69	754.1	79.5	26.4	89	W			3-4		4					Sm'h		D. clouds	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt.Comm. G.W.Pollard.

GERMAN NAVAL SERIES.

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

PORTUGUESE NAVAL SERIES.

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

Bengo																			Carlos Candido dos Reis, Comd't
Quanza, St. Vincent, Cape Verde, I'd	30.02	762.5	80.2	26.8	72	NE			4		3		NE			3	NE	D. clouds	Carlos M. da Silva Costa, Comd't
RioLima																			S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't.
Tamega, Hong-Kong, China	29.87	758.6	80.6	27.0	88	ENE			2		10		NE	1	hour			Drizzling	P. I de Rio Carvallio, Comd't.

SWEDISH NAVAL SERIES.

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

H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.07	763.8	76	24.4	91	SE	6	2.7			8		SE	0	0			Fair	
N. Yard, Portsmouth, N. H.	30.21	767.3	61	16.1	82	NE	7	3.1		2c	0	NE		0	0			Fair	
Naval Hospital, Yokahama, Japan	29.50	749.3	70.5	21.4	88	SW			6		10		SW	0.03	0.8			Sprinkling	
Adams, Payta, Peru	29.79	756.7	70	21.1	80	ESE			2		5		NW			Sm'h		Fair	
Alaska, Callao, Peru	29.94	760.5	64	17.8	83	NE			1		10			0	0	Sm'h		Misty	
Alert, N. 26° 01′, E. 142° 16′ *	29.92	760.0	80	26.7	78	SE			4		8		Calm			Sm'h		Fair	
Alliance, Norfolk, Va	30.14	765.5	69	20.6	85	WNW			1		8			Heavy				Cloudy	
Ashuelot, Kobe, Japan	29.75	755.6	61	16.1	94	WSW			1		10		Calm					Raining	
Colorado, New York, N. Y.	30.24	768.1	58	14.4	82	NNE	4	1.8			5			0.02	0.5			Cloudy	
Constitution, Norfolk, Va	30.10	764.5	67	19.4	89	N	1	0.4			8		S					Cloudy	
Franklin, Norfolk, Va	30.10	764.5	67	19.4	84	N	4	1.8			8		N	0.30	7.6			Fair	
Galena, Villafranca, France	29.95	760.7	71	21.7	90	Calm			0		0					Sm'h		Clear	
Independence, N. Yard, Mare I'd, Cal.	29.94	760.5	56	13.3	81	SW	3.6	1.6			5		SW					Fair	
Jamestown, Sitka, Alaska *	30.03	762.7	46	7.8	92	SE			4		10		SE	0.13	3.3			Misty	
Kearsarge, Port Royal, S. C.	30.10	764.5	73	22.8	90	ENE			3		8		E			Sm'h		Threatening	
Lackawanna, S. 16° 39′, W. 115° 27′ †	30.20	767.1	78	25.6	91	NE			2		5		NE			Mod.	SW	Fair	
Marion, Montevideo, Uruguay	30.05	763.3	54	12.2	74	NW			3		10		NW	0	0	Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	30.15	765.8	65	18.3	100	E	1	0.4			0							Clear	
Minnesota, Newport, R. I.	30.21	767.3	58	14.4	88	Calm			0		10		E			Sm'h		Misty	
Monocacy, Yokohama, Japan	29.61	752.1	72	22.2	85	S			3		10		S					Cloudy	
New Hampshire, Port Royal, S. C.	30.07	763.8	73	22.8	90	NE	10	4.5			8		NE	0	0			Fair	
Nipsic, Villafranca, France	29.97	761 2	73	22.8	67	ENE			2		2					Sm h		D. clouds	
Onward, Callao, Peru †	29.98	761.5	64	17.8	94	NE			1		10					Long	W	Cloudy	
Palos, Genkai Nada, Japan	29.80	756.9	61	16.1	94	SSW			1		5					Sm'h		Fair	
Passaic, Washington, D. C.	30.33	770.4	63	17.2	89	NE			3		0							Clear	
Pensacola, N. 44° —′, W. 139° 55′	30.44	773.2	51	10.6	72	Calm			0		10			0	0	Sm'h		Cloudy	
Portsmouth, Elizabeth River, Va	30.16	766.1	66	18.9	100	NNE			1		1		NE			Sm'h		Clear	
Powhatan, Port Royal, S. C.	30.09	764.3	74	23.3	90	NE			2		8		NE					Cloudy	
Quinnebaug, N. 22° 34′, W. 39° 07′	30.22	767.6	73	22.8	89	ENE			4		8		ENE			Long	ENE	Cloudy	
Ranger, N. 15° 44′, W. 96° 08′ *	29.83	757.7	80	26.7	82	N			1		10		E	0.4	10.	Mod.	SSE	Cloudy	
Richmond, Yokohama, Japan	29.64	752.8	72	22.2	85	SSW			3		10		SSW	0.01	0.3			Cloudy	
Saratoga, Norfolk, Va	30.11	764.8	65	18.3	100	N			1		10			Light				Cloudy	
Shenandoah, Montevideo, Uruguay *	30.04	763.0	53	11.7	80	NW			3		10					Sm'h		Cloudy	
St. Louis, League Island, Pa	29.77	756.1	62	16.7	83	N	5	2.2			2			0.05	1.3			Clear	
Swatara, Shanghai, China *†	29.86	758.4	73	22.8	72	Calm			0		2		Calm					D. clouds	
Tennessee, N. 36° 58′, W. 76° 07′	30.18	766.6	67	19.4	95	N	11	4.9			2			1.36	34.5	Sm'h		Clear	
Ticonderoga, S. 47° 44′, W. 98° 10′	30.08	764.0	47	8.3	77	NNW			2		8		NW	0	0	Mod.	S	Cloudy	
Trenton, Villafranca, France *	29.95	760.7	74	23.3	68	E			3		0			0	0	Sm'h		Clear	
Vandalia, N. 38° 51′, W. 74° 47′	30.17	766.3	57	13.9	94	NE			3		Fg							Foggy	
Wabash, Boston, Massachusetts	30.23	767.8	65	18.3	73	N	5	2.2			5		NE	0	0			Foggy	
Wachusetts, N. Yard, Mare I'd, Cal.	29.95	760.7	61	16.1	77	SW			2		5		W			Sm'h		Fair	
Wyoming, Old Point, Va	30.13	765.3	66	18.9	84	N			1		5		N			Sm'h	SSE	Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡																			Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Clpero, N. 30° 35′, W. 43° 12′	30.39	771.9	66.3	19.1	84	NE			4		5					3	NE; ESE	D. clouds	Capt. W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbighshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart, ‡																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow ‡																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 31° 47′, W. 48° 40′	30.10	761.5	66.5	19.2	68	WSW			3		3							D. clouds	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lammerts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ N. 33° 30′, W. 41° 32′	30.46	773.7	65 5	18.6	64	NE			3		4							Misty	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Merlota																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ S. 0° 08′, W. 23° 14′	29.99	761.7	82	27.8	79	SE			3		5							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 8° 22′, E. 69° 16′	29.74	755.4	84.5	29.2	89	WNW			3		10							Overcast	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton, N. 37° 36′, W. 9° 16′ ‡	29.90	759.4	67	19.4	89	WSW			1		7							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, Clyde River, Scotland						NE			3		0					Sm'll		Clear	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Gallia. N. 51° 12′, W. 15° 49′ *	30.03	762.7	62	16.7		SE			4		5		SE	0	0	Mod.	SW	Hazy	Capt. W. H. P. Hains.
S. S. Algeria																			Capt. W. Watson.
S. S. Scythia, N. 44° 13′, W. 44° 44′	30.13	765.3	61	16.1	77	SW			4		5?		SW	0	0	Mod.	Con.	Clear°	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 46° 08′, W. 41° 10′ †	30.10	764.5	54	12.2	?	W			5		2		W			Mod.	NW	D. clouds	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic, N. 41° 10′, W. 60° 48′ †	30.12	765.0	66	18.9		NW			3		2		N			Long	E	Misty	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, N. 49° 10′, W. 31° 43′ †	30.05	753.3	50	10.0		WNW			4		8?		NW	Showers		Long	WNW	Clear?	Capt. Ch. W. Konnedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, ‡ N. 48° 36′, W. 16° 54′	29.92	760.0	57.9	14.4		SE			4		5		SE	2 hours		Mod.	SE; S	Fair	
S. S. Köln																			Capt. Th. Jüngst
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, Philadelphia, Pa.....*†	30.17	766.3	59	15.0	94	NE	.....	.....	4	.....	2	.....	NE	.....	.....	.....	.....	Hazy.....	Capt. J. W. Shackford.
S. S. Indiana.....																		.....	Capt. R. W. Sargent.
S. S. Ohio, Liverpool, England....*†	30.40	772.1	70	21.1	95	E	.....	.....	4	.....	2	.....	E	0	0	.....	.....	Fair.....	W. Shackford, Chief Off'r
S. S. Pennsylvania, Liverpool, England....*†	30.28	769.1	75	23.9	81	SE	.....	.....	2	.....	2	.....	SE	.....	.....	.....	.....	Fair.....	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 28° 38′, W. 115° 34′....†	29.98	761.5	62	16.7	66	WNW	.....	.....	4	.....	10	.....	WNW	0	0	Sm'll	WNW	Cloudy.....	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 43° 49′, E. 169° 49′.....†	30.17	766.3	48	8.9	85	NNE	.....	.....	4	.....	Fog	.....	.....	0	0	Mod.	W	Overcast.....	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China.....*†	29.98	761.5	86	30.0	68	NE	.....	.....	2	.....	2	.....	N	.....	.....	.....	.....	Clear.....	Capt. W. H. Kidley.
S. S. Oceanic, N. 34° 36′, W. 139° 30′.....	29.72	754.9	68	20.0	95	SSW	.....	.....	5	.....	10	.....	SW	0.16	4.1	Mod.	SW	Raining.....	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, Astoria, Oregon.. .....†	30.13	765.3	52	11.1	86	N	.....	.....	1	.....	5	.....	.....	.....	.....	.....	.....	Fair.....	Capt. Fred. Bolles.
S. S. Oregon.....																		.....	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon.....																		.....	Capt. J. N. Ingalls.
S. S. Dakota, N. 47° 35′, W. 124° 52′.. *†	30.06	763.5	53	11.7	93	NNW	.....	.....	4	.....	10	.....	NNW	.....	.....	Mod.	NW	Hazy.....	Capt. H. G. Morse.
S. S. Idaho, N. 40° 00′, W. 124° 20′.....†	30.00	762.0	50	10.0	79	NW	.....	.....	5	.....	0	.....	.....	.....	.....	H'vy	NW	Clear.....	C. E. Lyons, 1st Officer.
S. S. Orizaba.....																		.....	Geo. H. Harrison.
S. S. Senator, Santa Barbara, Cal.....†	29.92	760.0	56	13.3	94	NW	.....	.....	1	.....	0	.....	.....	.....	.....	Sm'h	.....	Clear.....	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal.....†	29.95	760.7	50	10.0	86	W	.....	.....	3	.....	5	.....	.....	.....	.....	.....	.....	Fair.....	Capt. G. Debney.
S. S. Victoria, Nanaimo, Vancouver Id..†	30.03	762.7	55	12.8	62	NW	.....	.....	4	.....	2	.....	.....	.....	.....	Sm'h	.....	Clear.....	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 34 52′, E. 174° 07′.....	30.36	771.1	56	13.3	63	S	.....	.....	4	.....	8	.....	SE	.....	.....	Mod.	SE	Cloudy.....	A. Bannerman, 2d Officer
S. S. City of New York, Sydney, N. S. W.....†	30.21	767.3	69	20.6	89	N	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	Clear.....	Wm.H.Hawes,2d Officer.
S. S. City of Panama, N. 26° 03′, W 114° 11′...†	29.96	761.0	62	16.7	77	N	.....	.....	4	8c	0	NE	.....	0	0	Mod.	N	Cloudy.....	Capt. D. S. Austin.
S. S. City of Peking, Yokohama, Japan .....†	29.64	752.8	71	21.7	85	S	.....	.....	4	.....	0	.....	.....	0	0	.....	.....	Clear.....	Capt. G. G. Berry.
S. S. City of Sidney.....																		.....	Capt. H. C. Dearborn.
S. S. City of Tokio.....																		.....	A. L. Ritchie, 2d Officer
S. S. Colima, Panama, Panama .....†	29.90	759.4	80	26.7	87	SW	.....	.....	2	.....	8	.....	W	0	0	.....	.....	Fair.....	Capt. R. R. Searle.
S. S. Granada, N. 23° 07′, W. 108° 20′...†	29.81	757.2	77	25.0	82	SW	.....	.....	3	.....	0	.....	.....	0	0	Sm'll	WSW	Hazy.....	Capt. M. Connolly.
S. S. Zealandia, S. 9° 12′, W. 169° 12°.....	29.88	758.9	73	22.8	72	E	.....	.....	2	.....	1	.....	E	0	0	Sm'h	E	Clear.....	.....
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland.....																		.....	Capt. Sam'l Jackson.
S. S. Nederland, N. 46° 26′, W. 27° 54′....†	30.03	762.7	56	13.3	?	N	.....	.....	1	.....	2	.....	N	0	0	Mod.	N	Fine.....	A. Feddersen, 2d Officer.
S. S. Rhynland. N. 49° 43′, W. 11° 34′.....†	30.20	767.1	66	18.9	81	E	.....	.....	4	.....	0	.....	.....	0	0	Long	W	Clear.....	Capt. W. Geo. Randle.
S. S. Vaderland.....																		.....	T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley.....																		.....	Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 40° 23′, W. 72° 11′	30.14	765.5	56	13.3	74	E	7	3.1	.....	.....	Fg	.....	.....	0	0	Sm'h	.....	Foggy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.....																		.....	Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 20° 28′, W. 65° 03′...*†	30.14	765.5	79	26.1	.....	E	.....	.....	3	.....	5	.....	E	0	0	Sm'h	E	Fair.....	Capt B. F. Woodbury.
Brigantine George, N. 32° 10′, W. 63° 58′.....†	30.22	767.6	75	24.4	.....	S	.....	.....	3	.....	2	.....	.....	0	0	Sm'h	.....	Squally.....	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Md..†	30.29	769.4	68	20.0	74	NE	2	0.9	.....	28	0	.....	.....	0	0	.....	.....	Clear.....	.....
Bark Sunbeam, Lisbon, Portugal.....†	29.97	761.2	77	25.0	61	SW	.....	.....	4	.....	10	.....	SW	0	0	.....	.....	Cloudy.....	Capt. Jos. Hand.

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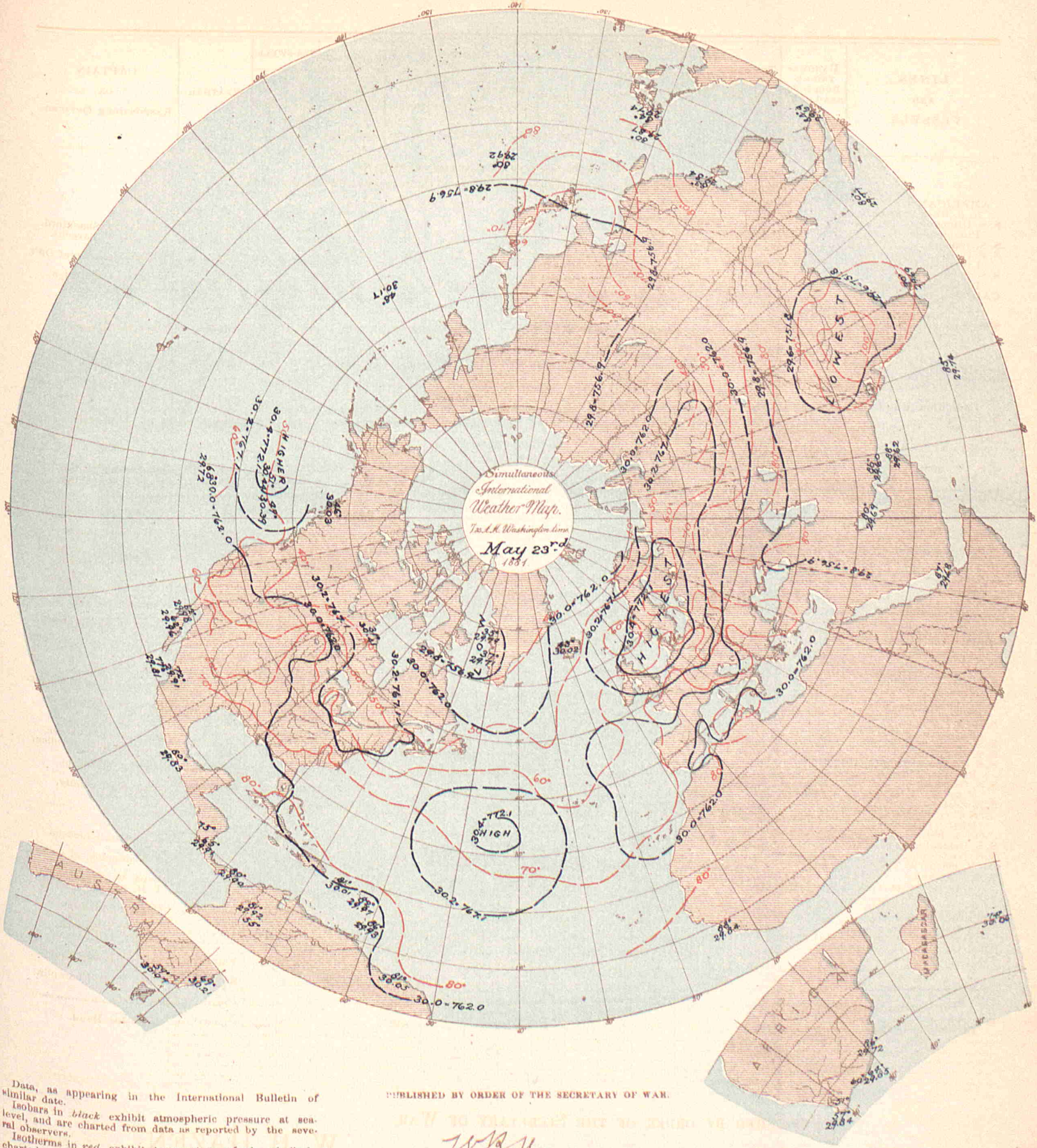
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 24, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From	Clouds. Direction. Lower From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather	Observers.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco‡			30.10	764.5	71.2	21.8	82	SW			1		3			0	0	Pretty fair	Dr. Olive.
Nemours‡			29.92	760.0	72.9	22.7	90	W			1		2			0	0	Fair	Raynard.
Algiers‡			29.93	760.2	75.6	24.2	65	W			5		0			0	0	Clear	Nicolas.
La Calle‡			29.94	760.5	74.8	23.8	92	ESE			2		1			0	0	Very fair	Fonfrède.
Tunis‡			29.98	761.5															Jacques.
Sfax‡			30.12	765.0															Gau.
Saida‡			30.00	762.1	83.1	28.4	31	NE			4		8			0	0	Very cloudy	Dumas.
Tebessa‡			30.06	763.4	77.0	25.0	42	W			4		6			Inap.	Inap.	Cloudy	Watrin.
Geriville‡																			Lonchamp.
Laghouat‡			30.02	762.6	87.4	30.8	20	S			1		1			0	0	Very fair	Herbin.
Biskra‡			30.02	762.5															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.85	758.2	29.94	760.5	47.2	8.4	77	NW	15	6.7			4			0.08	2.0	Fine	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.47	748.4	30.01	762.2	59.0	15.0	86	Calm			0		10			0.051	1.3		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.32	744.6	30.07	763.8	63.3	17.4	80	NE	12.5	5.6			10			0.228	5.8		Dr. Wierzbicki.
Eperies	29.11	739.4	29.97	761.1	68.7	20.4	68	Calm			0		10ks			0	0		Julius Mikolik.
Gratz‡	28.77	730.7	30.02	762.5	54.3	12.4	85	WNW			2		5			0	0		Andreas Rospini.
Hermannstadt	28.49	723.7	29.89	759.3	61.2	16.2	85	NE			2		10			0.475	12.1	Raining	Prof. A Gottschling.
Kremsmunster, Obs'y	28.67	728.3	30.00	762.0	57.4	14.1	84	ENE			3		8			0	0		The Staff.
Lemberg	29.02	737.2	29.98	761.6	67.4	19.5	74	NE			2		7			0	0		Dr. T. Stanecki.
Poln	29.89	759.3	30.00	762.1	68.4	20.2	62	W			1		1			0	0		..R. HydrographicOffice.
Szathmar	29.45	748.1	29.89	759.3	78.4	25.8	47	SW			3		5			0.134	3.4		Beicht Peter, S. J.
Szegedin	29.01	752.1	29.88	758.9	72.3	22.4	65	Calm			0		5			0.370	9.4		Karl Stancel.
Trieste	29.90	759.4	30.00	762.0	71.1	21.7	47	NW			1		5			0	0	½ clear	Secco.
Vienna	29.34	745.2	30.05	763.5	53.6	12.0	94	NW			1		10			0.272	6.9		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.28	769.1	30.38*	771.6	51.0	10.6	80	E	9	4.0			0			0	0	Blue sky	W. Boswell.
Armagh, Observatory	29.88	758.9	30.11	764.8	62.4	16.9	54	E	13	5.8			0					Misty	S. Call.
Bidston, Liverpool Obs'y			30.09	764.3	65.8	18.8	25	ENE	19	8.5			0					Misty	John Hartnup.
Bolton, Sharples	29.61	752.1	30.14	765.5	64.6	18.1	32	E	18	8.0			0					Blue sky	Thomas Mackereth.
Bradford, Yorkshire	29.76	755.9	30.16	766.1	62.3	16.8	38	SE			1		0			0.18	4.6	Blue sky	J.McLandsbo ough,F.R.S
Bridgetown, Barbadoes	29.90	759.4	29.93	760.2	84	28.9	75	SE			1		8					Overcast	Corpl. J. Surgener,AH.C.
Cardington			30.08	764.0	70.0	21.1	67	SE			3.0		0					Blue sky	John McLaren.
Chatham, School M. E.	29.98	721.5	30.11	764.8	56.1	13.4	82	NE			3		6					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.71	754.6	29.93	760.2	58.0	14.4	64	E			5		1					D. clouds	The Staff.
Fort Napier, Natal	27.78	705.6	30.00	762.0	60.2	15.7	81	NE			1		6†					Overcast †.	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.61	752.1	29.84	757.9	87	30.6	84	SW			1							Raining	Sgt. C. E. Keane.
Galway, Queen's College			30.16	766.1	64	17.8	73	N			2		4			0	0	Blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	29.95	761.0	30.01	762.2	75.6	24.2	84	SW			3		3					Blue sky	2nd Cpl. C. Baldwin.
Glasgow, Observatory	30.01	762.2	30.21	767.3	64.4	18.0	47	NE			6		0					Blue sky	Harry Urquhart.
Greenwich, Royal Obs'y	29.90	759.4	30.07	763.8	66.4	19.1	41	E			2		1					Blue sky	The Staff.
Guernsey	29.66	753.4	29.87	758.7	59.5	15.3	70	NE			3		0					Blue sky	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.03	762.7	30.07	763.8	63.5	17.5	45	E	28	12.5			2					Blue sky	The Staff.
Leicester. Museum	29.85	758.4	30.11	764.8	66.2	19.0	40	SW			1		0					Blue sky	J. E. Carryer.
Malta, Mediterranean	29.90	759.4	29.98	761.5	70.0	21.1	72	NE			2		2			0	0	Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.91	759.7	29.96	761.0	75.5	24.2	88	SE			1		10					Drizzling	C. S. Duncombe.
Oscott, St. Mary's College	29.58	751.3	30 10	734.5	66.7	19.3	34	E			3		0					Blue sky	John Mac Email.
Oxford, Radcliffe Obs'y	29.84	757.9	30.07	763.8	67.6	19.8	48	E			4		0					Blue sky	The Staff.
Plymouth	29.87	758.7	29.94	760.5	66.5	19.2	47	E			5		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			30.34	770.6	56	13.3	73	S	27	12.1			0					Blue sky	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.73	755.1	29.79	756.7	67.8	19.9	63	S			1		4			Blank		D. clouds	Serg't W. H. Lyne.
Sheffield	29.91	759.7	30.19	766.8	63.8	17.7	56	E			4		0			0.36	9.1	Blue sky	W. F. Cooper.
Silloth Rectory	30.16	766.1	30.18	766.6	68.2	20.1	48	SE			6		0			0.314	8.0	Blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.18	766.6	63.0	17.2	33	E	27	12.1			0					Blue sky	Rev. S. J. Perry.
Stratfield Turgiss	29.81	757.2	30.05	763.3	68.0	20.0	38	NE			1		0					Blue sky	Rev C.H.Griffiths, F.M.S.
Truro, Royal Institution	29.92	760.0	29.92	760.0	71	21.7	49	E			7		0					Blue sky	W. Newcombe.
Valencia, Observatory	29.84	757.9	29.87	758.7	65.6	18.7	62	E	25	11.2			6					Misty	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.08	764.0	30.12	765.0	57	13.9	88	SW	7	3.1		10n				0	0	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	30.06	763.5	30.12	765.0	03	17.2	82	NW	2	0.9		10ck	0	NW		0.01	0.3	Fair	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	30.19	766.8	30.22	7 7.6	44	6.7	84	NE	5	2.2		0	0			0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.25	742.9	30.08	764.0	52	11.1	100	NW	7	3.1		5k	5n	NW	NW	0.020	0.5	Cloudy	James Stewart.
Fredericton, N. B																			Prof. Harrison
Granton, Ontario																			James Grant.
Halifax, N. S.*	30.09	764.3	30.22	7 7.6	60	15.6	88	Calm	0	0		0	Hz			0	0	Hazy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.90	759.4	30.23	767.8	57	13.9	88	SE	3	1.3		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	30.00	762.0	30.20	7 7.1	68	20.0	67	W	6	2.7		5c?	8k			0	0	Cloudy?	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.60	751.8	30.28	769.1	60	15.6	90	Calm	0	0		2k	0	NE		0.04	1.0	Fair	Rev R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.59	751.6	30.27	768.8	60	15.6	88	Calm	0	0		0	0			0	0	Clear	H. Morgan.
Port Stanley, Ontario	29.66	753.4	30.30	769.6	61	16.1	88	E	1	0.4		2ck	0	SW		0	0	Clear	M. Payne.
Quebec, Quebec*	29.87	758.7	30.19	766.8	62	16.7	83	W			1	0	2s	W		0	0	Fair	Capt. Archie, R. N.
Rockliffe, Ontario*	29.79	756.7	30.24	768.1	58	14.4	88	Calm	0	0		5k	0	NW		0.08	2.0	Fair	W. H. McIntyre.
Saugeen, Ontario*	29.55	750.6	30.25	768.3	64	17.8	81	SE	4	1.8		0	Fg			0	0	Foggy	K. Stewart.
St. Andrews, N. B	30.15	765.8	30.20	767.1	56	13.3	91	Calm	0	0		0	0			0	0	Clear	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. Macgregor, M. A.
Sydney, C. B*	30.12	765.0	30.16	769.1	61	16.1	62	S	6	2.7		8k	0	N		0	0	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.89	759.2	30.27	768.8	68	20.0	61	NW	6	2.7		0	0			0	0	Clear	Magnetic Observatory
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.17	766.3	30.24	768.1	53	11.7	89	W	1	0.4		0	0			0	0	Clear	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	30.01	762.2	30.26	768.6	35	1.7	82	NE				5k	5s			0	0	Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	30.05	763.5			60.0	15.6	71	E	20.8	9.3		6c	0			0.290	7.4	Fine	John Duthie.
Cape Town, C. G. H. Obs'y	29.97	761.2	30.01	762.2	64.9	18.3		S	9.7	4.3		5	5cs;s			0	0		The Staff, for D. Gill.
Worcester *†	29.01	736.8			56.1	13.4	69	SSE			1	5	5			0	0		C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.92	759.9	29.94	760.5	64.4	18.0	82	SE	1.3	0.6			0			0	0	Clear	M. Marc Dechevrens, S.

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

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Clouds. Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
COSTA RICA SERIES. By authority of the Minister of Foreign Affairs. Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	25.20	665.5	29.92	760.0	68.0	20.0	91	NE			1	7c	1d			0.04	1.	Cloudy	Amand Maison.
DANISH SERIES. Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.33	770.3	30.37	771.5	58.8	14.9	51	ESE	20	9			0						Oversergent Fischer.
Fanöe	30.30	769.5	30.32	770.0	63.7	17.6		E			4		0						Overloerer Lauridsen.
Godthaab, Greenland	29.73	755.1	29.77	756.2	39.9	4.4	80	Calm			0		4						S. Kleinschmidt.
Stykkisholm, Iceland	30.05	763.4	30.10	764.5	46.8	8.2		SE			2		8						A. O. Thorlacius.
Thorshavn	30.24	768.2	30.28	769.1	53.2	11.8	85	Calm	0	0			0						Overloerer Bergh.
Vestervig	30.27	768.8	30.36	771.2	65.5	18.6	34	ENE			4		0						Loerer Oesterbol.
FRENCH SERIES. Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.16	740.7	29.78	756.4	80.2	26.8	36	SE			1	ck	0		E	0	0		M. Labrone, Director.
Alençon Normal School	29.39	740.5	29.94	760.5	66.2	19	51	NE			2		2k		E	0.04	1.	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	29.72	754.8	29.97	761.1	66.9	19.4	25	E			1		k		E	0	0		M. Klein Commandant.
Avignon, Normal School	29.83	757.7	29.91	759.7	77.4	25.2	56	S			1		2		SW	0	0	Slightly cl'dy	M. Giraud, Director.
Bar-sur-Seine	29.32	744.8	29.85	758.5	68.7	20.4	40	SE			3		5kn		ENE	0	0	Cloudy	M. Saillard, Director.
Beauvais, Normal School	29.71	754.5	29.92	760.0	68.5	20.3	24	E			3		5		ENE	0	0	Cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.03	737.4	29.89	759.2	68.0	20	55	NE			2	0	0		SE	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.51	749.6	29.75	755.9	82.8	28.2	33	SE			1		5			0	0	Cloudy	M. Rayet, Director.
Bourges, Normal School	29.32	744.6	29.85	758.1	69.1	20.6	30	NE			2					0	0		M. Postel, Director.
Brest, Naval Observatory	29.00	751.9	29.85	758.1	80.6	27.0	50	SE			1		4		SE			Stormy	M. de Kermaree, Dir.
Caen, Normal School	29.82	757.4	29.89	759.2	72.7	22.6	54	NE			1		2		N	0	0	Slightly cl'dy	M. Biétrix, Director.
Châlons-sur-Marne, N. Sch'l	29.61	752.2	29.93	760.1	70.5	21.4	36	SE			2		5		ENE	0	0	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.43	747.5	29.93	760.1	66.9	19.4	37	ESE			3		2			0	0	¼ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.48	723.3	29.77	756.2	71.2	21.8	56	NNW			1		2k			0	0	Stormy	M. Alluard, Director.
Cluny, Normal School	29.02	737.1	29.84	757.9	74.1	23.4	53	ENE			2		1		SW	0.008	0.2		M. de Villemontée, Dir.
Commercy, Normal School	29.08	738.5	29.92	760.0	64.2	17.9	54	E			6	8ck	0	E	E	0	0	Very cloudy	Dr Coulet, Director.
Gap, Normal School	27.41	695.1	29.84	758.0	72.7	22.6	39	SE			2		10k		E	0	0	Covered	M. Jeangirard, Director.
Gréasque, du Rhone	28.91	734.4	30.05	763.4	78.1	25.6	54	SE			2		5		SE	0	0	½ covered	M. Kina, Director.
Grenoble, Normal School	29.10	739.0	29.83	757.6	76.1	24.5	51	WNW			1		k			0	0		M. Ablard, Director.
Guéret, Normal School	28.28	718.4	29.82	757.3	69.8	21	57	E			1	ck	0		W	0	0	Slightly cl'dy	M. Rivoire, Director.
Lamballe, Normal School	29.63	752.5	29.89	759.3	74.5	23.6	41	NE			1		k		NE	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.21	741.8	29.84	757.9	81.5	27.5	80	W			1				W	0.205	5.2		M. Chauvin, Director.
Lorient, Naval Observatory	29.80	756.8	29.90	759.4	77.0	25.0	61	E			2		2		Calm	0.087	2.2	¼ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.80	731.6	29.82	757.3	76.1	24.5	45	SSE			1		2			0	0	Slightly cl'dy	M. André, Director.
Mans, Normal School	29.61	752.1	29.91	759.7	68.0	20	35	SE			4		0			0	0	Clear	M. Piboen, Director.
Marseille, Observatory	29.67	753.7	29.94	760.4	73.6	23.1	59	S			2		4		SE	Inap	Inap.		M. Stephan, Director.
Montlouis l'instituteur	24.74	628.3	29.97	761.3	59.0	15.0	48	W	11.2	5.0			5		W	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.81	757.2	29.92	759.9	71.6	22	72	SE			3		2	W	E	0	0	Slightly cl'dy	M. P. Galzin, Director.
Nancy, Normal School	29.19	741.5	29.94	760.5	63.7	17.6	44	NE			1		2kn			0	0	Slightly cl'dy	M. Hasse.
Nantes, Observatory	29.71	754.5	29.87	758.0	74.7	23.7	45	ENE			1–3	2c	0	WSW		0	0		M. Larocque, Director.
Nice	29.95	760.9	29.99	761.8	66.9	19.4	75	ESE			3		10	SE	SE	0	0	Covered	Capt. Boissière, Director.
Perpignan, Observatory	29.75	755.9	29.87	758.6	66.2	19.0	76	S	5.6	2.5			9	NW	SE	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.51	571.8			48.2	9.0							10		SW	0.154	3.9	Rain & snow	Gen'l de Nansouty, Dir.
Privas, Normal School	28.87	733.4	29.89	759.3	75.2	24	53	N			1		0			0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.07	636.7			56.8	13.8	78	SE			1		8kn		SW	0	0	Stormy	M. Alluard, Director
Rochefort, Naval Obs'y	29.82	757.5	29.85	758.3	77.4	25.2	60	SW			1		8		NW	1.14	29.	¾ covered	Lt. E. Decante, Director
Roche-sur-Yon, N. School	29.63	752.5	29.83	757.7	77.7	25.4	43	E			2		2		E	0	0	Slightly cl'dy	M. Mouillot, Director.
Rodez, Normal School	27.75	704.8	29.78	756.5	77.4	25.2	35	S			1		2		S	0	0	Slightly cl'dy	M. Richard, Director.
Rouen, Normal School	29.85	758.5	29.95	760.7	72.0	22.2	28	S			2		0			0	0	Clear	M. Platrier, Director.
Saint Lô, Normal School	29.81	757.2	29.97	761.2	68.5	20.3	30	E			2		0			0	0	Clear	M. Delaplanche, Dir.
Saint Maur, Observatory	29.70	755.8	29.92	760.0	72.0	22.2	24	ENE			3		1		E	0	0		M. Renou, Director.
Toulouse, Observatory	29.13	740.0	29.85	758.3	79.2	26.2	41	SSE			3					0	0		M. Baillaud, Director.
Tours	29.66	753.4	29.85	758.4	71.6	22.0	36	E			1		0			0	0	Clear	M. de Tastes.
Versailles, Observatory	29.44	747.8	29.93	760.3	70.2	21.2	26	E			4					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
GERMAN SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.22	742.2	30.08	764.1	60.8	16.0	60	NNE			2		7k	NE		0.039	1.0		Prof. Dr. Hoh.
Berlin	30.01	762.3	30.19	766.7	62.6	17.	63	E			1		10			0	0		Prof. Dr. Arndt.
Breslau	29.65	753.0	30.18	766.6	57.4	14.1	83	ENE			2		10			0	0		Royal University Obs'y.
Carlsruhe	29.50	750.7	29.97	761.3	64.9	18.3	62	E			1		5	NE		0	0		Albert Senz.
Cassel	29.39	746.4	30.10	764.6	59.0	15.0	67	ESE			4		8	E		0	0		Dr. H. Möhl.
Frankfort on the Main	29.73	755.1	30.09	764.3	61.2	16.2	52	E			2		9			0	0		Physical Society.
Friedrichshafen	28.53	724.6	29.93	760.2	63.7	17.6	52	ESE			2		0			0	0		Wilhelm, Chief Tel.
Hamburg	30.14	765.5	30.21	767.3	65.3	18.5	60	NE			5		2			0	0		Dr. R. Kleemann.
Kiel	30.27	768.8	30.28	769.2	51.8	11.0	58	E			7		0			0.433	11.0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.73	755.2	30.15	765.9	55.8	13.2	89	ENE			3		10	E		0.087	2.2	Sprinkling	Prof. Dr. Bruhns.
Magdeburg	29.92	759.9	30.21	767.3	60.1	15.6	77	NE			2		10n	NE		0	0		Dr. Assmann.
Memel	30.28	769.2	30.33	770.4	70.5	21.4	28	ENE			5	3c	0					Squally	Reimbrecht & Issermann.
Munich	28.20	716.2	30.05	763.5	58.6	14.8	55	NE			2		4	NE		0.039	1.0		Central Station.
Neufahrwasser	30.29	769.4	30.31	769.8	55.4	13.0	60	NE			2		8			0	0		A. Lothes.
Neustadt, Palatinate	29.47	748.4	29.99	761.8	65.8	18.8	51	E			2		7	NE		0	0		Dicknether.
Stuttgart	29.04	737.5	29.91	759.7	64.0	17.8	50	E			6		3	E		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.54	725.0	30.03	762.7	60.4	15.8	56	NE			2		7	E		0.003	1.0		Prof. Keulein.
Wustrow	30.27	768.8	30.29	769.4	59.9	15.5	66	NE			4		28			0	0		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.53	750.0	29.91	759.6	74.5	23.6		NE			1.0		10					Thund'r st'm	A. Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.61	752.0	29.66	753.2	87.9	31.1	83	SW	36.0	16.1			0			0	0	Blue sky	
Deesa	29.13	739 9	29.58	751.4	101.5	38.6	29	W	10.9	4.9			5		S	0	0	D. clouds	
Bombay	29.67	753.5	29.70	754.4	87.6	30.9	70	NW	16.0	7.2			1	NW		0	0	D. clouds	
Poona, Yarrowda	27 82	705.8	29.62	752.3	93.8	34.3	37	WNW					2	Calm		0	0	D. clouds	
Belgaum	27.18	690.5	29.63	752.6	92.6	33.7	69	SW	11.0	4.9			8	NE		0	0	Misty	
Lahore	28.90	733.9	29.62	752.3	91.1	32.8	38	NE	4.3	1.9			3			0.03	0.8	Blue sky	
Roorkee	28.76	730.5	29.65	753.2	81.6	27.6	49	SE	4.7	2.1			4			0.15	3.8		
Agra	29.04	737.6	29.58	751.4	95.1	35.6	33	W	6.4	2.9						0	0		
Nagpur	28.50	723.9	29.48	748.8	105.9	41.1	17	NW	8.4	3.8			2	W		0	0	D. clouds	
Jubbulpore	28.22	716.9	29.52	749.7	101.7	38.7	16	NW	4.3	1.9			2			0	0	Blue sky	
Lucknow	29.15	740.4	29.52	749.8	83.2	28.4	69	ENE	5.0	2.2			8	Calm		0.02	0.5	Blue sky	
Allahabad	29.16	740.7	29.48	748.8	98.7	37.1	41	E	3.9	1.7			7			0	0	D. clouds	
Patna	29.40	746.9	29.58	751.4	87.0	30.6	82	NE	5.0	2.2			5	NE	NE	1.21	30.7	D. clouds	
Hazaribagh	27.62	701.4	29.58	751.3	86.0	30.0	61	ESE	9.3	4.2			8			0.18	4.6	Thunder	
Cuttack	29.51	749.6	29.59	751.6	92.0	33.3	56	NE	4.0	1.8			9			0	0	D. clouds	
Calcutta, Alipore	29.61	752.1	29.03	752.6	80.7	27.1	87	SSE	6.0	2.7			10	E	SW	0.12	3.0	Overcast	
Dhubri	29.57	751.1	29.69	754.0	81.2	27.3	84	Calm	2.8	1.2			5			1.88	47.8	D. clouds	
Chittagong	29.04	752.8	29.73	755.1	79.3	26.3	92	E	2.4	1.1			10			0.10	2.5	Drizzling	
Sibsagar	29.33	744.9	29.66	753.3	84.1	28.9	81	SW	1.6	0.7			10	SW	SW	0	0	D. clouds	
Zanzibar, Africa			29.95	761.0	81.2	27.3	73	SSE	7	3.1			7			0	0	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.60	751.7	29.99	761.8	70.2	21.2	53	SW	0.7	0.3			5			0.819	20.8		Prof. Giovanni Clodig.
Milan	29.50	749.2	30.00	762.0	71.8	22.1	40	SW	4.3	1.9			7	N		0	0		Prof. Schiaparelli.
Padua	29.90	759.5	30.01	7 2.2	68.4	20.2	41	WSW	3.8	1.7			1			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.10	739.2	29.99	761.7	66.0	18.9	52	NE	1.8	0.8			8	NE		0	0		Prof. P. F. Denza.
Genoa	29.83	757.6	30.02	762.5	67.6	19.8	64	SW	4.3	1.9			4	SW		0.224	5.7		Prof. G. M. Garibaldi.
Mondovi	28.13	714.5	30.00	762.1	58.5	14.7	74	W			2		9			0.098	2.5		Prof. D. C. Bruno.
Pesaro	29.97	761.2	30.02	762.4	63.3	17.4	67	N	0.9	0.4			0			0	0		Prof. Luigi Guidi.
Florence	29.72	754.9	29.97	761.2	74.3	23.5	44	NW			2		5	W		0.059	1.5		Prof. Costantino Pitter.
Leghorn	29.93	760.1	30.01	762.2	70.0	21.1	62						3			0	0		Prof. P. Monte.
Rome	29.82	757.5	29.99	761.8	75.6	24.2	43	SW	9.4	4.2			1			0.012	0.3		Prof. P. S. Ferrari.
Lecce	29.71	754.5	29.95	760.7	71.2	21.8	43	NNW	13.6	6.1			0			0	0		Prof. C. de Giorgi.
Cosenza	29.14	739.5	29.98	761.6	75.6	24.2	68	NW	2.5	1.1			3	NNW		0	0		Prof. D. Conti.
Cagliari	29.73	755.2	29.92	760.0	72.0	22.2	61	SE			2		2			0	0		Prof. A. Pacinotti.
Palermo	29.75	756.0	30.01	762.3	72.1	22.3	54	NE	1.3	0.6			5			0	0		Prof. G. Ciaccialore.
Syracuse	29.93	760.1	29.97	761.2	74.3	23.5	66	NE	6.3	2.8			4	WNW		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.46	748.2	29.97	761.2	74.8	23.8	61	W	1.8	0.8			5	S		0	0		Prof. F. Brioschi.
Stelvio	22.17	563.2			42.1	5.6	53	SW			4		1ks	NW		0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.22	564.5			43.2	6.2	74	E			2		10	W		0	0	Overcast	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y †	29.85	758.4	29.88	758.9	65.1	18.4	62	SSW	9.3	4.2		cs;ck	6s			0	0	Cloudy	K. Sasaki.
Kioto	29.72	754.9	29.89	759.2	58.9	14.9	80	N	1.0	0.4		0	2s			0	0	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.76	755.9	29.96	761.0	64.4	18.0	75	SW	2.6	1.2			10s			0	0	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	29.82	757.4	29.88	758.9	62.4	16.9	85	ESE	5.8	2.6			10s			0.040	1.0	Covered	The Staff.
Wakayama	29.85	758.2	29.90	759.4	62.1	16.7	82	NE	2.3	1.0		0	0			0	0	Clear	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.88	758.9	30.07	763.8	74.4	23.6	61	ESE	13.5	6.0		0	2		SSE	0	0	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Barcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.64	752.9	29.90	759.5	72.5	22.5	90	E	0.9	0.4		0	1s			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacolalpam																			Prof. M. Chazaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.10	764.4	30.10	764.4	62.1	16.7		E			4					0	0		
Groningen	30.10	764.6	30.16	766.0	62.2	16.8		ENE			4					0	0		
Helder	30.15	765.9	30.15	765.9	57.0	13.9		NE			4					0.016	0.4		
Hellevoetsluis	30.10	764.4	30.10	764.4	60.4	15.8	65	ENE			3					0	0		
Utrecht	30.07	763.7	30.11	764.9	64.4	18.0	46	ESE			4		5			0	0	Cloudy	H. van de Bird.

STATIONS.	Barometer. Corrected for instrumental error and temperature. Inch.	Barometer. Corrected for instrumental error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. h'r p. sec	Wind. Force 0—10	Clouds. Amount and kind Up'er 0—10	Clouds. Amount and kind Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.34	770.7	30.41	772.3	67.6	19.8	41	W	1.1	0.5			0			0	0		
Christiania	30.25	768.7	30.41	772.3	70.0	21.1	38	SSW	7	3			0			0	0		
Gjesvær	30.09	754.2	30.11	764.8	31.1	— 0.5		WNW			7–8		10						
Lodingen	30.17	766.4	30.22	767.6	40.1	4.5	97	W			4		10			0.713	18.1	Rain & f[illegible]	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.83	757.6	29.98	761.6	58.5	14.7	75	NW	9.4	4.2			5			0.039	1.0		Dr. J. A. Sampaio.
Campo Major	28.92	734.5	29.89	759.3	68.7	20.4	50	W	6.3	2.8			9			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.93	760.3	30.02	762.6	66.2	19.0	50	W	15.4	6.9			4			0.039	1.0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.56	750.8	29.92	759.9	59.7	15.4	96	SSW	11.9	5.3			10			0.146	3.7		The Staff.
Ponta Delgada, Azores	29.89	759.3	29.97	761.1	62.6	17.0	57	NNW	13.0	5.8			3			0.291	7.4		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski																			Capt. Lasarew.
Archangel	30.17	766.4	30.19	766.9	46.9	8.3	59	WNW	18	8		2cs	0						Capt. Sseliwerstow.
Astrakhan	29.87	758.7	29.79	756.6	82.6	28.1	42	E	7	3			10s						Capt. Wisganow.
Barnaul ‡	29.61	752.1	30.11	764.8	49.5	9.7	30	NNE	4	2			7					Light clouds	Meteorological Obs'y.
Dorpat	30.16	766.0	30.39	772.0	68.0	20.0	34	W	4	2			0						Observatory.
Ekaterinburg	29.03	737.4	29.97	761.3	65.3	18.5	29	SSE	9	4		7c	0					Light clouds	Meteorological Obs'y.
Kasan	29.79	756.6	30.05	763.2	72.0	22.2	50	Calm	0	0			9						Observatory.
Kertch	29.82	757.4	29.84	757.9	64.6	18.1	94	S	4	2			5						Lago-lo & Sastyrez.
Kieff	29.31	744.5	29.93	760.1	70.2	21.2	67	NNE	27	12		ck;cs	4cks						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.58	751.2	29.77	756.1	82.2	27.9	37	SSE	4	2			10					Light clouds	Meteorological Obs'y.
Moscow	29.66	753.4	30.20	767.0	69.3	20.7	46	NW	4	2			0						Meteorological Obs'y.
Nertchinsk	27.35	694.6	29.53	750.1	61.2	16.2	44	S	4	2			1						Meteorological Obs'y.
Nikolaiev	29.70	755.9	29.83	757.7	74.7	23.7	72	E	9	4			9kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	29.56	750.9	29.71	754.5	72.9	22.7	39	Calm	0	0			1k						Physical Observatory.
St. Petersburg	30.32	770.2	30.34	770.6	58.8	14.9	51	WNW	16	7			0						Central Physical Obs'y.
Tashkend, Laboratory	28.22	716.7	29.08	753.9	84.2	29.	42	Calm	0	0			0						Teich, A. M.
Tiflis	28.37	720.7	29.72	754.8	77.5	25.3	58	Calm	0	0			10						Physical Observatory.
Warsaw	29.75	755.8	30.18	766.5	59.5	15.3	79	ENE	11	5			10ks						Astronomical Obs'y.
Wilna	29.85	758.4	30.27	768.9	60.2	19.0	62	ENE	4	2			0						Berg, Assistant.
Yeniseisk	29.88	759.0	30.18	766.6	31.1	— 0.5	61	NW	11	5			10					Snow & sleet	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.29	769.4	58.6	14.8	59	NE			6		0			0	0	Fine	Andrew Gibb.
Monach Lt. House, Heb'des			30.24	768.1	59	15.0	94	ESE			6	0	0			0	0		J. Youngclause.
North Unst, Shetland Isl'ds			30.41	772.4				S			3	0	0						Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.82	757.4	29.92	760.0	75.2	21.	44	SW	3.6	1.6			1			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.70	754.3	29.75	755.7	84.7	29.3	49	E	1.8	0.8		2	3	SE		0.008	0.2	Cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	29.93	684.0			64.4	18.0	87	SW	14.3	6.4			10			0.059	1.5	Raining	Domingo Martin.
Madrid, Royal Obs'y	27.99	793.4	29.88	759.0	62.8	17.1	88	SW	20.8	9.3			10			0.437	11.1	Raining	The Staff.
Murcia, Met. Obs'y ‡	29.73	758.0	29.91	759.7	83.5	28.6	45	S	4.7	2.1		4	4	NNW		0	0	Almost cov'd	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.87	733.3	29.74	755.3	68.9	20.5	63	SW	15.4	6.9			9			0.024	0.6	Almost cov'd	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.81	757.3	29.88	759.0	77.2	25.1	87	SE	3.6	1.6		8ck	1s	W		0.004	0.1	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.69	754.1	29.74	755.4	79.8	24.9	81	E					10n		SE	6.57	166.8	Raining	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.95	760.6	30.05	763.1	68.5	20.3	72	E	7.3	3.3		2	6	SW	SW	0.087	2.2		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.90	759.4	29.99	761.7	81.3	27.4	82	SE	7.4	3.3		4c	3k	SE	SE	0	0		Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.75	755.7	29.90	759.4	78.1	25.6	92	NE	0	0			9kn		ENE	0.28	7.1	Very cloudy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.22	767.5	30.26	768.5	50.4	10.2	62	SW			2		1			0	0		
Umea	30.30	769.6	30.35	770.9	58.7	20.4	41	NW			2		6			0	0		
Hernosand	30.35	771.1	30.41	772.4	67.5	19.7	40	S			4		2			0	0		
Stockholm	30.20	768.5	30.43	773.0	70.5	21.4	44	S			2		0			0	0		
Wisby	30.31	769.8	30.37	771.3	55.0	12.8	53	NE			4		0			0	0		
Sub-Series.																			
Upsala	30.31	769.9	30.40	772.1	72.9	22.7	41	WNW	4.7	2.1			0			0	0		Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour Director of the Observatory at Geneva.																			
Geneva	28.53	724.7	29.95	760.7	56.7	13.7	70	N			3		4			0	0	Cloudy	The Observatory.
Zurich	28.33	719.6	29.93	760.3	64.4	18.0	60	E			1		1			0.102	2.6	Clear	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.84	757.9	69.1	20.6	75	SW	6	2.5			8		SW	0.220	5.6		The Observatory.
Valona			30.04	763.1	74.3	23.5		W			1		5			0	0	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.91	759.6	77.7	25.4	63	W			1		4k		W	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.21	767.3	30.29	769.4	65.2	18.4	63	W	2	0.9	.....	Hz	Hz	.....	.....	nap.	Inap.	Dense haze.	
Alpena, Michigan	29.64	752.8	30.28	769.1	59	15.0	76	W	1	0.4	.....	0	Fg	.....	.....	0	0	Clear	
Atlanta, Georgia	28.95	735.3	30.07	763.8	65.8	18.8	85	E	13	5.8	.....	10k	0	E	.....	0.01	0.3	Cloudy	
Atlantic City, New Jersey	30.24	768.1	30.26	768.6	56	13.3	100	NE	16	7.2	.....	.....	Fg	.....	Calm	0	0	Dense fog	
Augusta, Georgia	29.94	760.5	30.13	765.3	71.4	21.9	75	NE	2	0.9	.....	2cs	0	.....	.....	0	0	Fair	
Baltimore, Maryland	30.24	768.1	30.29	769.4	61	16.1	82	NE	9	4.0	.....	.....	10s	.....	.....	0	0	Cloudy	
Barnegat, New Jersey	30.23	767.8	30.25	768.3	55	12.8	100	NE	13	5.8	.....	.....	Fg	.....	Calm	0.02	0.5	Dense fog	
Bismarck, Dakota	28.30	718.8	30.16	766.1	55	12.8	100	N	16	7.2	.....	.....	10u	.....	Calm	0.42	10.7	Light rain	
Boise City, Idaho	27.26	692.4	30.22	767.6	44.8	7.1	61	NW	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Boston, Massachusetts	30.12	765.0	30.28	769.1	56.0	13.3	95	Calm	0	0	.....	.....	Fg	.....	.....	0	0	Dense fog	
Bracketville, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Brownsville, Texas	29.99	761.7	30.04	763.0	72	22.2	90	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Buffalo, New York	29.57	751.1	30.26	768.6	63.2	17.3	70	E	4	1.8	.....	0	Sk	.....	.....	0	0	Dense smoke	
Burlington, Vermont	29.96	761.0	30.24	768.1	65.0	18.3	82	S	5	2.2	.....	5cs	0	W	.....	0	0	Fair	
Cairo, Illinois	29.70	754.4	30.08	764.0	65	18.3	94	E	6	2.7	.....	.....	10ks	.....	E	0.02	0.5	Threatening	
Campo, California	27.35	694.7	29.92	760.0	47	8.3	77	NW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Camp Thomas, Arizona	27.12	688.8	.....	.....	50	10.0	39	Calm	.....	.....	0	2ck	0	.....	.....	0	0	Clear	
Cape Henry, Virginia	30.19	766.8	30.21	767.3	60	15.6	82	NE	18	8.0	.....	.....	10s	.....	NE	0	0	Cloudy	
Cape May, New Jersey	30.20	767.1	30.23	767.8	58	14.4	88	NE	10	4.5	.....	.....	10s	.....	NE	0.03	0.8	Cloudy	
Castroville, Texas	29.18	741.2	29.85	758.2	74	23.3	76	SW	2	0.9	.....	.....	10s	.....	SW	0	0	Cloudy	
Cedar Keys, Florida	29.98	751.5	30.00	762.0	73	22.8	81	NE	9	4.0	.....	0	0	.....	.....	1.08	27.4	Clear	
Champaign, Illinois	29.30	744.2	30.08	764.0	66	18.9	64	E	6	2.7	.....	.....	10s	.....	E	0	0	Cloudy	
Charleston, S. Carolina	30.04	763.0	30.10	764.5	72	22.2	80	NE	12	5.4	.....	0	5ks	.....	NE	0	0	Fair	
Charlotte, N. Carolina	29.32	744.7	30.11	764.8	69.8	21.0	73	NE	6	2.7	.....	5c	Sk	.....	.....	Inap.	Inap.	Fair	
Chattanooga, Tennessee	29.30	744.2	30.08	764.0	66	18.9	89	NE	5	2.2	.....	.....	10k,p	.....	S	0.29	7.4	Cloudy	
Cheyenne, Wyoming	24.10	612.1	30.04	763.0	46	7.8	100	N	10	4.5	.....	.....	10s	.....	N	0	0	Cloudy	
Chicago, Illinois	29.46	748.3	30.15	765.8	57.2	14.0	81	E	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Chincoteague, Virginia	30.19	766.8	30.20	767.1	57	13.9	94	NE	20	8.9	.....	.....	10s	.....	Calm	0	0	Threatening	
Cincinnati, Ohio	29.49	749.0	30.13	765.3	67	19.4	60	NE	2	0.9	.....	1c	0	N	.....	0	0	Clear	
Cleveland, Ohio	29.52	749.8	30.23	767.8	63.5	17.5	80	SE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Coleman City, Texas	28.18	715.8	29.81	757.2	64	17.8	89	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Columbus, Ohio	29.34	745.2	30.16	766.1	67	19.4	60	E	12	5.4	.....	5k	0	E	.....	0	0	Fair	
Concho, Texas	28.08	713.2	29.71	754.6	65	18.3	89	Calm	0	0	.....	1c	0	.....	.....	0	0	Clear	
Corsicana, Texas	29.54	750.3	29.99	761.7	78	25.6	65	SE	2	0.9	.....	1cs	0	.....	.....	0.69	17.5	Clear	
Davenport, Iowa	29.50	749.3	30.12	765.0	64	17.8	68	NE	6	2.7	.....	5cs	0	E	.....	0	0	Fair	
Dayton, Washington T'y	28.38	720.8	30.09	764.3	39.5	4.2	55	N	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Deadwood, Dakota	25.52	648.2	.....	.....	45	7.2	92	NE	1	0.4	.....	.....	Fg	.....	.....	0.04	1.0	Dense fog	
Decatur, Texas	28.69	728.7	29.82	757.4	69	20.6	85	E	5	2.2	.....	2cs	2ks	.....	.....	0	0	Fair	
Delaware Breakwater, Del	30.21	767.3	30.23	767.8	57	13.9	94	NE	16	7.2	.....	.....	10s	.....	NE	0	0	Cloudy	
Denison, Texas	29.21	741.9	29.98	761.5	69	20.6	90	E	4	1.8	.....	.....	10n	.....	NW	0.11	2.8	Thund'rs'm	
Denver, Colorado	24.84	630.9	30.05	763.5	53.7	12.1	80	N	9	4.0	.....	.....	10s	.....	NW	0	0	Cloudy	
Des Moines, Iowa	29.24	742.7	30.10	764.5	65	18.3	84	SE	1	0.4	.....	2cs	0	SE	.....	0	0	Clear	
Detroit, Michigan	29.55	750.6	30.23	767.8	64.2	17.9	73	E	9	4.0	.....	0	Hz	.....	.....	0	0	Clear	
Dodge City, Kansas	27.44	697.0	29.67	753.6	60	15.6	88	SE	9	4.0	.....	5k	0	S	.....	0	0	Fair	
Dubuque, Iowa	29.45	748.0	30.14	765.5	64.2	17.9	63	E	3	1.3	.....	5ck	Hz	SE	Calm	0.02	0.5	Fair	
Duluth, Minnesota	29.54	750.3	30.22	767.6	53	11.7	86	NE	2	0.9	.....	0	5s	.....	NE	0	0	Fair	
Eagle Pass, Texas	29.18	741.2	29.89	759.2	70.4	21.3	90	Calm	0	0	.....	2c	0	Calm	.....	0	0	Fair	
Eagle Rock, Idaho	25.32	643.1	29.97	761.2	35	1.7	61	N	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Eastport, Maine	30.15	765.8	30.21	767.3	60.5	15.8	71	SW	3	1.3	.....	2c	Hz	W	.....	0	0	Fair	
El Paso, Texas	25.19	665.2	.....	.....	67	19.4	50	E	4	1.8	.....	0	1ks	.....	.....	0	0	Clear	
Erie, Pennsylvania	29.55	750.6	30.25	768.3	64	17.8	73	NE	1	0.4	.....	0	Sk	.....	.....	0	0	Clear	
Escanaba, Michigan	29.62	752.3	30.27	768.8	59	15.0	76	N	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Florence, Arizona	28.32	719.3	29.92	760.0	62	16.7	46	W	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Fort Apache, Arizona	24.97	634.2	30.42	772.7	41	5.0	49	E	4	1.8	.....	5c	0	Calm	.....	0	0	Fair	
Fort Assinnaboine, Montana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Bennett, Dakota	28.48	723.4	.....	.....	61	16.1	71	W	6	2.7	.....	.....	10n	.....	W	Inap.	Inap.	Light rain	
Fort Buford, Dakota	27.32	693.9	.....	.....	40	4.4	65	Calm	0	0	.....	0	0	.....	.....	0.10	2.5	Clear	
Fort Custer, Montana	28.17	715.5	30.14	765.5	42	5.6	83	Calm	0	0	.....	0	0	.....	.....	0.02	0.5	Clear	
Fort Davis, Texas	27.01	686.0	.....	.....	47	8.3	77	N	5	2.2	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort Elliott, Texas	25.18	639.6	30.14	765.5	56	13.3	69	S	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Fort Gibson, Indian T'y	27.22	691.4	29.44	747.8	60	15.6	88	E	8	3.6	.....	10c	0	E	.....	0	0	Cloudy	
Fort Grant, Arizona	29.46	748.3	29.58	761.5	67	19.4	84	E	2	0.9	.....	2c	0	S	.....	0	0	Fair	
Fort Griffin, Texas	25.17	639.3	29.97	761.2	60	15.6	15	NE	9	4.0	.....	2cs	0	.....	.....	0	0	Clear	
Fort Keogh, Montana	28.61	720.7	29.84	757.9	67.6	19.8	89	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Macon, North Carolina	27.68	703.1	.....	.....	42	5.6	74	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort McKavett, Texas	30.14	765.5	30.15	765.8	65	18.3	84	NE	21	9.4	.....	5k	Hz	NE	Calm	0	0	Fair	
Fort Missoula, Montana	27.73	704.3	29.60	751.8	63.8	17.7	78	S	6	2.7	.....	1c	0	.....	.....	0	0	Clear	
Fort St. Michaels	20.84	681.7	.....	.....	34	1.1	100	NW	1	0.4	.....	0	0	.....	.....	0.03	0.8	Clear	
Fort Shaw, Montana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Sill, Indian Territory	25.55	674.4	.....	.....	34	1.1	90	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Stevenson, Dakota	28.75	730.5	29.84	757.9	67	19.4	89	E	3	1.3	.....	8c	0	W	.....	0	0	Fair	
Fort Verde, Arizona	28.29	718.6	.....	.....	53	11.7	93	N	8	3.6	.....	.....	10s	.....	N	0.80	20.3	Cloudy	
Fredericksburg, Texas	.....	.....	.....	.....	49	9.4	31	SW	.....	.....	1	0	0	.....	.....	0	0	Clear	
Galveston, Texas	28.25	717.8	29.77	756.1	67	19.4	79	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Grand Haven, Michigan	29.96	761.0	30.00	762.0	78	25.6	82	SW	5	2.2	.....	2k	0	.....	.....	0	0	Clear	
Hatteras, North Carolina	29.56	750.8	30.20	767.1	66	18.9	64	NE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Helena, Montana	30.14	765.5	30.16	766.1	61	16.1	88	NE	21	9.4	.....	0	8ks	.....	.....	0	0	Cloudy	
Henrietta, Texas	25.94	658.9	.....	.....	40	4.4	73	Calm	0	0	.....	2k	0	Calm	.....	0	0	Fair	
Indianapolis, Indiana	28.96	735.6	29.85	758.2	69	20.6	90	SE	5	2.2	.....	5cs	2s	.....	.....	0	0	Fair	
Indianola, Texas	29.32	744.7	30.08	764.0	68	20.0	60	NE	2	0.9	.....	2c	Hz	Calm	Calm	0	0	Fair	
Jacksboro, Texas	29.95	761.0	29.98	761.5	76.7	24.8	86	S	2	0.9	.....	1k	2ks	SE	E	0	0	Fair	
Jacksonville, Florida	28.80	731.5	29.88	758.9	71	21.7	75	SE	1	0.4	.....	5c	0	W	.....	0	0	Fair	
Keokuk, Iowa	29.98	761.5	30.02	762.5	77	25.0	86	NE	2	0.9	.....	5cs	Sk	NE	.....	0.01	0.3	Fair	
Key West, Florida	29.44	747.8	30.08	764.0	65.8	18.8	74	E	4	1.8	.....	.....	10s	.....	E	0.11	2.8	Cloudy	
Kittyhawk, North Carolina	29.88	758.9	29.91	759.7	75.4	24.7	86	SE	8	3.6	.....	2k	2ks	SE	SE	0.59	15.0	Fair	
Knoxville, Tennessee	30.18	766.6	30.21	767.3	58	14.4	94	NE	25	11.2	.....	.....	10s	.....	NE	0	0	Cloudy	
La Crosse, Wisconsin	29.12	739.6	30.11	764.8	66	18.9	84	NE	3	1.3	.....	.....	10s	.....	Calm	0.11	2.8	Cloudy	
La Mesilla, New Mexico	29.41	747.0	30.15	765.8	69	20.6	65	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Laredo, Texas	29.04	661.4	30.20	767.1	61	16.1	66	Calm	0	0	.....	1c	1s	.....	.....	0	0	Clear	
Leavenworth, Kansas	29.50	749.3	29.83	757.7	73	22.8	95	SE	1	0.4	.....	0	5s	.....	SE	0	0	Fair	
Lewiston, Idaho	29.19	741.4	30.01	762.2	65	18.3	84	E	5	2.2	.....	.....	10s	.....	.....	0	0	Cloudy	
Little Rock, Arkansas	29.32	744.7	29.98	761.5	41	5.0	48	E	1	0.4	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Los Angeles, California	29.70	754.4	30.01	762.2	64	17.8	94	Calm	0	0	.....	0	0	.....	.....	0.03	0.8	Clear	
Louisville, Kentucky	29.57	751.1	29.93	760.2	58.0	14.4	76	SE	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Lynchburg, Virginia	29.52	749.8	30.06	763.5	68.6	20.3	85	SE	1	0.4	.....	.....	10s	.....	.....	Inap.	Inap.	Cloudy	
Madison, Wisconsin	29.55	750.6	30.22	767.6	70	21.1	61	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Marquette, Michigan	29.19	741.4	30.16	766.1	61	16.1	71	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Mason, Texas	29.57	751.1	30.26	768.6	64	17.8	58	S	1	0.4	.....	Hz	0	.....	.....	0	0	Clear	
Memphis, Tennessee	28.32	719.3	30.02	762.5	70.1	21.2	70	SW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Milwaukee, Wisconsin	29.71	754.6	30.04	763.0	67	19.4	95	NE	2	0.9	.....	.....	10n	.....	E	0.05	1.3	Thund'rst'm	
	29.48	748.8	30.20	767.1	58	14.4	76	N	5	2.2	.....	Hz	Sk	.....	.....	0	0	Dense smoke	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.94	760.5	30.01	762.2	73	22.8	85	W	3	1.3	.....	8cs	0	W	.....	0	0	Fair	
Montgomery, Alabama	29.81	757.2	30.04	763.0	69.3	20.7	95	NE	3	1.3	.....	.....	10ks	.....	SW	0.05	1.3	Cloudy	
Moorhead, Minnesota	29.09	738.9	30.01	762.2	63	17.2	83	S	14	6.3	.....	.....	10s	.....	S	0	0	Cloudy	
Morgantown, W. Virginia	29.24	742.7	30.22	767.6	63	17.2	78	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Mt. Washington, N. H.	24.15	613.4	30.51	774.9	49	9.4	64	E	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Nashville, Tennessee	29.54	750.3	30.05	763.5	67.5	19.7	89	E	1	0.4	.....	5cs	5ks	.....	SE	0.14	3.6	Cloudy	
New Haven, Connecticut	30.16	766.1	30.28	769.1	55	12.8	93	E	1	0.4	.....	.....	10s;fg	.....	.....	0.01	0.3	Cloudy	
New London, Connecticut	30.27	768.8	30.32	770.1	57	13.9	87	E	2	0.9	.....	.....	10s;fg	.....	Calm	0	0	Cloudy	
New Orleans, Louisiana	29.92	760.0	29.98	761.5	75.7	24.3	84	S	1	0.4	.....	0	8k	.....	.....	0	0	Clear	
Newport, Rhode Island	30.23	767.8	30.28	769.1	54.7	12.6	94	Calm	0	0	.....	.....	Fg	.....	.....	0	0	Dense fog	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	30.27	768.8	30.30	769.6	50.8	10.4	100	Calm	0	0	.....	.....	Fg	.....	Calm	0	0	Dense fog	
New York, New York	30.12	765.0	30.30	769.6	57	13.9	94	NE	7	3.1	.....	.....	10s;fg	.....	.....	0	0	Cloudy	
Norfolk, Virginia	30.15	765.8	30.21	767.3	60	15.6	82	NE	10	4.5	.....	.....	10ks	.....	N	Inap.	Inap.	Cloudy	
North Platte, Nebraska	27.12	688.8	29.63	752.6	60	15.6	85	E	10	4.5	.....	5k	0	SE	.....	0	0	Fair	
Olympia, Washington T'y	30.05	763.5	30.10	764.5	41.0	5.0	91	S	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Omaha, Nebraska	28.97	735.8	30.04	763.0	64	17.8	89	SE	6	2.7	.....	.....	10s;fg	.....	.....	0	0	Light fog	
Oswego, New York	29.95	760.7	30.27	768.8	60.3	15.7	75	SW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Pensacola, Florida	29.93	760.0	29.99	761.7	73	22.8	85	NE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Philadelphia, Pa	30.22	767.6	30.27	768.8	60	15.6	82	E	9	4.0	.....	10k	Fg	NE	.....	0	0	Cloudy	
Phœnix, Arizona	28.74	730.0	30.53	775.4	58	14.4	64	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.91	454.9	30.12	765.0	26	— 3.3	28	SW	18	8.0	.....	2ck	0	.....	.....	0	0	Clear	
Ploche, Nevada	23.95	608.3	29.72	754.9	42	5.6	50	Calm	0	0	.....	4k	0	S	.....	0	0	Fair	
Pittsburg, Pennsylvania	29.44	747.8	30.24	768.1	62	16.7	77	NE	1	0.4	.....	2c	Fg	Calm	Calm	0	0	Clear	
Port Eads, Louisiana	29.98	761.5	29.98	761.5	75.1	23.9	90	E	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Port Huron, Michigan	29.61	752.1	30.27	768.8	63.3	17.4	72	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Portland, Maine	30.20	767.1	30.25	768.3	59	15.0	70	W	2	0.9	.....	0	2s	.....	Calm	0	0	Clear	
Portland, Oregon	30.06	763.5	30.13	765.3	48.0	8.9	81	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Portsmouth, N. Carolina	.....	.....	.....	.....	65	18.3	73	NE	28	12.5	.....	5k	0	N	.....	0	0	Fair	
Prescott, Arizona	24.68	626.9	30.04	763.0	41	5.0	41	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	29.90	759.4	29.92	760.0	72	22.2	87.5	SE	8	3.6	.....	.....	10ks	.....	E	0.55	14.0	Cloudy	
Red Bluff, California	29.57	751.1	29.92	760.0	53.5	11.9	67	NW	5	2.2	.....	0	0.	.....	Inap	Inap.	Inap.	Clear	
Rio Grande City, Texas	29.75	755.9	29.97	761.2	73	22.8	90	SE	.....	.....	1	0	0	.....	.....	0	0	Clear	
Rochester, New York	29.65	753.1	30.20	767.6	63	17.2	83	Calm	0	0	.....	0	Hz	.....	.....	0	0	Clear	
Roseburg, Oregon	29.58	751.3	30.16	766.1	40	4.4	82	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Sacramento, California	29.85	758.2	29.92	760.0	52 7	11.5	80	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
St. Louis, Missouri	29.52	749.8	30.08	764.0	64.5	18.1	97	E	8	3.6	.....	.....	10s	.....	.....	0.29	7.4	Cloudy	
St. Paul, Minnesota	29.31	744.5	30.11	764.8	65	18.3	73	E	2	0.9	.....	5ck	0	Calm	.....	0	0	Clear	
Salt Lake City, Utah	25.59	650.0	29.92	760.0	47	8.3	48	Calm	0	0	.....	7k	c	W	.....	0	0	Fair	
San Antonio, Texas	29.28	743.7	29.95	761.0	72.3	22.4	90	Calm	0	0	.....	0	4s	.....	SW	0	0	Fair	
San Diego, California	29.82	757.4	29.90	759.4	59.5	15.3	76	NW	6	2.7	.....	.....	10s	.....	.....	0	0	Cloudy	
Sandusky, Ohio	29.55	750.6	30.21	767.3	65	18.3	73	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Sandy Hook, New Jersey	30.25	768.3	30.28	769.1	58.0	14.4	94	E	7	3.1	.....	.....	10s	.....	.....	0.05	1.3	Cloudy	
San Francisco, California	29.88	758.9	29.95	760.7	52	11.1	80	S	4	1.8	.....	0	Fg	.....	S	0	0	Clear	
Santa Fé, New Mexico	23.28	591.3	29.82	757.4	56	13.3	24	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Savannah, Georgia	29.99	761.7	30.08	764.0	74	23.3	81	NE	12	5.4	.....	0	8ks	.....	NE	Inap.	Inap.	Fair	
Shreveport, Louisiana	29.75	755.9	30.00	762.0	68	20.0	95	NE	3	1.3	.....	2c	2s	.....	.....	0.10	2.5	Fair	
Silver City, New Mexico	24.22	615.2	30.35	770.9	47	8.3	48	NW	2	0.9	.....	2k	0	NW	.....	0	0	Clear	
Sitka, Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.24	6.1	.....	
Smithville, North Carolina	30.13	765.3	30.16	766.1	69	20.6	75	N	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Spokane Falls, Wash. Ter.	28.12	714.2	30.03	762.7	35	1.7	80	W	2	0.9	.....	0	5s	.....	W	0.01	0.3	Fair	
Springfield, Illinois	29.45	748.0	30.10	764.5	66	18.9	89	NE	2	0.9	.....	.....	10ks;k	.....	SE	0.33	8.4	Cloudy	
Springfield, Massachusetts	30.15	765.8	30.28	769.1	57	13.9	94	E	3	1.3	.....	.....	10s;fg	.....	SE	Inap.	Inap.	Cloudy	
Stockton, Texas	28.93	684.0	29.93	760.2	63.8	17.7	89	S	8	3.6	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	29.20	741.7	29.98	761.5	55	12.8	93	S	1	0.4	.....	.....	10n	.....	SW	0.38	9.7	Light rain	
Thatcher's Island, Mass.	30.21	767.3	30.26	768.6	52	11.1	79	S	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Toledo, Ohio	29.52	749.8	30.19	766.8	65	18.3	78	NE	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Tucson, Arizona	27.42	696.5	29.95	761.0	58	14.4	27	SE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.80	756.9	30.31	769.9	43.0	6.1	70	SE	6	2.7	.....	0	0	.....	.....	c	0	Clear	
Uvalde, Texas	28.99	736.3	29.79	756.7	69	20.6	80	Calm	0	0	.....	.....	Fg	.....	.....	0	0	Dense fog	
Vicksburg, Mississippi	29.74	755.4	30.00	762.0	70	21.1	85	SE	1	0.4	.....	2ck	0	SE	.....	0	0	Fair	
Visalia, California	29.46	748.3	29.82	757.4	58	14.4	53	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C.	30.15	765.8	30.20	767.0	61	16.1	88	NE	8	3.6	.....	8k	Hz	NE	.....	0	0	Fair	
Wickenburg, Arizona	.....	.....	.....	.....	52	11.1	41	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	30.08	764.0	30.14	765.5	68	20.0	64	E	4	1.8	.....	1c	0	Calm	.....	0	0	Clear	
Winnemucca, Nevada	25.59	650.0	29.95	760.7	42	5.6	42	NE	10	4.5	.....	5ck	0	SW	.....	0	0	Fair	
Wood's Holl, Mass.	30.24	768.1	30.28	769.1	56	13.3	94	Calm	0	0	.....	.....	Fg	.....	Calm	0	0	Dense fog	
Yankton, Dakota	28.80	731.5	30.06	763.5	65	18.3	68	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Yuma, Arizona	29.64	752.8	29.79	759.7	65.3	18.5	68	S	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.08	560.8	.....	.....	55.5	13.1	77	Calm	0	0	.....	.....	10n	.....	.....	0	0	Cloudy	Thomas Herran
Buff Bay Town, Jamaica.‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.88	758.9	29.92	760.0	78	25.6	82	Calm	0	0	.....	0	8ks	.....	Calm	0	0	Cloudy	A. Van Caneghem, Ass't
Jakolshavn, Greenland	29.86	758.5	29.91	759.8	36.9	2.7	.....	N	.....	.....	2	.....	2	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I.	29.90	759.4	29.91	759.7	80.0	26.7	64	Calm	0	0	.....	8cs	0	.....	.....	0	0	Fair	Robert Johnstone
Navassa, W. I.	29.84	757.9	29.92	760.0	81	27.2	83	E	15	6.7	.....	0	5k	.....	E	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	78	25.6	86	E	.....	.....	1	4c	3s	E	.....	0.020	0.5	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Columbia	29.43	747.5	29.99	761.7	77	25.0	94	Calm	.....	.....	0	.....	10ks	.....	Calm	1.78	45.2	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	78.8	26	.....	E	.....	.....	1	.....	9ks	.....	E	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	29.91	759.7	29.94	760.5	81	27.2	78	Calm	0	0	.....	.....	2cs	2k	.....	0	0	Fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	30.34	770.6	30.39	771.9	29.0	— 1.7	94	NE	16	7.2	.....	4k	3s	NE	NE	Inap.	Inap.	Cloudy	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross,																			
N. 38° 11′, E. 122° 27′	29.90	759.4	55	12.8		W			2		2							D. clouds	Comm A. J.Errington.
H. M. S. Alert																			Capt. J. P. Maclear,
H. M. S. Alexandra,																			
Malta, Mediterranean	30.02	762.5	70.5	21.4	78	NNE			1		2	WSW						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab,																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon,																			
N. 23° 50′, E. 58° 27′	29.62	752.3	92	33.3	71	ESE			1		0							Blue sky	Comm. G. W. Hand.
H. M. S Bittern,																			
Constantinople, Turkey			66	18.9		NNW			1		10							Misty	Capt. E. B. Pusey.
H. M. S. Blanche,																			
N. 17° 00′, W. 61° 46′	29.97	761.2	81	27.2	87	ESE			2		2							D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea,																			
S. 34° 11′, E. 18° 26′	29.99	761.7	59	15.0	54	ESE			2		2	SE						D. clouds	Com. F. W. Richards.
H. M. S. Champion,																			
S. 9° 31′, W. 17° 03′	29.99	761.7	78	25.6	69	SE			1		2					1	S	D. clouds	Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus,																			
N. 34° 50′, E. 123° 37′	29.86	758.4	57	13.9	94	E			1-2		0							Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S.Cruizer,																			
N. 36° 54′, E. 15° 24′	29.99	761.7	76	24.4		ESE			1		0							Blue sky	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae,																			
S. 2° 32′, W. 16° 56′	30.00	762 0	79	26.1	95	NE			4-5		2					3	E	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring,																			
N. 6° 00′, E. 95° 15′	29.72	754.9	83	28.3		W			2		2					2	WSW	D. clouds	Capt. F. J. Elliott.
H. M. S. Dido																			Capt C. Domville.
H. M. Dock-Yard,																			
Bermuda, W. I.	30.04	763.0	78	25.6	82	NNE			1		3	NNE						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid,																			
N. 47° 34′, W. 52° 41′	30.18	766.6	43.5	6.4	79	NE			1		6	N						D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
N. 22° 18′, E. 59° 40′	29.60	751.8	98?	36.7?		S			1-2		2	SW				1	S	D. clouds	
H. M. S. Eclipse,																			
N. 8° 34′, E. 81° 10′	29.77	756.1	91	32.8		SW			4-5		4					2		D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria,																			
N. 1° 17′, E. 103° 51′	29.77	756.1	81	27.2		SE			2		5	W						D. clouds	Comm. C. Johnstone.
H. M. S. Emerald,																			
S. 1° 47′, E. 175° 27′	29.85	758.2	84	28.9	83	SE			2-3		3	SE						D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus,																			
S. 12° 28′, E. 79° 05′	29.88	758.9	80	26.7	87	SE			3		7	SE				2-3	SSE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			
N. 13° 52′, E. 42° 45′	29.67	753.6	88.5	31.4	80	N			3		3	N				2	N	D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo,																			
N. 19° 54′, W. 82° 18′	29.95	750.7	78	25.6	95	ESE			2							2	SE	Raining	Comm. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet,																			
N. 45° 40′, W. 132° 00′	30.17	766.3	50.5	10.3	82	W			5		10					3	WSW	D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet,																			
Sandy Point, Patagonia	29.53	750.0	44	6.7	76	NNW			3		7	WSW						D. clouds	Capt. L. F. Jones.
H. M. S. Griffin,																			
N. 23° 36′, W. 81° 24′	29.88	758.9	79	26.1	89	SE			2		10					2	SE	D. clouds	Comm. J. Inglis.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant,																			
Melbourne, Australia	29.88	758.9	51	10.6	93	SW			3-4		6	SW						Squally	Capt. C. C.P. Fitzgerald.
H. M. S. Iris,																			
Alexandria, Egypt	29.95	761.0	70	21.1	75	NW			3		0					1		Blue sky	Capt. E. H. Seymour.
H. M. S. IronDuke,																			
N. 27° 10′, E. 123° 30′	29.94	760.5	69	20.6	95	E			1-2		10	W				2-3	NE	Overcast	Capt. R. E. Tracey.
H. M. S. Kingfisher,																			
S. 12° 04′, W. 77° 11′	29.95	760.7	64	17.8		Calm			0		9	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily,																			
Nagasaki, Japan	29.99	761.7	68	20.0		Calm			0		10							Overcast	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie,																			
Now Chow, China	29.82	757.4	83.5	28.6	79	ESE			2-3		4					Sl't	ESE	Squally	Capt. A. Carpenter.
H. M. S. Midge,																			
Amoy, China	29.82	757.4				NE			3		3	NE						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur,																			
N. 36° 07′, W. 5° 21	29.96	761.0	69	20.6	80	SSW			3		3	SSW						D. clouds	Capt. H. H. Rawson.
H. M. S. Modeste,																			
S. 3° 00′, E. 106° 06′	29.82	757.4	82	27.8	83	SE			3		4					2	SE	Misty	Capt. J. G. Mead.
H. M. S. Monarch,																			
Goletta, Tunis, N. Africa	29.96	761.0	72	22.2	85	NE			1		4	SSE						D. clouds	Capt. G. C. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	30.16	766.1	56.5	13.6	78	Calm			0									Foggy	Capt. E. B Drummond.
H. M. S. Orontes, S. 34° 48′, E. 22° 49′	30.05	763.3	62.5	16.9	64	E			2		3	WNW				4	SW	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.85	758.2	80	26.7		Calm			0		10							Overcast	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, N. 14° 29′, W. 71° 51′	29.84	757.9	82	27.8	87	E			4		5					2	E	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler, S. 4° 05′, E. 10° 08′	30.01	762.2	77	25.0		E			2		9	ESE				2	SSE	D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready																			Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	30.03	762.7	47	83		WSW			1–3		1							Blue sky	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.87	758.7	81.4	27.4	80	SE			2		8							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 13° 45′, E. 73° 25′	29.33	745.0	87	30.6	80	NW			3		2	W				3	W	Misty	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 14° 55′, W. 25° 12′	30.09	764.3	75	23.9	84	NE			3–4		8	NNE				3	NNE	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos, N. 41° 45′, W. 64° 01′	30.27	768.8	45	7.2	96	NNE			1		1					Sm'h		Blue sky	Capt. C. G. Fane.
H. M. S. Thetis, S. 5° 00′, W. 147° 53′	29.80	756.9	82	27.8	83	ENE			3–4		3					3	SE	D. clouds	Capt. P. W. Stephens.
H. M. S Thunderer, Naples, Italy	30.02	762.5	71	21.7	78	SSW			3		2					3		Blue sky	Capt. P. H. Colomb.
H. M. S Triumph, Coquimbo, Chili, S. A.	30.03	762.7	57	13.9	87	SE			1		10	Calm						Misty	Capt. A. H. Markham.
H. M. S. Turquoise, S 33° 18′, W. 71° 38′			58	14.4	100	Calm			0		10							Raining	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 35° 25′ E. 17° 15′	30.00	762.0	67	19.4	89	W			2										Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.			80	26.7		NNE			1		2							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	29.96	761.0	68	20.0	47	NW			2		9	SE						D. clouds	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, Bahrein Harbor, Arabia	29.66	753.4	91.5	33.1	62	N			1–2		3	N				Sm'h		D. clouds	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, Mossamedes, Benguela	29.99	761.8	66.2	19.0	76	W			3		3					1		D. clouds	Carlos Candid dos Reis, Comd't.
Quanza, St. Vincent, Cape Verd, I'd.	29.94	760.4	77.0	25.0	83	NE			3		9					1	NE	D. clouds	Carlos M. de Silva Costa, Comd't.
Rio Lima																			S. C da Silva Costa, Comd't.
Sado																			G. A de Brito Capello, Comd't.
Tamega, Hong-Kong, China	29.87	758 8	78.8	26.0	82	ENE			2		10		NE					Overcast	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah	Cent.	Per Ct.	From.	Miles p h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla.	30.06	763.5	75	23.9	77	NE	5	2.2			8		NE	0.32	8.1			Fair.	
N. Yard. Portsmouth, N. H.	30.24	768.1	59	15.0	88	Calm	0	0			0			0	0			Foggy	
Naval Hospital, Yokahama, Japan	29.69	754.1	63.5	17.5	89	Calm			0		10		N	0.29	7.4			Gloomy	
Adams, Payta, Peru	29.74	755.4	70	21.1	85	ESE			1		5					Sm'h		Fair.	
Alaska, Callao, Peru	29.85	758.2	64	17.8	89	SW			1		8		SSW	0	0	Sm'h		Cloudy	
Alert, N. 23° 44′, E. 142° 29′ *.	29.99	761.7	79	26.1	78	SE			3		2		SE			Sm'h		Clear	
Alliance, Norfolk, Va	30.20	767.1	61	16.1	94	ENE			2		10		NE	0	0			Cloudy	
Ashuelot, Kobe, Japan	29.89	759.2	67	19.4	64	NNW			1		2		Calm					Fair	
Colorado, New York, N. Y.	30.30	769.6	57	13.9	94	N	3	1.3			10			0.095	0.1			Misty	
Constitution, Norfolk, Va	30.17	766.3	62	16.7	77	NE	10	4.5			10							Cloudy	
Franklin, Norfolk, Va	30.13	765.3	61	16.1	88	NE	8	3.6			10		NE	0	0			Cloudy	
Galena, Villafranca, France	29.97	761.2	67	19.4	89	SE			2		10		SE			Sm'h		Cloudy	
Independence, N. Yard, Mare I'd, Cal.	29.96	761.0	53	11.7	86	SW	1.2	0.5			8		SW					Fair	
Jamestown, Sitka, Alaska *	29.67	753.6	48	8.9	92	E			5		10			0.42	10.7			Cloudy	
Kearsarge, Port Royal, S. C.	30.09	764.3	72	22.2	90	NNE			3		5		NE			Sm'h		Fair	
Lackawanna, S. 16° 18′, W. 117° 14′ †.	30.17	766.3	78	25.6	73	SSE			1-2		2		SE			Sm'h	SW	Fair	
Marion, Montevideo, Uruguay	30.13	765.3	54	12.2	87	N			3		10		N	0	0	Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	30.23	767.8	64	17.8	68	Calm	0	0			0							Clear	
Minnesota, Newport, R. I.	30.29	769.4	56	13.3	94	Calm			0		10					Sm'h		Dense fog	
Monocacy, Yokohama, Japan	29.84	757.9	65	18.3	89	ENE			1		10		Calm					Cloudy	
New Hampshire, Port Royal, S. C.	30.07	763.8	72	22.2	90	NE	16	7.2			8		NE	0	0			Cloudy	
Nipsic, Villafranca, France	29.97	761.2	67	19.4	84	SE			1		10					Sm'h		Overcast	
Onward, Callao, Peru †	29.95	760.7	64	17.8	94	Calm			0		8		N			Long	W	Cloudy	
Palos, Nagasaki, Japan	29.98	761.5	65	18.3	94	SSW			1		10							Hazy	
Passaic, Washington, D. C.	30.31	769.9	58	14.4	94	NE			1		0							Clear	
Pensacola, N. 44° 30′, W. 138° —′	30.37	771.4	50	10.0	79	SSW			2		10			0	0	Sm'h		Cloudy	
Portsmouth, Elizabeth River, Va	30.19	766.8	63	17.2	94	NE			1		5		NE			Sm'h		Fair	
Powhatan, Port Royal, S. C.	30.09	764.3	72	22.2	80	NE			4		2		E			Sm'h		Fair	
Quinnebaug, N. 22° 30′, W. 41° 36′	30.19	765.8	75	23.9	77	E			4		8		E			Long	E	Clearing	
Ranger, N. 15° 40′, W. 96° 15′ *.	29.80	756.9	83	28.3	79	ENE			2		8		Calm	0.1	3.	Sm'h		Cloudy	
Richmond, Yokohama, Japan	29.87	758.7	65	18.3	84	ENE			2		10			0.23	5.8			Cloudy	
Saratoga, Norfolk, Va	30.16	766.1	60	15.6	100	NE			2		10		Calm	0	0			Cloudy	
Shenandoah, Montevideo, Uruguay *	30.01	762.2	54	12.2	80	NW			3		10					Sm'h		Cloudy	
St. Louis, League Island, Pa.	29.83	757.7	59	15.0	88	N	5	2.2			8		NE	0	0			Cloudy	
Swatara, Shanghai, China *†	29.92	760.0	72	22.2	58	S			1		2		Calm					D. clouds	
Tennessee, N. 38° 53′, W. 73° 55′	30.24	768.1	66	18.9	100	NE					10			0.09	2.3	Sm'h		Foggy	
Ticonderoga, S. 48° 27′, W. 97° 35′	29.75	755.6	44	6.7	92	SE			6		10		SE	0.03	0.8	Mod.	SE	Cloudy	
Trenton, Villafranca, France *	29.95	760.7	68	20.0	79	E			3		8			0	0	Sm'h		Cloudy	
Vandalia, N. 38° 51′, W. 74° 47′	30.23	767.8	56	13.3	100	NNE			3		Fg							Foggy	
Wabash, Boston, Massachusetts	30.29	769.4	60	15.6	94	NNW	6	2.7			8		Calm					Foggy	
Wachusetts, N. Yard, Mare I'd, Cal.	29.94	760.5	59	15.0	88	SW			2		5		W					Fair	
Wyoming, Old Point, Va	30.20	767.1	59	15.0	88	NE			3		10		N			Sm'h	SSE	Fair	
Yantic, N. 38° 06′, W. 73° 42′ *	30.02	762.5	55	12.8	93	N			4		0					Sm'h		Foggy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Clpero, N. 32° 41′, W. 41° 08′	30.40	772.1	64.8	18.2	73	NE			1		7					3	N	D. clouds	W. N. Lalley.
City of Agra																			Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart ‡																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt W. Waring.
S. S. Han Kow ‡																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee, ‡ N. 34° 10′, W. 41° 40′	30.39	771.9	63.5	17.5	58	NW			1		7							D. clouds	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 1° 05′, W. 23° 48′	29.99	761.7	83.6	28.7	71	E			3		5							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 9° 26′, E. 60° 06′	29.73	755.1	79.5	26.4	98	SW			5		10							Raining	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, ‡ N. 41° 33′, W. 9° 44′	29.92	760.0	67	19.4	74	SSE			1		7							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, Clyde River, Scotland	30.25	768.3				NE			5		0							Clear	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia, N. 50° 18′, W. 25° 16′	29.88	758.9	56	13.3		N			2		5		NW	0	0	Mod.	NW	Fine	Capt. W. H. P. Hains.
S. S. Scythia, N. 46° 43′, W. 37° 50′	29.68	753.9	59	15.0	88	N			4		10			Showers		Long	NW	Overcast	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 43° 30′, W. 48° 25′	30.08	764.0	52	11.1		W			5		10		NW					Misty	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic, N. 42° 02′, W. 53° 05′	30.13	765.3	53	11.7		N			4		2		N			Sl't	E	Misty	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, N. 47° 03′, W. 39° 30′	29.93	760.2	52	11.1		WNW			4		5?		NW	Showers		Mod.	NW	Clear?	Capt. Ch. W. Kennedy
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Thol.
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, ‡ N. 49° 15′, W. 10° 36′	29.71	754.6	57.9	14.4		ESE			2		5		SE	0	0	Mod.	SE	Hazy	Capt. Th. Jüngst.
S. S. Köln																			Capt. F. Pfeiffer.
S. S. Leipzig																			Capt. G. Meyer.
S. S. Ohio																			Capt. C. Heimbourh.
S. S. Strassburg																			
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. hr.	Mtrs p. sec.	0—10	Up'er 0—10	Lo'er 0—10	Upper. From.	Lower. From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. Philadelphia, Pa.....*†	30.29	769.4	65	18.3	89	NW	.....	.....	3	.....	8	.....	NW	.....	.....	.....	.....	Overcast.....	Capt. J. W. Shackford.
S. S. Indiana.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. R. W. Sargent.
S. S. Ohio, Liverpool, England....*†	30.22	767.6	69	20.6	95	ESE	.....	.....	4	.....	2	.....	ESE	0	0	.....	.....	Fair	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, Liverpool, England.....*†	30.11	764.8	74	23.3	81	NE	.....	.....	5	.....	0	.....	.....	.....	.....	.....	.....	Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 31° 58′, W. 117° 10′....†	29.97	761.2	62	16.7	61	NNW	.....	.....	4	.....	10	.....	NW	0	0	G'tl	WNW	Cloudy.....	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 44° 35′, E. 174° 48′....†	30.31	769.9	51	10.6	65	NE	.....	.....	2	.....	10	.....	.....	0	0	Mod.	NE	Overcast.....	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China....*†	30.00	762.0	81	27.2	78	W	.....	.....	2	.....	10	.....	NW	.....	.....	.....	.....	Overcast.....	Capt. W. H. Kidley.
S. S. Oceanic, Yokohama, Japan.....	29.87	758.7	63	17.2	89	SW	.....	.....	3	.....	5	.....	SW	0.41	10.4	.....	.....	Clear.....	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 42° 27′, W. 124° 36′....†	30.11	764 8	52	11.1	79	N	.....	.....	5	.....	8	.....	N	.....	.....	Mod.	N	Cloudy.....	Capt. Fred. Bolles.
S. S. Oregon, N. 38° 40′, W. 123° 45′ ...†	29.99	761.7	50.5	10.3	96	NW	.....	.....	4	.....	5	.....	NW	.....	.....	H'vy	NW	Hazy	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. J. N. Ingalls.
S. S. Dakota.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. H. G. Morse.
S. S. Idaho, San Francisco, Cal..... †	29.94	760.5	50	10.0	86	S	.....	.....	2	.....	5	.....	.....	.....	.....	.....	.....	Clear.....	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 35° 09′, W. 120° 45′....†	29.96	761.0	56	13.3	81	NW	.....	.....	6	.....	Fog	.....	NW	0	0	Long	NW	Foggy	Geo. H. Harrison.
S. S. Senator, N. 35° 53′, W. 121° 35′....†	29.97	761.2	53	11.7	93	NW	.....	.....	3	.....	10	.....	NW	.....	.....	Mod.	NW	Cloudy.....	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal.....†	29.93	760.2	51	10.6	86	W	.....	.....	3	.....	5	.....	.....	.....	.....	.....	.....	Fair	Capt. G. Debney.
S. S. Victoria, N. 49° 10′, W. 123° 20′...†	30.00	762.0	52	11.1	86	N	.....	.....	4	.....	2	.....	.....	.....	.....	Sm'h	.....	Clear.....	Capt. H. M. Hayward.
PACIFIC MAIL S. S.CO. *J. B. Houston, President.*																			
S. S. Australia, S. 35° 31′ E. 175° 59′.....	30.36	771.1	58	14.4	64	Calm	.....	.....	0	.....	5?	.....	E	.....	.....	Mod.	NE	Cloudy?	A. Bannerman, 2d Officer.
S. S. City of New York, Sydney, N. S. W.....†	29.96	761.0	67	19.4	84	NNW	.....	.....	2	.....	10	.....	NW	.....	.....	.....	.....	Cloudy.....	Wm.H.Hawes,2d Officer.
S. S. City of Panama, N. 23° 23′, W. 111° 18′....†	29.87	758.7	62	16.7	88	NW	.....	.....	4	2c	0	NW	.....	0	0	Mod.	NW	Clear.....	Capt. D. S. Austin.
S. S. City of Peking, Yokohama, Japan.....†	29.88	758.9	65	18.3	84	S	.....	.....	4	.....	0	.....	.....	0	0	Sm'h	.....	Clear.....	Capt. G. G. Berry.
S. S. City of Sidney.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 37° 37′, W. 125° 34′....†	30.05	763.3	53	11.7	73	NW	.....	.....	6	.....	10	.....	NW	.....	.....	R'gh	N	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, Panama, Panama.....†	29.87	758.7	80	26.7	82	NW	.....	.....	3	.....	8	.....	NW	0	0	.....	.....	Cloudy.....	Capt. R. R. Searle.
S. S. Granada, N. 24° 30′, W. 112° 00′....†	29.84	757.9	62	16.7	88	WNW	.....	.....	5	.....	0	.....	.....	0	0	R'gh	WNW	Hazy.....	Capt. M. Connolly.
S. S. Zealandia, S. 13° 55′, W. 170° 48′.....	29.95	760.7	70	21.1	80	ESE	.....	.....	3	.....	1	.....	SE	0	0	Sm'h	SE	Fine.....	.....
RED STAR LINE. *Jas. A. Wright President.*																			
S. S. Belgenland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Sam'l Jackson.
S. S. Nederland, N. 47° 45′, W. 22° 00′.... †	29.92	760.0	58	14.4	100	E	.....	.....	1	.....	10	.....	E	0	0	Sm'h	.....	Gloomy	A. Feddersen, 2d Officer.
S. S. Rhynland, N. 49° 10′, W. 19° 28′....†	29.89	759.2	61	16.1	82	ENE	.....	.....	3	.....	10	.....	ENE	0	0	Light	W	Cloudy.....	Capt. Wm. Geo. Randle.
S. S. Vaderland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, N. 40° 51′, W. 72° 00′.....	30.23	767.8	56	13.3	74	Calm	0	0	.....	.....	Fog	.....	.....	0	0	Sm'h	.....	Foggy.....	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 20° 20′, W. 67° —'...*†	30.10	764.5	79	26.1	.....	E	.....	.....	4	.....	2	.....	ESE	0	0	Sm'h	E	Fair.....	Capt. B. F. Woodbury.
Brigantine George, N. 30° 50′, W. 64° 00′....†	30.12	765.0	74	23.3	.....	NNE	.....	.....	5	.....	8	.....	NE	Sho	wers	Sm'h	.....	Squally.....	Capt. W H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head. Chesapeake bay, Md†	30.26	768.6	61	16.1	88	NE	3	1.3	.....	.....	10n	.....	.....	0	0	.....	.....	Cloudy.....	.....
Bark Sunbeam. Lisbon, Portugal.....	29.90	759.4	62	16.7	94	SW	.....	.....	6	.....	10	.....	S W	Mode	rate	.....	.....	Rainy...	Capt. Jos. Hand.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
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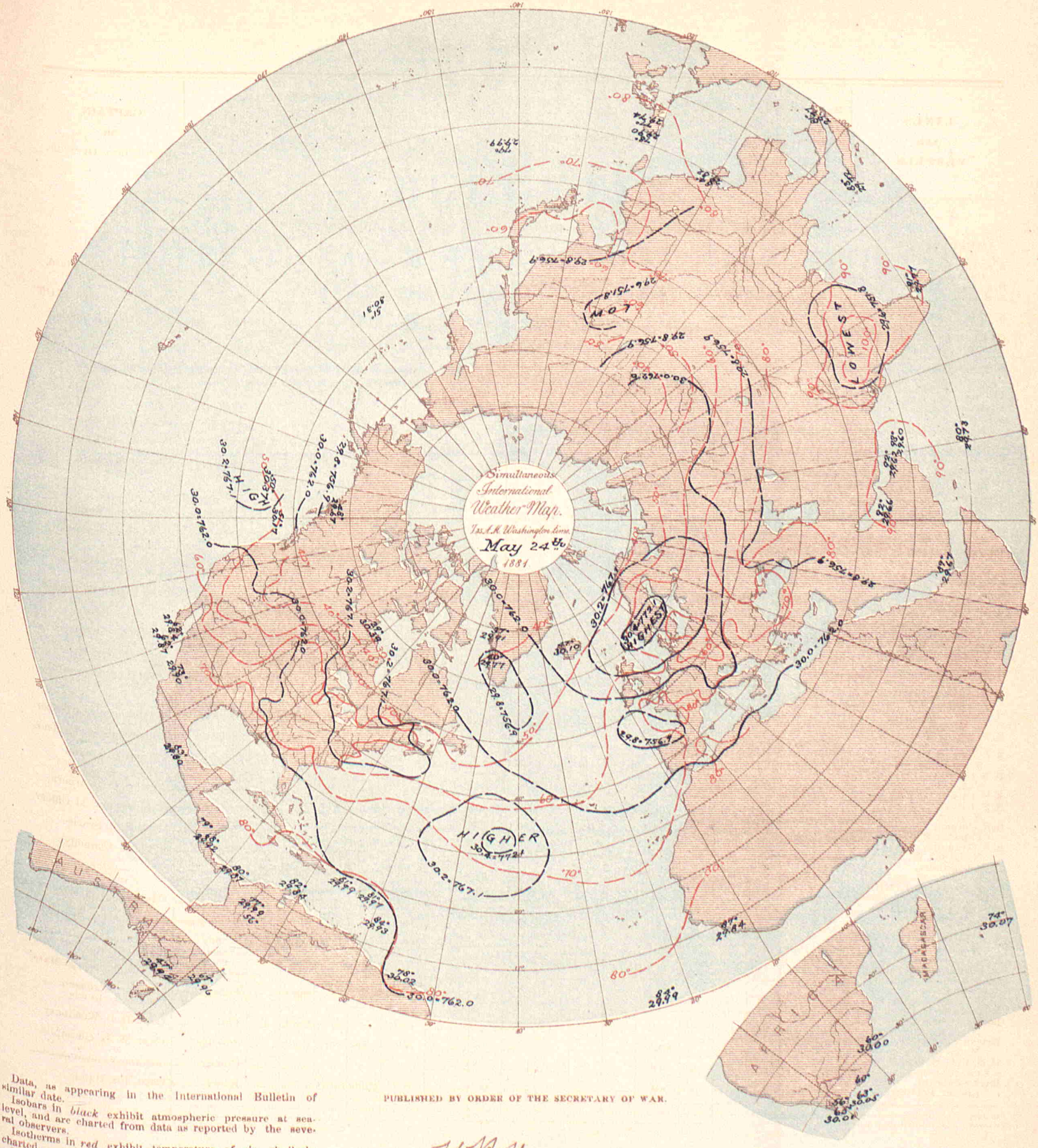
PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

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W. B. Hazen

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

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 25, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco‡			30.18	766.5	70.9	21.6	77	Calm			0		3			0	0	Pretty fair	Dr. Ollive.
Nemours‡			30.00	761.9	70.7	21.5	69	WSW			1		4			0.020	0.5	Cloudy	Raynard.
Algiers‡			30.00	762.0	75.2	24.0	56	W			2		10			0	0	Covered	Nicolas.
La Calle‡			29.95	760.8	71.6	22.0	82	N			2		4			0	0	Cloudy	Fonfrède.
Tunis‡			30.00	762.0															Jacques.
Sfax‡			30.10	764.4															Gau.
Saida‡			30.05	763.3	60.4	15.8	98	E			2		10			0.331	8.4	Covered	Dumas.
Tebessa‡			30.05	763.3	81.3	27.4	34	W			3		9			0	0	Covered	Watrin.
Geriville‡																			Lonchamp.
Laghouat‡			30.04	763.0	81.3	27.4	27	S			2		4			0	0	Cloudy	Herbin.
Biskra‡			30.02	762.5															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.97	761.2	30.03	763.5	53.9	11.7	74	N	17	7.6			9			0	0	Squally	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.37	746.0	29.90	759.5	71.6	22.0	44	W			3		2			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.22	742.1	29.97	761.2	64.8	18.2	82	ENE	14.3	6.4			10			0.406	10.3		Dr. Wierzbicki.
Eperies	29.02	737.1	29.86	758.5	72.0	22.2	69	N			2	08	8s			0.094	2.4		Julius Mikolik.
Gratz‡	28.68	728.5	29.89	759.3	67.1	19.5	56	SSW			2		2			0	0		Andreas Rospini.
Hermannstadt	28.42	721.8	29.78	756.4	72.9	22.7	66	NE			2		8			0.193	4.9	Rainy	Prof. A. Gottschling.
Kremsmunster, Obs'y	28.59	726.1	29.89	759.2	65.1	18.4	60	WSW			1		8			0	0		The Staff.
Lemberg	28.94	735.0	29.89	759.2	68.2	20.1	65	SE			2		7			0.398	10.1		Dr. T. Stanecki.
Pola	29.87	758.7	29.98	761.5	73.8	23.2	56	WSW			1		0			0	0		I. R. HydrographicOffice.
Szathmar	29.36	745.8	29.80	756.9	81.7	27.6	46	NW			3		7			0	0		Beicht Peter, S. J.
Szegedin	29.60	751.8	29.87	758.7	69.4	20.8	75	W			1		5			0	0		Karl Stancel.
Trieste	29.90	759.5	30.00	762.1	75.2	24.0	60	NE			1		2			0	0	Sligtlyel'dy	Secco.
Vienna	29.23	742.4	29.92	760.0	67.1	19.5	65	E			1		2			0.138	3.5		I. R. Central Met.' Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed May 22, 1882.

BRITISH SERIES.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Aberdeen	29.98	761.5	30.08	764.0	51.0	10.6	77	ENE	18	8.0			5			0.055	1.4	Blue sky	W. Boswell.
Armagh, *Observatory*	29.64	752.8	29.86	758.4	52.5	11.4	81	NE	9	4.0			10					Overcast	S. Call.
Bidston, Liverpool Obs'y			29.82	757.4	59.5	15.3	65	E	17	7.6			2					Blue sky	John Hartnup.
Bolton, Sharples	29.31	744.5	29.84	757.9	58.8	14.9	74	SE	9	4.0			7					D. cloud	Thomas Mackereth.
Bradford, Yorkshire	29.48	748.8	29.88	758.9	56.1	13.4	89	SE			1		10			0	0	Overcast	J.McLandsbo ough, F.R.S
Bridgetown, Barbadoes	29.90	759.4	29.93	760.2	87.5	30.8	66	NE			2		3					D. clouds	Corpl. J. Surgener, A.H.C.
Cardington			29.84	757.9	72.0	22.2	51	E			1.0		4					D. clouds	John McLaren.
Chatham, School M. E.	29.72	754.9	29.85	758.2	62.0	16.7	73	NE			1		5					D. clouds	Corpl. W. Beck, R. E.
Falmouth, *Observatory*	29.57	751.1	29.80	756.9	55.1	12.8	79	ESE			2		10					Overcast	The Staff.
Fort Napier, Natal	27.50	698.5	29.72	754.9	70.1	21.2	100	SW			4		5?					Overcast?	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.61	752.1	29.84	757.9	87	30.6	84	NW			1							Drizzling	Sgt. C. E. Keane.
Galway, Queen's College			29.91	759.7	62	16.7	72	NNW			2		2			0	0	Blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	30.02	762.5	30.08	764.0	73.0	22.8	86	W			3		6					Blue sky	2nd Cpl. C. Baldwin.
Glasgow, Observatory	29.74	755.4	29.94	760.5	48.1	8.9	91	E			6		10					D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	29.66	753.4	29.82	757.4	71.9	22.2	42	ENE			1		9					Overcast	The Staff.
Guernsey	29.57	751.1	29.79	756.7	57.5	14.2	75	ENE			1		7					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.79	756.7	29.82	757.4	70.0	21.1	44	ESE	8	3.6								Misty	The Staff.
Leicester, Museum	29.59	751.6	29.84	757.9	67.0	19.4	57	SE			1		2					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.94	760.5	30.01	762.2	72.8	22.7	65	SE			1		3			0	0	Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.84	757.9	29.88	758.9	75.0	23.9	98	SE			1		10			Blank		Overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.33	745.0	29.84	757.9	60.0	15.6	79	SSE			2		6					D. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	29.60	751.8	29.83	757.7	69.3	20.7	51	SSE			2		3					Blue sky	The Staff.
Plymouth	29.70	754.4	29.78	756.4	63.7	17.6	56	E			4		5					D. clouds	John Merrifield.
Sandwick Manse, Orkneys			30.15	765.8	59.2	15.1	57	E	29	13.0			0					Blue sky	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.70	754.4	29.76	755.9	69.4	20.8	81	S			1		9			Blank		D. clouds	Serg't. W. H. Lyne.
Sheffield	29.61	752.1	29.88	758.9	63.9	17.7	62	ENE			1		6			0	0	D. clouds	W. F. Cooper.
Silloth Rectory	29.85	758.2	29.88	758.9	58.9	14.9	67	SE			4		2			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.88	758.9	59.0	15.0	69	ESE	14	6.3			10					Misty	Rev. S. J. Perry.
Stratfield Turgiss	29.60	751.8	29.81	757.2	72.8	22.7	37	E			1		2					Blue sky	Rev C.H.Griffiths, F.M.S.
Truro, Royal Institution	29.76	755.9	29.77	756.1	62	16.7	72	SE			6		10					Gloomy	W. Newcombe.
Valencia, Observatory	29.72	754.9	29.75	755.6	66.5	19.2	45	E	22	9.8			2					Misty	The Met'g'l Office.

CANADIAN SERIES.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.28	769.1	30.32	770.1	45	7.2	78	NE	10	4.5			8n			0.155	3.9	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	30.27	768.8	30.33	770.4	47	8.3	82	NE	7	3.1		2k	8ks	NE	NE	0.01	0.3	Cloudy	G. A. Blair.
Chicontimi, *Quebec*																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A.
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	30.39	771.9	30.41	772.4	46	7.8	84	NE	15	6.7		2cs	0	Calm		0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.31	744.5	30.13	765.3	50	10.0	96	NE	6	2.7			1on			0.080	2.0	Cloudy	*James Stewart.*
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
*Halifax, N. S.**	30.13	765.3	30.25	768.6	51	10.6	77	NE	9	4.0		0	0			0	0	Clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.85	758.2	30.18	766.6	59	15.0	88	W	1	0.4		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	30.01	762.2	30.21	767.3	56	13.3	67	NE	16	7.2		0	0			0	0	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nuson.
Parry Sound, Ontario*	29.53	750.0	30.21	767.3	61	16.1	86	Calm	0	0		0	0			0	0	Clear	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.52	749.8	30.20	767.1	65	18.3	80	Calm	0	0		0	0			0	0	Clear	H. Morgan.
Port Stanley, Ontario	29.56	750.8	30.19	766.8	64	17.8	80	E	4	1.8		0	0			0	0	Clear	M. Payne.
Quebec, Quebec*	30.00	762.0	30.32	770.1	47	8.3	77	E			6	0	Hz			0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.72	754.9	30.18	766.6	59	15.0	82	Calm	0	0		0	0			0	0	Clear	W. H. McIntyre.
Saugeen, Ontario*	29.50	749.3	30.21	767.3	60	15.6	93	SE	3	1.3		0	Hz			0	0	Clear	K. Stewart.
St. Andrews, N. B.	30.19	766.8	30.25	768.3	50	10.0	80	E	3	1.3			10h			0.01	0.3	Cloudy	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.22	767.6	30.26	768.6	47	8.3	69	N	11	4.9		5c	0	N		0.02	0.5	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.84	757.9	30.21	767.3	66	18.9	79	Calm	0	0		0	0			0	0	Clear	Magnetic Observatory
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.12	765.0	30.19	766.8	50	10.0	94	W	1	0.4		Fg		W		0	0	Foggy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	30.01	762.2	30.26	768.6	35	1.7	82	NE				5k	5s			0	0	Fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Cape St. Francis Lt. House	29.89	759.2			62.5	16.9	80	W	15.3	6.8		8ck	0			0	0	Hazy	John Duthie.
Cape Town, C. G. H. Obs'y	29.93	760.2	29.97	761.2	61.0	16.1		NW	9.6	4.3		5	5n			0	0	Vapory	The Staff, for D. Gill.
Worcester *†	28.81	731.8			62.8	17.1	65	WNW			2	0	2			0	0	Fine	C. Stokes.

CHINESE SERIES.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.91	759.7	29.93	760.3	64.8	18.2	79	SSE	5.1	2.3		10				0	0	Covered	M. Marc Dechevrens, S.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

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

San José	25.18	665.0	29.90	759.4	67.1	19.5	90					10s				0	0	Cloudy	Amand Maison.

DANISH SERIES.

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

Copenhagen	30.12	765.1	30.17	766.3	61.2	16.2	59	ESE	18	8			1						Oversergent Fischer.
Fanöe	30.04	763.1	30.06	763.6	69.4	20.8	68	E			6		1						Overloerer Lauridsen.
Godthaab, Greenland	29.62	752.3	29.66	753.4	39.0	3.9	82	NW			2		7					Foggy	S. Kleinschmidt.
Stykkisholm, Iceland	30.09	764.2	30.13	765.3	40.8	8.2		SE			7		8						A. O. Thorlacius.
Thorshavn	30.22	767.6	30.26	768.5	51.4	10.8	82	Calm	0	0			0						Overloerer Bergh.
Vestervig	30.00	763.4	30.15	765.8	63.0	17.2	69	ENE			4		9						Loearer Oesterboi.

FRENCH SERIES.

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

Agen, Normal School	29.20	741.7	29.82	757.4	75.3	24.6	35	SSE			2	ck	0			0	0		M. Labroue, Director.
Alençon Normal School	29.30	744.1	29.85	758.1	67.6	19.8	75	N			1		10kn	SE	S	0	0	Covered	M. Nicot, Director.
Arras, Engineer School																			M. Klein, Commandant.
Avignon, Normal School	29.83	757.7	29.91	759.7	79.7	26.5	36	SE			1		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.31	744.5	29.84	758.0	75.0	23.9	47	S			2		8kn		SW	0	0	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.56	750.7	29.81	757.1	71.1	21.7	54	E			1		8		SSE	0	0	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.04	737.6	29.89	759.3	72.7	22.6	50	SSW			2		cn		SW	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.56	750.8	29.82	757.3	63.9	17.7	84	SSE			1		10		SSW	0.539	13.7	Covered	M. Rayet, Director.
Bourges, Normal School	29.31	744.4	29.84	757.8	75.6	24.2	46	W			1		k		W	0	0		M. Postel, Director.
Brest, Naval Observatory	29.56	750.7	29.80	756.9	59.4	15.2	91	SW			2		10		SW	4.114	104.5	Foggy	M. de Kermaree, Dir.
Caen, Normal School	29.71	754.6	29.78	756.4	66.4	19.1	96	SW			1		10			0.008	0.2	Covered	M. Bétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.54	750.4	29.85	758.3	74.8	23.8	49	S			1		2			0	0	Slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.32	744.6	29.80	757.0	78.8		50	S			1		2			0	0	¼ covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.48	723.5	29.77	756.1	79.2	26.2	27	SSW			1		5k			0	0	½ covered	M. Allnard, Director.
Cluny, Normal School	29.06	738.2	29.89	759.2	78.8		36	SE			3		4		S	0.020	0.5		M. de Villemontée, Dir.
Commercy, Normal School	29.00	736.7	29.84	757.9	77.2	25.1	40	SSW			2		5ck	0	SSW	SSW	0	0	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.47	697.7	29.91	759.8	70.9	21.6	43	NE			1		5c	0		E	0.04	1.	½ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	28.87	733.2	30.01	762.2	77.0	25.0	37	SE			3			2		SE	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.13	740.0	29.86	758.5	77.7	25.4	40	NNW			1		k			NW	0	0		M. Ablard, Director.
Guéret, Normal School	28.31	719.0	29.84	757.9	70.7	21.5	49	SW			1		ck	0		NE	0	0		M. Rivoire, Director.
Lamballe, Normal School	29.58	751.2	29.84	758.0	65.3	18.5	63	SSE			2					SSE	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.20	741.6	29.84	757.9	75.2	24	85	E			1		0	0		W	0.047	1.2		M. Chauvin, Director.
Lorient, Naval Observatory	29.74	755.3	29.84	757.9	61.5	16.4	92	SSE			1			5	NW	SSE	0.315	8.0	Cloudy	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.84	732.6	29.85	758.3	76.6	24.8	35	S			2			5		S	0	0	Cloudy	M. André, Director.
Mans, Normal School	29.52	749.9	29.83	757.6	60.8	16	79	E			1			10			0	0	Covered	M. Piboen, Director.
Marseille, Observatory	29.69	754.1	29.95	760.8	77.2	25.1	32	SSE			2			3		W	0.055	1.4		M. Stephan, Director.
Montlouis l'Instituteur	24.73	628.2	29.97	761.2	60.8	16.0	50	SE	15.0	6.7				4		S	0.140	3.7		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.84	757.8	29.94	760.5	69.6	20.9	80	E			3			2	E		0	0	Slightly cl'dy	M. P. Galzin, Director.
Nancy, Normal School	29.10	739.1	29.83	757.7	81.7	27.6	42	SSE			1		2kn				0	0	Slightly cl'dy	M. Hasse.
Nantes, Observatory	29.68	753 8	29.84	758.0	63.5	17.5	89	NNE			0–1		9kn	SW	SW	0.75	19.		M. Larocque, Director.
Nice	29.96	760.9	29.99	761.7	71.2	21.8	66	SE			1		1	SE	SE	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.78	756.4	29.89	759.1	68.9	20.5	70	SE	9.4	4.2			5	NE	E	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.49	571.2			43.7	6.5							1		SW	0.028	0.7	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	28.80	731.4	29.81	757.2	75.2	24	53	N			1		0			0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.11	637.8			55.6	13.1	58	SW			2		2				0.004	0.1	¼ cover d	M. Allnard, Director.
Rochefort, Naval Obs'y	29.82	757.4	29.85	758.2	69.8	21.0	75	SW			1		8		SSW	0	0	¾ covered	Lt. E. Decaure, Director
Roche-sur-Yon, N. School	29.63	752.7	29.84	758 0	65.5	18.6	75	S			3		8		S	0.161	4.1	Very cloudy	M. Mouillot, Director.
Rodez, Normal School	27.80	705.1	29.88	758.9	68.0	20	62	E			2		1c		SW	0.01	1.	Covered	M. Richard, Director.
Rouen, Normal School	29.75	755.7	29.84	757.9	64.8	18.2	71	SSE			1		10		SSE			Raining	M. Platrier, Director.
Saint Lô, Normal School	29.67	753.7	29.83	757.7	62.8	17.1	73	SSW			1		5		SW	0	0	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.66	753.4	29.83	757.6	72.0	22.2	57	SW			2		7		SW	0	0		M. Renou, Director.
Toulouse, Observatory	29.17	740.9	29.89	759.2	76.1	24.5	56	SSE			3					0.055	1.4		M. Baillaud, Director.
Tours	29.62	752.4	29.82	757.4	71.6	22.0	58	W			2		8		W	0.311	7.9	¾ covered	M. de Tastes.
Versailles, Observatory	29.34	745.2	29.83	757.7	68.4	20.2	68	SW			1					0.102	2.6		Dr. A. Bérigny, Director.
Sub-Series.																			

GERMAN SERIES.

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

Bamberg	29.10	739.2	29.96	761.0	70.2	21.2	55	Calm			0		6k			0	0		Prof. Dr. Hoh.
Berlin	29.83	757.6	29.99	761.8	79.3	26.3	40	E			1		3			0	0		Prof. Dr. Arndt.
Breslau	29.48	748.9	30.02	762.4	70.0	21.1	71	ENE			2		5			0	0		Royal University Obs'y.
Carlsruhe	29.46	748.2	29.87	758.6	75.2	24.0	56	NE			2		1	SW		0	0		Albert Senz.
Cassel	29.25	742.9	29.99	761.0	72.0	22.2	53	SE			4		4	E		0	0		Dr. H. Möhl.
Frankfort on the Main	29.58	751.3	29.93	760.1	75.6	24.2	38	ESE			1		3			0	0		Physical Society.
Friedrichshafen	28.52	724.5	29.93	760.1	64.8	18.2	72	SSW			2		0			0.252	6.4		Wilhelm, Chief Tel.
Hamburg	29.96	760.9	30.03	762.7	71.8	22.1	57	E			4		8			0	0		Dr. R. Kleeman.
Kiel	30.05	763.2	30.06	763.6	58.5	14.7	66	NE			2		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.58	751.4	29.99	761.8	68.0	20.0	73	ENE			2		9	E		0.150	3.8		Prof. Dr. Bruhns.
Magdeburg	29.79	756.7	30.07	763.8	73.8	23.2	59	ENE			2		7ks	SW		0	0		Dr. Assmann.
Memel	30.10	766.1	30.21	767.3	69.4	20.8	50	NW			3–4	10	0			0	0		Reinbrecht & Issermann.
Munich	28.15	715.0	30.01	762.3	63.7	17.6	62	NE			1		7	E		0	0		Central Station.
Neufahrwasser	30.10	766.0	30.17	766.4	61.5	10.4	60	NNE			4		0			0	0		A. Lothes.
Neustadt, Palatinate	29.24	742.6	29.76	755.9	73.8	23.2	59	Calm			1		7			0.059	1.5		Dicknether.
Stuttgart	28.96	735.5	29.81	757.1	74.8	23.8	47	N			4		1	N		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.47	723.0	29.95	760.7	68.7	20.4	55	NE			4		9	W		0.008	0.2		Prof. Kemlein.
Wustrow	30.05	763.3	30.08	763.9	65.5	18.6	78	NE			4		10s			0	0		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.46	748.3	29.84	757.9	76.3	24.6		SW			1.0		5					½ Clear.	A. Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.62	752.4	29.67	753.6	87.7	30.9	77	WSW	32.0	14.3			0			0	0	Blue sky	
Deesa	29.16	740.6	29.61	752.2	95.8	35.4	29	NE	9.5	4.2			6	NE		0	0	D. clouds	
Bombay	29.71	754.6	29.74	755.5	88.4	31.3	68	WNW	11.0	4.9			3		W	0.01	0.3	D. clouds	
Poona, Yarrowda	27.85	707.4	29.66	753.3	90.0	32.2	45	WNW					3	Calm	WNW	0	0	D. clouds	
Belgaum	27.22	691.3	29.71	754.6	83.2	28.4	62	WSW	14.0	6.3			6	NE.	SW	0	0	Misty	
Lahore	28.91	734.2	29.62	752.4	94.1	34.5	30	NW	2.5	1.1			0			0.22	5.6	Blue sky	
Roorkee	28.71	729.2	29.57	751.2	95.9	35.5	26	NW	2.2	1.0			2			0	0		
Agra	29.06	738.1	29.60	751.8	99.6	37.6	21	NW	5.2	2.3			0			0	0		
Nagpur	28.52	724.4	29.51	749.5	103.5	39.7	16	NW	6.8	3.0			3	NW		0	0	D. clouds	
Jubbulpore	28.27	718.1	29.58	751.2	97.7	36.5	18	NE	5.0	2.2			3	N		0	0	D. clouds	
Lucknow	29.23	742.5	29.60	751.8	93.0	33.9	35	NNW	2.7	1.2			0			0.30	7.6	Blue sky	
Allahabad	29.28	743.7	29.58	751.4	97.3	36.3	43	E	5.4	2.4			0			0	0	Blue sky	
Patna	29.43	747.4	29.61	752.0	83.2	28.4	86	NE	5.0	2.2			6	NE	NE	2.26	57.4	D. clouds	
Hazaribagh	27.66	702.4	29.65	753.1	78.8	26.0	67	W	9.5	4.2			10		W	0	0	Thund'r st'm	
Cuttack	29.50	749.3	29.58	751.4	80.0	26.7	82	Calm	3.0	1.3			10			0.04	1.0	Overcast	
Calcutta, Alipore	29.60	751.8	29.62	752.4	77.6	25.3	95	SE	5.0	2.2			10		S	1.79	45.5	Overcast	
Dhubri	29.54	750.3	29.67	753.5	80.6	27.0	85	SSW	0.8	0.4			5			0.02	0.5	D. clouds	
Chittagong	29.62	752.3	29.71	754.6	80.7	27.1	84	SE	5.4	2.4			7			0	0	D. clouds	
Sibsagar	29.36	745.7	29.69	754.2	80.7	27.1	86	SW	2.5	1.1			10	SW	SW	0.12	3.0	D. clouds	
Zanzibar, Africa			29.96	761.0	78.7	25.9	87	Calm	4	1.8			9			1.92	48.8	Gloomy	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.59	751.6	29.99	761.7	67.3	19.6	65	Calm	0	0			10			0.020	0.5		Prof. Giovanni Clodig.
Milan	29.41	747.1	29.92	759.9	74.1	23.4	43	WSW	5.6	2.5			4			0	0		Prof. Schiaparelli.
Padua	29.85	758.1	29.95	760.8	73.4	23.0	56	ESE	6.3	2.8			7	WSW		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.05	737.9	29.94	760.4	72.3	22.4	51	SSE	3.8	1.7			2	NW		0	0		Prof. P. F. Denza.
Genoa	29.82	757.4	30.01	762.3	68.4	20.2	65	SW	4.9	2.2			1	S		0	0		Prof. G. M. Garibaldi.
Mondovi	28.05	712.5	29.93	760.1	70.0	21.1	55	NW			2		2			0	0		Prof. D. C. Bruno.
Pesaro	29.91	759.8	29.96	761.0	66.9	19.4	64	E	9.8	4.4			3	SW		0	0		Prof. Luigi Guidi.
Florence	29.71	754.7	29.96	761.0	75.7	24.3	45	W			2		4	SW		0	0		Prof. Costantino Pitter.
Leghorn	29.93	760.1	30.01	762.2	71.8	22.1	82						4			0	0		Prof. P. Monte.
Rome	29.84	757.8	30.00	762.1	76.3	24.6	44	SW	4.3	1.9			0			0	0		Prof. P. S. Ferrari.
Lecce	29.71	754.5	29.95	760.7	75.0	23.9	22	NNW	10.5	4.7			0			0	0		Prof. C. de Giorgi.
Cosenza	29.12	739.6	29.99	761.7	76.6	24.8	71	SE	1.8	0.8			0			0	0		Prof. D. Conti.
Cagliari	29.77	756.1	29.96	760.9	72.0	22.2	66	SE			2		8			0	0		Prof. A. Pacinotti.
Palermo	29.81	757.2	30.05	763.5	73.4	23.0	53	NE	4.0	1.8			9			0	0		Prof. G. Cacciatore.
Syracuse	29.92	759.9	29.96	761.0	77.4	25.2	54	SE	4.0	1.8			6	WSW		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.47	748.5	29.98	761.4	75.7	24.3	57	NW	3.1	1.4			4	S		0	0		Prof. F. Brioschi.
Stelvio	22.21	564.2			46.0	7.8	56	SW			2		10cks	NW		0	0	Overcast	Prof. P. F. Denza.
Valdobbia	22.25	565.2			46.8	8.2	79	SE			2		10kn	SW		0	0	Overcast	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y †	29.99	761.7	30.00	762.0	62.8	17.1	63	NNE	7.5	3.3		0s	9s			0	0	Cloudy	K. Sasaki.
Kioto	29.85	758.2	30.03	762.7	60.4	15.8	73	NNE	2.0	0.9		0	4s			0	0	Fair	M. Tojima.
Nagasaki, I. M. Obs'y	29.82	757.4	30.02	762.5	63.5	17.5	86	WSW	1.2	0.5			0			0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	29.94	760.7	30.01	762.2	61.0	16.1	93	S	2.5	1.1		0	0			0	0	Clear	The Staff.
Wakayama	29.95	760.7	30.00	762.0	63.8	17.7	72	E	2.8	1.3		0	0			0	0	Clear	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.89	759.2	30.08	764.1	75.6	24.2	62	E	15.0	6.7		0	4		E	0	0	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.63	752.7	29.89	759.2	71.8	22.1	80	NW	0	0		0	0			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.85	758.2	29.85	758.2	68.7	20.4		ESE			3					0	0		
Groningen	29.88	759.0	29.94	760.4	69.8	21.0		E			4					0	0		
Helder	29.90	759.5	29.90	759.5	62.8	17.1		ENE			2					0	0		
Hellevoetsluis	29.84	757.9	29.84	757.9	70.0	21.1	68	ESE			3					0	0		
Utrecht	29.83	757.6	29.87	758.8	73.0	22.8	44	SE			3		2			0	0	Slightly cl'dy	H. van de Brin

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.15	765.8	30.21	767.4	69.1	20.6	32	NW	2.5	1.1	.....	.....	2	.....	.....	0	0	.....	
Christiania	30.08	764.0	30.22	767.6	75.2	24.0	31	SSW	11	5	.....	.....	0	.....	.....	0	0	.....	
Gjesvær	30.28	769.1	30.30	769.7	27.5	— 2.5	.....	NW	.....	.....	4	.....	10	.....	.....	.....	.....	.....	
Lodingen	30.32	770.1	30.41	772.3	36.9	2.7	51	NNE	.....	.....	4-6	.....	1	.....	.....	0	0	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.83	757.7	29.99	761.7	61.9	16.6	85	W	3.1	1.4	.....	.....	10	.....	.....	0.039	1.0	.....	Dr. J. A. Sampaio.
Campo Major	28.92	734.6	29.91	759.8	61.9	16.6	67	WSW	12.5	5.6	.....	.....	9	.....	.....	0.213	5.4	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.01	762.2	30.10	764.4	68.0	20.0	55	WSW	8.7	3.9	.....	.....	4	.....	.....	0.024	0.6	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.51	749.6	29.87	758.6	64.2	17.9	64	SSW	27.3	12.2	.....	.....	10	.....	.....	0.047	1.2	.....	The Staff.
Ponta Delgada, Azores	29.98	761.6	30.05	763.4	62.6	17.0	83	WNW	7.4	3.3	.....	.....	10	.....	.....	0	0	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	29.98	761.5	30.00	762.0	35.4	1.9	55	NNW	18	8	.....	.....	10	.....	.....	.....	.....	Light clouds	Capt. Sseliwerstow.
Astrakhan	29.72	755.0	29.64	752.9	81.7	27.6	42	SE	11	5	.....	.....	10s	.....	.....	.....	.....	Light clouds	Capt. Wisganow.
Barnaul ‡	29.18	741.2	29.67	753.5	60.4	15.8	24	NW	2	1	.....	.....	5	.....	.....	.....	.....	Light clouds	Meteorological Obs'y.
Dorpat	29.93	760.1	30.16	766.1	71.1	21.7	37	N	9	4	.....	.....	0	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	28.77	730.7	29.71	754.5	60.8	16.0	23	WNW	18	8	.....	.....	8k;ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Kasan	29.55	750.5	29.80	757.0	72.7	22.6	30	WSW	7	3	.....	.....	0	.....	.....	.....	.....	.....	Observatory.
Kertch	29.83	757.7	29.85	758.2	68.7	20.4	82	SW	7	3	.....	.....	3	.....	.....	.....	.....	.....	Lagorio & Sastyrez.
Kieff	29.23	742.5	29.84	757.9	72.5	22.5	63	NNE	13	6	.....	8	3cks	.....	.....	.....	.....	.....	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.55	750.5	29.74	755.4	82.0	27.8	46	ENE	13	6	.....	.....	5	.....	.....	.....	.....	.....	Meteorological Obs'y.
Moscow	29.45	748.1	29.98	761.4	73.9	23.3	38	W	7.8	3.5	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.53	699.2	29.84	757.9	39.7	4.3	79	NW	11	5	.....	.....	10	.....	.....	.....	.....	Raining	Meteorological Obs'y.
Nikolaiev	29.78	756.3	29.85	758.1	75.0	23.9	74	S	9	4	.....	.....	3ks	.....	.....	.....	.....	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lieut. Iwanow.
Pekin, China	29.56	750.7	29.74	755.3	73.8	23.2	48	Calm	0	0	.....	.....	2k	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	30.05	763.5	30.08	763.9	62.6	17.0	49	WNW	18	8	.....	10k	0	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.26	717.7	29.72	754.9	84.4	29.1	45	Calm	0	0	.....	.....	2	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.35	720.0	29.68	753.8	82.9	28.3	37	NW	2	1	.....	9cs	0	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	29.63	752.7	30.04	763.0	71.6	22.0	53	E	9	4	.....	.....	0	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.71	754.6	30.11	764.9	73.0	22.8	41	NNE	2	1	.....	.....	0	.....	.....	.....	.....	.....	Berg, Assistant.
Yeniseisk	29.48	748.9	29.78	759.3	43.2	6.2	58	SE	9	4	.....	.....	7	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	30.01	762.2	47.0	8.3	98	E	.....	.....	3	.....	10n	.....	.....	0.19	4.8	Raining	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	30.02	762.5	60	15.6	94	E	.....	.....	2	0	0	.....	.....	0	0	Hazy	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	30.23	767.8	.....	.....	.....	SE	.....	.....	1	0	0	.....	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.80	756.8	29.90	759.4	73.4	23	54	SSE	4.0	1.8	.....	.....	1	.....	.....	0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.78	756.4	29.84	757.8	77.0	25.0	54	NW	2.5	1.1	.....	1	8	SE	.....	0.303	7.7	Almost cov'd	Prof. Manuel de Naveran
Burgos, Met. Obs'y	29.99	085.5	.....	.....	57.2	14.0	89	S	18.3	8.2	.....	0	6	.....	.....	0.295	7.5	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.73	704.4	29.91	759.7	65.8	18.8	44	SW	15.9	7.1	.....	0	3	.....	.....	0	0	Clouds	The Staff.
Murcia, Met. Obs'y ‡	29.74	755.3	29.88	758.9	84.6	29.2	44	SE	5.4	2.4	.....	3	4	NW	.....	0	0	Cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.87	733.3	29.74	755.4	67.3	19.6	67	SW	4.9	2.2	.....	.....	0	.....	.....	0.252	6.4	Cloudy	R. Gil Vallanneva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.78	756.4	29.84	758.0	78.2	25.7	84	SW	3.8	1.7	.....	0	1k	.....	WSW	0.079	2.0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.77	756.1	29.82	757.4	82.1	27.8	85	W	0.7	0.3	.....	0	3ks	.....	E	0.23	5.9	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.96	761.0	30.06	763.5	68.9	20.5	60	W	9.4	4.2	.....	0	6	.....	SW	0.176	4.5	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.87	758.8	29.97	761.1	82.0	27.8	82	SE	7.8	3.5	.....	5c	2k	SE	SE	0	0	.....	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.73	755.2	29.88	758 9	79.9	26.6	91	ENE	0	0	.....	.....	1s	.....	.....	0.06	1.5	Clear	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.21	767.4	30.25	768.4	41.0	5.0	69	N	.....	.....	6	.....	10	.....	.....	0	0	.....	
Umea	30.11	764.9	30.17	766.2	70.9	21.6	28	NNE	.....	.....	2	.....	4	.....	.....	0	0	.....	
Hernosand	30.19	766.9	30.24	768.2	70.0	21.1	31	NW	.....	.....	2	.....	0	.....	.....	0	0	.....	
Stockholm	30.06	763.4	30.23	767.9	74.1	23.4	31	WNW	.....	.....	4	.....	0	.....	.....	0	0	.....	
Wisby	30.20	767.0	30.26	768.5	53.6	12.0	47	NNE	.....	.....	4	.....	0	.....	.....	0	0	.....	
Sub-Series.																			
Upsala	30.14	765.5	30.22	767.7	71.4	21.9	36	NE	6.7	3.0	.....	.....	0	.....	.....	0	0	.....	Nils Ekholm
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.53	724.6	29.91	759.7	69.1	20.6	55	N	.....	.....	2	.....	7	.....	.....	0	0	.....	The Observatory.
Zurich ‡	28.31	719.0	29.87	758.8	75.7	24.3	50	E	.....	.....	4-6	.....	2	.....	.....	0.016	0.4	Clear	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.80	757.0	72.9	22.7	70	SW	8	3.5	.....	.....	9	.....	SW	0	0	.....	The Observatory.
Valona	.....	.....	30.02	762.6	74.7	23.7	.....	W	.....	.....	1	.....	5	.....	.....	0	0	Cloudy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.91	759.7	76.8	24.9	60	W	.....	.....	1	.....	2k	.....	W	0	0	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.10	764.5	30.18	766.6	71	21.7	71	W	3	1.3	.....	Hz	Hz	.....	.....	0	0	Dense haze.	
Alpena, Michigan	29.58	751.3	30.22	767.6	61	16.1	77	W	2	0.9	.....	0	Fg	.....	.....	0	0	Clear.	
Atlanta, Georgia	28.96	735.6	30.08	764.0	64.2	17.9	72	E	7	3.1	.....	8k	2s	Calm	Calm	0.04	1.0	Cloudy	
Atlantic City, New Jersey	30.15	765.8	30.17	766.3	58	14.4	94	NE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Augusta, Georgia	29.95	760.7	30.15	765.8	67.2	19 6	64	Calm	0	0	.....	1c	0	.....	.....	0	0	Clear	
Baltimore, Maryland	30.24	768.1	30.29	769.4	61	16.1	82	NE	9	4.0	.....	.....	1os	.....	.....	0	0	Clear	
Barnegat, New Jersey	30.13	765.3	30.16	766.1	60	15.6	82	E	6	2.7	.....	0	0	.....	.....	0	0	Cloudy	
Bismarck, Dakota	28.22	716.8	30.07	763.8	58	14.4	93	E	8	3.6	.....	.....	1os	.....	Calm	Inap.	Inap.	Cloudy	
Boise City, Idaho	27.17	690.1	30.13	765.3	42.1	5.6	66	SW	3	1.3	.....	c	0	.....	.....	0	0	Clear	
Boston, Massachusetts	30.00	762.0	30.15	765.8	65.0	18.3	68	Calm	0	0	.....	0	Hz	.....	.....	0	0	Dense haze.	
Brackettville, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Brownsville, Texas	29.88	758.9	29.92	760.0	76	24.4	90	Calm	0	0	.....	2c	0	.....	.....	0.20	5.1	Clear.	
Buffalo, New York	29.51	749.5	30.19	766.8	64.8	18.2	71	E	1	0.4	.....	0	Sk	.....	.....	0	0	Dense smoke	
Burlington, Vermont	29.90	759.4	30.19	766.8	60.0	15.6	82	N	13	5.8	.....	0	0	.....	.....	0	0	Clear	
Cairo, Illinois	29.74	755.4	30.13	765.3	68	20.0	90	NE	6	2.7	.....	5ck	2s	SE	Calm	0.27	6.9	Fair	
Campo, California	27.32	693.9	29.89	759.2	46	7.8	77	NW	4	1.8	.....	0	2ks	.....	W	0	0	Fair	
Camp Thomas, Arizona	27.12	688.8	.....	.....	52	11.1	47	Calm	.....	.....	0	2c	0	.....	.....	0	0	Clear	
Cape Henry, Virginia	30.12	765.0	30.14	765.5	63	17.2	78	N	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Cape May, New Jersey	30.13	765.3	30.16	766.1	60	15.6	82	NE	6	2.7	.....	5k	0	NE	.....	0	0	Clear	
Castroville, Texas	29.19	741.4	29.87	758.7	72	22.2	85	SW	2	0.9	.....	.....	1os	.....	SW	0	0	Fair	
Cedar Keys, Florida	29.98	761.5	30.00	762.0	71	21.7	85	NE	11	4.9	.....	1cs	0	.....	.....	0	0	Cloudy	
Champaign, Illinois	29.31	744.5	30.09	764.3	66.3	19.1	84	SE	7	3.1	.....	0	0	.....	.....	0.54	13.7	Clear	
Charleston, S. Carolina	30.05	763.3	30.10	764.5	66	18.9	74	NE	12	5.4	.....	5c	0	Calm	.....	0	0	Clear	
Charlotte, N. Carolina	29.30	744.2	30.1c	764.5	67.0	19.4	60	NE	5	2.2	.....	2c	0	W	.....	0	0	Fair	
Chattanooga, Tennessee	29.34	745.2	30.13	765.3	66	18.9	95	Calm	0	0	.....	8ck;cs	2ks;fg	Calm	Calm	0.49	12.4	Cloudy	
Cheyenne, Wyoming	24.11	612.4	30.05	763.3	50	10.0	93	S	16	7.2	.....	.....	1os	.....	SW	0.18	4.6	Cloudy	
Chicago, Illinois	29.47	748.5	30.14	765.5	65.5	18.6	68	SE	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Chincoteague, Virginia	30.13	765.3	30.15	765.8	59	15.0	82	NE	15	6.7	.....	1k	0	Calm	.....	0	0	Clear	
Cincinnati, Ohio	29.[illegible]	749.5	30.15	765.8	68	20.0	60	E	4	1.8	.....	4ck	0	W	.....	0	0	Fair	
Cleveland, Ohio	29.49	749.0	30.20	767.1	63.2	17.3	71	SE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Coleman City, Texas	28.18	715.8	29.80	756.9	64	17.8	89	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Columbus, Ohio	29.35	748.0	30.16	766.1	67	19.4	60	E	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Concho, Texas	28.08	713.2	29.71	754.6	65	18.3	84	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Corsicana, Texas	29.56	750.8	30.01	762.2	72	22.2	85	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Davenport, Iowa	29.50	749.3	30.12	765.0	66	18.9	69	E	2	0.9	.....	0	1s	.....	.....	3.80	96.5	Clear	
Dayton, Washington T'y	28.17	715.5	29.82	757.4	48.5	9.2	49	N	6	2.7	.....	Hz	0	Calm	.....	0.04	1.0	Clear	
Deadwood, Dakota	25.41	645.4	.....	.....	48	8.9	100	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Decatur, Texas	28.82	732.0	29.94	760.5	75	23.9	90	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Delaware Breakwater, Del.	30.14	765.5	30.16	766.1	58	14.4	88	NE	7	3.1	.....	8k	c	SE	.....	0	0	Clear	
Denison, Texas	29.22	742 2	30.00	762.0	68	20.0	95	E	3	1.3	.....	5ck	0	NE	.....	0	0	Fair	
Denver, Colorado	24.84	630.9	30.06	763.5	55.0	12.8	93	E	1	0.4	.....	0	8ks	.....	NW	0.02	0.5	Cloudy	
Des Moines, Iowa	29.24	742.7	30.09	764.3	65	18.3	89	SE	1	0.4	.....	5k	0	W	.....	0.11	2.8	Fair	
Detroit, Michigan	29.51	749.5	30.19	766.8	62.8	17.1	62	NE	3	1.3	.....	8c	Sk	.....	.....	0	0	Fair	
Dodge City, Kansas	27.46	697.5	29.70	754.4	60	15.6	100	S	6	2.7	.....	0	Hz	.....	.....	0	0	Clear	
Dubuque, Iowa	29.45	748.0	30.13	765.3	64.2	17.9	78	E	1	0.4	.....	.....	ion	.....	SW	0.92	23.4	Light rain	
Duluth, Minnesota	29.43	747.5	30.10	764.5	56	13.3	81	NE	[illegible]	0.4	.....	Hz	Hz	Calm	Calm	0	0	Light haze	
Eagle Pass, Texas	29.18	741.2	29.88	758.9	69.0	20.6	85	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Eagle Rock, Idaho	25.22	640.6	29.87	758.7	41	5.0	74	Calm	0	0	.....	2cs	0	Calm	.....	0	0	Fair	
Eastport, Maine	30.19	766.8	30.23	768.6	47.5	8.6	81	NE	16	7.2	.....	c	0	.....	.....	0	0	Clear	
El Paso, Texas	25.15	664.2	.....	.....	60	15.6	88	Calm	0	0	.....	0	8s	.....	NE	0	0	Fair	
Erie, Pennsylvania	29.49	749.0	30.19	766.8	67	19.4	69	S	4	1.8	.....	1cs	0	.....	.....	0.05	1.3	Clear	
Escanaba, Michigan	29.54	750.3	30.19	766.8	60	15.6	77	Calm	0	0	.....	0	1fz	.....	.....	0	0	Dense haze	
Florence, Arizona	28.31	719.1	29.91	759.7	59	15.0	38	NE	2	0.9	.....	0	Sk	.....	Calm	0	0	Clear	
Fort Apache, Arizona	24.96	634.0	30.41	772.4	42	5.6	50	NW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Fort Assinnaboine, Montana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2k	0	Calm	.....	0	0	Fair	
Fort Bennett, Dakota	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Benton, Montana	28.40	721.3	.....	.....	62	16.7	88	SE	2	0.9	.....	10cs;k	0	S	.....	0.01	0.3	Cloudy	
Fort Buford, Dakota	27.14	689.3	.....	.....	48	8.9	43	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Custer, Montana	27.94	709.7	29.74	755.4	55	12.8	93	E	7	3.1	.....	.....	1os	.....	E	0.09	2.3	Cloudy	
Fort Davis, Texas	26.85	682.0	.....	.....	49	9.4	100	NE	4	1.8	.....	.....	Fg	.....	.....	0.65	16.5	Dense fog	
Fort Elliott, Texas	25.14	638.5	30.10	764.5	60	15.6	77	SW	3	1.3	.....	5c	0	SW	.....	0	0	Fair	
Fort Gibson, Indian T'y	27.28	692.9	29.50	749.3	60	15.6	88	E	4	1.8	.....	.....	1os	.....	E	0	0	Cloudy	
Fort Grant, Arizona	29.47	748.5	29.99	761.7	68	20.0	84	E	4	1.8	.....	5c	0	N	.....	0	0	Fair	
Fort Griffin, Texas	25.17	639.3	29.97	761.2	59	15.0	23	E	6	2.7	.....	2cs	0	.....	.....	0	0	Clear	
Fort Keogh, Montana	28.63	727.2	29.84	757.9	70.6	21.4	75	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Macon, North Carolina	27.49	698.2	.....	.....	50	10.0	92	W	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Fort McKavett, Texas	30.07	763.8	30.09	764.3	64	17.8	83	N	15	6.7	.....	5k	0	Calm	.....	0.16	4.1	Clear	
Fort Missoula, Montana	27.72	704.1	29.59	751.6	62.2	16.8	77	W	2	0.9	.....	1c	0	.....	.....	0	0	Fair	
Fort St. Michaels	26.73	678.9	.....	.....	36	2.2	100	N	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Fort Shaw, Montana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Sill, Indian Territory	26.39	670.3	.....	.....	37	2.8	71	W	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Fort Stevenson, Dakota	28.77	730.7	29.84	757.9	69	20.6	85	E	1	0.4	.....	0	2s	.....	.....	0	0	Fair	
Fort Verde, Arizona	28.16	715.3	.....	.....	58	14.4	94	E	6	2.7	.....	.....	1oks	.....	E	0	0	Cloudy	
Fredericksburg, Texas	.....	.....	.....	.....	49	9.4	37	W	.....	.....	1	0	0	.....	.....	0	0	Clear	
Galveston, Texas	28.27	718.0	29.79	756.7	66	18.9	79	W	1	0.4	.....	4cs	0	.....	.....	0	0	Fair	
Grand Haven, Michigan	29.92	760.0	29.96	761.0	77	25.0	77	NW	8	3.6	.....	2cs	Hz	.....	.....	0	0	Dense haze	
Hatteras, North Carolina	29.54	750.3	30.18	766.6	68	20.0	65	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Helena, Montana	30.06	763.5	30.08	764.0	64	17.8	78	NE	25	11.2	.....	0	0	.....	.....	0	0	Clear	
Henrietta, Texas	25.80	655.3	.....	.....	47	8.3	62	S	6	2.7	.....	2k	0	Calm	.....	0	0	Fair	
Indianapolis, Indiana	28.97	735.8	29.86	758.4	71	21.7	90	E	4	1.8	.....	2ck	5s	NE	.....	0	0	Fair	
Indianola, Texas	29.35	745.5	30.11	764.8	71	21.7	53	Calm	0	0	.....	1c	Hz	Calm	Calm	0	0	Clear	
Jacksboro, Texas	29.92	760.0	29.94	760.5	75.7	24.3	90	S	4	1.8	.....	2cs	0	W	.....	0	0	Fair	
Jacksonville, Florida	28.83	732.3	29.93	760.2	68	20.0	90	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Keokuk, Iowa	29.98	761.5	30.02	762.5	73	22.8	76	NE	9	4.0	.....	.....	1os	.....	NE	0.11	2.8	Clear	
Key West, Florida	29.46	748.3	30.09	764.3	69.2	20.7	75	SE	4	1.8	.....	0	Hz	.....	Calm	0.99	25.1	Cloudy	
Kittyhawk, North Carolina	29.83	757.7	29.86	758.4	77.8	25.4	82	SE	1	0.4	.....	1k	0	.....	.....	0	0	Clear	
Knoxville, Tennessee	30.11	764.8	30.13	765.3	61	16.1	82	NE	29	13.0	.....	1k	0	.....	.....	1.31	33.3	Clear	
La Crosse, Wisconsin	29.15	740.4	30.13	765.3	68	20.0	77	NE	5	2.2	.....	5c	2ks	Calm	Calm	0	0	Clear	
La Mesilla, New Mexico	29.36	745.7	30.09	764.3	73	22.8	59	SE	2	0.9	.....	0	0	.....	.....	0.11	2.8	Fair	
Laredo, Texas	26.02	660.9	30.17	766.3	60	15.6	49	SE	1	0.4	.....	1c	1s	.....	.....	0	0	Clear	
Leavenworth, Kansas	29.51	749.5	29.84	757.9	74	23.3	81	SE	1	0.4	.....	0	0	.....	.....	0.06	1.5	Fair	
Lewiston, Idaho	29.21	741.9	30.03	762.7	64	17.8	78	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Little Rock, Arkansas	29.16	740.7	29.81	757.2	45	7.2	48	Calm	0	0	.....	5cs	0	SW	.....	0	0	Fair	
Los Angeles, California	29.72	754 9	30.03	762.7	66	18.9	95	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Louisville, Kentucky	29.56	750.8	29.92	760.0	55.2	12.9	87	E	2	0.9	.....	.....	1os	.....	.....	0.26	6.6	Cloudy	
Lynchburg, Virginia	29.54	750.3	30.08	764.0	68.0	20.0	90	N	3	1.3	.....	.....	10s	.....	Calm	0	0	Cloudy	
Madison, Wisconsin	29.50	749.3	30.17	766.3	66	18.9	69	NE	1	0.4	.....	5c	Sk	.....	.....	0.01	0.3	Fair	
Marquette, Michigan	29.17	740.9	30.13	765.3	63	17.2	72	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Mason, Texas	29.47	748.5	30.14	765.5	75	23.9	40	SW	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Memphis, Tennessee	28.35	720.1	30.06	763.5	67.3	19.6	84	Calm	0	0	.....	0	Sk	.....	.....	0	0	Clear	
Milwaukee, Wisconsin	29.75	755.6	30.08	764.0	69	20.6	85	Calm	0	0	.....	1c	0	Calm	.....	0	0	Clear	
	29.46	748.3	30.18	766.6	58	14.4	64	Calm	0	0	.....	0	5s	.....	E	0.30	7.6	Fair	
												0	Sk	.....	.....	0	0	Dense smoke	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.95	760.7	30.02	762.5	72	22.2	80	E	12	5.4	.....	8cs	0	.....	.....	0.04	1.0	Fair	
Montgomery, Alabama	29.85	758.2	30.08	764.0	69.2	20.7	79	E	4	1.8	.....	8k	0	E	.....	0.02	0.5	Fair	
Moorhead, Minnesota	29.06	738.1	30.00	762.0	60	15.6	82	N	2	0.9	.....	0	5s	.....	NE	0.27	6.9	Fair	
Morgantown, W. Virginia	29.22	742.2	30.19	766.8	61	16.1	82	Calm	0	0	.....	Hz	Fg	.....	.....	0	0	Clear	
Mt. Washington, N. H.	24.12	612.6	30.48	774.2	55	12.8	50	E	7	3.1	.....	8k	Hz	NE	Calm	0.07	1.8	Fair	
Nashville, Tennessee	29.59	751.6	30.12	765.0	67.5	19.7	88	E	3	1.3	.....	10ok;cs	0	E	.....	1.31	33.3	Cloudy	
New Haven, Connecticut	30.05	763.3	30.16	766.1	53	11.7	100	Calm	0	0	.....	.....	Fg	.....	.....	0	0	Dense fog	
New London, Connecticut	30.14	765.5	30.19	766.8	58	14.4	82	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
New Orleans, Louisiana	29.92	760.0	29.98	761.5	72.8	22.7	86	E	1	0.4	.....	2c	8ks	SW	E	1.48	37.6	Cloudy	
Newport, Rhode Island	30.12	765.0	30.18	766.6	52.7	11.5	92	SW	2	0.9	.....	.....	Fg	.....	.....	0	0	Dense fog	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd.	30.12	765.0	30.15	765.8	53.0	11.7	80	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
New York, New York	30.00	762.0	30.17	766.3	58	14.4	94	E	5	2.2	.....	.....	Fg	.....	.....	0	0	Dense fog	
Norfolk, Virginia	30.08	764.0	30.13	765.3	64	17.8	78	NE	12	5.4	.....	8k	0	N	.....	Inap.	Inap.	Fair	
North Platte, Nebraska	27.12	688.8	29.63	752.6	60	15.6	91	SE	6	2.7	.....	2c	8s	SE	SE	2.58	65.5	Cloudy	
Olympia, Washington T'y	29.88	758.9	29.92	760.0	49.0	9.4	78	S	4	1.8	.....	.....	10s	.....	SW	0	0	Cloudy	
Omaha, Nebraska	28.95	735.3	30.01	762.2	67	19.4	84	Calm	0	0	.....	10c	0	.....	.....	0	0	Cloudy	
Oswego, New York	29.88	758.9	30.20	767.1	61.2	16.2	79	SW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Pensacola, Florida	29.99	761.7	30.02	762.5	72	22.2	85	NE	10	4.5	.....	.....	8s	.....	E	Inap.	Inap.	Fair	
Philadelphia, Pa.	30.11	764.8	30.16	766.1	61	16.1	88	SE	2	0.9	.....	0	Fg	.....	.....	0	0	Clear	
Phœnix, Arizona	28.71	729.2	30.49	774.4	59	15.0	54	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.90	454.7	30.11	764.8	26	— 3.3	28	SW	8	3.6	.....	2ck	0	.....	.....	Inap.	Inap.	Clear	
Pioche, Nevada	23.96	608.6	29.73	755.1	45	7.2	31	NW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Pittsburg, Pennsylvania	29.40	746.7	30.20	767.1	59.3	15.2	85	Calm	0	0	.....	0	Fg	.....	Calm	0	0	Clear	
Port Eads, Louisiana	29.96	761.0	29.97	761.2	75.1	23.9	90	E	10	4.5	.....	5k	0	E	.....	0	0	Fair	
Port Huron, Michigan	29.57	751.1	30.23	767.8	54.1	12.3	67	NE	5	2.2	.....	0	Hz	.....	Calm	0	0	Clear	
Portland, Maine	30.12	765.0	30.17	766.3	58	14.4	82	NE	8	3.6	.....	0	5s	.....	NE	0	0	Fair	
Portland, Oregon	29.95	760.7	30.02	762.5	48.7	9.3	79	E	5	2.2	.....	.....	10s	.....	SW	0	0	Cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	64	17.8	73	NE	20	8.9	.....	5k	0	NE	.....	0	0	Fair	
Prescott, Arizona	24.69	627.1	30.08	763.3	42	5.6	50	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	29.86	758.4	29.88	758.9	74	23.3	81	NE	10	4.5	.....	0	1ks	.....	NE	0.03	0.8	Clear	
Red Bluff, California	29.51	749.5	29.85	758.2	56.5	13.6	78	N	3	1.3	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Rio Grande City, Texas	29.80	756.9	30.01	762.2	72	22.2	85	SE	.....	.....	1	0	8s	.....	SE	0	0	Fair	
Rochester, New York	29.59	751.6	30.20	767.1	65	18.3	73	W	3	1.3	.....	0	Hz	.....	.....	0	0	Clear	
Roseburg, Oregon	29.49	749.0	30.07	763.8	42.5	5.8	83	Calm	0	0	.....	1cs	0	.....	.....	0	0	Clear	
Sacramento, California	29.89	756.9	29.87	758.7	54.3	12.4	87	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
St. Louis, Missouri	29.55	750.6	30.11	764.8	65.0	18.3	97	E	3	1.3	.....	0	Fg	.....	.....	0.07	1.8	Clear	
St. Paul, Minnesota	29.20	743.2	30.06	763.5	65	18.3	81	SE	3	1.3	.....	.....	10s	.....	SE	Inap.	Inap.	Threatening	
Salt Lake City, Utah	25.55	649.0	29.88	758.9	51	10.6	59	N	5	2.2	.....	0	0	.....	.....	0	0	Clear	
San Antonio, Texas	29.29	744.0	29.97	761.2	70.3	21.3	95	Calm	0	0	.....	1c	4s	Calm	SE	0	0	Fair	
San Diego, California	29.81	757.2	29.88	758.9	60.3	15.7	65	W	4	1.8	.....	.....	10s	.....	.....	0	0	Cloudy	
Sandusky, Ohio	29.53	750.0	30.19	766.8	64	17.8	78	E	1	0.4	.....	0	Sk	.....	.....	0	0	Clear	
Sandy Hook, New Jersey	30.14	765.5	30.17	766.3	60.0	15.6	88	SE	3	1.3	.....	0	Fg	.....	.....	0	0	Clear	
San Francisco, California	29.86	758.4	29.92	760.0	51	10.6	89	SE	2	0.9	.....	0	Fg	.....	S	0	0	Clear	
Santa Fé, New Mexico	23.33	592.6	29.87	758.7	50	10.0	52	SE	2	0.9	.....	5c	0	.....	.....	0.06	1.5	Fair	
Savannah, Georgia	30.00	762.0	30.09	764.3	70	21.1	70	NE	9	4.0	.....	8cs	1ks	NE	NE	0	0	Fair	
Shreveport, Louisiana	29.78	756.4	30.02	762.5	68	20.0	95	NE	6	2.7	.....	.....	10s	.....	.....	0	0	Cloudy	
Silver City, New Mexico	24.22	615.2	30.30	769.6	52	11.1	73	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Sitka Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	.....	
Smithville, North Carolina	30.09	764.3	30.12	765.0	62	16.7	88	N	12	5.4	.....	8k	1s	NE	.....	0	0	Cloudy	
Spokane Falls, Wash. Ter.	27.95	709.9	29.81	757.2	42	5.6	83	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Springfield, Illinois	29.47	748.5	30.12	765.0	67	19.4	89	SW	3	1.3	.....	0	Hz	.....	.....	0	0	Clear	
Springfield, Massachusetts	30.03	762.7	30.16	766.1	65	18.3	78	S	2	0.9	.....	0	Hz	.....	.....	0	0	Clear	
Stockton, Texas	29.91	683.5	29.91	759.7	65.0	18.3	89	SE	12	5.4	.....	5cs	0	SE	.....	0	0	Fair	
St. Vincent, Minnesota	29.23	742.4	30.02	762.5	53	11.7	93	NE	8	3.6	.....	.....	10s	.....	Calm	0.03	0.8	Cloudy	
Thatcher's Island, Mass.	30.12	765.0	30.17	766.3	55.0	12.8	68	S	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Toledo, Ohio	29.51	749.5	30.17	766.3	68	20.0	74	NE	3	1.3	.....	0	Sk	.....	.....	0	0	Clear	
Tucson, Arizona	27.41	696.2	29.90	761.0	58	14.4	22	SE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.58	751.3	30.07	763.8	45.0	7.2	68	SE	8	3.6	.....	2cs	0	.....	.....	0	0	Clear	
Uvalde, Texas	29.00	736.6	29.81	757.2	67	19.4	89	SE	1	0.4	.....	.....	Fg	.....	.....	0	0	Dense fog	
Vicksburg, Mississippi	29.78	756.4	30.04	763.0	68	20.0	90	E	8	3.6	.....	.....	10s	.....	.....	0	0	Cloudy	
Visalia, California	29.46	748.3	29.82	757.4	57	13.9	63	N	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C.	30.04	763.0	30.15	765.8	64	17.8	83	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Wickenburg, Arizona	.....	.....	.....	.....	51	10.6	40	Calm	.....	.....	0	1c	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	30.06	763.5	30.12	765.0	63	17.2	83	NE	5	2.2	.....	5k	0	N	.....	0	0	Fair	
Winnemucca, Nevada	25.58	649.7	29.94	760.5	42	5.6	66	NE	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Wood's Holl, Mass.	30.14	765.5	30.17	766.3	55	12.8	93	Calm	0	0	.....	.....	Fg	.....	Calm	0	0	Dense fog	
Yankton, Dakota	28.81	731.8	30.06	763.5	68	20.0	79	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Yuma, Arizona	29.63	752.6	29.77	756.1	61.6	16.4	61	SW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
SUB-SERIES.																			
Bogota, U. S. Columbia	22.07	560.6	.....	.....	50.5	10.3	81	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	Thomas Herran
Buff Bay Town, Jamaica.‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.85	758.2	29.90	759.4	78	25.6	82	Calm	0	0	.....	0	0	.....	.....	0.15	3.8	Clear	A. Van Caneghem, Ass't.
Jakobshavn, Greenland	29.79	756.6	29.84	757.9	43.2	6.2	.....	NW	.....	.....	4	.....	1	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I.	29.90	759.4	29.91	759.7	82.7	28.2	70	Calm	0	0	.....	8ck	0	S	.....	0	0	.....	Robert Johnstone
Navassa, W. I.	29.83	757.7	29.91	759.7	81	27.2	78	E	12	5.4	.....	8es	2k;n	NW	E	0	0	Hazy	F. M. Everett.
Paramaribo, S. A.	29.98	761.5	29.99	761.7	79	26.1	87	E	.....	.....	2	4ck	4s	E	.....	1.050	26.7	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.38	746.2	29.94	760.5	78	25.6	84	Calm	.....	.....	0	.....	10ks	.....	N	0	0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	77.0	25.	.....	W	.....	.....	1	10ck	0	W	.....	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	29.90	759.4	29.92	760.0	82	27.8	79	Calm	0	0	.....	4ks	8k	.....	S	0.20	5.1	Cloudy	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	30.22	767.6	30.27	768.8	32.0	0.0	95	NE	14	6.3	.....	2k	1s	E	E	0	0	Fair	J. Fortescue & W. Wood.

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

BRITISH NAVAL SERIES.

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

H. M. S. Albatross, N. 37° 34′, E. 121° 25′	29.79	756.7	76	24.4	...	S			3		8							D. clouds	Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.06	763.5	71.2	21.8	53	SW			1		6							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 23° 38′, E. 58° 36′	29.62	752.3	94	34.4	61	SE			1		2	W						D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			66	18.9		SSE			1		6	SSE						D. clouds	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	29.97	761.2	84	28.9	83	ESE			2		4							D. clouds.	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 11′, E 18° 26′	29.93	760.2	63	17.3	72	NW			3-5		4	NW						Squally	Com. F. W. Richards.
H. M. S. Champion, S. 10° 13′, W. 18° 10′	29.88	758.9	79	26.1	70	ESE			2		1					3	SSW	Blue sky	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 36° 51′, E. 123° 13′	29.90	759.4	57	13.9	94	S			2-3		0							Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 36° 20′, E. 15° 10′	30.01	762.2	75	23.9		WSW			1		0							Blue sky.	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, S. 1° 01′, W. 18° 16	30.02	762.5	78	25.6	91	ESE			4		1					3	SE	Blue sky	Capt. J. C. Parvis.
H. M. S. Daring, N. 5° 43′, E. 97° 09′	29.72	754.9	84	28.9		NW			1		2	SW				1	WNW	D. clouds	Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.96	761.0	78	25.6	82	NE			1		5	NE						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 34′, W. 52° 41′	30.08	764.0	37.5	3.1	90	NE			1-2		10					1	NE	Drizzling	Capt. W. R. Kennedy.
H. M. S. Dryad, N. 22° 18′, E. 59° 40′	29.61	752 1	100?	37.8?		SE			1		1	SW				1	S	Blue sky	Capt. John Hext.
H. M. S. Eclipse, N. 8° 34′, E. 81° 10′	29.87	758.7	90	32.2		NE			1-2		3							D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 1° 17′, E. 103° 51′	29.77	756.1	83	28.3		N			1		1	SW						Blue sky	Comm. C. Johnstone.
H. M. S. Emerald, S. 1° 30′, E. 174° 45′	29.82	757.4	83.5	23.6		SE			1-2		1							Blue sky	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, S. 13° 39′, E. 78° 12′	29.92	760.0	81	27.2	78	SE			3		1	SSE				2	SE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn, N. 13° 52′, E. 42° 45′	29.68	753.9	87.5	30.8	78	WNW			2		4					1	N	D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo N. 20° 44′, W. 83° 25′	29.85	758.2	84	28.9	87	SSW			2		1					1	SW	Blue sky	Comm. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 47° 25′, W. 128° 30′	29.81	757.2	46	7.8	84	SW			4-6		9					3	WSW	Showery	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.44	747.8	42	5.6	82	Calm			0		0								Capt. L. F. Jones.
H. M. S. Griffon, N. 23° 41′, W. 80° 26′	29.83	757.7	79	26.1	91	SW			3		10					3	SW	Raining	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant, Melbourne, Australia	30.08	764.0	54	12.2	74	N			5-6		5	N						Squally	Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Alexandria, Egypt	29.95	760.7	70	21.1	57	WNW			1		0					1	WNW	Blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 27° 55′, E. 123° 14′	29.97	761.2	65	18.3	94	ENE			3-5		10	W				3	E	Raining	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.97	761.2	63	17.2		Calm			0		7	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, N. 33° 38′, E. 128° 55′	30.04	763.0	69	20.6		W			1		2							D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Now Chow I'd, China Sea	29.85	758.2	82.0	27.8	86	SE			3		5					2	SE	Squally	Capt. A. Carpenter.
H. M. S. Midge, Amoy, China	29.87	758.7				NE			2		6	NE						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 36° 07′, W. 5° 21′	29.96	761.0	67	19.4	94	SW			4		2	WSW						D. clouds	Capt. H. H. Rawson.
H. M. S. Modeste, S. 5° 17′ E. 106° 18′	29.85	758.4	85	29.4	79	Calm			0		5							D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Goletta, Tunis, N. Africa	29.98	761.5	74	23.3	81	ESE			2		7	ESE						D. clouds	Capt. G. Tryon, C. B

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	30.19	766.8	52.5	11.4	79	NE			2									D. clouds	Capt. E. B. Drummond.
H. M. S. Orontes, Off Cape Colony†	29.92	760.0	61.5	16.4	80	NW			5-6		5	WNW				4	SSW	Squally	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S Pelican, N. 8° 55′, W. 79° 30′	29.85	758.2	82.5	28.1		Calm			0		6					2	SE	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, N. 13° 57′, W. 70° 47′	29.85	758.2	83	28.3	83	E			3-4		5					4	E	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler, S. 5° 18′, E. 11° 40′	29.91	759.7	75	23.9		SSE			2		9	SSW				1	S	D. clouds	Capt. Hon. A.C.Littleton.
H. M. S. Ready, Rangoon, India	29.69	754.1	83	28.3		SW			3		2	WSW				5	SSW	D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	29.87	758.7	49	9.4		Calm			0		2							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.87	758.7	81.4	27.4	80	SE			2		6							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 10° 55′, E. 74° 35′	29.36	745.7	85	29.4	87	W			3-4		9	W				4	W	D. clouds	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 16° 54′, W. 25° 02′	30.09	764.3	75	23.9	77	NE			6		6	NE				4	NE	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 3° 39′, W. 147° 40′	29.65	753.1	81	27.2	78	ESE			4		3					3	NE	D. clouds	Capt. P. W. Stephens.
H. M. S. Thunderer, Naples, Italy	30.04	763.0	71	21.7	75	SSW			4		1					3		Blue sky	Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A	30.01	762.2	54	12.2	93	Calm			0		10	Calm						Foggy	Capt. A. H. Markham.
H. M. S. Turquoise, S. 33° 18′, W. 71° 38′			56	13.3	91	Calm			0		0							Blue sky	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I			81	27.2		N			2		4							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W	30.23	767.8	55	12.8	68	SSW			1		0							Blue sky	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Bahrein Harbor, Africa	29.67	753.6	91.5	33.1	62	NE			1-2		1	N				Sm'h		Blue sky	Capt. T. P. Nesham.
H. M. S. Zephyr, N. 35° 30′, E. 123° 25′	29.93	760.2	60	15.6	100	S			3		3	E				1	NE	D. clouds	Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, Mossamedes, Benguela	30.00	762.0	68.2	20.1	80	N			1		5							D. clouds	Carlos Candido dos Reis, Comd't
Quanza, Santiago, Cape Verde, P'd	29.98	761.5	78.8	26.0	76	NE			3		0					2	NE	Blue sky	Carlos M. da Silva Costa, Comd't
RioLima																			S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't,
Tamega, Hong-Kong, China	29.85	758.2	78.8	26.0	80	SE			2		8		SE					D. clouds	P. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla.	30.08	764.0	74	23.3	81	NE	13	5.8			5		NE	0	0			Fair	
N. Yard, Portsmouth, N. H.	30.14	765.5	60	15.6	88	Calm	0	0			0			0	0			Clear.	
Naval Hospital, Yokahama, Japan	29.81	757.2	63.5	17.5	92	Calm			0		0			0	0			Hazy	
Adams, S. 3° 47′, W. 81° 11′	29.72	754.9	72	22.2	90	SE			1		8					Long	SW	Cloudy	
Alaska, Callao, Peru	29.90	759.4	63	17.2	89	NW			1		10			0	0	Sm'h		Hazy	
Alert, N. 21° 35′, E. 142° 15′ *	29.98	761.5	80	26.7	78	ESE			3		5?		ESE			Sm'h		Clear?	
Alliance, Norfolk, Va	30.14	765.5	65	18.3	84	NE			2		8		NE	0	0			Cloudy	
Ashuelot, Kobe, Japan	30.00	762.0	69	20.6	65	E			1		2		Calm					Fair	
Colorado, New York, N. Y.	30.16	766.1	56	13.3	100	Calm	0	0			10			0	0			Dense fog	
Constitution, Norfolk, Va.	30.08	764.0	65	18.3	78	NNE	9	4.0			8		NNE					Cloudy	
Franklin, Norfolk, Va.	30.09	764.3	65	18.3	78	NE	12.4	5.5			2		NE	0	0			Fair	
Galena, Villafranca, France	29.99	761.7	68	20.0	84	SE			1		5					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal.	29.88	758.9	55	12.8	87	SW	2.4	1.1			5		SW					Fair	
Jamestown, Sitka, Alaska *	29.91	759.7	46	7.8	92	N			1		2			0	0			Clear	
Kearsarge, Port Royal, S. C.	30.12	765.0	69	20.6	80	NNE			2		5		W			Sm'h		Fair	
Lackawanna, S. 15° 34′, W. 119° 57′ †	30.15	765.8	79	26.1	78	ESE			2-3		2		SE			Sm'h	SE	Fair	
Marion, Montevideo, Uruguay	29.98	761.5	53	11.7	80	SW			5		5		SW	0	0	Mod.		Fair	
Michigan, Erie, Pennsylvania	30.11	764.8	78	25.6	65	E	0	0			0							Clear	
Minnesota, Newport, R. I.	30.18	766.6	55	12.8	93	WSW			1		10					Sm'h		Dense fog	
Monocacy, Yokohama, Japan	29.93	761.5	67	19.4	89	SSE			1		5		Calm					Fair	
New Hampshire, Port Royal, S. C.	30.06	763.5	69	20.6	80	NNE	24	10.7			2		NE	0	0			Clear	
Nipsic, Villafranca, France	29.98	761.5	70	21.1	70	ESE			1		8					Sm'h		D. clouds	
Onward, Callao, Peru †	29.96	761.0	64	17.8	89	Calm			0		10					Long	W	Cloudy	
Palos, Nagasaki, Japan	30.14	765.5	68	20.0	?	NE			1		5							Fair	
Passaic, Washington, D. C.	30.18	766.6	63	17.2	94	W			1		0							Clear	
Pensacola, N. 45° 40′, W. 134° 48′	30.08	764.0	49	9.4	85	WNW			6		8		NW	0	0	Mod.		Cloudy	
Portsmouth, Elizabeth River, Va.	30.14	765.5	64	17.8	94	N			2		10?		NE			Sm'h		Clear?	
Powhatan, Port Royal, S. C.	30.09	764.3	69	20.6	85	N			2		2							Fair	
Quinnebaug, N. 22° 31′, W. 44° 15′	30.15	765.8	75	24.4	77	ESE			4		8		ESE			Long	ESE	Rainy	
Ranger, N. 15° 39′, W. 95° 31′ *	29.76	755.9	81	27.2	83	W			1		2		Calm	0	0	Sm'h		Fair	
Richmond, Yokohama, Japan	29.87	758.7	68	20.0	79	S			1		0			0.05	1.3			Clear	
Saratoga, Norfolk, Va.	30.13	765.3	64	17.8	100	N			3		5		NW	Light				Cloudy	
Shenandoah, Montevideo, Uruguay *	29.92	760.0	53	11.7	80	WSW			4		5					Mod.	SW	Fair	
St. Louis, League Island, Pa.	29.71	754.6	61	16.1	100	Calm	0	0			8			0	0			Foggy	
Swatara, Shanghai, China * †	29.88	758.9	70	21.1	75	SW			2		2		Calm					D. clouds	
Tennessee, New York, N. Y.	30.17	766.3	63	17.2	94	ENE	2	0.9						0	0	Sm'h		Foggy	
Ticonderoga, S. 48° 39′, W. 98° 30′	29.97	761.2	44	6.7	100	ESE			2		8		ESE	Inap.	Inap.	Mod.	SSE	Cloudy	
Trenton, Villafranca, France *	29.96	761.0	76	24.4	68	SE			2		5			0	0	Sm'h		Fair	
Vandalia, Chester, Penn.	30.14	765.5	63	17.2	89	ESE			1		Fg							Foggy	
Wabash, Boston, Massachusetts	30.15	765.8	60	15.6	88	SW	1	0.4			2		W	0	0			Fair	
Wachusetts, N. Yard, Mare I'd, Cal.	29.91	759.7	56	13.3	94	SW			2		0							Clear	
Wyoming, Old Point, Va.	30.12	765.0	66	18.9	74	NE			3		10		NE			Sm'h	SSE	Cloudy	
Yantic, New York, N. Y. *	30.08	764.0	61	16.1	94	ESE			0-1		8							Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 19° 07′, W. 81° 00′	29.90	759.4	81	27.2	85	SE			3		6							D. clouds	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. N. Youlden.
S. S. Cipero, N. 35° 00′, W. 38° 41′	30.27	768.8	66	18.9	84	WNW			3		4					2	N	D. clouds	Capt. W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbighshire																			Capt. H. Y. Murdoch.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randell.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamports																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ N. 36° 12′, W. 41° 50′	30.20	767.1	65.5	18.6	84	W			5		10							Overcast	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria, ‡ N. 2° 33′, W. 25° 09′	30.01	762.2	85.5	29.7	68	ESE			4		4							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 10° 45′, E. 63° 15′	29.77	756.1	82.0	27.8	98	W			6		10							Overcast	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton, ‡ N. 45° 18′, W. 7° 42′	29.81	757.2	65	18.3	73	S			4		3							D. clouds	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, Clyde River, Scotland	29.97	761.2				E			1		10		E					Hazy	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Gallia, N. 48° 32′, W. 33° 54′	29.76	755.9	51	12.2		SW to WNW			5		10		W	Rain		Str'g	NW	Showery	Capt. W. H. P. Hains.
S. S. Scythia, N. 48° 08′, W. 30° 17′	29.66	753.4	58	14.4	76	NNW			5					0	0	Mod.	NW	Clear	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 42° 10′, W. 56° 42′ †	30.05	763.3	56	13.3		NNW			4		8		NW					D. clouds	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic, N. 44° 17′, W. 45° 51′ †	30.08	764.0	45	7.2		NE			3		2		NE			Sl't	NE	Raining	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, N. 44° 25′, W. 47° 31′ †	30.16	766.1	38	3.3		Var.			1		10		N	Showers		Sm'h		Hazy	Capt. Ch. W. Kennedy.
S. S. Republic, Queenstown, Ireland †	29.94	760.5	58	14.4	64	ENE			3		5		NE	0	0			Fair	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, ‡ N. 50° 02′, W. 4° 15′	29.77	756.1	53.4	11.9		E			4		8		SE	6 hours		Mod.	E	Hazy	
S. S. Köln																			Capt. Th. Jüngst.
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, Philadelphia, Pa	30.04	763.0	67	19.4	95	SW			1		8		SW					Foggy	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio, Liverpool, England...*†	29.92	760.0	64	17.8	94	SSW			3		2		SSW	Light				Fair	W. Shackford, Chief Off'r
S. S. Pennsylvania, Liverpool, England...*†	30.02	762.5	63	17.2	89	E			4		2		SE					Fair	Capt. Geo. H. Doige.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 34° 22′, W. 120° 04′...†	29.95	760.7	56	13.3	81	NW			2		0			0	0	G'tl	W	Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 45° 13′, W. 179° 36′...†	30.28	769.1	48	8.9	85	NNW			3		10			0	0	Mod.	NE	Overcast	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China...*†	29.98	761.5	84	28.9	79	N			1		10		NW					Overcast	Capt. W. H. Kidley.
S. S. Oceanic, Yokohama, Japan	30.09	764.3	63	17.2	83	E			2		5?			0	0			Clear?	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Boiles.
S. S. Oregon, N. 42° 30′, W. 124° 45′...†	30.11	764.8	48.5	9.2	92	NW			2		10		NW			Mod.	NW	Cloudy	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, San Francisco, Cal...†	29.92	760.0	49	9.4	85	SW			2		0							Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 34° 44′, W. 118° 28′...†	29.96	761.0	56	13.3	81	Calm			0		0			0	0	Sm'h	NW	Clear	Geo. H. Harrison.
S. S. Senator, San Francisco, Cal...†	30.00	762.0	[illegible]	10.6	93	SW			1		2							Fair	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal...†	29.89	759.2	50	10.0	79	NW			2		8		NW					Fair	Capt. G. Debney.
S. S. Victoria, N. 47° 41′, W. 124° 35′...†	29.59	751.7	51	10.6	93	SSE			5		10		SW			Light	SSE	Heavy rain	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 31° 35′, W. 178° 37′	30.36	771.1	62	16.7	66	ENE			4		8		NE			Long	NE	Cloudy	A. Bannerman, 2d Officer
S. S. City of New York, Sydney, N. S. W.†	30.17	766.3	51	10.6	100	W			1		0							Clear	Wm.H.Hawes,2d Officer.
S. S. City of Panama, Mazatlan, Mexico...†	29.89	759.2	74	23.3	72	NE			2	2c	0	SE		0	0	Sm'll	SE	Clear	Capt. D. S. Austin.
S. S. City of Peking, Yokohama, Japan...†	30.00	762.0	66	18.9	79	E			1		2			0	0	Sm'h		Clear	Capt. G. G. Berry.
S. S. City of Sidney																			Capt. H. C. Dearborn.
S. S. City of Tokio, N. 37° 17′, W. 130° 59′...†	30.31	769.9	55	12.8	87	WNW			6		10		WNW			R'gh	N	Cloudy	A. L. Ritchie, 2d Officer
S. S. Colima, Panama, Panama...†	29.88	758.9	81	27.2	78	SW			4		8		W	0	0			Cloudy	Capt. R. R. Searle.
S. S. Granada, N. 27° 20′, W. 114° 45′...†	29.84	757.9	60	15.6	76	WNW			5		10		WNW	0	0	Mod.	WNW	Foggy	Capt. M. Connolly.
S. S. Zealandia, S. 18° 30′, W. 172° 04′	29.96	761.0	68	20.0	90	S			1		2		S	0	0	Sm'h	S	Fine	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, N. 48° 38′, W. 15° 44′...†	29.79	756.7	61	16.1	88	E			1		8		E	0	0	Sm'h	SW	Overcast	A. Feddersen, 2d Officer.
S. S. Rhyniand, N. 48° 24′, W. 26° 52′...†	29.74	755.4	57	13.9	75	NW			6		2		NW	0.1	3.	Mod.	NW	Clear	Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 40° 51′, W. 72° 00′	30.13	765.3	55	12.8	80	Calm	0	0			Fog			0	0	Sm'h		Foggy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 19° 50′, W. 69° 20′...*†	30.06	763.5	81	27.2		ESE			4		10		ESE	0	0	Sm'h	ESE	Fair	Capt B. F. Woodbury.
Brigantine George, N. 30° 00′, W. 63° 56′...†	30.14	765.5	76	24.4		NW			3		8			Sho	wers	Mod.	ESE	Squally	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Md..†	30.24	768.1	66	18.9	89	WNW	1	0.4		0	2s			0	0			Fine	
Bark Sunbeam, Lisbon, Portugal...†	29.82	757.4	66	18.9	83	SSW			8		10		SW	Light				Cloudy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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W. B. Hazen

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

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 26, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instru-m'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco	‡		30.18	766.5	70.5	21.4	77	NE			2		0			0	0	Clear	Dr. Ollive.
Nemours	‡		30.04	763.0	70.5	21.4	93	SSW			2		1			0	0	Very fair	Raynard.
Algiers	‡		30.03	762.8	73.0	22.8	50	WNW			6		6			0	0	Cloudy	Nicolas.
La Calle	‡		29.99	761.7	75.2	24.0	74	NNW			2		5			0	0	Cloudy	Fonfrède.
Tunis	‡		30.01	762.2															Jacques.
Sfax	‡		30.09	764.2															Gau.
Saida	‡		30.08	764.1	69.6	20.9	50	NW			3		7			0.008	0.2	Very cloudy	Dumas.
Tebessa	‡		30.07	763.7	74.8	23.8	40	Calm			0		9			0.024	0.6	Very cloudy	Watrin.
Geriville	‡																		Lonchamp.
Laghouat	‡		30.08	764.1	81.3	27.4	53	W			1		4			0.795	20.2	Cloudy	Herbin.
Biskra	‡		30.04	763.0															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.85	758.4	29.95	760.7	51.2	10.7	88	W	7	3.1			10			0.03	0.8	Showery	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram																			
Cracow, I. R. Obs'y	29.29	744.0	29.82	757.3	77.0	25.0	49	SE			3	2				0	0		Prof. Ivan Stozir.
Eperies	29.09	738.8	29.82	757.4	74.8	23.8	60	ESE.	13.0	5.8		3				0.138	3.5		Dr. Wierzbicki.
Gratz	28.93	734.9	29.76	756.0	78.8	26.0	45	N			1	cs	48			0	0		Julius Mikolik.
Hermannstadt	28.60	726.4	29.80	756.9	69.4	20.8	64	SW			2		5			0	0		Andreas Rospini.
Kremsmunster, Obs'y	28.38	720.8	29.75	755.7	69.4	20.8	78	E			1		6			0.362	9.2	Rainy	Prof. A. Gottschling.
Lemberg	28.48	723.5	29.77	756.1	70.5	21.4	63	N			1		4			0	0		The Staff.
Pola	28.88	733.5	29.82	757.5	71.8	22.1	57	NE			2		4			0	0		Dr. T. Stanecki.
Szathmar	29.77	750.1	29.87	758.8	76.5	24.7	57	SE			1		7			0.126	3.2		I. R. Hydrographic Office.
Szegedin	29.32	744.8	29.76	756.0	78.8	26.0	29	W			1		2			0	0		Beicht Peter, S. J.
Trieste	29.52	749.9	29.79	756.7	73.8	23.2	68	W			1		5			0	0		Karl Stancel.
Vienna	29.78	756.5	29.89	759.1	73.6	23.1	59	Calm			0		1			0.173	4.4	Slightly Cl'dy	Secco.
	29.13	740.0	29.82	757.5	71.2	21.8	58	E			1		1			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.92	760.0	30.01	762.2	51.7	10.9	87	E	7	3.1			6			0.010	0.3	D. clouds	W. Boswell.
Armagh, Observatory	29.68	753.9	29.90	759.4	65.4	18.6	72	ENE	7	3.1			1					D. clouds	S. Call.
Bidston, Liverpool Obs'y			29.84	757.9	65.7	18.7	62	NNW	10	4.5			5					Misty	John Hartnup.
Bolton, Sharples	29.30	744.2	29.83	757.7	68.8	20.4	67	ENE	24	10.7			7					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.44	747.8	29.83	757.7	63.4	17.4	72	SE			3		5			0.25	6.3	Showery	J. McLandsbo ough, F.R.S
Bridgetown, Barbadoes	29.92	760.0	29.95	760.7	86	30.0	68	NE			2		3					D. clouds	Corpl. J. Surgener, A.H.C.
Cardington			29.79	756.7	68.4	20.2	77	NW			0.2		10					Overcast	John McLaren.
Chatham, School M. E.	29.67	753.6	29.80	756.9	67.0	19.4	74	W			1		7					Gloomy	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.68	753.9	29.90	759.4	57.6	14.2	83	SSE			1		9					Foggy	The Staff.
Fort Napier, Natal	27.53	699.2	29.75	755.6	73.2	22.9	100	NE			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.61	752.1	29.84	757.9	88	31.1	80	W			1		4					Drizzling	Sgt. C. F. Keane.
Galway, Queen's College			29.75	755.6	70	21.1	100	E			2		8			0	0	Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.08	764.0	30.13	765.3	72.6	22.6	88	W			2		3					Blue sky	2nd Cpl. C. Baldwin.
Glasgow, Observatory	29.56	753.4	29.86	758.4	65.9	18.8	45	ENE			4		8			Blank		Gloomy	Harry Urquhart.
Greenwich, Royal Obs'y	29.64	752.8	29.80	756.9	62.9	17.2	77	NE			1		10					Showery	The Staff.
Guernsey	29.65	753.1	29.80	758.4	60	15.6	85	NW			2		5					D. clouds	Dr. S. E. Hoskins, F.R.S.
Kew, Observatory	29.78	750.4	29.82	757.4	62.8	17.1	78	NNW	6	2.7			10					Threatening	The Staff.
Leicester. Museum	29.57	751.1	29.82	757.4	64.5	18.1	81	N			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.88	758.9	29.96	761.0	74.8	23.8	77	SE			1		7			0.01	0.3	D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas	29.87	758.7	29.92	760.0	77.5	25.3	84	N			3		8					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.33	745.0	29.85	758.2	57.7	14.3	94	ENE			0–1		10					Overcast	John Mac Email.
Oxford, Radcliffe Obs'y	29.60	751.8	29.83	757.7	61.2	16.2	82	Calm			0		10					Overcast	The Staff.
Plymouth	29.80	756.9	29.88	758.9	59.4	15.2	80	SW			2		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			30.01	762.2	59.2	15.1	75	SE	20	8.9			4					D. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.74	755.4	29.80	756.9	65.4	18.6	80	NE			1		10			Blank		Gloomy	Serg't W. H. Lyne.
Sheffield	29.60	751.8	29.88	758.9	64.7	18.2	74	NE			1		10			0.63	16.0	Overcast	W. F. Cooper.
Silloth Rectory	29.89	759.2	29.92	760.0	63.4	17.4	71	SE			3		7			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.87	758.7	65.8	18.8	73	NE	11	4.9			10					Misty	Rev. S. J. Perry.
Stratfield Turgiss	29.63	752.6	29.84	757.9	63.8	17.7	79	E			1		10					Raining	Rev C.H.Griffiths, F.M.S
Truro, Royal Institution	29.88	758 9	29.89	759.2	64	17.8	78	NW			4		6					D. clouds	W. Newcombe.
Valencia, Observatory	29.85	758.4	29.89	759.2	62.6	17.0	68	SW	4	1.8			8					Misty	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.25	768.6	30.30	769.6	48	8.9	72	S	7	3.1		0	28			0	0	Fair	H. J. Cundall, C. E.
Chatham, N. B.*	30.23	767.8	30.29	769.4	46	7.8	78	SE	2	0.9			10s		SE	0	0	Cloudy	G. A. Blair.
Chicontimi, Quebec																			ev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	30.13	765.3	30.15	765.8	45	7.2	61	NE	2	0.9			10n		Calm	0.05	1.3	Threatening	J. McWilliams.
Fort Garry, Manitoba*	29.18	741.2	30.00	762.0	54	12.2	93	N	4	1.8		5k	5s			0.000	1.5	Cloudy	James Stewart.
Fredericton, N. B																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S *	30.20	767.1	30.33	770.4	48	8.9	82	S	5	2.2		2cs	0			0	0	Fair	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.82	757.4	30.14	765.5	62	16.7	83	S	3	1.3		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	29.93	760.2	30.12	765.0	58	14.4	76	SW	6	2.7		0	Sk			Inap.	Inap.	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason
Parry Sound, Ontario*	29.48	748.8	30.16	766.1	62	16.7	83	Calm	0	0		0	0			0	0	Clear	Rev R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.49	749.0	30.17	766.3	64	17.8	84	Calm	0	0		0	0			0	0	Clear	H. Morgan.
Port Stanley, Ontario	29.52	749.8	30.15	765.8	65	18.3	83	E	1	0.4		0	Hz			0	0	Clear	M. Payne.
Quebec, Quebec*	29.84	757 9	30.17	766.3	49	9.4	78	E			1		Hz			0	0	Hazy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.78	753.9	30.13	765.3	58	14.4	82	Calm	0	0		0	0			0	0	Clear	W. H. McIntyre.
Saugeen, Ontario*	29.45	748.0	30.15	765.8	64	17.8	79	SE	1	0.4						0	0	Smoky	K. Stewart.
St. Andrews, N. B	30.23	767.8	30.28	769.1	49	9.4	85	S	3	1.3		Hz	5n			0	0	Fair	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	30.29	769.4	30.32	770.1	55	12.8	62	SW	6	2.7		2c	0	NW		0	0	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.79	756.7	30.17	766.3	63	17.2	82	S	3	1.3		0	0			0	0	Clear	Magnetic Observatory
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	30.21	767.3	30.28	769.1	50	10.0	65	SE	2	0.9		5k	0	W		0	0	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.97	761.2	30.22	767.6	43	6.1	75	E				0	0			0.13	3.3	Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't.
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.82	757.4			65.0	18.3	78	Calm	10.3	4.6			6s					Cloudy	John Duthie.
Cape Town, C. G. H. Obs'y	29.85	758.2	29.89	759.2	56.0	13.3		NW	7.9	3.5		5	5s			1.554	39.5		The Staff, for D. Gill.
Worcester*†	28.73	729.7			60	15.6	76	WNW			2	5	5			Inap	Inap.	Dull	C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.02	762.5	30.04	763.1	62.6	17.0	84	ESE	1.6	0.7			0			0	0	Clear	M. Marc Dechevrens, S.

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

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Tempera-ture of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direc-tion. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.20	665.5	29.92	760.0	67.1	19.5	95					7cs	0			0.59	15.	Cloudy.	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.00	761.9	30.04	763.1	61.9	16.6	60	ESE	20	9			0						Oversergent Fischer.
Fanöe	29.93	760.1	29.95	760.6	70.9	21.6	60	E			6		1						Overloerer Lauridsen.
Godthaab, Greenland	29.52	749.9	29.57	751.0	43.0	6.1	78	NE			4		8					Foggy.	S. Kleinschmidt.
Stykkisholm, Iceland	29.95	750.6	29.99	761.7	47.1	8.4		SE			8		2						A. O. Thorlacius.
Thorshavn	30.10	764.5	30.13	765.4	40.8	8.2	91	NE	7	3			10					Foggy	Overloerer Bergh.
Vestervig	29.93	760.1	30.02	762.5	70.9	21.6	42	ENE			4		0						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.19	741.5	29.82	757.5	68.4	20.2	49	ENE			1		nk		NE	0	0		M. Labrone, Director.
Alençon Normal School	29.36	745.8	29.91	759.8	63.0	17.2	80	N			1		10kn		N	0.16	4.	Covered	M. Nicot, Director.
Arras, Engineer School	29.55	750.5	29.80	759.8	66.2	19.0	64	NW			1		k		W	0	0		M. Klein, Commandant.
Avignon, Normal School	29.77	750.2	29.85	758.2	68.9	20.5	72	W			1		8		S	0	0	Very cloudy	M. Giraud, Director.
Bar-sur-Seine	29.20	743.3	29.80	757.0	68.9	20.5	50	NW			2		8kn		WNW	0	0	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.58	751.4	29.84	757.9	68.9	20.5	66	WNW			1		8		WNW	0.374	9.5	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	28.97	735.7	29.82	757.5	69.8	21	57	SSE			2		cn		NW	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.59	751.0	29.85	758.1	65.3	18.5	70	E			1		8		S	0.390	9.9	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.34	745.1	29.87	758.7	66.6	19.2	61	W			1		k		W	0.708	19.5		M. Postel, Director.
Brest, Naval Observatory	29.08	753.8	29.92	760.0	68.0	20.0	70	SW			1		2k		SW	0.012	0.3		M. de Rermaree, Dir.
Caen, Normal School	29.77	756.1	29.84	757.9	63.7	17.6	78	NW			1		10			0.083	2.1	Covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.54	750.2	29.84	758.0	71.1	21.7	54	SW			1		8		SW	0.008	0.2	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.30	744.3	29.80	756.9	67.3	19.6	77	SW			1		10			0	0	Covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.50	724.0	29.83	757.7	62.2	16.8	83	NW			1		8			0.138	3.5	Stormy	M. Allnard, Director.
Cluny, Normal School	29.06	738.0	29.88	759.0	71.6	22	45	NNE			3		4		N	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.00	736.7	29.84	758.0	66.7	19.3	61	W			1	5ck	0	W	W	0	0	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.34	694.5	29.85	758.2	56.8	13.8	65	NE			4		10n		NE	0.71	18.	Covered	M. Jeangirard, Director.
Grénasque, du. Rhone	28.77	730.7	29.91	759.7	62.1	16.7	89	SE			1		10		S	0	0	Stormy	M. Kina, Director.
Grenoble, Normal School	29.04	737.0	29.78	756.5	67.3	19.6	58	NW			3		kn			0	0		M. Ablard, Director.
Guéret, Normal School	28.32	719.2	29.87	758.8	63.5	17.5	70	W			1		kn		E	0.453	11.5		M. Rivoire, Director.
Lamballe, Normal School	29.69	754.2	29.90	761.0	66.9	19.4	70	N			1				N	0.217	5.5		M. Ollitrault, Director.
Lescar, Normal School	29.20	743.1	29.91	759.6	69.4	20.8	80	SE			1		k		W	0	0		M. Chauvin, Director.
Lorient, Naval Observatory	29.89	759.2	29.99	761.8	65.1	18.4	59	WSW			3		2	S	WSW	0	0	¼ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.81	731.8	29.84	758.0	66.2	19.0	65	N			1		10		WNW	0.020	0.5	Covered	M. André, Director.
Mans, Normal School	29.59	751.0	29.89	759.3	64.2	17.9	61	NW			3		5		NNW	0.252	6.4	Cloudy	M. Piboeu, Director.
Marseille, Observatory	29.58	751.2	29.84	758.0	66.0	18.9	89	WNW			1		10		E	0.055	1.4	Raining	M. Stephan, Director.
Montlouis Pinstituteur	24.72	627.9	29.90	760.9	51.8	11.0	55	S	7.4	3.3			9			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.72	755.0	29.83	757.7	68.0	20	61	ENE			2		8	S	E	0	0	Very cloudy	M. P. Galzin, Director.
Nancy, Normal School	29.09	738.8	29.83	757.6	66.2	19	63	WNW			1	ck	5n		SW	0	0	Cloudy	M. Hasse.
Nantes, Observatory	29.70	755.9	29.92	760.0	66.7	19.3	50	NNW			1-2		8k;n	WNW	W	0	0		M. Larocque, Director.
Nice	29.83	757.6	29.80	758.5	66.9	19.4	74	E			2		10	E	E			Light rain	Capt. Boissière, Director.
Perpignan, Observatory	29.72	754.8	29.82	757.5	68.2	20.1	70	SE	7.4	3.3			9		SE	0.012	0.3		Dr. Fines.
Pic-du-Midi, Plantade	22.43	599.7			41.4	5.2							10	NE	SW	0.205	5.2	Snowing	Gen'l de Nansouty, Dir.
Privas, Normal School	28.80	731.5	29.83	757.6	71.6	22	54	S			1		10			0	0	Covered	M. Taillon.
Puy de Dôme Obs'y, Summit	25.06	636.5			47.7	8.7	90	E			1		10			0.075	1.9	Stormy	M. Allnard, Director
Rochefort, Naval Obs'y	29.88	758.9	29.91	759.7	71.0	22.0	56	NE			1		5		NE	0	0	½ covered	Lt. E. Decaux, Director
Roche-sur-Yon, N. School	29.66	753.4	29.87	758.0	68.0	20.0	57	SW			1		2		W	0	0	Slightly cl'dy	M. Monillot, Director.
Rodez, Normal School	27.71	703.9	29.81	757.1	64.9	18.3	60	NW			1		10		NW			Covered	M. Richard, Director.
Rouen, Normal School	29.77	756.1	29.85	758.3	66.2	19	64	NW			2		5		NW	0.055	1.4	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.74	755.3	29.89	759.3	62.1	16.7	81	WNW			1		5	NW	WNW	0.55	14.	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.67	753.7	29.84	757.9	69.1	20.6	61	SW			1		0	ESE	W	0.421	10.7		M. Renou, Director.
Toulouse, Observatory	29.12	739.7	29.84	758.0	70.6	24.8	60	SE			1				SE	0.209	5.3		M. Baillaud, Director.
Tours	29.67	753.6	29.87	758.6	69.8	21.0	57	W			1		8		WNW	0.512	13.0	¾ covered	M. de Tastes.
Versailles, Observatory	29.35	745.4	29.84	757.9	67.6	19.8	65	N			2					0.409	11.9		Dr. A. Bérigny, Director.
Sub-Series.																			
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.97	735.9	29.83	757.6	72.0	22.2	50	SE			1		5k		E	0.984	25.0		Prof. Dr. Hoh.
Berlin	29.60	753.3	29.82	757.4	82.8	28.2	29	NE			4		4			0	0		Prof. Dr. Arndt.
Breslau	29.34	745.2	29.87	758.6	79.0	26.1	49	E			2		8			0	0	Thunder	Royal University Obs'y.
Carlsruhe	29.38	740.2	29.79	756.7	65.8	18.8	84	SW			1		10	SW		0.012	0.3		Albert Senz.
Cassel	29.12	739.6	29.83	757.7	65.8	18.8	69	NNW			1		6	E		0.142	3.6	Thnd'r str'm	Dr. H. Möhl.
Frankfort on the Main	29.47	748.6	29.83	757.6	71.8	22.1	50	SE			1		4			0	0		Physical Society.
Friedrichshafen	28.35	720.1	29.75	755.6	62.6	17.0	72	ESE			3		10	N		0	0		Wilhelm, Chief Tel.
Hamburg	29.80	757.0	29.87	758.8	76.8	24.9	47	E			4		4			0	0		Dr. R. Kleeman.
Kiel	29.90	759.5	29.92	759.9	56.5	13.6	53	ENE			4		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.43	747.0	29.85	758.1	66.6	19.2	73	E			3		9	ESE		0.075	1.9		Prof. Dr. Bruhns.
Magdeburg	29.54	750.3	29.82	757.3	77.0	25.0	64	S			3		6ks	SE		0.150	3.8		Dr. Assmann.
Memel	30.03	702.7	30.08	703.9	74.8	23.8	30	NE			3		0						Reinbrecht & Issermann.
Munich	28.07	712.9	29.92	760.0	54.9	12.7	90	SW			3		10			0.945	24.0	Raining	Central Station.
Neufahrwasser	30.04	703.1	30.05	703.5	59.2	15.1	61	NE			3		0			0	0		A. Lothes.
Neustadt, Palatinate	29.24	742.6	29.76	755.9	73.8	23.2	59	E			1		7			0.059	1.5		Dicknether.
Stuttgart	28.87	733.4	29.73	755.1	71.1	21.7	58	W			1		10			0.118	3.0		Prof. Dr. Schoder.
Thorn																			Dr. O. Ounerth.
Weissenburg, Bavaria	28.33	719.6	29.80	757.0	70.2	21.2	41	SW			2		8	SW		0.020	0.5		Prof. Kemlein.
Wustrow	29.95	760.8	29.98	761.4	68.4	20.2	66	NE			4		3s			0	0		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.50	749.2	29.88	758.9	74.5	23.6		S			1.0		5					⅛ clear	A. Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.61	752.1	29.66	753.4	88.0	31.1	74	SSW	31.0	13.8			0			0	0	Blue sky	
Deesa	29.15	740.4	29.60	751.8	103.4	39.7	24	S	10.4	4.6			6		S	0	0	D. clouds	
Bombay	29.71	754.5	29.74	755.5	89.0	31.7	66	WNW	10.0	4.5			1	NW		0	0	D. clouds	
Poona, Yarrowda	27.86	707.5	29.65	753.2	92.3	33.5	37	W					4		ENE	0	0	D. clouds	
Belgaum	27.24	691.9	29.74	755.4	81.8	27.7	53	SSW	14.0	6.3			6	E	NW	0	0	Threatening	
Lahore	28.85	732.7	29.56	750.8	99.2	37.3	22	W	1.3	0.6			0			0	0	Blue sky	
Roorkee	28.66	728.0	29.52	749.9	96.9	36.1	22	NW	2.6	1.2			2			0	0		
Agra	28.99	736.4	29.53	750.0	104.1	40.1	17	W	4.5	2.0						0	0		
Nagpur	28.52	724.5	29.51	749.6	104.0	40.0	17	N	4.5	2.0			5		NW	0	0	D. clouds	
Jubbulpore	28.32	719.4	29.62	752.4	98.7	37.1	22	N	3.0	1.3						0	0	Blue sky	
Lucknow	29.19	741.5	29.55	750.7	99.4	37 4	16	N	1.9	0.8						0	0	Blue sky	
Allahabad	29.24	742.6	29.54	750.2	100.4	38.0	25	N	1.9	0.8			0			0	0	Blue sky	
Patna	29.39	746.4	29.56	750.9	90.4	32.4	62	ENE	3.6	1.6			5	ENE	ENE	0	0	D. clouds	
Hazaribagh	27.62	701.4	29.59	751.7	82.3	27.9	61	E	6.4	2.9			9	S	N	0.02	0.5	Showery	
Cuttack	29.50	749.3	29.58	751.4	81.1	27.3	67	WNW	1.0	0.4			10			0.16	4.1	Gloomy	
Calcutta, Alipore	29.55	750.7	29.58	751.2	78.4	25.8	95	Calm	0.1	0.04			10		SE	0.60	15.2	Showery	
Dhubri	29.56	750.7	29.68	753.8	75.5	24.2	94	ESE	6.1	2.7			10			1.60	40.6	Raining	
Chittagong	29.59	751.5	29.68	753.8	82.9	28.3	79	SE	6.2	2.8			8			0	0	D. clouds	
Sibsagar	29.26	743.2	29.59	751.6	80.9	27.2	90	SE	2.6	1.2			10	W	W	1.03	26.2	Overcast	
Zanzibar, Africa			29.97	761.2	82.0	27.8	75	SSW	4	1.8			8		S	0	0	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.48	748.8	29.88	758.9	73.6	23.1	55	Calm	0	0			8			0.217	5.5		Prof. Giovanni Clodig.
Milan	29.32	744.8	29.83	757.6	75.2	24.0	49	SW	3.8	1.7			8			0	0		Prof. Schiaparelli.
Padua	29.77	756.1	29.87	758.8	72.1	22.3	54	Calm	0	0			10	E		0.047	1.2		Prof. Dott. Lorenzoni.
Moncalieri	28.93	734.9	29.82	757.4	66.7	19.3	76	NNW	3.8	1.7			10	N		0.846	21.5		Prof. P. F. Denza.
Genoa	29.72	755.0	29.92	759.9	64.8	18.2	79	SE	3.8	1.7			10	SE		0.083	2.1		Prof. G. M. Garibaldi.
Mondovi	27.93	709.5	29.81	757.1	65.7	18.7	62	W			2		9			0	0		Prof. D. C. Bruno.
Pesaro	29.81	757.1	29.85	758.3	71.6	22.0	64	E	15.4	6.9			6	W		0	0		Prof. Luigi Guidi.
Florence	29.60	751.7	29.84	758.0	80.1	26.7	35	SW			2		9	SW		0	0		Prof. Costantino Pitter.
Leghorn	29.79	756.6	29.87	758.7	73.8	23.2	64						8	SE		0	0		Prof. P. Monte.
Rome	29.74	755.5	29.91	759.8	76.6	24.8	30	SSW	14.3	6.4			7			0	0		Prof. P. S. Ferrari.
Lecce	29.65	753.2	29.90	759.4	79.0	26.1	50	WSW	6.9	3.1			0			0	0		Prof. C. de Giorgi.
Cosenza	29.08	738.7	29.95	760.8	79.2	26.2	70	SW	3.1	1.4			0			0	0		Prof. D. Conti.
Cagliari	29.69	754.1	29.88	758.9	77.4	25.2	49	SE			4		2			0	0		Prof. A. Pacinotti.
Palermo	29.72	754.9	29.97	761.2	75.6	24.2	35	NE	4.9	2.2			9			0	0		Prof. G. Cincciatore.
Syracuse	29.87	758.8	29.92	759.9	79.9	26.6	48	SE	4.9	2.2			10	WSW		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.36	745.8	29.87	758.6	76.5	24.7	51	W	7.4	3.3			2	W		0	0		Prof. F. Brioschi.
Stelvio	22.12	561.9			44.6	7.0	55	SE			2		8ks	SW		0.173	4.4	Cloudy	Prof. P. F. Denza.
Valdobbia	22.13	562.1			43.0	6.1	85	SE			2		10kn	SSW		0	0	Covered	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y †	30.01	762.2	30.02	762.5	62.5	16.9	78	NNE	3.8	1.7		0	18			0	0	Clear	K. Sasaki.
Kioto	29.88	758.9	30.05	763.3	62.8	17.1	82	E	2.0	0.9		0	18			0	0	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.83	757.7	30.03	762.7	62.4	16.9	69	WSW	0.7	0.3			0			0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	30.02	762.5	30.09	764.3	61.6	16.4	90	ENE	4.0	1.8		0	18			0	0	Clear	The Staff.
Wakayama	30.00	762.0	30.05	763.3	65.4	18.6	81	S	1.8	0.8		0	0			0	0	Clear	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.92	760.0	30.11	764.8	75.4	24.1	64	E	19.0	8.5		0	2		ESE	0.27	6.8	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Barcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.69	754.1	29.95	760.6	74.0	23.3	79	ENE	0.9	0.4			9n		SE	0	0	Very cloudy	F. Quijano, U. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.79	756.7	29.79	756.7	74.1	23.4		W			3					0	0		
Groningen	29.76	755.9	29.82	757.3	74.3	23.5		ENE			4					0	0		
Helder	29.81	757.2	29.81	757.2	65.3	18.5		ENE			2					0.236	6.0		
Hellevoetsluis	29.78	756.3	29.78	756.3	82.4	28.0	67	SE			1					0.028	0.7		
Utrecht	29.73	755.1	29.78	756.3	80.1	26.7	47	SSE			2		5			0.811	20.6	Cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrumental error and temperature. Inch.	Barometer. Corrected for instrumental error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind Up'er 0—10	Clouds. Amount and kind Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.03	762.7	30.09	764.3	70.5	21.4	32	NNW	6.0	2.7			2			0	0		
Christiania	29.91	759.6	30.04	763.1	80.6	27.0	30	SSW	4	2			3			0	0		
Gjesvær	30.24	768.1	30.25	768.7	29.5	— 1.4		WNW			6		10						
Lodingen	30.32	770.1	30.37	771.3	34.9	1.6	61	N			4		0			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.93	760.2	30.09	764.2	62.2	16.8	100	W	10.5	4.7			8			0.079	2.0		Dr. J. A. Sampaio.
Campo Major	29.08	738.7	30.07	763.7	67.6	19.8	52	WNW	6.3	2.8			9	WSW		0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.17	766.3	30.20	767.0	67.1	19.5	59	SW	1.8	0.8			4			0	0		Capt. D. A. da Cunha.
Lisbon, Observatory	29.81	757.2	30.17	766.3	64.6	18.1	68	W	13.6	6.1			9			0	0		The Staff.
Ponta Delgada, Azores	30.09	764.3	30.16	766.1	63.3	17.4	94	WSW	6.9	3.1			10			0.051	1.3	Light rain	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski																			Capt. Lasarew.
Archangel	30.07	763.7	30.09	764.2	32.5	0.3	83	N	22	10			10					Snow & sleet	Capt. Sseliwerstow.
Astrakhan	29.67	753.0	29.59	751.5	80.2	30.1	31	S	2	1			10ks						Capt. Wisganow.
Barnaul	29.23	742.4	29.71	754.5	64.9	18.3	35	NW	9	4			0						Meteorological Obs'y.
Dorpat	29.93	760.3	30.18	766.6	52.2	11.2	50	NNE	13	6			3k						Observatory.
Ekaterinburg	28.48	723.3	29.43	747.5	44.8	7.1	55	WNW	18	8			10n						Meteorological Obs'y.
Kasan	29.42	747.2	29.69	754.1	49.6	9.8	45	NNW	13	6			9						Observatory.
Kertch	29.74	755.4	29.71	755.9	68.5	20.3	98	Calm	0	0			9					Heavy cl'ds	Lagodio & Sastyrez.
Kieff	29.17	741.0	29.78	756.4	72.5	22.5	43	NNE	11	5		ck	3ks						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.44	747.7	29.63	752.7	78.6	25.9	51	NW	4	2			8			Blank			Meteorological Obs'y.
Moscow	29.30	744.3	29.84	758.0	58.5	14.7	56	N	7.8	3.5			7ks						Meteorological Obs'y.
Nertchinsk	27.72	704.2	30.03	762.8	41.9	5.5	48	NW	2	1			0						Meteorological Obs'y.
Nikolaiev	29.71	754.5	29.78	756.3	80.6	27.0	62	SW	9	4			2kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	29.84	757.8	29.98	761.4	77.2	25.1	27	SE	9	4			6k						Physical Observatory.
St. Petersburg	30.21	767.2	30.22	767.6	40.1	4.5	43	NNE	13	6			1k						Central Physical Obs'y.
Tashkend, Laboratory	28.24	717.4	29.71	754.6	84.2	29	48	Calm	0	0			5						Teich, A. M.
Tiflis	28.35	720.3	29.74	755.5	70.0	21.1	46	WNW	9	4			10k						Physical Observatory.
Warsaw	29.48	748.9	29.89	759.1	75.8	24.9	46	ENE	9	4			3k						Astronomical Obs'y.
Wilna	29.56	750.9	29.97	761.1	72.9	22.7	35	NE	7	3			0						Berg, Assistant.
Yeniseisk	29.48	748.7	29.77	756.1	44.1	6.7	48	W	16	7			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.01	762.2	54.8	12.7	93	E			2		10s			0	0	Foggy	Andrew Gibb.
Monach Lt. House, Hebrides			29.98	761.5		15.0	94	SE			2	0	0			0	0	Hazy	J. Youngclause.
North Unst, Shetland Isl'ds			30.15	765.8				E			1	1	0	NE					Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.75	755.6	29.85	758.3	72.0	22.2	63	SE	3.4	1.5			3k			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	29.88	759.0	29.94	760.4	60.8	16.0	58	N	2.7	1.2			10			0.268	6.8	Raining	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.00	685.8			52.7	11.5	81	SW	10.1	4.5			10			1.083	27.5	Covered	Domingo Martin.
Madrid, Royal Obs'y	27.78	705.7	29.98	761.6	62.6	17.0	56	SW	23.3	10.4		0	6			0.010	0.4	Clouds	The Staff.
Murcia, Met. Obs'y	29.83	757.7	29.98	761.4	81.5	27.5	32	NW	3.4	1.5		1	3	ESE		0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.06	738.0	29.94	760.5	62.2	10.8	85	W	15.0	6.7			0			0.220	5.6	Cloudy	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	29.84	758.0	29.91	759.7	79.5	26.4	78	SE	3.1	1.4		8c;cs	0	WSW		0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.78	756.3	29.83	757.6	82.8	28.2	82	SE	0.7	0.3		0	3km		E	0.01	0.2	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.10	764.5	30.20	767.0	67.3	19.6	61	W	11.5	5.1		0	4		W	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.88	758.9	29.97	761.2	83.1	28.4	84	SE	6.5	2.9		4cs	3k	SE	SE	0	0		Enrique Gedea, Chief Engineer.
Tuguegarao, Philippine Ids	29.73	755.2	29.88	758.9	85.0	29.4	72	S	0.2	0.1			3s		SSE	0	0	Clear	José L. Pastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.31	769.9	30.35	770.9	40.3	4.6	44	NE			4		5			0	0		
Umea	30.35	770.8	30.40	772.1	40.3	4.6	47	SSW			2		0			0	0		
Hernosand	30.39	771.2	30.41	772.5	41.5	5.3	53	NE			4		7			0	0		
Stockholm	30.01	762.2	30.19	766.7	59.4	15.2	39	E			4		0			0	0		
Wisby	30.08	764.0	30.14	765.5	59.7	15.4	55	N			2		0			0	0		
SUB-SERIES.																			
Upsala	30.10	764.6	30.19	766.8	60.1	15.6	43	NE	15.4	6.9			0			0	0		Nils Ekholm
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.40	721.3	29.78	756.5	68.7	20.4	48	N			2		7			0	0		The Observatory.
Zurich	28.23	717.0	29.83	757.0	65.2	19.0	72	NE			2		4			0.024	0.6		The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.86	758.4	62.4	16.9	75	N	11	5.0			10		N	0	0		The Observatory.
Valona			30.00	762.0	71.1	21.7		W			1		0			0	0	Clear	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			29.91	759.8	76.8	24.9	62	W			2		3k		W	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
Albany, New York	30.18	766.6	30.27	768.8	64.5	18.1	78	S	8	3.6	.....	0	8ks	.....	S	0.43	10.9	Fair	
Alpena, Michigan	29.49	749.0	30.13	765.3	60.5	15.8	82	NW	2	0.9	.....	0	Fg	.....	.....	0	0	Clear	
Atlanta, Georgia	28.95	735.6	30.09	764.3	63.2	17.3	73	NE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Atlantic City, New Jersey	30.22	767.6	30.24	768.1	55	12.8	100	NE	16	7.2	.....	.....	10s;fog	.....	Calm	0	0	Cloudy	
Augusta, Georgia	29.93	760.2	30.13	765.3	65.3	18.5	78	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Baltimore, Maryland	30.24	768.1	30.29	769.4	60	15.0	77	N	5	2.2	.....	.....	10s	.....	N	0	0	Cloudy	
Barnegat, New Jersey	30.20	767.1	30.22	767.6	55	12.8	100	NE	14	6.3	.....	.....	Fg	.....	Calm	0	0	Dense fog	
Bismarck, Dakota	28.15	715.0	30.00	762.0	58	14.4	92	NE	8	3.6	.....	8c	0	S	.....	0.91	23.1	Cloudy	
Boise City, Idaho	27.02	686.3	29.98	761.5	52.3	11.3	60	SE	4	1.8	.....	1cs	0	Calm	.....	0	0	Clear	
Boston, Massachusetts	30.12	765.0	30.28	769.4	48.5	9.2	91	NE	2	0.9	.....	.....	10s	.....	.....	0.01	0.3	Cloudy	
Brackettville, Texas	28.88	733.5	29.91	759.7	69.8	21.0	53	SE	6	2.7	.....	5ck	0	S	.....	0	0	Fair	
Brownsville, Texas	29.88	758.9	29.93	760.2	79	26.1	78	SE	4	1.8	.....	5k	0	SE	.....	0	0	Fair	
Buffalo, New York	29.48	748.8	30.10	766.1	68.8	20.4	61	SW	2	0.9	.....	.....	Sk	.....	.....	0	0	Dense smoke	
Burlington, Vermont	29.88	758.9	30.17	766.3	64.0	17.8	78	S	7	3.1	.....	5c	0	E	.....	0	0	Fair	
Cairo, Illinois	29.77	756.1	30.15	765.8	71	21.7	85	E	2	0.9	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Campo, California	27.34	694.4	29.91	759.7	37	2.8	81	NW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Camp Thomas, Arizona	27.13	689.1	.....	.....	58	14.4	32	Calm	.....	.....	0	2cs	0	.....	.....	0	0	Clear	
Cape Henry, Virginia	30.15	765.8	30.17	766.3	59	15.0	88	NE	26	11.6	.....	.....	10s	.....	NE	Inap.	Inap.	Cloudy	
Cape May, New Jersey	30.20	767.1	30.22	767.6	57	13.9	87	N	16	7.2	.....	.....	10s	.....	N	0	0	Cloudy	
Castroville, Texas	29.18	741.2	29.88	758.9	67	19.4	84	N	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Cedar Keys, Florida	30.00	762.0	30.03	762.7	70	21.1	85	NE	13	5.8	.....	0	8ks	.....	.....	Inap.	Inap.	Fair	
Champaign, Illinois	29.33	745.0	30.10	764.5	68.7	20.4	84	SE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Charleston, S. Carolina	30.03	762.7	30.09	764.3	67	19.4	79	N	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Charlotte, N. Carolina	29.28	743.7	30.08	764.0	68.0	20.0	56	NE	6	2.7	.....	0	Sk	.....	.....	0	0	Clear	
Chattanooga, Tennessee	29.34	745.2	30.13	765.3	66	18.9	79	W	2	0.9	.....	5cs	Fg	SW	Calm	0	0	Fair	
Cheyenne, Wyoming	24.04	610.6	29.98	761.5	43.4	6.3	83	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Chicago, Illinois	29.42	747.3	30.10	764.5	63.8	17.7	73	Calm	0	0	.....	Hz	Hz	.....	.....	0	0	Light haze	
Chincoteague, Virginia	30.18	766.6	30.20	767.1	56	13.3	100	NE	22	9.8	.....	.....	10u	.....	Calm	Inap.	Inap.	Light rain	
Cincinnati, Ohio	29.51	749.5	30.15	765.8	67	19.4	64	NW	1	0.4	.....	.....	Sk	.....	Calm	0	0	Dense smoke	
Cleveland, Ohio	29.46	748.3	30.18	766.6	63	17.2	68	SE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Coleman City, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Columbus, Ohio	29.33	745.0	30.15	765.8	66	18.9	69	Calm	0	0	.....	0	Fg	.....	.....	0	0	Clear	
Concho, Texas	28.09	713.5	29.73	755.1	64	17.8	89	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Corsicana, Texas	29.56	750.8	30.02	762.5	67	19.4	89	NW	2	0.9	.....	0cs	0	.....	.....	2.66	67.6	Fair	
Davenport, Iowa	29.47	748.5	30.08	764.0	70	21.1	70	SE	1	0.4	.....	Hz	0	Calm	.....	0	0	Clear	
Dayton, Washington T'y	28.14	714.7	29.80	756.9	43.5	6.4	83	W	2	0.9	.....	0	5ks	.....	SW	0	0	Fair	
Deadwood, Dakota	25.36	644.1	.....	.....	55	12.8	68	NE	3	1.3	.....	5cs	5ks	.....	NE	0.02	0.5	Cloudy	
Decatur, Texas	28.85	732.8	29.98	761.5	67	19.4	89	NE	5	2.2	.....	1ck	0	.....	.....	0	0	Fair	
Delaware Breakwater, Del.	30.19	766.8	30.21	767.3	56	13.3	100	NE	20	8.9	.....	.....	10s	.....	NE	0	0	Cloudy	
Denison, Texas	29.25	742.9	30.02	762.5	69	20.6	90	N	2	0.9	.....	2cs	0	Calm	.....	0.36	9.1	Fair	
Denver, Colorado	24.76	628.9	29.98	761.5	51.5	10.8	83	NW	3	1.3	.....	0	0	.....	.....	0.20	5.1	Clear	
Des Moines, Iowa	29.18	741.2	30.03	762.7	67	19.4	84	SW	1	0.4	.....	2c	0	.....	.....	0	0	Clear	
Detroit, Michigan	29.48	748.8	30.16	766.1	65.7	18.7	74	SE	1	0.4	.....	0	Hz	.....	.....	0	0	Clear	
Dodge City, Kansas	27.40	695.9	29.61	752.1	64	17.8	89	S	12	5.4	.....	0	0	.....	.....	0.06	1.5	Clear	
Dubuque, Iowa	29.40	746.7	30.08	764.0	70.2	21.2	75	SE	2	0.9	.....	0	Hz	.....	Calm	0	0	Clear	
Duluth, Minnesota	29.34	745.2	30.01	762.2	54	12.2	93	NE	2	0.9	.....	.....	10n	.....	NE	0.12	3.0	Light rain	
Eagle Pass, Texas	29.16	740.7	29.87	758.7	72.3	22.4	85	SE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Eagle Rock, Idaho	25.17	639.3	29.82	757.4	39	3.9	38	N	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Eastport, Maine	30.21	767.3	30.28	769.1	51.2	10.7	61	S	5	2.2	.....	5cs	2s	NW	.....	0	0	Cloudy	
El Paso, Texas	29.21	665.7	.....	.....	59	15.0	82	E	4	1.8	.....	0	5s	.....	NE	Inap.	Inap.	Fair	
Erie, Pennsylvania	29.45	748.0	30.14	765.5	71	21.7	58	S	8	3.6	.....	Hz	0	.....	.....	0	0	Clear	
Escanaba, Michigan	29.44	747.8	30.08	764.0	61	16.1	71	SW	3	1.3	.....	2k	Sk	W	Calm	0	0	Clear	
Florence, Arizona	28.35	720.1	29.95	760.7	60	15.6	34	NE	3	1.3	.....	2c	0	N	.....	0	0	Clear	
Fort Apache, Arizona	24.98	634.5	30.43	772.9	41	5.0	57	E	3	1.3	.....	2c	0	Calm	.....	0	0	Fair	
Fort Assinnaboine, Montana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Bennett, Dakota	28.28	718.3	.....	.....	61	16.1	82	E	24	10.7	.....	8cs	0	S	.....	0.15	3.8	Cloudy	
Fort Benton, Montana	27.07	687.6	.....	.....	45	7.2	61	NE	3	1.3	.....	0	0	.....	.....	0.18	4.6	Clear	
Fort Buford, Dakota	27.98	710.7	29.80	756.9	52	11.1	79	NE	7	3.1	.....	.....	Fg	.....	Calm	0	0	Foggy	
Fort Custer, Montana	26.75	679.7	.....	.....	53	11.7	93	E	8	3.6	.....	0	5s	.....	NE	0	0	Fair	
Fort Davis, Texas	25.19	639.8	30.15	765.8	59	15.0	82	N	1	0.4	.....	.....	10s	.....	W	0	0	Cloudy	
Fort Elliott, Texas	27.25	692.1	29.46	748.3	62	16.7	88	S	8	3.6	.....	.....	Fg	.....	.....	0	0	Light fog	
Fort Gibson, Indian T'y	29.50	749.3	30.02	762.5	71	21.7	80	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Grant, Arizona	25.19	639.8	29.99	761.7	58	14.4	22	E	6	2.7	.....	2cs	0	.....	.....	0	0	Clear	
Fort Griffin, Texas	28.66	728.0	29.88	758.9	68.2	20.1	84	NE	1	0.4	.....	0	0	.....	.....	0.74	18.8	Clear	
Fort Keogh, Montana	27.42	696.5	.....	.....	57	13.9	93	NE	2	0.9	.....	5cs	0	.....	.....	0	0	Fair	
Fort Macon, North Carolina	30.04	763.0	30.09	763.5	63	17.2	89	NW	18	8.0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Fort McKavett, Texas	27.74	704.6	29.61	752.1	65	18.3	84	E	3	1.3	.....	1ck	0	.....	.....	0	0	Clear	
Fort Missoula, Montana	26.55	674.4	.....	.....	58	13.3	57	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort St. Michaels	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Shaw, Montana	26.28	667.5	.....	.....	40	4.4	82	W	2	0.9	.....	2c	0	S	.....	0.10	2.5	Clear	
Fort Sill, Indian Territory	28.79	731.3	29.80	756.4	67	19.4	89	Calm	0	0	.....	1c	0	W	.....	0	0	Clear	
Fort Stevenson, Dakota	28.11	714.0	.....	.....	58	14.4	94	NE	10	4.5	.....	.....	10ks	.....	NE	0.51	13.0	Cloudy	
Fort Verde, Arizona	.....	.....	.....	.....	51.2	10.7	28	SW	.....	.....	1	5cs	0	S	.....	0	0	Fair	
Fredericksburg, Texas	28.28	718.3	29.80	756.9	66	18.9	84	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Galveston, Texas	29.95	760.7	29.99	761.7	77	25.0	82	W	5	2.2	.....	8cs;k	0	W	.....	0.49	12.4	Cloudy	
Grand Haven, Michigan	29.49	749.0	30.12	765.0	70	21.1	61	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Hatteras, North Carolina	30.01	762.2	30.03	762.7	63	17.2	100	N	34	15.2	.....	.....	10s	.....	N	0	0	Cloudy	
Helena, Montana	25.71	653.0	.....	.....	51	10.6	59	S	1	0.4	.....	0	0	.....	.....	0.05	1.3	Clear	
Henrietta, Texas	29.60	736.0	29.90	759.4	65	18.3	94	SE	2	0.9	.....	2cs	0	.....	.....	0	0	Clear	
Indianapolis, Indiana	29.35	745.5	30.11	764.8	70.5	21.4	53	Calm	0	0	.....	0	Hz	.....	Calm	0	0	Clear	
Indianola, Texas	29.90	759.0	29.98	761.5	75.8	24.3	86	S	4	1.8	.....	8k	0	.....	.....	0	0	Fair	
Jacksboro, Texas	28.80	733.0	29.95	761.0	64	17.8	89	SE	1	0.4	.....	1cs	0	Calm	.....	0.07	1.8	Clear	
Jacksonville, Florida	30.00	762.0	30.05	763.3	71	21.7	80	NE	5	2.2	.....	2cs	5s	.....	NE	Inap.	Inap.	Fair	
Keokuk, Iowa	29.44	747.8	30.00	762.5	69.7	20.9	77	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Key West, Florida	29.89	759.2	29.92	760.0	78.4	25.8	85	E	12	5.4	.....	2k	2ks	E	E	0	0	Fair	
Kittyhawk, North Carolina	30.09	764.3	30.11	764.8	58	14.4	100	NE	36	16.1	.....	.....	10n	.....	NE	0.07	1.8	Light rain	
Knoxville, Tennessee	29.10	740.7	30.16	766.1	63	17.2	80	NE	3	1.3	.....	1c	0	Calm	.....	0	0	Clear	
La Crosse, Wisconsin	29.29	744.0	30.01	762.2	77	25.0	56	S	5	2.2	.....	0	0	.....	.....	0	0	Clear	
La Mesilla, New Mexico	26.05	661.7	30.20	767.1	62	16.7	67	N	2	0.9	.....	5	8ks	.....	SW	0.14	3.6	Cloudy	
Laredo, Texas	29.49	749.0	29.82	757.4	74	23.3	81	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Leavenworth, Kansas	29.18	741.2	29.99	761.7	67	19.4	79	SE	1	0.4	.....	2c	0	W	.....	0	0	Clear	
Lewiston, Idaho	28.97	735.8	29.60	751.8	50	10.0	53	SW	1	0.4	.....	0	5s	.....	Calm	0	0	Fair	
Little Rock, Arkansas	29.70	755.9	30.07	763.8	67	19.4	95	E	4	1.8	.....	2cs	2ks	.....	SE	Inap.	Inap.	Fair	
Los Angeles, California	29.57	751.1	29.93	760.2	51.8	11.0	79	NE	3	1.3	.....	.....	1cs	.....	Calm	0	0	Cloudy	
Louisville, Kentucky	29.56	750.8	30.11	764.8	67.5	19.7	84	N	2	0.9	.....	c	0	.....	.....	0	0	Clear	
Lynchburg, Virginia	29.52	749.8	30.18	766.6	69	20.6	61	NE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Madison, Wisconsin	29.10	739.1	30.06	763.5	66	18.9	74	SE	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Marquette, Michigan	29.37	745.7	30.04	763.0	65	18.3	58	E	1	0.4	.....	5k	Sk	.....	.....	0	0	Dense smoke	
Mason, Texas	28.37	720.6	30.09	764.3	63.9	17.7	92	Calm	0	0	.....	1c	0	Calm	.....	0	0	Clear	
Memphis, Tennessee	29.80	756.9	30.13	765.3	71	21.7	80	Calm	0	0	.....	8cs	0	NE	.....	0.01	0.3	Fair	
Milwaukee, Wisconsin	29.38	746.2	30.10	764.5	62	16.7	67	SE	3	1.3	.....	0	Sk	.....	.....	0	0	Dense smoke	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill	Weather.	OBSERVERS.
UNITED STATES SERIES—CONTINUED.																			
Mobile, Alabama	29.99	751.7	30.06	763.5	69	20.6	85	NE	6	2.7		5cs	0	NE		0.02	0.5	Fair	
Montgomery, Alabama	29.89	759.2	30.12	765.0	66.2	19.0	78	E	3	1 3		0	0			0	0	Clear	
Moorhead, Minnesota	28.95	735.3	29.87	758.7	62	16.7	88	S	8	3.6			10n		S	0.13	3.3	Light rain	
Morgantown, W. Virginia	29.22	742.2	30.19	766.8	67	19.4	69	Calm	0	0		0	0			0	0	Clear	
Mt. Washington, N. H.	24.08	611.6	30.44	773.2	50	10.0	78	NW	22	9.8		10c	8s	Calm	Ca'm	0.06	1.5	Fair	
Nashville, Tennessee	29.61	752.1	30.14	765.5	64.2	17.9	93	Calm	0	0			Fg			Inap	Inap	Dense fog	
New Haven, Connecticut	30.14	765.5	30.20	766.6	53	11.7	80	N	6	2.7			08[illegible]			0	0	Cloudy	
New London, Connecticut	30.20	768.0	30.31	769.9	51	10.6	93	E	2	0.9			10		Calm	0	0	Cloudy	
New Orleans, Louisiana	29.96	761.0	30.02	762.5	74.5	23.6	84	E	6	2.7		1k	0	E		Inap.	Inap.	Clear	
Newport, Rhode Island	30.21	767 3	30.20	768.0	50.8	10.4	88	N	5	2.2			Fg			0	0	Dense fog	
New River, N. Carolina																			
New Shoreham, Rhode I'd	30.25	768.3	30.28	769.1	47.8	8.8	93	E	16	7.2			Fg		S	0	0	Dense fog	
New York, New York	30.10	764.5	30.28	769.1	56.3	13.5	90	N	6	2.7			0c[illegible]			0	0	Cloudy	
Norfolk, Virginia	30.11	764.8	30.17	766.3	58	14.4	94	NE	12	5.4			10ks		N	0.02	0.5	Cloudy	
North Platte, Nebraska	27.02	686.3	29.49	749.0	63	17.2	90	S	4	1.8		2	0			0	0	Clear	
Olympia, Washington T'y	29.80	756.9	29.88	758.9	43.0	6.1	92	S	2	0.9		8ck	0	S		0.09	2.3	Cloudy	
Omaha, Nebraska	28.89	733 8	29.94	760.5	71	21.7	75	S	8	3 6		2c	8s			0	0	Cloudy	
Oswego, New York	29.85	758.2	30.10	766.1	66.0	18.9	79	S	5	2.2		Hz	0			0	0	Clear	
Pensacola, Florida	30.02	762.5	30.05	763.3	71	21.7	85	NE	7	3.1		0	0			0.17	4.3	Clear	
Philadelphia, Pa	30.21	767.3	30.20	768.0	57	13.9	94	E	10	4.5			10s			Inap	Inap.	Cloudy	
Phœnix, Arizona	28 75	730.2	30.54	775.7	59	15.0	54	E	2	0.9		0	0			0	0	Clear	
Pike's Peak Colorado	17.89	454.4	30.10	764.5	28	— 2.2	22	SW	18	8.0		0	0			0.06	1.5	Clear	
Pioche, Nevada	23.94	608.1	29.72	754.9	46	7.8	40	Calm	0	0		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.39	746.5	30.19	766.8	61.7	16.5	83	Calm	0	0			Fg		Calm	0	0	Dense fog	
Port Fads, Louisiana	30.01	762 2	30.01	762.2	74.4	23.6	86	E	9	4.0		1k	0	E		0	0	C ear	
Port Huron, Michigan	29.53	750.0	30.18	766.0	66.3	19.1	64	N	5	2.2		0	Hz		Calm	0	0	C ear	
Portland, Maine	30.23	767 8	30.28	769.1	52	11.1	73	E	4	1.8		0	2s		Calm	0	0	C ear	
Portland, Oregon	29.87	758 7	29.94	760.5	47.1	8.4	84	S	6	2 7			10n		S	0 25	6.3	Light rain	
Portsmouth, N. Carolina					64	17.8	83	N	34	15.2		10k	0	NW		0	0	Cloudy	
Prescott, Arizona	24.09	627.1	30.05	763.3	39	3.9	40	S	2	0 9		0	0			0	0	Clear	
Punta Rassa, Florida	29.92	760.0	29.94	760.5	74.5	23.6	79	NE	11	4 9		1ck	0	Calm		0	0	Clear	
Red Bluff, California	29.48	748.8	29.62	757 4	60.5	15 8	69	SW	4	1.8		0	0s		SW	0	0	Cloudy	
Rio Grande City, Texas	29.70	755.9	29.97	761.2	72	22.2	85	SE			2	0	0			0	0	Clear	
Rochester, New York	29.55	750.0	30.15	765.8	67	19.4	69	W	2	0.9		0	Hz			0	0	Clear	
Roseburg, Oregon	29.44	747.8	30.01	762.2	45.5	7.5	84	Calm	0	0		5k	0	SW		0.01	0.3	Fair	
Sacramento, California	29.76	756.4	29.80	758.4	54.9	12 7	74	SE	11	4.9		0	8s			0	0	Fair	
St. Louis, Missouri	29.55	750.0	30.10	764.5	69.5	20.8	92	SE	3	1.3		0	Fg			0	0	Clear	
St. Paul, Minnesota	29.14	740.1	29.93	760.2	68	20.0	79	SE	3	1.3		1c	0	W		0.04	1.0	Clear	
Salt Lake City, Utah	25.52	648.2	29.84	757.9	54	12.2	43	NE	2	0.9		7k	0	SW		0	0	Fair	
San Antonio, Texas	29.24	742 7	29.92	760.0	66.8	19.3	89	Calm	0	0		0	0			0	0	Clear	
San Diego, California	29.81	757.2	29.86	758.9	60.1	15.6	65	Calm	0	0			10s			0	0	Cloudy	
Sandusky, Ohio	29.50	749 3	30.15	765.8	67	19.4	64	E	4	1.8		0	0			0	0	Clear	
Sandy Hook, New Jersey	30.24	768.1	29.27	768.8	56.0	13.3	94	SE	11	4.9			10s			0	0	Cloudy	
San Francisco, California	29.80	758.4	29.92	760.0	52	11.1	89	W	10	4.5		1cs	0	W		0	0	Clear	
Santa Fé, New Mexico	23.33	592.0	29.67	758.7	48	8.9	70	Calm	0	0			10s		S	0.32	8.1	Cloudy	
Savannah, Georgia	30 00	762.0	30.04	763.0	69	20.6	75	N	4	1.8		5ck	0	E		0	0	Fair	
Shreveport, Louisiana	29.82	757.4	30.05	763.3	71	21.7	90	NE	4	1.8			10s			0	0	Cloudy	
Silver City, New Mexico	24.21	614.9	30.23	767.8	58	14.4	42	Calm	0	0		8k	0	Calm		0	0	Fair	
Sitka Alaska																			
Smithville, North Carolina	30.08	764.0	30.11	764.8	62	16.7	88	N	7	3.1			10s			0	0	Cloudy	
Spokane Falls, Wash. Ter.	27 78	705 6	29.59	751.6	49	9.4	77	Calm	0	0		10k	0			0	0	Cloudy	
Springfield, Illinois	29.40	746.3	30.12	765.0	69	20.6	85	SE	3	1.3		0	0			0.01	0.3	Clear	
Springfield, Massachusetts	30.14	765 5	30.27	768.8	54	12.2	87	NE	4	1.8			10s		NE	0	0	Cloudy	
Stockton, Texas	29.90	759.8	30.00	762.0	63.0	17.2	89	NW	1	0.4		0	1s		Calm	0	0	Clear	
St. Vincent, Minnesota	29.12	739.6	29.90	759.4	59	13.3	87	N	6	2.7		2cs	5s	W	NE	0.07	1.8	Fair	
Thatcher's Island, Mass.	30.24	768.1	30.29	769.4	48.6	9.2	78	NE	12	5.4			10s		NE	0	0	Cloudy	
Toledo, Ohio	29.48	748.8	30.15	765.8	66	18.9	64	N	3	1.3		0	Sk			0	0	Clear	
Tucson, Arizona	27.42	696.5	29.57	751.2	62	16.7	30	SE	3	1 3		0	0			0	0	Clear	
Umatilla, Oregon	29.50	749.3	29.98	761.5	55.3	12.9	55	W	3	1.3			10s		SW	Inap	Inap.	Cloudy	
Uvalde, Texas	29.91	759.5	29.71	754.6	67	19.4	89	E	2	0.9		0	0			0	0	Clear	
Vicksburg, Mississippi	29.82	757.4	30.07	763 8	68	20.0	90	E	0	2 7		8ck	0			0	0	Fair	
Visalia, California	29.47	748.5	29.83	757.7	58	14.4	70	N	3	1.3		0	0			0	0	Clear	
Washington, D. C.	30.10	764.1	30.20	769.1	59	15.0	82	N	5	2.2			10ks		NE	0	0	Cloudy	
Wickenburg, Arizona					53	11.7	42	Calm			0	0	0			0	0	Clear	
Wilmington, N. Carolina	30.03	762.7	30.09	764.3	59	15 0	89	NE	4	1.8			10s		Calm	0	0	Cloudy	
Winnemucca, Nevada	25.48	647 2	29.84	757.9	44	6.7	68	SW	0	2 7		0	0			0	0	Clear	
Wood's Holl, Mass.	30.23	767 6	30.20	767.0	50	10.0	93	NE	5	2.2			10s		Calm	0	0	Cloudy	
Yankton, Dakota	28.65	727 7	29.89	759.2	68	20.0	84	S	12	5.4			10n			0.05	1.3	Light rain	
Yuma, Arizona	29.05	737.1	29.80	756.9	62.3	16.8	67	Calm	0	0		0	0			0	0	Clear	
SUNDRIES.																			
Bogota, U. S. Columbia	22.10	561.3			55 5	13.1	80	Calm	0	0			10ks			0 01	0.3	Cloudy	Thomas Herran
Buff Bay Town, Jamaica, I.	29.68	753.9	30.00	7 2.0	77	25.0	82	SE				0	2c			Blank			
Havana, Cuba, W. I.	29.88	758 9	29.93	7 0.2	80	26.7	78	Calm	0	0		0	8ks		SW	0	0	Cloudy	A. Van Caneghem, Ass't.
Jakobshavn, Greenland	29.74	755 4	29.79	756.7	52.2	11 2		SW			8		8			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	29.90	759 4	29.91	759 7	83.0	28 3	72	Calm	0	0		10s	2ks		E	0 48	12 2		Robert Johnstone.
Navassa, W. I.	29.84	757 9	29.92	7 0.0	82	27.8	79	E	15	6.7		5cs	5n[illegible]	NW	E	0	0	Hazy	F. M. Everett.
Paramaribo, S. A.	29.90	760.0	29.97	761.2	79	26.1	87	E			1	3c	4k	E		0.170	4.3	Fair	Dr. C. J. Hering.
Puerto Bertio, U. S. Columbia	29.44	747 5	30.00	7 2 0	75	24.4	100	Calm			0		10n		Calm	0 23	5.8	Raining	Francesco J. Cisneros.
Rivas, Nicaragua					77 0	25		NW			1	10ck	1ks	SE	WNW	0 59	15.		Earl Flint.
Santiago de Cuba, W. I.	29.90	759 4	29.93	760.2	80	26.7	78	Calm	0	0			10k			0.28	7.1	Light rain	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.10	765.1	30.21	7 7.3	32.0	0.0	94	E	11	4.9		1c	1s	E	E	0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross, N. 37° 34′, E. 121° 25′	30.03	762.7	73	22.8		S			3		1							D. clouds	Comm. A. J. Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.01	762.2	74.5	23.6	55	SW			1		8							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab,																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 22° 18′, E. 60° 03′	29.65	753.1	81	27.2	87	S			3		1	S				3	S	Blue sky	Comm. G. W. Hand.
H. M. S Bittern, Constantinople, Turkey			62	16.7		NNE			1		8	NNW						Raining	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 46′	30.00	762 0	84	28.9	79	ESE			2		3							D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.82	757.4	61.5	16.4	80	NW			3-4		10							Showery	Com. F. W. Richards.
H. M. S. Champion, S. 11° 25′, W. 19° 56′	29.85	758.9	78	25.6	82	ESE			3-4		3	Calm				2	S	D. clouds	Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerrell.
H. M. S. Comus, N. 37° 34′, E. 121° 26′	30.01	762,2	59	15.0	88	SW			2		0							Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruizer, N. 36° 21′, E. 14° 50′	30.01	762.2	70	21.1		W			1		5	WSW				1	wsw	Threatening	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, S. 0° 03′, W. 19° 20′	30.02	762.5	78	25.6	91	ESE			2-3		3					2	E	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring, N. 4° 39′, E. 99° 13′	29.79	756.7	86	30.0		Calm			0							1	WNW	D. clouds	Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.93	760.2	77	25.0	91	ENE			1		3							D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hutton.
H. M. S. Druid, N. 47° 34′, W. 52° 41′	30.20	767.1	44	6.7	76	WSW			2-3		0							Squally	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
N. 22° 18′, E. 59° 40′	29.57	751.1	96	35.6		ESE			1		1	SW				1	SW	Blue sky	
H. M. S. Eclipse, N. 7° 54′, E. 81° 42′	29.86	758.4	87	30.6		SE			2		7					2		D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 1° 17′, E. 103° 51′	29.76	755.9	84	28.9		NE			1		5	SW						D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, S. 1° 05′, E. 174° 35′	29.84	757.9	84	28.9	79	E			2-3		2							D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, S. 15° 00′, E. 76° 08′	29.94	760.5	80	26.7	78	ESE			3		3	SE				3-4	ESE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn N. 13° 52′, E. 42° 45′	29.72	754.9	87.5	30.8	78	WNW			2		6					2	NW	D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo, N. 21° 15′, W. 84° 18′	29.87	758.7	80	26.7	87	SE			3-4		10					2	SE	Raining	Comm. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 48° 30′, W. 125° 40′	29.78	756.4	47.5	8.6	81	SE			4		8					3	wsw	Thund'r st'm	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.78	756.4	37	2.8	81	WNW			2		2							Blue sky	Capt. L. F. Jones.
H. M. S. Griffin, N. 24° 43′, W. 80° 13′	29.86	758.4	78	25.6	95	SE			1		4	SE						D. clouds	Comm. J. Inglis.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 33° 00′, W. 61° 40′	29.95	760.7	72	22.2		E			1		9	ESE				3	ESE	Overcast	Capt. J. L. Way.
H. M. S. Inconstant, Melbourne, Australia	30.02	762.5	52	11.1	86	SW			2-4		10	SW						Showery	Capt. C. C.P. Fitzgerald.
H. M. S. Iris, N. 31° 33′, E. 30° 09′	29.93	760.2	70	21.1	61	NW			1-2		1					1	wsw	Blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 28° 08′, E. 123° 05′	29.86	758.4	67	19.4	95	ENE			5-6		10	WSW				7	NE	Raining	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.00	762 0	63	17.2		Calm			0		7	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, N. 33° 50′, E. 132° 25′	30.03	762.7	63	17.2		Calm			0		3							Misty	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 29′. E. 110° 33.′	29.77	756.1	81.9	27.7	85	ESE			2		3					1	E	Squally	Capt. A. Carpenter.
H. M. S. Midge, Amoy, China	29.86	758.4				E			2		4	NE						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 36° 07′, W. 5° 21	30.09	764.3	67	19.4	74	WNW			3		3	WNW						D. clouds	Capt. H. H. Rawson.
H. M. S. Modeste, S. 6° 27′, E. 105° 17′	29.83	757.7	84	28.9	79	SE			2-3		4					1	SE	D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Goletta, Tunis, N. Africa	29.95	761.0	75	23.9	77	S			2		6	SSW						D. clouds	Capt. G. C. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper.	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	30.30	769.6	48.5	9.2	74	SSW			1									D. clouds	Capt. E. B Drummond.
H. M. S. Orontes																			Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.85	758.2	80	26.7		Calm			0		6					2	SE	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, N. 12° 39′, W. 69° 41′	29.85	758.9	83	28.3	83	E			5		6	E				4	E	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler, S. 7° 17′, E. 12° 04′	29.92	760.0	76	24.4		SE			2		2					1	S	D. clouds	Capt. Hon. A. C. Littleton.
H. M. S. Ready, Rangoon, India	29.74	755.4	84	28.9		SSW			4		3	SW				4	SW	D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id	29.88	758.9	45	7.2		Calm			0		5							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.89	759.2	81.4	27.4	77	SE			2		5							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 8° 30′ E. 75° 05′	29.42	747.3	84	28.9	79	NNW			2-3		8	SW				7	WNW; S	D. clouds	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 16° 53′, W. 25° 00′	30.15	765.8	75.5	24.2	79	NNE			6		5	NNE				3	N	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S Thunderer, N. 39° 56′, E. 14° 37′	29.99	761.7	72	22.2	76	S			2		3					2		Blue sky	Capt. P. H. Colomb.
H. M. S Triumph, Coquimbo, Chili, S. A	29.97	761.2	53	11.7	100	Calm			0		10	Calm						Foggy	Capt. A. H. Markham.
H. M. S. Turquoise, S. 34° 30,′ W. 72° 20′	30.01	762.2	58	14.4	94	SSW			1		6							D. clouds	Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.			82	27.8		SE			1		6							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W	30.09	764.3	62	16.7	36	Calm			0		7	Calm						D. clouds	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, Bahrein Harbor, Arabia	29.68	753.9	92.5	33.6	56	NW			4-5		0					Sm'h		Misty	Capt. T. P. Nesham.
H. M. S. Zephyr, N. 33° 30′ E. 122° 39′	30.08	764.0	59	15.0	100	ESE			1		4	SE					E	D. clouds	Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candid dos Reis, Comd't.
Quanza, Santiago, Cape Verd Id's	30.04	762.9	80.2	26.8	64	NE			4		3		NE			3	NE	D. clouds	Carlos M. de Silva Costa, Comd't.
Rio Lima																			S. C aa Silva Costa, Comd't.
Sado																			G. A de Brito Capello, Comd't.
Tamega, Hong-Kong, China	29.82	757 4	79.7	26.5	80	ENE			2		5		NE					D. clouds	P. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mil.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mil.				
N. Yard, Pensacola, Fla	30.13	765.3	73	22.8	72	NE	7	3.1			5		NE	0.24	6.1			Fair	
N. Yard. Portsmouth, N. H.	30.25	768.6	53	11.7	86	NE	4	1.8		8c	0	NE		0	0			Cloudy	
Naval Hospital, Yokahama, Japan	29.91	759.7	64.5	18.1	89	E			1		8		ENE	Slight				Clearing	
Adams, S. 3° 00′, W. 80° 03′	29.73	755.1	75	23.9	86	NW			1		10		NW			Long	SW	Cloudy	
Alaska, Callao, Peru	29.91	759.7	64	17.8	89	SE			1		8		SSE	0	0	Sm'h		Cloudy	
Alert, N 21° 02′, E. 143° 18′ *	29.85	758.2	81	27.2	70	ENE			4		2		ENE			Long	ENE	Clear	
Alliance, Norfolk, Va	30.16	766.1	61	16.1	94	NNE			3		10			Light				Cloudy	
Ashuelot, Kobe, Japan	30.04	763.0	66	18.9	94	WNW			1		2		Calm					Fair	
Colorado, New York, N. Y	30.32	770.1	58	14.4	88	NE	1	0.4			10		N	0	0			Overcast	
Constitution, Norfolk, Va	30.09	764.3	60	15.6	94	NE	9	4.0			10		SW					Cloudy	
Franklin, Norfolk, Va	30.09	764.3	59	15.0	94	NE	9.6	4.3			10		NE	0	0			Rainy	
Galena, Villafranca, France	29.88	758.9	65	18.3	89	ESE			1		10		SW	Light		Sm'h		Cloudy	
Independence, N. Yard, Mare I'd, Cal	30.04	763.0	50	10.0	79	WSW	1.2	0.5			0							Clear	
Jamestown, Sitka, Alaska *	29.82	757.4	42	5.6	91	Calm			0		2			0	0			Clear	
Kearsarge, Port Royal, S. C	30.10	764.5	70	21.1	80	N			2		2		Calm			Sm'h		Fair	
Lackawanna, S. 14° 51′, W. 122° 18′ †	30.12	765.0	79	26.1	82	E			3-4		8		E			Sm'h	E	Fair	
Marion, Montevideo, Uruguay	29.90	759.4	52	11.1	86	WSW			6		8		SW	Light		R'gh	SW	Cloudy	
Michigan, Erie, Pennsylvania	30.07	763.8	70	21.1	54	S	3	1.3			2							Fair	
Minnesota, Newport, R. I	30.27	768.8	53	11.7	93	NE			2		10					Sm'h		Foggy	
Monocacy, Yokohama, Japan	30.10	764.5	66	18.9	94	E			1		10		Calm					Cloudy	
New Hampshire, Port Royal, S. C	30.07	763.8	72	22.2	71	N	10	4.5			10		N	0	0			Fair	
Nipsic, Villafranca, France	29.88	758.9	68	20.0	79	E			1		8					Sm h		D. clouds	
Onward, Callao, Peru †	29.96	761.0	64	17.8	89	SSE			1		10		NNW			Long	W	Cloudy	
Palos, Nagasaki, Japan	30.06	763.5	65	18.3	78	NE			1		0							Clear	
Passaic, Washington, D. C	30.33	770.4	60	15.6	94	NE			3		10							Cloudy	
Pensacola, N. 45° 23′, W. 131° 32′	29.99	701.7	48	8.9	85	W			3		2		WNW	0	0	Long	NNW	Clear	
Portsmouth, Elizabeth River, Va	30.17	766.3	60	15.6	100	NE			2-4		1		N			Sm'h			
Powhatan, Port Royal, S. C	30.00	762.0	69	20.6	85	NE			4		8		N			Long	NE	Fair	
Quinnebaug, N. 21° 40′, W. 45° 36′	30.15	765.8	76	24.4	77	ESE			4		10		ESE			Long	SE	Cloudy	
Ranger, N. 16° 14′, W. 98° 42′ *	29.79	756.7	81	27.2	78	W			2		5		Calm	0	0	Sm'h		Fair	
Richmond, Yokohama, Japan	30.10	764.5	66	18.9	89	NE			2		10			0.06	1.5			Misty	
Saratoga, Norfolk, Va	30.12	765.0	61	16.1	88	NE			2		10		Calm	Moderate				Drizzling	
Shenandoah, Montevideo, Uruguay *	29.87	758.7	51	10.6	86	SW			5		8		SW			Mod.	SW	Fair	
St. Louis, League Island, Pa	29.80	756.9	58	14.4	88	NE	7	3.1			10			0	0			Cloudy	
Swatara, Shanghai, China * †	30.02	762.5	73	22.8	72	WSW			1		0							Blue sky	
Tennessee, New York, N. Y	30.28	769.1	59	15.0	100	NNE			2-3		10		NE	0	0	Sm'h		Hazy	
Ticonderoga, S. 48° 38′, W. 99° 00′	30.15	765.8	43	6.1	92	SSE			1		2		S	Inap.	Inap.	Mod.	S	Fair	
Trenton, Villafranca, France *	29.85	758.2	68	20.0	79	E			2		8			8 h'rs	sh'rs	Sm'h		Cloudy	
Vandalia, N. Yard, League I'd., Pa	30.23	767.8	59	15.0	94	NE			2		10		NE					Cloudy	
Wabash, Boston, Massachusetts	30.31	769.9	51	10.6	86	N	1	0.4			10		NNE	0.03	0.8			Misty	
Wachusetts, N. Yard, Mare I'd, Cal	29.88	758.9	58	14.4	88	W			2		0							Clear	
Wyoming, Norfolk, Va	30.14	765.5	60	15.6	94	NE			2		2?	Calm				Sm'h	SSE	Cloudy?	
Yantic, New York, N. Y *	30.17	766.3	59	15.0	88	NE			2-3		10		N					Hazy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mil.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mil.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 19° 34′, W. 82° 06′	29.88	758.9	79.5	26.4	89	ESE			2		5							D. clouds	Capt. A. J. Brown.
British Merchant. ‡																			Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 37° 38′, W. 35° 58′	30.16	766.1	64	17 8	100	WSW			4		10					3	W	Overcast	Capt. W. N. Lalley.
City of Agra																			Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbighshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart ‡																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow ‡																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barque Intine Hope ‡																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamberts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ N. 39° 23′, W. 39° 34′	30.15	765.8	57.1	13.9	75	NW			6		9							Showery	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland ‡																			Capt. H. W Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cumbria, ‡ N. 4° 14′, W. 26° 10′	30.01	762.2	86	30.0	62	ENE			3		2							Blue sky	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 11° 51′, E. 61° 11′	29.72	754.9	82.0	27.8	93	WSW			6		10							Overcast	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton, N. 48° 41′, W. 4° 50′ ‡	29.91	759.7	59	15.0	94	NNW			2		2							Blue sky	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, Clyde River, Scotland	29.99	761.7				NE			2		2		NE					Fair	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Gallia, N. 46° 12′, W. 41° 18′ *	29.86	758.4	48	8.9		WNW			6		5		NW	hail&	sleet	St'g	NW	Hailing	Capt. W. H. P. Hains.
S. S. Algeria																			Capt. W. Watson.
S. S. Scythia, N. 49° 44′, W. 22° 30′	29.69	754.1	58	14.4	75	SE			2		10		SE	0	0	Mod.	NW	Cloudy	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 41° 19′, W. 64° 50′ †	30.12	765.0	58	14.4		NE			4		2		N					D. clouds	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic, N. 46° 55′, W. 38° 14′ †	29.85	758.2	49	9.4		N			5		5		NNE			Mod.	N	Raining	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, N 43° 05′, W. 55° 31′ †	30.41	772.4	41	5.0		E			2		10?		SW	0	0	Sm'h		Clear?	Capt. Ch. W. Kennedy.
S. S. Republic, N. 51° 11′, W. 15° 18′ †	30.02	762.5	60	15.6	88	W			2		0			0	0	Sm'h		Fair	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, ‡ N. 51° 29′, E. 2° 07′	29.75	755.9	57.9	14.4		Calm			0		10		SE	0	0	Sm'h		Dense haze	
S. S. Köln																			Capt. Th Jüngst
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Philadelphia, Pa	30.00	762.0	63	17.2	94	SW			4		8		SW					Fair	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio, Liverpool, England...*†	29.96	761.0	72	22.2	90	NNE			1		2		NNE	0	0			Fair	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, Queenstown, Ireland.*†	29.87	758.7	59	15.0	94	SE			3		10		S					Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 37° 00′, W. 122° 22′...†	30.04	763.0	54	12.2	93	NW			4		10		NW	0	0	L'go	WNW	Cloudy	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 45° 26′, E. 173° 58′...†	30.19	766.8	50	10.0	86	S			3		10			Driz	zles	Mod.	NE	Overcast	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China....*†	29.95	760.7	78	25.6	91	SW			2		10		SW					Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 34° 13′, E. 137° 58′	30.11	764.8	67	19.4	74	SE			1		10		SW	0	0	Sm'h		Overcast	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, N. 46° 05′, W. 124° 05′...†	30.13	765.3	49.0	9.4	96	NW			1		10		NW			Sm'h	NW	Cloudy	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, San Francisco, Cal.....†	29.92	760.0	52	11.1	85	SW			3		0							Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 32° 40′, W. 117° 18′....†	29.97	761.2	58	14.4	76	SE			3		8		SE	0	0	Sm'h	NW	Cloudy	Geo. H. Harrison.
S. S. Senator, San Francisco, Cal.....†	30.00	762.0	53	11.7	86	SW			1		0							Clear	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal.....†	29.90	759.4	52	11.1	86	W			3		5		NW					Fair	Capt. G. Debney.
S. S. Victoria, N. 43° 02′, W. 124° 50′...†	29.90	759.5	50	10.0	79	SW			2		2		SW			High	SW	Fair	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 27° 24′ W. 175° 18′	30.26	768.6	66	18.9	79	ENE			4		5		NNE			Long	NE	Cloudy	A. Bannerman, 2d Officer.
S. S. City of New York, Sydney, N. S. W.....†	30.05	763.3	61	16.1	100	NW			1		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 21° 37′, W. 105° 44′....†	29.95	760.7	66	18.9	68	E			2		2k		E	0	0	Sm'h	NW	Clear	Capt. D. S. Austin.
S. S. City of Peking, Yokohama, Japan.....†	30.08	764.0	65	18.3	100	SSE			1		0			0	0	Sm'h		Clear	Capt. G. G. Berry.
S. S. City of Sidney																			Capt. H. C. Dearborn.
S. S. City of Tokio, N. 37° 37′, W. 136° 36′....†	30.25	768.3	57	13.9	75	NW			4		10		NW			Sm'h		Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, Panama, Panama.....†	29.91	759.7	81	27.2	87	NE			2		5		N	0.55	14.0			Fair	Capt. R. R. Searle.
S. S. Granada, N. 30° 55′, W. 117° 20′....†	29.93	760.2	61	16.1	66	NW			6		10		NW	0	0	R'gh	WNW	Gloomy	Capt. M. Connolly.
S. S. Zealandia, S. 22° 48′, W. 174° 55′	30.14	765.5	64	17.8	94	E			4		5		E	0	0	R'gh	SE	Squally	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, N. 49° 31′, W. 9° 06′....†	29.85	758.2	64	17.8	97	Calm			0		2			0	0	Sm'h		Clear	A. Feddersen, 2d Officer.
S. S. Rhyniand, N. 47° 20′, W. 33° 47′....†	29.76	755.9	51	10.6	86	W			6		8		W	0.15	3.8	Long	WNW	Showery	Capt. Wm. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, Off Block Island	30.23	767.8	56	13.3	74	ENE	6	2.7			Fog			0	0	Sm'h		Foggy	Capt J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 20° 14′, W. 71° 30′...*†	30.06	763.5	82	27.8		SW			2		2		SW	0	0	Sm'h	E	Fair	Capt. B. F. Woodbury.
Brigantine George, N. 29° 30′, W. 63° 20′....†	30.05	763.3	76	24.4		S			5		10			0	0	Mod.	ESE	Squally	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Chesapeake bay, Md†	30.31	769.9	61	16.1	88	NE	3	1.3			10n			0	0			Cloudy	
Bark Sunbeam, Lisbon, Portugal.....†	30.12	765.0	66	18.9	84	WSW			6		5		WSW	Light				Fair	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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W. B. Hazen

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

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 27, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From	Velocity Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From	Lower From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER	OBSERVERS.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco‡			30.13	765.3	70.0	21.1	78	NE			4		1			0	0	Very fair	Dr. Ollive.
Nemours‡			30.01	762.3	77.0	25.0	90	WSW			1		1			0	0	Very fair	Raynaud.
Algiers‡			30.04	762.9	73.4	23.0	60	W			5		0			0	0	Clear	Nicolas.
La Calle‡			30.03	762.8	78.1	25.6	60	NNW			3		2			0	0	Fair	Fonfréde.
Tunis‡			30.00	762.0															Jacques.
Sfax‡			30.11	764.8															Gan.
Saida‡			30.08	764.1	72.9	22.7	34	W			2		1			0	0	Very fair	Dumas.
Tebessa‡			30.08	763.9	66.9	19.4	53	SSW			3		9			0.087	2.2	Covered	Watrin.
Geriville‡																			Lonchamp.
Laghouat‡			30.08	764.0	69.1	20.6	39	N			1		0			0	0	Clear	Herbin.
Biskra‡			30.06	763.5															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.17	766.3	30.26	768.6	50.2	10.1	88	SW	3	1.3			5			0.02	0.5	Fine	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.21	741.8	29.69	754.2	73.2	22.9	59	SE			3		2			0.008	0.2	Raining	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.02	737.1	29.75	755.7	73.2	22.9	57	S	7.4	3.3			10			0	0		Dr. Wierzbicki.
Eperies	28.90	734.0	29.73	755.2	75.7	24.3	51	Calm			0		7ks		E	0	0		Julius Mikolik.
Gratz‡	28.48	723.4	29.08	753.8	72.0	22.2	57	ENE			2		6			0	0		Andreas Rospini.
Hermannstadt	28.39	721.0	29.76	755.8	71.8	22.1	69	ESE			4		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.34	719.9	29.62	752.3	71.6	22.0	65	E			1		4			1.591	40.4		The Staff.
Lemberg	28.83	732.3	29.77	756.1	75.0	23.9	48	SE			2		4			0	0		Dr. T. Stanecki.
Pola	29.68	753.8	29.79	756.6	74.8	23.8	51	SE			2		6			0	0		I. R. HydrographicOffice.
Szathmar	29.30	744.1	29.73	755.2	80.1	26.7	45	SE			2		7			0	0		Beicht Peter, S. J.
Szegedin	29.46	748.3	29.73	755.2	67.6	19.8	94	Calm			0		10			0.453	11.5		Karl Stancel.
Trieste	29.71	754.6	29.81	757.2	73.0	22.8	64	NW			1		3			0.035	0.9	Slightlycl'dy	Secco.
Vienna	29.00	736.5	29.67	753.7	74.8	23.8	54	SE			4		2			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Mateseyck																			M. Pierrot.

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BRITISH SERIES.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
Aberdeen	29.91	759.7	30.01	762.2	53.0	11.7	80	E	10	4.5	.....	.....	1	.....	.....	0	0	Blue sky	W. Boswell.
Armagh, Observatory	29.67	753.6	29.90	759.4	57.4	14.1	96	NE	3	1.3	.....	.....	10	.....	.....	.....	.....	Raining	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.87	758.7	54.2	12.3	97	WSW	10	4.5	.....	.....	10	.....	.....	.....	.....	Raining	John Hartnup.
Bolton, Sharples	29.31	744.5	29.84	757.9	62.1	16.7	77	E	12	5.4	.....	.....	10	.....	.....	.....	.....	Gloomy	Thomas Mackereth.
Bradford, Yorkshire	29.40	746.7	29.79	756.7	65.5	18.6	70	E	.....	.....	1	.....	4	.....	.....	0.01	0.3	D. clouds	J. McLandsbo ough, F.R.S
Bridgetown, Barbadoes	29.92	760.0	29.95	760.7	87	30.6	66	NE	.....	.....	1	.....	6	.....	.....	.....	.....	D. clouds	Corpl. J. Surgener, A.H.C.
Cardington	.....	.....	29.82	757.4	62.0	16.7	88	NW	.....	.....	0.2	.....	10	.....	.....	.....	.....	Overcast	John McLaren.
Chatham, School M. E.	29.70	754.4	29.83	757.7	62.0	16.7	84	NW	.....	.....	1	.....	10	.....	.....	.....	.....	Overcast	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.73	755.1	29.95	760.7	63.7	17.6	61	W	.....	.....	3	.....	5	.....	.....	.....	.....	D. clouds	The Staff.
Fort Napier, Natal	27.52	699.0	29.74	755.4	67.2	19.6	59	NE	.....	.....	1	.....	0	.....	.....	.....	.....	Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.62	752.3	29.85	758.2	88	31.1	88	SW	.....	.....	1	.....	3	.....	.....	.....	.....	Drizzling	Sgt. C. E. Keane.
Galway, Queen's College	.....	.....	29.81	757.2	59	15.0	94	SE	.....	.....	2	.....	3	.....	.....	0	0	D. clouds	J. O'Donaghue.
Gibraltar, Mediterranean	30.04	763.0	30.10	764.5	75.6	24.2	85	W	.....	.....	3	.....	0	.....	.....	.....	.....	Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.70	754.4	29.93	760.2	61.0	16.1	87	NE	.....	.....	4	.....	4	.....	.....	.....	.....	Blue sky	Harry Urquhart.
Greenwich, Royal Obs'y	29.67	753.6	29.84	757.9	62.3	16.8	79	NW	.....	.....	1	.....	10	.....	.....	.....	.....	Overcast	The Staff.
Guernsey	29.70	754.4	29.92	760.0	58	14.4	82	SW	.....	.....	3	.....	4	.....	.....	.....	.....	D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.82	757.4	29.85	758.4	63.5	17.5	75	NW	8	3.6	.....	.....	10	.....	.....	.....	.....	Threatening	The Staff.
Leicester, Museum	29.61	752.1	29.86	758.4	58.9	14.9	83	N	.....	.....	1	.....	10	.....	.....	.....	.....	Overcast	J. E. Carryer.
Malta, Mediterranean	29.85	758.4	29.93	760.2	68.2	20.1	84	NW	.....	.....	1	.....	9	.....	.....	0.15	3.8	Overcast	F. S. Vine, A. H. C.
Nassau, Bahamas	29.85	758.4	29.91	759.7	75.0	23.9	88	NE	.....	.....	2	.....	10	.....	.....	.....	.....	Overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.35	745.5	29.85	758.4	59.7	15.4	87	Calm	.....	.....	0	.....	10	.....	.....	Blank		Overcast	John Mac Email.
Oxford, Radcliffe Obs'y	29.63	752.6	29.85	758.4	60.5	15.8	88	WNW	.....	.....	1	.....	10	.....	.....	.....	.....	Threatening	The Staff.
Plymouth	29.85	758.4	29.94	760.5	63.5	17.5	71	SW	.....	.....	1	.....	8	.....	.....	.....	.....	D. clouds	John Merrifield.
Sandwick Manse, Orkneys	.....	.....	30.04	763.0	60.2	15.7	65	ESE	20	8.9	.....	.....	0	.....	.....	.....	.....	Blue sky	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.75	755.6	29.81	757.2	64.6	18.1	85	S	.....	.....	1	.....	2	.....	.....	.....	.....	D. clouds	Serg't W. H. Lyne.
Sheffield	29.57	751.1	29.84	757.9	62.9	17.2	82	NE	.....	.....	1	.....	10	.....	.....	0	0	Overcast	W. F. Cooper.
Silloth Rectory	29.83	757.7	29.86	758.4	71.7	22.1	55	SE	.....	.....	4	.....	0	.....	.....	0	0	Blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.87	758.7	66.0	18.9	67	E	11	4.9	.....	.....	10	.....	.....	.....	.....	Misty	Rev. S. J. Perry.
Stratfield Turgiss	29.64	752.8	29.85	758.2	65.4	18.6	77	W	.....	.....	1	.....	10	.....	.....	.....	.....	Foggy	Rev C.H. Griffiths, F.M.S
Truro, Royal Institution	29.95	757.0	29.97	761.2	64	17.8	73	NW	.....	.....	6	.....	5	.....	.....	.....	.....	D. clouds	W. Newcombe.
Valencia, Observatory	29.92	760.0	29.95	760.7	60.1	15.6	83	SE	3	1.3	.....	.....	4	.....	.....	.....	.....	Misty	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.66	753.4	29.71	754.6	51	10.6	82	W	9	4.0	.....	.....	10n	.....	.....	0	0	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	29.67	753.6	29.73	755.1	49	9.4	91	S	4	1.8	.....	.....	10n	.....	S	0.05	1.3	Light rain	G. A. Blair.
Chicontimi, Quebec	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Rev. V. A. Huart.
Cornwall, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	James Smith, M. A
Dalhousie, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. A. Johnson.
Father Point, Quebec*	29.80	756.9	29.82	757.4	50	10.0	89	N	8	3.6	.....	0	0	.....	.....	0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.16	740.7	29.98	761.5	54	12.2	93	E	8	3.6	.....	5ck	2ks	E	.....	0	0	Fair	James Stewart.
Fredericton, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. Harrison.
Granton, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	James Grant.
Halifax, N. S.*	29.68	753.9	29.81	757.2	47	8.3	98	SW	2	0.9	.....	.....	10n	.....	.....	0	0	Cloudy	A. Allison.
Hamilton, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. Dickson, B. A.
Kingston, Ontario*	29.63	752.6	29.95	760.7	65	18.3	84	Calm	0	0	.....	Hz	0	.....	.....	0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. H. Rigby.
Montreal, Quebec*	29.68	753.9	29.87	758.7	67	19.4	63	W	12	5.4	.....	.....	10ks	.....	.....	0	0	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. R. Nason.
Parry Sound, Ontario*	29.32	744.7	30.00	762.0	58	14.4	94	Calm	0	0	.....	2cs	Sk	W	.....	0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. F. Jeffers, M. A.
Port Dover, Ontario	29.35	745.7	30.04	763.0	65	18.3	84	S	3	1.3	.....	5c	0	NW	.....	0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.41	747.0	30.04	763.0	65	18.3	90	S	1	0.4	.....	2k	Hz	W	.....	0	0	Hazy	M. Payne.
Quebec, Quebec*	29.55	750.6	29.86	758.4	64	17.8	83	NW	.....	.....	1	2cs	2k	NW	NW	0.02	0.5	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.55	750.6	30.00	762.0	58	14.4	87	Calm	0	0	.....	.....	8s	.....	NW	Inap.	Inap.	Cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.31	744.5	30.00	762.0	63	17.2	81	W	3	1.3	.....	0	Sk	.....	.....	0	0	Smoky	K. Stewart.
St. Andrews, N. B.	29.75	755.6	29.80	756.9	49	9.4	92	SW	1	0.4	.....	Hz	5n	.....	.....	0	0	Fair	
St. John, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Murdock, C. E.
Stratford, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. J. Macgregor, M. A.
Sydney, C. B*	29.64	752.8	29.68	753.9	47	8.3	82	SW	14	6.3	.....	.....	10s	.....	.....	0	0	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.63	752.6	30.00	762.0	66	18.9	71	NW	2	0.9	.....	Hz	0	.....	.....	0	0	Hazy	Magnetic Observatory
Windsor, N. S.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Woodstock, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. Wolverton.
Yarmouth, N. S.*	29.82	757.4	29.88	758.9	44	6.7	98	SW	3	1.3	.....	Fg	Fg	.....	.....	0	0	Foggy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.67	753.6	29.92	760.0	37	2.8	100	S	.....	.....	.....	.....	10n	.....	.....	0.17	4.3	Rainy	John Delany.
St. Pierre, N. F.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Cape St. Francis Lt. House	29.79	756.7	.....	.....	65.0	18.3	82	WSW	9.8	4.4	.....	.....	3k	.....	.....	0.015	0.4	.....	John Duthie.
Cape Town, C. G. H. Obs'y	29.85	758.2	29.89	759.2	62.2	16.8	.....	W	13.7	6.1	.....	5	5ks;n	.....	.....	0.138	3.5	.....	The Staff, for D. Gill.
Worcester*†	28.72	729.5	.....	.....	64.8	18.2	56	NW	.....	.....	6	2	5	.....	.....	0.75	19.0	.....	C. Stokes.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	30.04?	763.0?	30.04?	763.0?	63.5	17.5	85	E	1.1	0.5	.....	.....	10	.....	.....	0	0	Covered	M. Marc Dechevrens, S

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

COSTA RICA SERIES.

By authority of the MINISTER OF FOREIGN AFFAIRS.

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

San José	25.17	664.7	29.89	759.2	69.4	20.8	95					8cs	0			0.24	6.	Hazy.	Amand Maison.

DANISH SERIES.

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

Copenhagen	29.91	759.7	29.96	760.9	60.6	15.9	59	E	18	8			0						Oversergent Fischer.
Fanöe	29.84	757.9	29.85	758.4	70.0	21.1	64	E			6		1						Overloerer Lauridsen.
Godthaab, Greenland	29.47	748.5	29.51	749.6	44.6	7.0	79	Calm			0		5					Foggy	S. Kleinschmidt.
Stykkisholm, Iceland	29.98	751.5	30.02	762.6	53.2	11.8		SE			2		2						A. O. Thorlacius.
Thorshavn	30.12	765.0	30.15	765.9	47.5	8.6	95	NE	4	2			10					Foggy	Overloerer Bergh.
Vestervig	29.86	758.4	29.95	760.8	70.7	21.5	50	ENE			4		1						Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.39	746.5	30.04	752.9	61.9	16.6	73	WNW			2		nk		S	0.126	3.2		M. Labroue, Director.
Alençon Normal School	29.44	747.7	29.99	761.7	63.3	17.4	78	NW			2		5k		W	0	0	Cloudy	M. Nicot, Director.
Arras, Engineer School	29.58	751.4	29.84	758.0	54.0	12.2		NW			3		10					Raining	M. Klein, Commandant.
Avignon, Normal School	29.78	756.3	29.85	758.3	65.8	18.8	69	N			2		5		N	1.397	33.2	Cloudy	M. Giraud, Director.
Bar-sur-Seine	29.31	744.4	29.85	758.1	67.3	19.6	49	NNW			3		8km		NW	0	0	Very cloudy	M. Sailliard, Director.
Beauvais, Normal School	29.02	752.3	29.87	758.8	64.6	18.1	56	W			3		10		W	0	0	Covered	M. Frère Eugene Marie.
Besançon, Normal School	28.95	735.0	29.82	757.4	65.3	18.5	67	S			1		n		SW	0.04	1.		M. Gobin, Director.
Bordeaux, Observatory	29.77	750.2	30.03	702.8	65.1	18.4	60	NNE			1		8		NW	0.004	0.1	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.39	746.6	29.93	760.2	67.1	19.5	58	WNW			1		sk		WNW	0	0		M. Postel, Director.
Brest, Naval Observatory	29.79	756.6	30.03	762.7	70.5	21.4	57	NW			1		1k		NW	0	0		M. de Kermaree, Dir.
Caen, Normal School	29.85	758.2	29.92	760.0	64.4	18	78	SW			1		5		W	0	0	Cloudy	M. Bétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.53	750.0	29.84	758.0	63.3	17.4	73	SW			1		8			0	0	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.29	743.9	29.79	756 7	59.0	15	91	WNW			1		10			0	0	Covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.57	725.6	29.88	758.9	67.6	19.8	54	NW			2		8			0.130	3.3	¼ covered	M. Alluard, Director.
Cluny, Normal School	29.00	738.0	29.89	759.1	64.6	18.1	60	NW			3		7		NW	0.528	13.4		M. de Villemontée, Dir.
Commercy, Normal School	28.96	735.5	29.80	759.9	68.0	20	55	W			3		5km	W	W	0	0	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.25	692.2	29.71	754.6	63.7	17.6	58	NE			4		5k		SW	0.053	1.6	¼ covered	M. Jeangirard, Director.
Grénsque, du. Rhone	28.69	728.8	29.84	757.8	64.8	18.2	56	NW			4		8		NW	0.409	10.4	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.08	738.7	29.85	758.1	58.1	14.5	92	NW			1		10n			0.843	21.4	Light rain	M. Ablard, Director.
Guéret, Normal School	28.40	721.4	29.90	701.0	61.3	16.3	75	W			1		kn		E	0	0		M. Riveire, Director.
Lamballe, Normal School	29.70	754.3	29.97	761.1	65.1	18.4	66	N			1				N	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.52	749.9	30.19	706.9	59.7	15.4	87	W			1		n		W	0.55	14.		M Chauvin, Director.
Lorient, Naval Observatory	29.95	700.8	30.00	703.4	64.4	18.0	71	WSW			3		2	WNW	WSW	0	0	¼ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.85	732.8	29.89	759.3	60.6	15.9	60	NNW			2		10		NNW	0.594	15.1	Covered	M. André, Director.
Mans, Normal School	29.67	753.7	29.98	701.4	63.3	17.4	60	NW			3		8		WNW	0	0	Very cloudy	M Piboeu, Director.
Marseille, Observatory	29.51	749.5	29.78	750.3	68.2	20.1	53	NW			4		5		NW	0.630	16.0		M. Stephan, Director.
Montlouis Pinstituteur	24 82	030.3	30.05	703.3	49.6	9.8	53	SW	9.4	4.2			9			0.0.7	1.7		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.73	755.1	29.84	757.8	67.3	19.6	67	NW			3		8		NW	0.250	6.6	Very cloudy	M. P. Galzin, Director.
Nancy, Normal School	29.05	737.8	29.80	750.8	65.8	18.8	56	WNW			1	ck	n		WNW	0	0		M. Hasse.
Nantes, Observatory	29.80	758.4	30.02	702.6	66.9	19.4	57	W			2–3		8k		W	0.220	5.6		M. Larocque, Director.
Nice	29.73	755.1	29.70	756.0	68.0	20.0	67	S			3		10	S	S	0.236	6.0	Light rain	Capt. Boissière, Director.
Perpignan, Observatory	29.85	758.1	29.95	700.8	67.8	19.9	46	N	25.2	11.7			6	NW	NW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.52	572.0			37.0	2.8							10			1.339	34.0	Snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.85	732.8	29.90	759.4	62.4	16.9	64	S			1		10			0.795	20.2	Covered	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.08	037.0			43.9	6.6	95	NW			4		8			0.270	7.0	¼ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.02	702.5	30.05	753.3	72.0	22.2	51	WSW			1		5		SW	0	0	½ covered	Lt. E. Decanie, Director
Roche-sur-Yon, N. School	29.81	757.1	30.02	702.5	67.3	19.6	61	W			3		8		W	0	0	Very cloudy	M. Mouillot, Director.
Rodez, Normal School	27.84	707.1	29.96	730.9	58.6	14 8	70	NW			4		10		NW	0.398	10.1	Covered	M. Richard, Director.
Rouen, Normal School	29.82	757.5	29.91	759.7	59.7	15.4	76	W			1		8		W	0	0	Very cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.83	757.0	29.98	701.6	62.4	16.9	66	WNW			1		5	W	NW	0	0	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.72	755.0	29.89	759.2	64.4	18.0	62	WNW			2		10		NW	1.500	38.1		M. Renou, Director.
Toulouse, Observatory	29.35	745.4	30.07	703.8	66.2	19.0	63	NW			3					0.598	15.2		M. Bailland, Director.
Tours	29.70	750.0	29.93	701.0	68.0	20.0	47	WNW			3		8		WNW	0	0	¼ covered	M. de Tastes.
Versailles, Observatory	29.40	746.8	29.89	759.3	64.8	18.2	60	NW			3					0	0		Dr. A. Bérigny, Director
SUB-SERIES.																			

GERMAN SERIES.

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

Bamberg	28.84	732.6	29.70	754.3	72.3	22.4	52	SW			2		7k	SW		0.043	1.1		Prof. Dr. Hoh.
Berlin	29.00	751.7	29.76	755.8	80.8	27.1	39	E			1		4			0.331	8.4		Prof. Dr. Arndt.
Breslau	29.25	743.3	29.79	756.7	75.6	24.2	48	ESE			2		3			0.173	4.4		Royal University Obs'y.
Carlsruhe	29.32	744.0	29.72	755.0	68.7	20.4	74	SW			2		10	SW		0.055	1.4	Raining	Albert Senz.
Cassel	29.07	738.4	29.79	756.7	75.9	24.4	61	S			2		4	E		0.039	1.0		Dr. H. Möhl.
Frankfort on the Main	29.41	747.1	29.72	755.0	67.1	19.5	72	SW			1		7			0.059	1.5		Physical Society.
Friedrichshafen	28.33	719.5	29.71	754.6	67.6	19.8	64	W			4		6	W		0.378	9.6		Wilhelm, Chief Tel.
Hamburg	29.09	754.1	29.76	755.9	75.2	24.0	55	E			4		7			0.035	0.9		Dr. R. Kleeman.
Kiel	29.82	757.4	29.84	757.8	57.0	13.9	60	ENE			5		5			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.32	744.0	29.72	754.9	70.5	21.4	72	E			1		8	SE		0.197	5.0	Thun'rstorm	Prof. Dr. Bruhns.
Magdeburg	29.45	747.9	29.72	754.9	75.6	24.2	68	NE			2		7ks	SE		0.453	11.5		Dr. Assmann.
Memel	29.98	701.5	30.03	702.7	63.7	17.6	27	NNW			3–4	2c	0						Reinbrecht & Issermann.
Munich	27.93	709.4	29.78	750.3	67.1	19.5	57	W			1		7			0.047	1.2	Light rain	Central Station.
Neufahrwasser	29.90	701.0	29.98	701.4	59.7	15.4	59	NNE			4		3			0	0		A. Lothes.
Neustadt, Palatinate	29.19	741.4	29.71	754.6	68.5	20.3	69	W			3		5			0.04	1.		Dicknether.
Stuttgart	28.81	731.7	29.07	753.7	64.4	18.0	85	W			1		10			0.110	2.8	Light rain	Prof. Dr. Schoder.
Thorn																			Dr. O. Ouneth.
Weissenburg, Bavaria	28.23	717.0	29.09	754.2	73 2	22.9	49	NW			4		9	W		0.057	1.7		Prof. Kemlein.
Wustrow	29.85	758.1	29.87	758.7	65.5	18.6	70	NE			4		8s			0	0		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.50	749.4	29.89	759.1	76.6	24.8		S		1.5		0						Clear	A. Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.60	751.7	29.64	753.0	88.0	31.1	86	SSW	27	12.1		2				0	0	Blue sky	
Deesa	29.13	739.8	29.58	751.2	105.0	40.6	23	W	10.9	4.9		0				0	0	Blue sky	
Bombay	29.68	753.9	29.72	754.8	89.2	31.8	61	W	10.0	4.5		0				0	0	Blue sky	
Poona, Yarrowda	27.83	707.0	29.63	752.5	97.8	33.8	34	W				1			S	0	0	D. clouds	
Belgaum	27.23	691.6	29.75	755.7	77.8	25.4	70	SSW	11.0	4.9		6		E	SE	0	0	Threatening	
Lahore	28.78	730.9	29.47	748.6	105.3	40.7	23	W	1.8	0.8		0				0	0	Blue sky	
Roorkee	28.59	726.2	29.44	747.8	101.9	38.8	21	NW	2.2	1.0		0				0	0		
Agra	29.01	736.8	29.54	750.3	105.1	41.2	15	NW	4.7	2.1						0	0		
Nagpur	28.50	724.0	29.49	749.0	105.2	41.2	17	NW	6.0	2.7		8		NW		0	0	D. clouds	
Jubbulpore	28.24	717.3	29.54	750.3	98.9	37.2	18	W	3.6	1.6						0	0	Blue sky	
Lucknow	29.14	740.2	29.50	749.4	99.6	37.6	17	NNW	2.0	0.9						0	0	Blue sky	
Allahabad	29.19	741.4	29.48	748.9	103.0	39.4	23	NNE	2.4	1.1		0				0	0	Blue sky	
Patna	29.39	745.4	29.56	750.9	91.7	33.2	59	E	2.8	1.2		4		E	E	0	0	D. clouds	
Hazaribagh	27.60	701.1	29.56	750.7	88.8	31.6	44	N	7.0	3.1		2				0	0		
Cuttack	29.49	749.0	29.57	751.0	92.3	33.5	65	S	1.0	0.4		4				0.20	5.1	D. clouds	
Calcutta, Alipore	29.55	750.6	29.57	751.1	86.5	30.3	76	WSW	3.0	1.3		6		SW		0.31	7.9		
Dhubri	29.48	748.8	29.60	751.9	73.5	23.1	95	NE	14.6	6.5		10				1.03	26.2	Raining	
Chittagong	29.57	751.1	29.66	753.4	79.7	26.5	87	SE	8.2	3.7		6				0	0	D. clouds	
Sibsagar	29.32	744.7	29.65	753.1	82.2	27.9	85	NE	2.3	1.0		10		W	W	0.61	15.5	D. clouds	
Zanzibar, Africa			29.97	761.2	79.0	26.1	81	WSW	4	1.8		8				0.03	0.8	Gloomy	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.39	746.5	29.79	756.6	70.3	21.3	57	Calm	0	0		7				0.059	1.5		Prof. Giovanni Clodig.
Milan	29.30	744.3	29.81	757.1	62.8	17.1	80	E	6.9	3.1		9				0	0		Prof. Schiaparelli.
Padua	29.71	754.6	29.82	757.3	68.5	20.3	67	ESE	8.7	3.9		8		ESE		0.382	9.7		Prof. Dott. Lorenzoni.
Moncalieri	28.88	733.5	29.76	756.0	63.7	17.6	72	N	4.3	1.9		7		E		0	0		Prof. P. F. Denza.
Genoa	29.61	752.1	29.80	757.0	60.8	16.0	79	NE	4.9	2.2		10		NE		0.472	12.0		Prof. G. M. Garibaldi.
Mondovi	27.86	707.7	29.74	755.3	64.6	18.1	70	WNW			2	7				0.819	20.8		Prof. D. C. Bruno.
Pesaro	29.72	754.9	29.77	756.1	71.6	22.0	66	E	3.8	1.7		9		SW		0	0		Prof. Luigi Guidi.
Florence	29.55	750.6	29.80	756.9	65.1	18.4	79	SW			2	10				0.020	0.5		Prof. Costantino Pitter.
Leghorn	29.74	755.3	29.82	757.4	68.2	20.1	64					10				0	0		Prof. P. Monte.
Rome	29.66	753.3	29.83	757.6	73.2	22.9	57	WSW	12.5	5.6		7				0.177	4.5		Prof. P. S. Ferrari.
Lecce	29.58	751.4	29.83	757.6	78.1	25.6	39	SSW	17.4	7.8		8		W		0	0		Prof. C. de Giorgi.
Cosenza	29.03	737.3	29.90	759.4	74.5	23.6	72	WSW	1.8	0.8		9		SW		0.047	1.2		Prof. D. Conti.
Cagliari	29.66	753.4	29.85	758.2	74.7	23.7	46	SW			4	5		W		0	0		Prof. A. Pacinotti.
Palermo	29.70	754.4	29.95	760.7	74.8	23.8	40	WNW	11.2	5.0		4				0.008	0.2		Prof. G. Cincciatore.
Syracuse	29.85	758.2	29.89	759.3	76.6	24.8	67	S	6.3	2.8		10		SW		0.039	1.0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.34	745.2	29.85	758.1	70.5	21.4	81	SE	4.3	1.9		10		SW		0.248	6.3		Prof. F. Brioschi.
Stelvio	22.06	560.3			46.0	7.8	57	WSW			2	10n		S		0.043	1.1	Covered	Prof. P. F. Denza.
Valdobbia	22.06	560.3			46.8	8.2	75	E			2	10k		S		0.512	13.0	Covered	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.97	761.2	29.99	761.7	64.4	18.0	73	NNE	7.1	3.2		2cs	0			0	0	Clear	K. Sasaki.
Kioto	29.83	757.7	30.00	762.0	59.8	15.4	66	NNW	2.5	1.1		0	0			0	0	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.81	757.2	30.01	762.2	68.4	20.2	66	NE	3.5	1.6		0	0			0	0	Clear	S. Takehuyashi.
Tokei Obs'y, Yeddo	29.98	761.5	30.05	763.3	61.9	16.6	89	E	4.4	2.0		0	4s			0	0	Fair	The Staff.
Wakayama	29.96	761.0	30.02	762.5	66.7	19.3	78	WNW	1.4	0.6		0	0			0	0	Clear	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.87	758.7	30.05	763.5	75.3	24.1	68	E	16.0	7.2		0	2		E	1.18	30.0	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.73	755.1	29.99	761.7	73.0	22.8	85	E	0.9	0.4		0	7n		SE	0	0	Cloudy	F. Quijano, U. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.80	756.8	29.80	756.8	60.1	15.6		WNW			4					0	0		
Groningen	29.69	754.2	29.75	755.6	69.4	20.8		NE			2					0.020	0.5		
Helder	29.77	756.1	29.77	756.1	60.6	15.9		NE			3					0.008	0.2		
Hellevoetsluis	29.75	755.7	29.75	755.7	67.5	19.7	86	NNW			1					0.709	18.0		
Utrecht	29.69	754.2	29.74	755.4	68.0	20.0	65	NE			2		5			0.425	10.8	Cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.95	761.0	30.02	762.6	69.1	20.6	30	NW	3.8	1.7			1			0	0		
Christiania	29.81	757.2	29.95	760.8	73.8	23.2	41	SW	4	2			7			0	0		
Gjesvær	30.11	764.8	30.13	765.4	30.9	— 0.6		NW			6		10						
Lodingen	30.25	768.4	30.30	769.6	39.0	3.9	54	Calm			0		10			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.01	762.2	30.17	766.2	61.5	16.4	91	WNW	3.1	1.4			8			0.157	4.0		Dr. J. A. Sampaio.
Campo Major	29.14	740.2	30.12	765.0	72.3	22.4	40	W	6.3	2.8			5			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.21	767.2	30.29	769.4	68.4	20.2	65	SW	2.5	1.1			3			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.85	758.5	30.22	767.6	66.9	19.4	59	NW	5.6	2.5			8			0	0		The Staff.
Ponta Delgada, Azores	30.14	765.6	30.21	767.4	64.8	18.2	88	SW	8.1	3.6			10			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski																			Capt. Lasarew.
Archangel	29.92	759.9	29.94	760.4	33.3	0.7	83	NW	18	8			10						Capt. Sselliwerstow.
Astrakhan	29.72	755.0	29.64	752.9	68.2	20.1	68	NNE	13	6			10s;n			Blank			Capt. Wisganow.
Barnaul ‡	28.90	734.0	29.36	745.8	76.5	24.7	32	SSW	22	10			10						Meteorological Obs'y.
Dorpat	29.85	758.4	30.11	764.7	48.7	9.3	45	ENE	4	2			0						Observatory.
Ekaterinburg	28.66	728.0	29.64	752.8	37.8	3.2	48	WNW	9	4			10n						Meteorological Obs'y.
Kasan	29.59	751.6	29.87	758.6	42.1	5.6	32	NNW	7	3			10ks						Observatory.
Kertch	29.78	756.4	29.80	756.9	73.6	23.1	73	W	7	3			3						Lago lo & Sastyrez.
Kieff	29.23	742.4	29.85	758.1	64.2	17.9	58	NNE	13	6			8cks						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.47	748.4	29.66	753.4	72.5	22.5	58	ENE	13	6			7			Blank			Meteorological Obs'y.
Moscow	29.40	748.2	30.02	762.4	45.3	7.4	37	S	7.8	3.5			6ks						Meteorological Obs'y.
Nertchinsk	27.59	700.8	29.84	757.8	54.5	12.5	25	Calm	0	0			8						Meteorological Obs'y.
Nikolaiev	29.75	755.6	29.82	757.4	68.2	20.1	87	S	4	2			9n						Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	29.73	755.2	29.87	758.8	79.5	26.4	38	Calm	0	0			2k						Physical Observatory.
St. Petersburg	30.05	763.5	30.08	763.9	46.4	8.0	50	NW	13	6		0s	3ks						Central Physical Obs'y.
Tashkend, Laboratory	28.23	717.0	29.69	754.1	83.5	30.3	25	W	9	4			10						Teich, A. M.
Tiflis	28.41	721.5	29.80	757.0	73.4	23.0	52	Calm	0	0			10s						Physical Observatory.
Warsaw	29.45	748.0	29.85	758.3	72.9	22.7	39	E	13	6			0						Astronomical Obs'y.
Wilna	29.59	751.5	30.00	762.0	61.0	16.1	34	E	2	1			2					Light clouds	Berg, Assistant.
Yeniseisk	29.05	737.9	29.32	744.8	66.2	19.0	41	SSW	16	7			10						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.97	761.2	55.1	12.8	81	E			3		0			0	0	Clear	Andrew Gibb.
Monach Lt. House, Hebrides			29.94	760.5	68	20.0	95	NE			3	0	0			0	0	Hazy	J. Youngclause.
North Unst, Shetland Isl'ds			30.13	765.3				NE			4		10						Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.87	758.6	29.97	761.2	70.7	21.5	56	ESE	3.8	1.7			4k			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.09	764.2	30.14	765.6	68.0	20.0	70	NW	2.7	1.2		2	7	NE		0.236	6.0	Almost cov'd	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.16	689.8			58.3	14.6	65	NE	2.5	1.1		2	4	SW		0.181	4.6	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.89	708.4	30.05	763.4	71.4	21.9	39	SE	4.0	2.7		0	7			Inap.	Inap.		The Staff.
Murcia, Met. Obs'y ‡	29.87	758.6	30.01	762.3	81.7	27.6	36	NW	3.4	1.5		0	2			0	0	Almost clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.23	742.5	30.12	765.0	63.9	17.7	74	SW	5.6	2.5			9			0.047	1.2	Almost cov'd	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.83	757.7	29.90	759.4	77.5	25.3	83	S	4.0	1.8		1ck	1s	NW		0.224	5.7	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.78	756.3	29.83	757.6	85.0	29.4	69	SE	4.4	2.0		0	0			0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.08	764.0	30.18	766.4	70.0	21.1	80	WNW	11.9	5.3		0	1	W		0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.90	759.4	29.99	761.7	82.4	28.0	86	SE	8.9	4.0		5cs	2k	SE	SE	0	0		Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.73	755.1	29.87	758.8	84.8	29.3	74	S	2.6	1.3			1s			0	0	Fair	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.13	765.3	30.17	766.3	41.0	5.0	45	N			2		10			0	0		
Umea	30.07	763.7	30.12	765.0	47.8	8.8	48	Calm			0		8			0	0		
Hernosand	30.05	763.3	30.10	764.6	46.6	8.1	40	S			2		0			0	0		
Stockholm	29.86	758.5	30.04	763.0	59.7	15.4	43	SSW			4		2			0	0		
Wisby	30.01	762.2	30.07	763.7	53.2	11.8	51	NW			2		0			0	0		
Sub-Series.																			
Upsala	29.91	759.8	30.00	762.0	61.2	16.2	53	SSW	4.5	2.0			3		W	0	0		Nils Ekholm
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.44	722.3	29.85	758.3	56.5	13.6	95	SW			1		10					Raining	The Observatory.
Zurich	28.15	715.0	29.75	755.6	66.2	19.0	71	NW			4		6			0.507	14.4	Cloudy	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.85	758.3	70.2	21.2	67	SW	6	2.5			2		SW	0.067	1.7		The Observatory.
Valona			29.95	760.8	76.1	24.5		S			1		2			0	0	Slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.94	760.5	77.0	25.0	60	W			1		1k			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
Albany, New York	29.94	760.5	30.02	762.5	70.8	21.6	71	S	7	3.1		8cs	Hz			0	0	Fair	
Alpena, Michigan	29.38	746.2	30.01	762.2	60	15.6	82	W	3	1.3		2k	Sk	W		0	0	Fair	
Atlanta, Georgia	28.93	734.8	30.05	763.3	64.8	18.2	59	NE	9	4.0		0	0			0	0	Clear	
Atlantic City, New Jersey	30.08	764.0	30.10	764.5	53	11.7	100	Calm	0	0			Fg		Calm	0	0	Dense fog	
Augusta, Georgia	29.88	758.9	30.08	764.0	68.8	20.4	65	E	3	1.3		0	Hz			0	0	Clear	
Baltimore, Maryland	30.06	763.5	30.10	764.5	66	18.9	74	SE	1	0.4		Hz	Hz			0	0	Light haze	
Barnegat, New Jersey	30.04	763.0	30.06	763.5	57	13.9	94	N	4	1.8		0	0			0	0	Clear	
Bismarck, Dakota	28.05	712.5	29.90	759.4	60	15.6	94	E	10	4.5			10s		Calm	0	0	Cloudy	
Boise City, Idaho	27.05	687.1	30.01	762.2	47.2	8.4	55	NE	2	0.9			10s		NW	0	0	Cloudy	
Boston, Massachusetts	29.80	756.9	29.95	760.7	68.0	20.0	67	SW	8	3.6		2c	0			0	0	Fair	
Brackettville, Texas	28.74	730.0	29.76	755.9	69.0	20.6	95	SE	6	2.7		0	0			0	0	Clear	
Brownsville, Texas	29.87	758.7	29.91	759.7	77	25.0	82	SE	4	1.8		0	0			0	0	Clear	
Buffalo, New York	29.35	745.5	30.03	762.7	62.9	17.2	75	SW	6	2.7		5k	Sk	SW		0	0	Fair	
Burlington, Vermont	29.64	752.8	29.92	760.0	69.1	20.6	75	SW	7	3.1		8cs	Hz	W		0	0	Light haze	
Cairo, Illinois	29.72	754.9	30.09	764.3	72	22.2	85	NE	2	0.9		0	0			0	0	Clear	
Campo, California	27.43	696.7	30.00	762.0	40.6	4.8	82	S	2	0.9			Fg		W	0	0	Light fog	
Camp Thomas, Arizona	27.18	690.4			64	17.8	39	Calm			0	5ck	0			0	0	Fair	
Cape Henry, Virginia	30.04	763.0	30.06	763.5	61	16.1	94	NE	14	6.3			10s			0.01	0.3	Cloudy	
Cape May, New Jersey	30.06	763.5	30.08	764.0	55	12.8	93	SE	3	1.3			Fg		Calm	0	0	Dense fog	
Castroville, Texas	29.18	741.2	29.86	758.4	72	22.2	76	Calm	0	0			10s			0	0	Cloudy	
Cedar Keys, Florida	30.01	762.2	30.03	762.7	67	19.4	84	N	9	4.0		0	0			0	0	Clear	
Champaign, Illinois	29.27	743.4	30.04	763.0	69.6	20.9	85	S	1	0.4		0	0			0	0	Clear	
Charleston, S. Carolina	29.97	761.2	30.03	762.7	66	18.9	74	N	10	4.5		0	8ks	N		0	0	Cloudy	
Charlotte, N. Carolina	29.23	742.4	30.02	762.5	68.2	20.1	65	NE	6	2.7		0	0			0	0	Clear	
Chattanooga, Tennessee	29.30	744.2	30.09	764.3	66	18.9	79	Calm	0	0		0	Sk	Calm		0	0	Clear	
Cheyenne, Wyoming	24.03	610.4	29.97	761.2	49	9.4	64	NW	8	3.6			10s			Inap.	Inap.	Cloudy	
Chicago, Illinois	29.34	745.2	30.00	762.0	71.6	22.0	62	W	5	2.2		Hz	Hz			0	0	Light haze	
Chincoteague, Virginia	30.07	763.8	30.09	764.3	53	11.7	100	NE	13	5.8			Fg		Calm	Inap.	Inap.	Dense fog	
Cincinnati, Ohio	29.46	748.3	30.09	764.3	65	18.3	63	SE	1	0.4			Sk			0	0	Dense smoke	
Cleveland, Ohio	29.36	745.7	30.00	763.5	68	20.0	60	S	6	2.7		0	0			0	0	Clear	
Coleman City, Texas																			
Columbus, Ohio	29.25	742.9	30.07	763.8	66	18.9	59	E	1	0.4		0	Fg			0	0	Clear	
Concho, Texas	28.06	712.7	29.70	754.4	63	17.2	89	Calm	0	0		5ck	0			0	0	Fair	
Corsicana, Texas	29.56	750.8	30.01	762.2	73	22.8	85	Calm	0	0		0	5s			0	0	Fair	
Davenport, Iowa	29.37	746.0	29.99	761.7	71	21.7	75	SW	4	1.8		1cs	0	SW		0	0	Clear	
Dayton, Washington T'y	28.29	718.6	29.97	761.2	43.3	6.3	75	S	2	0.9		0	5s		SW	0.05	1.3	Fair	
Deadwood, Dakota	25.32	643.1			50	10.0	79	SW	3	1.3		0	0			0	0	Clear	
Decatur, Texas	28.72	729.5	29.84	757.9	70	21.1	80	SE	4	1.8		0	1s			0	0	Clear	
Delaware Breakwater, Del.	30.07	763.8	30.09	764.3	55	12.8	100	Calm	0	0			Fg			0	0	Dense fog	
Denison, Texas	29.22	742.2	29.99	761.7	74	23.3	81	SE	3	1.3		8cs	0	Calm		0	0	Fair	
Denver, Colorado	24.74	628.4	29.96	761.0	55.0	12.8	77	S	4	1.8		5ck	5s	Calm	W	0.35	8.9	Cloudy	
Des Moines, Iowa	29.08	738.6	29.93	760.2	69	20.6	85	SW	4	1.8		5c	0			0	0	Fair	
Detroit, Michigan	29.36	745.7	30.03	762.7	69.0	20.6	70	S	4	1.8		0	Sk			0	0	Clear	
Dodge City, Kansas	27.31	693.7	29.51	749.5	63	17.2	89	S	11	4.9		5k	0	S		0	0	Fair	
Dubuque, Iowa	29.31	744.5	29.68	761.5	68.5	20.3	97	S	6	2.7		7cs;k	2s	SE;S	Calm	0	0	Cloudy	
Duluth, Minnesota	29.25	742.9	29.62	760.0	49	9.4	93	NE	4	1.8			10s;fg		NE	0.30	7.6	Cloudy	
Eagle Pass, Texas	29.14	740.1	29.84	757.9	72.5	22.5	85	SE	3	1.3		0	0			0	0	Clear	
Eagle Rock, Idaho	25.21	640.3	29.80	758.4	41	5.0	41	E	6	2.7		0	0			0	0	Clear	
Eastport, Maine	29.75	755.6	29.82	757.4	48	8.9	93	SW	2	0.9			Fg			0	0	Dense fog	
El Paso, Texas	26.17	664.7			61	16.1	82	Calm	0	0		0	0			0	0	Clear	
Erie, Pennsylvania	29.34	745.2	30.03	762.7	68	20.0	70	S	3	1.3		1k	0			0	0	Clear	
Escanaba, Michigan	29.32	744.7	29.90	761.0	57	13.9	75	SE	3	1.3			10s		Calm	0.51	13.0	Cloudy	
Florence, Arizona	28.42	721.9	30.02	762.5	60	15.6	34	NE	2	0.9		0	0			0	0	Clear	
Fort Apache, Arizona	25.02	635.5	30.47	773.9	43	6.1	43	NE	3	1.3		1ck	0	Calm		0	0	Clear	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota	28.29	718.6			62	16.7	88	E	5	2.2		8c	2ks	W	E	0.97	24.6	Cloudy	
Fort Benton, Montana	27.10	688.3			46	7.8	54	W	2	0.9		0	0			0	0	Clear	
Fort Buford, Dakota	27.92	709.2	29.72	754.9	55	12.8	87	S	4	1.8		0	5ks		W	0.64	16.3	Fair	
Fort Custer, Montana	26.81	681.0			48	8.9	85	E	4	1.8		0	0			0	0	Clear	
Fort Davis, Texas	25.18	639.6	30.14	765.5	58	14.4	76	Calm	0	0		0	5s		S	0.68	17.3	Fair	
Fort Elliott, Texas	27.19	690.6	29.40	746.7	60	15.6	77	Calm	0	0		5k	0			0	0	Fair	
Fort Gibson, Indian T'y	29.44	747.8	29.95	760.7	73	22.8	76	E	4	1.8		2c	0	Calm		0	0	Fair	
Fort Grant, Arizona	25.20	640.1	30.00	762.0	59	15.0	38	NW	6	2.7		0	0			0	0	Clear	
Fort Griffin, Texas	28.59	726.2	29.81	757.2	69.5	20.8	90	Calm	0	0		5cs	0			0.02	0.5	Fair	
Fort Keogh, Montana	27.35	694.7			50	10.0	100	Calm	0	0			Fg			0.42	10.7	Light fog	
Fort Macon, North Carolina	29.97	761.2	29.98	761.5	64	17.8	94	N	20	8.9			10s		N	0	0	Cloudy	
Fort McKavett, Texas	27.71	703.8	29.58	751.3	63.1	17.3	89	W	2	0.9		4cs	0			0	0	Fair	
Fort Missoula, Montana	20.03	670.4			57	13.9	69	S	2	0.9			10s			0	0	Cloudy	
Fort St. Michaels																			
Fort Shaw, Montana	26.30	668.0			48	8.9	70	NE	5	2.2		2cs	0			0	0	Clear	
Fort Sill, Indian Territory	28.74	730.0	29.81	757.2	68	20.0	95	S	6	2.7		5k	0	W		0.12	3.0	Fair	
Fort Stevenson, Dakota	28.01	711.4			59	15.0	94	E	4	1.8			10ks		E	0	0	Cloudy	
Fort Verde, Arizona					59	15.0	94	W								0	0	Clear	
Fredericksburg, Texas					48.5	9.2	29				2	0	0			0	0	Clear	
Galveston, Texas	28.24	717.3	29.77	756.1	65	18.3	89	Calm	0	0		2cs	0			0	0	Fair	
Grand Haven, Michigan	29.94	760.5	29.98	761.5	78	25.6	82	SE	2	0.9		0	5ks			0.32	8.1	Fair	
Hatteras, North Carolina	29.38	746.2	30.01	762.2	70	21.1	70	S	3	1.3		0	0			0	0	Clear	
Helena, Montana	29.96	761.0	29.98	761.5	64	17.8	100	NE	16	7.2		5cs	0			0.02	0.5	Fair	
Henrietta, Texas	25.72	653.3			51	10.6	65	S	4	1.8		0	0			0	0	Clear	
Indianapolis, Indiana	28.96	735.6	29.84	757.9	70	21.1	90	SE	5	2.2		0	5s			0	0	Fair	
Indianola, Texas	29.28	743.7	30.04	763.0	68.5	20.3	65	Calm	0	0		1c	Hz	S	Calm	0	0	Light haze	
Jacksboro, Texas	29.94	760.5	29.97	761.2	77.1	25.1	82	S	6	2.7		2cs	1ks;hz	SW	Calm	0	0	Fair	
Jacksonville, Florida	28.81	731.8	29.90	759.4	69	20.6	95	SE	2	0.9		1k	0	SE		1.04	26.4	Clear	
Keokuk, Iowa	29.98	761.5	30.03	762.7	70	21.1	80	NE	6	2.7		0	0			0	0	Clear	
Key West, Florida	29.37	746.0	29.99	761.7	74.5	23.6	68	SW	4	1.8		0	Hz		Calm	0	0	Clear	
Kittyhawk, North Carolina	29.89	759.2	29.92	760.0	75.0	23.9	87	E	9	4.0		0	8ks		E	0.31	7.9	Threatening	
Knoxville, Tennessee	30.03	762.7	30.05	763.3	58	14.4	100	NE	31	13.9			Fg			0.10	2.5	Dense fog	
La Crosse, Wisconsin	29.12	739.6	30.11	764.8	63.8	17.7	79	NE	1	0.4		0	1s		Calm	0	0	Clear	
La Mesilla, New Mexico	29.18	741.2	29.90	759.4	73	22.8	72	S	9	4.0		5cs	0	S		0.01	0.3	Fair	
Laredo, Texas	26.05	661.7	30.20	767.1	59	15.0	88	Calm	0	0		0	1s			0	0	Clear	
Leavenworth, Kansas	29.46	748.3	29.79	756.7	75	23.9	85	SE	4	1.8		0	5s	S		0	0	Fair	
Lewiston, Idaho	29.09	738.9	29.90	759.4	69	20.6	80	S	4	1.8		0	0			0	0	Clear	
Little Rock, Arkansas	29.20	741.7	29.85	758.2	51	10.6	59	SW	1	0.4		5k	0	Calm		Inap.	Inap.	Fair	
Los Angeles, California	29.72	754.9	30.03	762.7	68	20.0	90	Calm	0	0		0	0			0	0	Clear	
Louisville, Kentucky	29.67	753.6	30.04	763.0	57.2	14.0	87	E	2	0.9			10s		Calm	0	0	Cloudy	
Lynchburg, Virginia	29.51	749.5	30.05	763.3	70.0	21.1	75	SW	1	0.4		0	Sk			0	0	Clear	
Madison, Wisconsin	29.43	747.5	30.09	764.3	65	18.3	73	NE	2	0.9		0	0			0	0	Clear	
Marquette, Michigan	29.00	736.0	29.94	760.5	70	21.1	75	S	7	3.1		5c	0	NW		0	0	Fair	
Mason, Texas	29.28	743.7	29.97	761.2	55	12.8	93	NW	2	0.9			10n;fg		Calm	1.00	25.4	Light rain	
Memphis, Tennessee	28.34	719.8	30.00	763.5	65	18.3	73	S	2	0.9		1c	0	SE		0	0	Clear	
Milwaukee, Wisconsin	29.75	755.6	30.08	764.0	73	22.8	67	Calm	0	0		1cs	Sk	SE	Calm	0	0	Light sm'e	
	29.28	743.7	29.97	761.2	70	21.1	70	SW	6	2.7		5c	Sk			0	0	Fair	

MAY 27, 1881.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er	Lo'er	Direction, Upper.	Lower.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.97	761.2	30.04	763.0	68	20.0	84	N	6	2.7		2cs	Hz			0	0	Clear	
Montgomery, Alabama	29.84	757.9	30.07	763.8	67.1	19.5	79	NE	3	1.3		0	0			0	0	Clear	
Moorhead, Minnesota	28.90	734.0	29.83	757.7	57	13.9	87	E	4	1.8			10s		E	0.03	0.8	Cloudy	
Morgantown, W. Virginia	29.11	739.4	30.08	764.0	66	18.9	79	Calm	0	0		Hz	0			0	0	Clear	
Mt. Washington, N. H.	23.78	604.0	30.14	765.5	46	7.8	85	NW	64	28.6		8c	fg;hz		NW;C	0	0	Fair	
Nashville, Tennessee	29.56	750.8	30.08	764.0	69.2	20.7	79	SW	1	0.4		5ck	0	SW		0	0	Fair	
New Haven, Connecticut	29.91	759.7	30.02	762.5	61	16.1	82	S	2	0.9		Hz	Fg			0	0	Dense haze.	
New London, Connecticut	29.99	761 7	30.04	763.0	62	16.7	77	W	4	1.8		0	0			0	0	Clear	
New Orleans, Louisiana	29.96	761.0	30.02	762.5	75.7	24.3	77	SE	5	2.2		1c	Sk			0	0	Clear	
Newport, Rhode Island	29.95	760.7	30.00	762.0	60.2	15.7	79	SW	9	4.0		1c	Hz	Calm		0	0	Fair	
New River, N. Carolina																			
New Shoreham, Rhode I'd	30.03	762.7	30.06	763.5	51.0	10.6	72	W	8	3.6		2cs	0	Calm		0	0	Fair	
New York, New York	29.88	758.9	30.05	763.3	58	14.4	88	W	6	2.7		0	Fg			0	0	Clear	
Norfolk, Virginia	30.04	703.0	30.07	763.8	61	16.1	94	NE	12	5.4			10s			Inap.	Inap.	Cloudy	
North Platte, Nebraska	26.96	684.8	29.40	746.7	65	18.3	87	S	8	3.6		5c	0	S		0	0	Fair	
Olympia, Washington T'y	29.99	761.7	30.03	762.7	42.0	5.6	96	NE	1	0.4			Fg		Calm	0.07	1.8	Dense fog	
Omaha, Nebraska	28.81	731 8	29.85	758 2	69	20.6	83	SE	6	2.7		8cs	1s			0.30	7.6	Cloudy	
Oswego, New York	29.68	753.9	29.99	761.7	67.7	19.8	76	SW	1	0.4		2k	Hz	NW		0	0	Fair	
Pensacola, Florida	30.00	702.0	30.03	762.7	71	21.7	75	NW	6	2.7		0	0			0	0	Clear	
Philadelphia, Pa	30.03	762 7	30.08	764.0	60	15.6	88	SW	8	3.6		0	Fg			0	0	Clear	
Phœnix, Arizona	28.81	731.8	30.59	777.0	62	16.7	61	N	1	0.4		0	0			0	0	Clear	
Pike's Peak, Colorado	17.85	453.4	30.06	703.5	23	— 5.0	8	NE	32	14.3		0	0			0.09	2.3	Clear	
Pioche, Nevada	24.00	609.6	29.77	756.1	48	8.9	29	S	4	1.8		0	0					Clear	
Pittsburg, Pennsylvania	29.28	743.7	30.07	763.8	61.2	16.2	85	W	3	1.3			Fg	Calm		0	0	Dense fog	
Port Eads, Louisiana	30.02	762.5	30.02	762.5	74.5	23.6	86	E	10	4 5		1k	0	Calm		0	0	Clear	
Port Huron, Michigan	29.38	746 2	30.02	762.5	69.0	20.6	70	SW	5	2.2		2ck	Hz	Calm	Calm	0	0	Clear	
Portland, Maine	29.82	757 4	29.87	758.7	61	16.1	77	W	2	0.9		2cs	Hz	Calm		0	0	Fair	
Portland, Oregon	29.97	761.2	30.04	763.0	42.9	6.1	94	SE	2	0.9			Fg			0.05	1.3	Dense fog	
Portsmouth, N. Carolina					64	17.8	78	NE	28	12.5			10s		NE	0	0	Cloudy	
Prescott, Arizona	24.76	628.9	30.12	765.0	41	5.0	41	SW	2	0.9		0	0			0	0	Clear	
Punta Rassa, Florida	29.92	760.0	29.94	760.5	74	23.3	79	NE	10	4.5		0	Hz		Calm	0.43	10.9	Clear	
Red Bluff, California	29.05	753.1	30.00	762.0	52.0	11.1	69	S	5	2.2		0	0			0	0	Clear	
Rio Grande City, Texas	29.74	755.4	29.95	760.7	72	22.2	85	SE			1	1c	0	Calm		0	0	Clear	
Rochester, New York	29.40	746.7	29.99	761.7	67	19.4	69	W	1	0.4		Hz	Hz			0	0	Dense haze	
Roseburg, Oregon	29.47	748.5	30.05	763.3	37.5	3.1	86	Calm	0	0		0	0			0	0	Clear	
Sacramento, California	29.94	760.5	30.02	762.5	49.8	9.9	79	S	10	4.5		0	0			0	0	Clear	
St. Louis, Missouri	29.49	749.0	30.04	763.0	71.0	21.7	85	SE	3	1.3		1c;hz	0			0	0	Clear	
St. Paul, Minnesota	29.02	737.1	29.81	757 2	68	20.0	90	SE	2	0.9		2ck	5ks	NW	SE	0.97	24.6	Fair	
Salt Lake City, Utah	25.54	648.7	29.87	758.7	55	12.8	28	Calm	0	0		0	0			0	0	Clear	
San Antonio, Texas	29.27	743.4	29.95	760.7	72.7	22.6	85	Calm	0	0			10s		SE	0	0	Cloudy	
San Diego, California	29.93	760.2	30.01	762.5	59.0	15.0	65	Calm	0	0			10s			0	0	Cloudy	
Sandusky, Ohio	29.40	746.7	30.05	763.3	68	20.0	86	W	7	3.1		0	Hz			0	0	Clear	
Sandy Hook, New Jersey	30.03	762.7	30.06	763.5	61.0	16.1	88	SW	2	0.9		0	Fg			0	0	Clear	
San Francisco, California	30.00	762.0	30.07	763.8	49	9.4	81	NW	12	5.4		0	Fg		NW	0	0	Clear	
Santa Fé, New Mexico	23.32	592.3	29.86	758.4	50	10.0	45	Calm	0	0		0	0			0.19	4.8	Clear	
Savannah, Georgia	29.90	701.0	30.05	763.3	68	20.0	84	N	5	2.2		0	Fg			0	0	Clear	
Shreveport, Louisiana	29.80	756.9	30.03	762.7	73	22.8	85	SE	4	1.8		2cs	0			0	0	Clear	
Silver City, New Mexico	24.24	615.7	30.34	770.6	52	11.1	60	Calm	0	0		0	0			0	0	Clear	
Sitka, Alaska																			
Smithville, North Carolina	29.96	761.0	30.00	762.0	64	17.8	89	N	10	4.5			10s			0	0	Cloudy	
Spokane Falls, Wash. Ter.	28.01	711.4	29.86	758.4	44	6.7	84	Calm	0	0		10k	0			0	0	Cloudy	
Springfield, Illinois	29.40	746.7	30.04	763.0	71	21.7	80	S	4	1.8		0	0			0	0	Clear	
Springfield, Massachusetts	29.87	758.7	30.00	762.0	64	17.8	78	S	1	0.4		5c;hz	Hz			0	0	Light haze	
Stockton, Texas	20.95	684.5	29.95	760.7	63.0	17.2	100	NW	16	7.2			10ks		NW	0.26	6.6	Cloudy	
St. Vincent, Minnesota	29.07	738.4	29.84	757.9	60	15.6	88	E	3	1.3		10cs	0	E		0	0	Cloudy	
Thatcher's Island, Mass.	30.07	763.8	30.13	765.3	56.4	13.6	81	S	1	0.4		0	0			0	0	Clear	
Toledo, Ohio	29.38	740.2	30.04	763.0	71	21.7	49	W	5	2.2		0	Sk			0	0	Dense smoke	
Tucson, Arizona	27.51	698.7	30.06	763.5	63	17.2	47	SE	3	1.3		2k	0			0	0	Clear	
Umatilla, Oregon	29.71	754.6	30.21	767.3	43.0	6.1	70	S	1	0.4		10cs	0	SE		0.04	1.0	Cloudy	
Uvalde, Texas	28.99	736.3	29.78	756.4	68	20.0	84	E	2	0.9			10s		Calm	0	0	Cloudy	
Vicksburg, Mississippi	29.81	757.2	30.06	763.5	71	21.7	71	SE	3	1.3		2ck	0	NE		0	0	Fair	
Visalia, California	29.62	752.3	29.99	761.7	55	12.8	56	SW	2	0.9		0	0			0	0	Clear	
Washington, D. C.	30.00	762.0	30.11	764.8	60	15.6	88	Calm	0	0		0	Sk			0	0	Clear	
Wickenburg, Arizona					55	12.8	45	Calm			0	0	0			0	0	Clear	
Wilmington, N. Carolina	29.94	760.5	30.00	762.0	65	18.3	84	N	6	2.7			10s		Calm	0	0	Cloudy	
Winnemucca, Nevada	25.57	649.5	29.93	760.2	48	8.9	49	SW	6	2.7		0	0			0	0	Clear	
Wood's Holl, Mass.	29.95	760.7	29.99	761.7	59	15.0	70	W	17	7.6		0	Hz			0	0	Clear	
Yankton, Dakota	28.03	727.2	29.87	758.7	64	17.8	94	NE	3	1.3			10n			1.57	39.9	Light rain	
Yuma, Arizona	29.75	755.6	29.89	759.2	63.8	17.7	63	Calm	0	0		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.11	561.6			54.0	12.2	83	Calm	0	0		10cs;k	0			0.08	2.0	Cloudy	Thomas Herran
Buff Bay Town, Jamaica	29.71	754.6	30.02	762.5	74	23.3	95	E				k	k			Blank			
Havana, Cuba, W. I.	29.89	759.2	29.94	760.5	79	20.1	78	NE	3	1.3		0	8ks		Calm	0.49	12.4	Cloudy	A. Van Caneghem, Ass't.
Jakotshavn, Greenland	29.60	751 8	29.65	753.1	53.1	11.7		SW			4		2			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	29.91	759.7	29.92	760.0	70.0	24.4	95	Calm	0	0			10n			0.77	19.6	Raining	Robert Johnstone.
Navassa, W. I.	29.85	758.2	29.93	760.2	81	27.2	83	E	15	6.7			10			1.71	43.4	Cloudy	F. M. Everett.
Paramuribo, S. A.	30.02	762.5	30.02	762.5	78	25.6	86	SE			2		8ks	E		1.46	37.1	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Colombia	29.38	746.2	29.93	760.2	83	28.3	64	Calm			0	2c	8ks	Calm	S	0.14	3.6	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					77.0	25		NW			1		10ks		NW	0.55	14.		Earl Flint.
Santiago de Cuba, W. I.	29.86	758.4	29.89	759.2	76	24.4	86	S	2.4	1.1		0	10k			1.56	39.6	Cloudy	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.10	764.5	30.15	765.8	33.0	0.6	95	E	10	4.5		0	0			0	0	Clear	J. Fortescue & W Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.98	761.5	71	21.7	78	NW			1		10							Raining	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 20° 30′, E. 59° 00′	29.67	753.6	86	30.0	84	S			2		1	S				3	S	Blue sky	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			72	22.2		ESE			1-2		0							Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N. 16° 56′, W. 61° 40′	30.02	762.5	83	28.3	83	ESE			2		5					2	SE	D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 11′, E 18° 26′	29.84	757.9	65.5	18.6	74	NW			2-4		8	NW						Showery	Com. F. W. Richards.
H. M. S. Champion, S. 12° 47′, W. 22° 08′	30.01	762.2	73	22.8	95	SE			3		5	ESE				2	SSW	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Chefoo Harbor, China	30.16	766.1	72	22.2	58	SSW			1		2							Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 35° 05′, E. 14° 28′	29.95	760.7	68	20.0		WNW			2		10	WNW				2	WSW	Showery	Capt. F. A. Wotherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, N. 1° 29′, W. 20° 50	30.01	762.2	80	26.7	87	ESE			3		4					4	ESE	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring, N. 2° 48′, E. 101° 00′	29.81	757.2	81	27.2		Calm			0		3							Showery	Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.92	760.0	77	25.0	82	NNE			1		4	NNE						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 34′, W. 52° 41′	29.88	758.9	38	3.3	91	S			1		10							Raining	Capt. W. R. Kennedy.
H. M. S. Dryad, N. 22° 18′, E. 59° 40′	29.58	751.3	95	35.0		Calm			0		1	SW				1	S	Blue sky	Capt. John Hext.
H. M. S. Eclipse, N. 5° 26′, E. 82° 57′	29.77	756.1	81	27.2		SW			5-6		2					4	SW	D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 1° 17′, E. 103° 51′	29.76	755.9	84	28.9		WNW			2		9	S				1	S	Raining	Comm. C. Johnstone.
H. M. S. Emerald, S. 0° 41′, E. 174° 24′	29.85	758.2	84	28.9	79	E			1-2		3	E				2	S	D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, S. 16° 12′, E. 73° 35′	29.95	760.7	79	26.1	78	E			4-5		4	ESE				4	ESE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn, N. 13° 52′, W. 42° 45′	29.72	754.9	86.5	30.3	82	WNW			3-4		3					2	WNW	D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo N. 21° 15′, W. 85° 21′	29.89	759.2	81	27.2	87	E			1-2		2	E				1	E	D. clouds	Comm. R. N. Custance.
H M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, N. 48° 25′, W. 123° 26′	29.99	761.7	47	8.3	85	NE			2		9							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	30.12	765.0	32	0.0	100	WSW			1		3							Blue sky	Capt. L. F. Jones.
H. M. S. Griffon, N 25° 54′, W. 79° 56′	29.83	757.7	80	26.7	93	ENE			2		10					1	NE	Raining	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 33° 45′, W. 57° 40′	29.96	761.0	72	22.2		SSE			3		3	SSE				2	ESE	D. clouds	Capt. J. L. Way.
H. M. S. Inconstant, Melbourne, Australia	30.15	765.8	52	11.1	93	Calm			0		8	Calm						D. clouds	Capt. C. C. P. Fitzgerald.
H. M. S. Iris, N. 34° 21′, E. 33° 04′	29.91	759.7	70	21.1	85	W			3		4					1	WSW	D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 28° 02′, E. 123° 05′	29.96	761.0	70	21.1	95	ENE			3-4		10	WSW				5	NE	Squally	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.99	761.7	62	16.7		Calm			0		6							D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, N. 34° 25′, E. 134° 20′	30.05	763.3	65	18.3		N			1		8							Misty	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	29.79	756.7	83.5	28.6	80	ENE			2		2					Sl't	ENE	Squally	Capt. A. Carpenter.
H. M. S. Midge, Amoy, China	29.92	760.0				E			2		4	NE						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 36° 07′, W. 5° 21′	30.08	764.0	68	20.0	79	SSW			3		1	SSW						Blue sky	Capt. H. H. Rawson.
H. M. S. Modeste, S. 7° 50′ E. 103° 20′	29.77	756.1	84	28.9	79	SSE			2-3		1					3	SE	Blue sky	Capt. J. G. Mead.
H. M. S. Monarch, Goletta, Tunis, N. Africa	29.99	761.7	70	21.1	95	S			1		5	SW						D. clouds	Capt. G. Tryon, C. B

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.82	757.4	58	14.4	42	NNW			1									Foggy	Capt. E. B. Drummond.
H. M. S. Orontes																			Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.86	758.4	80	26.7		Calm			0		8					2	SE	Showery	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Puget.
H. M. S. Phœnix, N. 11° 22′, W. 67° 45′	29.91	759.7	83	28.3	87	ESE			3-4		3					4	ESE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler, St. Paul deLoando, Benguela	29.89	759.2	75	23.9		WNW			2		0					Sm'h		Blue sky	Capt. Hon. A.C.Littleton.
H. M. S. Ready, Rangoon, India	29.73	755.1	83	28.3		S			3		2	SW				4	SW	D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	29.99	761.7	45	7.2		Calm			0		6							Showery	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.89	759.2	81.4	27.4	77	SE			3		7							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 6° 00′, E. 74° 47′	29.38	746.2	85	29.4	83	WSW			3		3					4	wsw	D. clouds	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 16° 53′, W. 25° 00′	30.13	765.3	74.5	23.6	76	NNE			3		2	NNE				2	N	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer N. 37° 47′, E. 15° 31′			68	20.0	79	Calm			0		8					1		Showery	Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A	29.98	761.5	52.5	11.4	93	Calm			0		10	Calm						Foggy	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 37° 15′, E. 11° 00′	29.98	761.5	68	20.0	79	W			1		0					Sm'h		Blue sky	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I			81	27.2		WNW			1		10							Raining	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W	30.24	768.1	54	12.2	80	Calm			0		1	Calm						Blue sky	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, N. 26° 50′, E. 50° 38′	29.65	753.1	88.5	31.4	57	NNW			2-3		0					Sm'h		Blue sky	Capt. T. P. Nesham.
H. M. S. Zephyr, N. 31° 20′, E. 122° 00′	30.08	764.0	66	18.9	94	E			3		6	NE				1	E	D. clouds	Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, Mossamodes, Benguela	30.03	762.8	63.0	17.2	78	N			3		10					1		Misty	Carlos Candido dos Reis, Co md't
Quanza, Santiago, Cape Verde, I'd	30.07	763.7	80.6	27.0	74	NE			4		2		NE			3	NE	D. clouds	Carlos M. da Silva Costa, Comd't
RioLima																			S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.85	758.1	80.6	27.0	88	SSW			3		8		S					D. clouds	P. I de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mil.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	p sec	0—10	0—10	0—10	From.	From.	Inch.	Mil.				
N. Yard, Pensacola, Fla	30.10	764.5	72	22.2	71	NE	3	1.3			5		NE	0	0			Fair	
N. Yard, Portsmouth, N. H	29.91	759.7	69	20.6	80	Calm	0	0			0			0	0			Clear	
Naval Hospital, Yokahama, Japan	29.91	759.7	64.5	18.1	83	Calm			0		10		E	0	0			Cloudy	
Adams, Guayaquil, Peru	29.75	755.6	75	23.9	81	SW			1		10		SW			Long		Cloudy	
Alaska, Callao, Peru	29.92	760.0	61	16.1	88	SE			1		10			0	0	Sm'h		Cloudy	
Alert, N. 20° 55′, E. 143° 01′ *	29.84	757.9	81	27.2	70	E			4		2		Calm			Long	E	Clear	
Alliance, Norfolk, Va	30.06	763.5	63	17.2	94	NE			2		10			Light				Cloudy	
Ashuelot, Kobe, Japan	29.99	761.7	67	19.4	69	SSW			2		2		Calm					Fair	
Colorado, New York, N. Y	30.05	763.5	60	15.6	88	S	10	4.5			0			0	0			Hazy	
Constitution, Norfolk, Va	30.00	762.0	62	16.7	94	NE	5	2.2			10		NE					Cloudy	
Franklin, Norfolk, Va	30.04	763.0	62	16.7	94	NE	8	3.6			10		NE	0	0			Cloudy	
Galena, Villafranca, France	29.77	756.1	67	19.4	74	S			2		5			Light		Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	30.11	764.8	49	9.4	85	SW	2.4	1.1			0							Clear	
Jamestown, Sitka, Alaska *	29.84	757.9	44	6.7	92	N			1		0			0	0			Clear	
Kearsarge, N. 32° 21′, W. 79° 26′	30.04	763.0	68	20.0	79	NNW			4		5		NNE			Mod.	NE	Fair	
Lackawanna, S. 14° 34′, W. 124° 22′ †	30.17	766.3	78	25.6	86	ENE			2-3		8		ENE			Sm'h	E	Fair	
Marion, Montevideo, Uruguay	29.94	760.5	56	13.3	75	SW			3		2		Calm	0	0	Mod.	SW	Clear	
Michigan, Erie, Pennsylvania	30.01	762.2	78	25.6	78	SW	2	0.9			8							Fair	
Minnesota, Newport, R. I	30.00	762.0	64	17.8	83	SW			2		1					Sm'h		Clear	
Monocacy, Yokohama, Japan	30.02	762.5	66	18.9	89	E			1		5		Calm					Fair	
New Hampshire, N. 32° 12′, W. 79° 25′	29.98	761.5	69	20.6	100	N	19	8.5			8		N	0	0			Cloudy	
Nipsic, Villafranca, France	29.78	756.4	70	21.1	70	SSW			3		2					Sm'h		D. clouds	
Onward, Callao, Peru †	29.97	761.2	63	17.2	83	NE			1		10		NW			Long	W	Cloudy	
Palos, Nagasaki, Japan	30.02	762.5	70	21.1	75	NE			1		0							Clear	
Passaic, Washington, D. C	30.15	765.8	60	15.6	88	NE			1		0							Clear	
Pensacola, N. 43° 43′, W. 128° 23′	29.96	761.0	49	9.4	100	SSW			5		8			Slight		Sm'h		Squally	
Portsmouth, Elizabeth River, Va	30.05	763.3	61	16.1	100	NE			3		10		NE			Sm'h		Misty	
Powhatan, N. 32° 16′, W. 79° 29′	29.88	758.9	75	23.9	77	SE			2		8		NE			Long	SE	Fair	
Quinnebaug, N. 21° 18′, W. 49° 12′	30.10	764.5	78	25.6	82	ESE			4		5		ESE			Long	ESE	Fair	
Ranger, Acapulco, Mexico *	29.85	758.2	84	28.9	79	W			2		8		Calm	0	0	Sm'h		Fair	
Richmond, Yokohama, Japan	30.02	762.5	67	19.4	79	NE			2		10		ENE	0	0			Misty	
Saratoga, Norfolk, Va	30.06	763.5	61	16.1	100	NE			2		10		NE	Light				Cloudy	
Shenandoah, Montevideo, Uruguay *	29.92	760.0	56	13.3	75	SW			5		8					Mod.	SW	Fair	
St. Louis, League Island, Pa	29.53	750.0	62	16.7	88	S	2	0.9			2			0	0			Clear	
Swatara, Shanghai, China *†	30.05	763.3	72	22.2	71	ENE			2		8		Calm					D. clouds	
Tennessee, New York, N. Y	30.08	764.0	64	17.8	89	SW			2-3		0			0	0	Sm'h		Foggy	
Ticonderoga, S. 49° 03′, W. 97° 32′	30.28	769.1	44	6.7	92	S			4		5			0.02	0.5	Mod.	S	Fair	
Trenton, Villafranca, France *	29.76	755.9	71	21.7	66	Var.			0-1		0			9 h'r	s mod	Sm'h		Clear	
Vandalia, N. Yard, League I'd., Pa	30.06	763.5	61	16.1	88	SSW			1		0							Clear	
Wabash, Boston, Massachusetts	30.10	764.5	59	15.0	82	SW	6	2.7			0			0	0			Clear	
Wachusetts, N. Yard, Mare I'd, Cal *†	30.07	763.8	51	10.6	93	W			3-4		2		W					Fair	
Wyoming, Norfolk, Va	30.04	763.0	61	16.1	94	NE			1		2?					Sm'h	SSE	Cloudy?	
Yant, N. 49° 29′, W. 73° 56′ *	29.95	760.7	61	16.1	88	SSW			1		0					Sm'h		Hazy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 20° 30′, W. 83° 10′	29.88	758.9	80	26.7	94	NE			4		8							D. clouds	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Clpero, N. 40° 06′, W. 33° 40′	30.22	767.6	59	15.0	82	WSW			1		9					3	N	Overcast	W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart ‡																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow ‡																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee, ‡ N. 40° 12′, W. 37° 12′	30.21	767.3	58.7	14.8	64	NNW			2	4c; ck	0	NW						D. clouds	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 5° 39′, W. 26° 17′	29.99	761.7	76.8	24.9	87	ESE			5		10							Raining	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 13° 01′, E. 58° 44′	29.68	753.9	84.0	28.9	98	SW			6		10							Overcast	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton, ‡ N. 50° 47′, E. 0° 40′	29.86	758.4	55	12.8	100	NW			1		10							Dense mist	Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, Clyde River, Scotland	29.98	761.5				SE			2		0							Clear	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia, N. 43° 50′, W. 48° 31′ *	30.09	764.3	47	8.3		SSW			3		5		SW	0	0	Sm'h		Fine	Capt. W. H. P. Hains.
S. S. Scythia, N. 50° 54′, W. 14° 09′	29.97	761.2	60	15.6	88	S			4		10			0	0	Sm'h	NW	Overcast	Capt. M. Murphy.
WHITE STAR LINE. *Jenney, Imrie & Co.*																			
S. S. Adriatic, N. 40° 23′, W. 72° 04′ †	29.94	760.5	49	9.4		SW			2		2		SW					D. clouds	Capt. J. W. Jennings.
S. S. Baltic, N. 40° 04′, W. 70° 18′	29.95	760.7	54	12.2	87	Var.			1							Sm'h		Foggy	Capt. H. Parsell.
S. S. Britannic, N. 48° 53′, W. 29° 47′ †	29.78	756.4	50	10.0		Var.			2		2		NW			Sl't	NW	Raining	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, N. 41° 39′, W. 63° 39′ †	30.03	762.7	46	7.8		WSW			3		10		W	0	0	Sm'h		Foggy	Capt. Ch. W. Kennedy
S. S. Republic, N. 50° 25′, W. 23° 52′ †	29.90	759.4	55	12.8	74	WSW			5		5		W	Sho	wers	Mod.	W	Fair	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Thol.
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern ‡																			Capt. Th. Jüngst.
S. S. Köln, N. 36° 38′, W. 75° 54′	30.12	765.0	58.0	14.4	94	NE			3-4		10		NE	0	0	Mod.	NE	Light fog	Capt. F. Pfeiffer.
S. S. Leipzig																			Capt. G. Meyer.
S. S. Ohio																			Capt. C. Helmbourh.
S. S. Strassburg																			
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, Philadelphia, Pa.	30.17	766.3	62	16.7	94	NE			2		10		NE					Overcast	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio, Liverpool, England....*†	29.97	761.2	59	15.0	94	WSW			1		10		WSW	Light				Raining	W. Shackford, Chief Off'r
S. S. Pennsylvania, N. 50° 11′, W. 15° 17′... *†	29.92	760.0	56	13.3	94	W			4		10		W			Mod.	W	Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 45° 26′, W. 167° 42′....†	29.97	761.2	56	13.3	81	S			4		10			Drizzles		Mod.	S	Hazy	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China....*†	30.00	762.0	84	28.9	79	SE			4		10		SE					Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 32° 21′, E. 133° 27′	30.03	762.7	70	21.1	75	E			2		8?		E	0	0	Sl't	ESE	Clear†	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon	30.01	762.2	45.0	7.2	92	Calm			0		0							Clear.	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, San Francisco, Cal.... ††	30.11	764.8	48	8.9	78	W			4		0							Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 33° 40′, W. 118° 12′.....†	30.04	763.0	59	15.0	82	SW			5		5		SW	0	0	Mod.	SW	Cloudy	Geo. H. Harrison.
S. S. Senator, San Francisco, Cal.....†	30.06	763.5	50	10.0	79	NW			2		0							Clear	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal.....†	30.02	762.5	49	9.4	71	NW			4		2		NW					Fair	Capt. G. Debney.
S. S. Victoria, N. 40° 25′, W. 124° 32′ ...†	30.03	762.8	50	10.0	86	Calm			0		2		SW			Light	NW	Fair	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 23° 48′, W. 174° 08′.....	30.13	765.3	68	20.0	70	ENE			5		5		ENE			Long	ENE	Cloudy	A. Bannerman, 2d Officer
S. S. City of New York, Sydney, N. S. W.....†	30.18	766.6	58	14.4	88	SW			2		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 20° 08′, W. 105° 31′.....	29.99	761.7	76	24.4	86	Calm			0		10ks		S	0	0	Sm'h	W	Cloudy	Capt. D. S. Austin.
S. S. City of Peking, N. 35° 13′, E. 140° 42′.....†	30.02	762.5	65	18.3	78	E			5		10		E	0	0	Mod.	NE	Overcast	Capt. G. G. Berry.
S. S. City of Sidney																			Capt. H. C. Dearborn.
S. S. City of Tokio, N. 38° 11′, W. 142° 04′....†	29.97	761.2	62	16.7	88	SSW			6		10		S			Sm'h		Cloudy	A. L. Ritchie, 2d Officer
S. S. Colima, Panama, Panama .....†	29.90	759.4	79	26.1	91	NNE			2		8		E	0.05	1.3			Cloudy	Capt. R. R. Searle.
S. S. Granada, N. 34° 05′, W. 119° 10′...†	30.00	762.0	58	14.4	82	N			2		10		NW	0	0	Sm'h		Gloomy	Capt. M. Connolly.
S. S. Zealandia, S. 27° 25′, W. 177° 14°.....	30.32	770.1	66	18.9	79	E			3		2		E	0	0	R'gh	SE		
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland, N. 45° 48′, W. 39° 35′.....†	30.01	762.2	45	7.2	73	WNW			6		5		WNW	0.2	5.	High	WNW	Squally	Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Fall River, Mass	30.00	762.0	61	16.1	71	SSW	5	2.2			0			0	0			Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 20° 18′, W. 73° 00′...*†	30.05	763.3	81	27.2		Calm			0		10		SW	Rain		Sm'h	E		Capt B. F. Woodbury.
Brigantine George, N. 28° 20′, W. 63° 50′ ....†	30.01	762.2	72	22.2		E			5		10		E	Showers		Mod.	ESE	Squally	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Md..†	30.19	766.8	67	19.4	95	NE	1	0.4			48			0	0			Clear	
Bark Sunbeam, Lisbon, Portugal.....†	30.22	767.6	72	22.2	75	SW			1		5			0	0			Fair	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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W. B. Hazen

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

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 28, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco ‡			30.12	765.1	69.8	21.0	78	NE			3		2			0	0	Fair	Dr. Ollive.
Nemours ‡			30.04	763.0	79.0	26.1	86	N			1		0			0	0	Clear	Raynard.
Algiers ‡			30.06	763.5	72.0	22.2	64	W			5		0			0	0	Clear	Nicolas.
La Calle ‡			30.04	763.1	76.3	24.6	63	N			3		4			Inap.	Inap.	Cloudy	Fonfrède.
Tunis ‡			30.00	762.1															Jacques.
Sfax ‡			30.12	765.1															Gau.
Saida ‡			30.09	764.2	75.6	24.2	21	W			2		0			0	0	Clear	Dumas.
Tebessa ‡			30.06	763.6	68.0	20.0	43	Calm			0		9			0.307	7.8	Covered	Watrin.
Geriville ‡																			Lonchamp.
Laghouat ‡			30.08	763.9	76.3	24.6	37	N			1		1			0	0	Very fair	Herbin.
Biskra ‡			30.06	763.4															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.31	769.9	30.40	772.1	49.0	9.4	94	S	5	2.2			1			0	0	Very fine	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.12	739.7	29.65	753.0	75.9	24.4	47	SE			2		5			0.535	13.6		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.91	734.4	29.65	753.1	70.2	21.2	67	N	9.8	4.4			6			0	0		Dr. Wierzbicki.
Eperies	28.76	730.5	29.59	751.5	77.0	25.0	53	Calm			0	cs	10s		S	0.039	1.0		Julius Mikolik.
Gratz ‡	28.47	723.0	29.66	753.4	72.0	22.2	56	NW			3		6			0	0		Andreas Rospini.
Hermannstadt	28.27	718.0	29.62	752.4	73.0	22.8	65	S			3		10			0.165	4.2		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.42	721.9	29.72	754.9	63.3	17.4	69	W			4		5			0.953	24.2		The Staff.
Lemberg	28.86	733.1	29.80	756.9	75.0	23.9	49	SE			2		6			0.083	2.1		Dr. T. Stanecki.
Pola	29.63	752.7	29.74	755.5	70.2	21.2	65	WNW			2		5			0.063	1.6		I. R. HydrographicOffice.
Szathmar	29.18	741.1	29.62	752.4	69.8	21.0	68	S			5		10			0.181	4.6		Beicht Peter, S. J.
Szegedin					75.9	24.4	66	W			1		8			0	0		Karl Stancel.
Trieste	29.66	753.3	29.76	755.9	71.6	22.0	56	Calm			0		9			0.445	11.3	Cloudy	Secco.
Vienna	28.99	736.4	29.67	753.7	73.8	23.2	50	W			2		2			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed May 27, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.95	760.7	30.05	763.3	55.0	12.8	77	SE	7	3.1			0			0	0	Blue sky	W. Boswell.
Armagh, Observatory	29.84	757.9	30.07	763.8	56.7	13.7	85	NW	3	1.3			10					Overcast	S. Call.
Bidston, Liverpool Obs'y			30.01	762.2	57.0	13.9	92	NW	16	7.2			10					Misty	John Hartnup.
Bolton, Sharples	29.44	747.8	29.93	760.2	67.6	19.8	74	NNW	12	5.4			0					Blue sky	Thomas Mackereth.
Bradford, Yorkshire	29.61	752.1	30.00	762.0	66.6	19.2	43	E			1		0			0	0	Blue sky	J.McLandsbo ough,F.R.S
Bridgetown, Barbadoes	29.92	760.0	29.95	760.7	86	30.0	68	NE			2		5					D. clouds	Corpl. J. Surgener,AH.C.
Cardington			29.93	760.2	63.0	17.2	86	N			0.2		10					Overcast	John McLaren.
Chatham, School M. E.	29.79	756.7	29.92	760.0	59.0	15.0	90	N			1		9					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.82	757.4	30.05	763.3	65.1	18.4	59	NW			2		1					D. clouds	The Staff.
Fort Napier, Natal	27.55	699.8	29.77	756.1	74.3	23.5	18	Calm			0		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.63	752.6	29.86	758.4	87	30.6	88	SE			1		3					Raining	Sgt. C. E. Keane.
Galway, Queen's College			29.85	758.2	61	16.1	77	S			2		10			0	0	Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.02	762.5	30.07	763.8	73.4	23.0	86	SW			5		0					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.78	756.4	29.99	761.7	65.2	18.4	53	NE			1		10					D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	29.76	755.9	29.92	760.0	61.0	16.1	89	NNW			1		10					Overcast	The Staff.
Guernsey	29.79	756.7	30.00	762.0	58	14.4	100	WNW			3		10					Misty	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.91	759.7	29.94	760.5	65.4	18.6	69	N	5	2.2			8					Threatening	The Staff.
Leicester, Museum	29.70	754.4	29.95	760.7	67.0	19.4	69	NE			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.88	758.9	29.96	761.0	72.0	22.2	69	NW			3		6			0.01	0.3	D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas	29.80	756.9	29.85	758.2	76.5	24.7	88	E			1		10			Blank		Overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.45	748.0	29.95	760.7	69.7	20.9	73	NW			2		6					D. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	29.73	755.1	29.96	761.0	65.9	18.8	76	NW			3		7					Misty	The Staff.
Plymouth	29.94	760.5	30.01	762.2	72.0	22.2	56	WNW			1		2					D. clouds	John Merrifield.
Sandwick Manse, Orkneys			30.05	763.3	59.1	15.1	71	SE	20	8.9			0					Blue sky	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.69	754.1	29.76	755.9	77.2	25.1	64	S			1		6					D. clouds	Serg't W. H. Lyne.
Sheffield	29.93	760.2	30.00	762.0	69.8	21.0	60	NE			1		5			0	0	D. clouds	W. F. Cooper.
Silloth Rectory	29.96	761.0	29.99	761.7	68.9	20.5	69	Calm			0		4			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.00	762.0				SW	7	3.1			6					D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	29.74	755.4	29.95	760.7	62.5	16.9	94	NW			2		10					Showery	Rev.C.H.Griffiths,F.M.S
Truro, Royal Institution	30.04	763.0	30.05	763.3	65	18.3	58	NW			6		0					Blue sky	W. Newcombe.
Valencia, Observatory	30.07	763.8	30.10	764.5	58.6	14.8	66	NW	10	4.5			7					Misty	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.81	757.2	29.86	758.4	54	12.2	60	NW	9	4.0		0	0			0.100	2.5	Clear	H. J. Cundall, C. E.
Chatham, N. B.*	29.82	757.4	29.88	758.9	53	11.7	76	Calm	0	0		2k	8ks	NW	NW	0.02	0.5	Cloudy	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.84	757.9	29.86	758.4	48	8.9	74	NW	5	2.2		0	0			0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.04	737.6	29.84	757.9	66	15.6	92	SE	4	1.8		0	5s		SW	0	0	Fair	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.76	755.9	29.89	759.2	57	13.9	63	NW	4	1.8		0	0			0	0	Clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.59	751.6	29.92	760.0	58	14.4	92	NE	4	1.8			10n		Calm	0.35	8.9	Light rain	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.79	756.7	29.98	761.5	60	15.6	63	NE	7	3.1		2c	0	N		Inap.	Inap.	Fair	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.25	742.9	29.94	760.5	55	12.8	94	NE	5	2.2			10n		E	0.63	16.0	Heavy rain	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.24	742.7	29.91	759.7	62	16.7	88	NE	5	2.2		5ck	0	W		0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.27	743.4	29.90	759.4	65	18.3	85	E	5	2.2		2k	Hz	W		0	0	Hazy	M. Payne.
Quebec, Quebec*	29.72	754.9	30.04	763.0	55	12.8	68	NW			1	0	0			0	0	Clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.56	750.8	30.02	762.5	57	13.9	66	Calm	0	0		5c	0	W		0.09	2.3	Fair	W. H. McIntyre.
Saugeen, Ontario*	29.17	740.9	29.86	758.4	63	17.2	92	SW	6	2.7					W	0.43	10.9	Light rain	K. Stewart.
St. Andrews, N .B	29.86	758.4	29.92	760.0	58	14.4	52	N	3	1.3		0	0			0	0	Clear	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	29.80	756.9	29.84	757.9	49	9.4	70	N	3	1.3		0	0			Inap.	Inap.	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.57	751.1	29.94	760.5	61	16.1	87	NE	10	4.5		8cs	0			0.17	4.3	Cloudy	Magnetic Observatory
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	29.81	757.2	29.88	758.9	59	15.0	67	E	5	2.2		2c	0	NW		0	0	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.54	750.3	29.79	756.7	37	2.8	100	NE					10			0.29	7.4	Fine	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.93	760.2			59.0	15.0	93	SE	14.4	6.4			10n			0.020	0.5	Showery	John Duthie.
Cape Town, C. G. H. Obs'y.	29.77	756.1	29.80	756.9	70.0	21.1		N	3.0	1.3		2cs	3			0	0		The Staff, for D. Gill.
Worcester *†	28.71	729.2			66.1	18.9	58	ESE			1	4	4			0	0	Cloudy	C. Stokes.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.98	761.6	30.01	762.2	65.3	18.5	80	ESE	0.9	0.4			10			0	0	Covered	M. Marc Dechevrens, S J.

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

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Tempera-ture of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direc-tion. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	25.18	665.0	29.90	759.4	69.4	20.8	95					ck	0			0.79	20.	Hazy	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.06	763.4	30.10	764.6	57.9	14.4	52	ESE	20	9	4		0						Oversergent Fischer.
Fanöe	30.02	762.5	30.04	763.0	67.3	19.6	48	E			4		1						Overloerer Lauridsen.
Godthaab, Greenland	29.53	750.1	29.58	751.2	42.8	6.0	70	NNE			4		9						S. Kleinschmidt.
Stykkisholm, Iceland	29.98	761.4	30.02	762.5	47.5	8.6		SE			2		8					Raining	A. O. Thorlacius.
Thorshavn	30.09	764.3	30.13	765.2	49.6	9.8	75	ENE	7	3			7						Overloerer Bergh.
Vestervig	29.98	761.5	30.08	763.9	68.9	20.5	43	E			4		0						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.45	747.9	30.08	764.1	64.0	17.8	56	NW			1		km		E	0.055	1.4		M. Labroue, Director.
Alençon Normal School	29.49	749.1	30.04	763.0	63.3	17.4	80	NW			1		10n		N	0	0	Covered	M. Nicot, Director.
Arras, Engineer School																			M. Klein, Commandant.
Avignon, Normal School	29.82	757.4	29.90	759.4	70.7	21.5	49	N			4					0	0		M. Giraud, Director.
Bar-sur-Seine	29.39	746.6	29.95	760.6	56.1	13.4	89	WSW			1		10		W	0.118	3.0	Covered	M. Saillard, Director.
Beauvais, Normal School	29.67	753.5	29.93	760.2	56.7	13.7	86	W			2		10			0.354	9.0	Covered	M. Frère Eugene Marie.
Besançon, Normal School	29.12	739.6	29.99	761.8	57.2	14	89	S			1		10n		SSE	0.413	10.5	Raining	M. Gobin, Director.
Bordeaux, Observatory	29.82	757.4	30.07	763.8	70.2	21.2	49	WSW			1		8		NW	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.47	748.4	30.01	762.3	60.4	15.8	66	WSW			1		kn		WNW	0	0		M. Postel, Director.
Brest, Naval Observatory	29.86	758.5	30.11	764.7	69.1	20.6	71	SW			1		10		SW	0	0		M. de Kermaree, Dir.
Caen, Normal School	29.89	759.3	29.97	761.1	60.1	15.6	93	W			1		10			0	0	Covered	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.61	752.0	29.92	760.0	57.0	13.9	95	SW			1		10			0.362	9.2	Covered	M. Jadot, Director.
Charleville, Normal School	29.35	745.5	29.85	758.3	59.0	15	87	WSW			1		10			0.20	5.	Covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.65	727.6	29.96	761.0	68.0	20.0	43	NW			2		2			0	0	¼ covered	M. Alluard, Director.
Cluny, Normal School	29.15	740.3	29.97	761.1	60.8	16	73	SW			3		7		SW	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.04	737.6	29.89	759.2	57.2	14	91	W			2		10n	W	W	0.08	2.	Light rain	Dr. Coulet, Director.
Gap, Normal School	27.32	693.8	29.77	756.1	65.8	18.8	46	NE			2		5k		S	0	0	½ covered	M. Jeangirard, Director.
Gréasque, du. Rhone	28.77	730.7	29.91	759.7	70.5	21.4	51	NW			2		5		NW	0	0	½ covered	M. Kina, Director.
Grenoble, Normal School	29.18	741.1	29.94	760.4	58.1	14.5	70	NNW			3		kn			1.189	30.2		M. Ablard, Director.
Guéret, Normal School	28.46	722.9	30.00	762.0	61.5	16.4	59	W			3		k		E	0	0		M. Rivoire, Director.
Lamballe, Normal School	29.80	757.0	30.07	763.8	68.0	20	64	NNW			1				NNW	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.54	750.2	30.19	760.9	65.8	18.8	88	E			1	0	0	W		0.819	20.8		M. Chauvin, Director.
Lorient, Naval Observatory	30.00	762.0	30.10	764.6	68.0	20.0	64	WSW			3		2	NW	WSW	0	0	¼ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28 93	734.9	29.97	761.8	64.6	18.1	55	NNW			1		5	SE	NW	0	0	Cloudy	M. André, Director.
Mans, Normal School	29.72	754.9	30.03	762.7	62.4	16.9	68	WNW			1		8		NW	0	0	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.56	750.9	29.83	757.6	70.3	21.3	46	WNW			3		4		NW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.85	631.2	30.09	764.2	52.3	11.3	49	WSW	9.4	4.2			3		W	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.80	757.0	29.91	759.7	73.0	22.8	50	NNW			3		2	N	NW	0	0	Slightly cl'dy	M. P. Galzin, Director.
Nancy, Normal School	29.14	740.2	29.90	759.5	57.6	14.2	85	W			1		10n		W	0.004	0.1	Misty	M. Hasse.
Nantes, Observatory	29.93	760.3	30.10	764.4	65.3	18.5	60	WSW			1–2		5k		W	0	0		M. Larocque, Director.
Nice	29.77	756.1	29.80	757.0	66.6	19.2	79	SW			3		10	SW	SW	0.024	0.6	Covered	Capt. Boissière, Director.
Perpignan, Observatory	29.90	759.5	30.01	702.2	68.7	20.4	41	N	26.2	11.7			6	NW	SE	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.58	573.4			37.0	2.8							1	SSE	NNW	0.295	7.5	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	28.92	734.6	29.96	761.0	66.2	19	49	N			1		5			0	0	Cloudy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.14	638.5			45.1	7.3	76	WNW			4		5k		WNW	0.024	0.6	½ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.07	763.8	30.10	764.6	73.4	23.0	53	W			2		2		W	0	0	¼ covered	Lt. E. Decante, Director
Roche-sur-Yon, N. School	29.80	758.4	30.07	763.7	71.2	21.8	59	W			1		5		W	0	0	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.91	709.0	30.04	763.0	58.6	14.8	70	NW			3		2		NW	0.217	5.5	Slightly cl'dy	M. Richard, Director.
Rouen, Normal School	29.87	758.7	29.96	760.9	56.8	13.8	82	WNW			3		8		WNW	0.138	3.5	Very cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.89	759.3	30.05	763.3	55.2	12.9	90	NW			1		10	WNW	NW	0	0	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.79	756.6	29.95	760.8	57.0	13.9	86	WNW			2		10		NW	0.012	0.3		M. Renou, Director.
Toulouse, Observatory	29.40	746.8	30.13	765.2	68.5	20.3	57	NW			2					0.020	0.5		M. Bailland, Director.
Tours	29.83	757.6	30.02	762.6	66.2	19.0	60	W			2		8		WNW	0	0	¼ covered	M. de Tastes.
Versailles, Observatory	29.46	748.2	29.95	760.7	56.1	13.4	88	NW			4					0.047	1.2		Dr. A. Bérigny, Director
Sub-Series.																			
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.93	734.8	29.78	756.5	63.3	17.4	66	NE			2		8n	NE		1.106	28.1		Prof. Dr. Hoh.
Berlin	29.71	754.5	29.87	758.7	72.3	22.4	27	NE			4		7			0	0		Prof. Dr. Arndt.
Breslau	29.27	743.5	29.80	756.9	69.1	20.6	53	ENE			3		5			0.165	4.2		Royal University Obs'y.
Carlsruhe	29.42	747.3	29.84	757.8	64.8	18.2	78	SW			4		9	SW		0	0		Albert Senx.
Cassel	29.08	738.7	29.80	756.8	70.9	21.6	67	NNE			5		10	E		0.102	2.6	Thnd'r str'm	Dr. H. Möhl.
Frankfort on the Main	29.48	748.7	29.83	757.7	67.6	19.8	67	W			0		9			0	0		Physical Society.
Friedrichshafen	28.46	722.8	29.87	758.7	59.4	15.2	75	W			3		10	WNW		0.209	5.3	Raining	Wilhelm, Chief Tel.
Hamburg	29.85	758.3	29.93	760.1	71.6	22.0	45	ENE			4		2			0.105	4.2		Dr. R. Kleeman.
Kiel	29.99	761.7	30.00	762.1	49.8	9.9	48	E			6		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.38	746.3	29.79	756.6	66.9	19.4	71	NE			4		8	ENE		1.669	42.4		Prof. Dr. Bruhns.
Magdeburg	29.56	750.8	29.84	757.9	63.5	17.5	85	NNE			3		10ks	ENE		0.177	4.5		Dr. Assmann.
Memel	29.90	760.9	30.00	762.1	62.8	17.1	28	NE			4–5		3ks						Reinbrecht & Issermann.
Munich	28.01	711.5	29.86	758.5	59.0	15.0	81	W			1		10	W		2.770	70.5	Light rain	Central Station.
Neufahrwasser	30.00	761.9	30.01	762.3	52.5	11.4	62	NNE			3		1			0	0		A. Lothes.
Neustadt, Palatinate	29.28	743.8	29.81	757.1	67.8	19.9	59	W			1		7			0	0		Dicknether.
Stuttgart	28.87	733.4	29.74	755.4	66.6	19.2	61	W			5		8	W		0.142	3.6		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.32	719.2	29.79	756.6	60.8	16.0	80	W			6		10	W		0.866	22.0		Prof. Kemlein.
Wustrow	30.04	762.9	30.00	763.5	58.5	14.7	63	ENE			5		3s			0	0		Prof. J. Rëimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.43	747.5	29.81	757.1	79.2	26.2	.....	S	.....	.....	1.0	.....	0	.....	.....	.....	.....	Clear.	A. Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.64	752.7	29.68	754.0	88.0	31.1	71	SSW	23.0	10.3	.....	3	.....	.....	.....	0	0	Blue sky	
Deesa	29.16	740.8	29.61	752.2	104.9	40.5	25	W	10.9	4.9	.....	0	.....	.....	.....	0	0	Blue sky	
Bombay	29.68	753.9	29.72	754.8	88.6	31.4	69	SSW	20.0	8.9	.....	2	.....	SW	.....	0	0	D. clouds	
Poona, Yarrowda	27.88	708.2	29.74	755.4	75.6	24.2	76	W	.....	.....	.....	9	.....	W	.....	0	0	D. clouds	
Belgaum	27.24	692.0	29.74	755.5	82.2	27.9	61	SSW	16.0	7.2	.....	6	.....	S	.....	0	0	D. clouds	
Lahore	28.77	730.7	29.46	748.3	111.3	44.1	17	Calm	1.2	0.5	.....	0	.....	.....	.....	0	0	Blue sky	
Roorkee	28.62	727.0	29.47	748.5	104.1	40.1	29	Calm	3.3	1.5	.....	0	.....	.....	.....	0	0		
Agra	28.96	735.7	29.49	749.1	110.6	43.7	14	NW	4.8	2.2	.....	0	.....	.....	.....	0	0		
Nagpur	28.57	725.6	29.56	750.9	101.0	38.3	25	Calm	6.1	2.7	.....	9	.....	W	.....	0	0	Gloomy	
Jubbulpore	28.27	718.1	29.57	751.2	96.7	35.9	23	NW	5.4	2.4	.....	8	.....	WNW	.....	0.17	4.3	Overcast	
Lucknow	29.17	740.8	29.53	749.9	101.4	38.6	32	NW	2.3	1.0	.....	0	.....	.....	.....	0	0	Blue sky	
Allahabad	29.22	742.2	29.51	749.6	105.8	41.0	23	NE	1.6	0.7	.....	0	.....	.....	.....	0	0	Blue sky	
Patna	29.41	747.1	29.59	751.6	92.3	33.5	54	E	3.1	1.4	.....	0	.....	.....	.....	0	0	Blue sky	
Hazaribagh	27.62	701.4	29.55	750.5	94.6	34.8	26	N	8.0	3.6	.....	0	.....	.....	.....	0	0	Blue sky	
Cuttack	29.53	750.0	29.61	752.1	91.0	32.8	62	S	2.0	0.9	.....	9	.....	.....	.....	0	0	Threatening	
Calcutta, Alipore	29.59	751.6	29.61	752.2	87.7	30.9	73	SSW	5.0	2.2	.....	1	.....	SW	.....	0	0	D. clouds	
Dhubri	29.55	750.6	29.67	753.6	79.5	26.4	91	NE	12.4	5.5	.....	9	.....	.....	.....	0.75	19.0	D. clouds	
Chittagong	29.63	752.5	29.72	754.8	83.7	28.7	79	Calm	6.1	2.7	.....	4	.....	.....	.....	0	0	Blue sky	
Sibsagar	29.41	747.1	29.75	755.7	78.4	25.8	94	NE	2.1	0.9	.....	10	.....	NE	.....	0.89	22.6	Gloomy	
Zanzibar, Africa	.....	.....	29.97	761.2	82.0	27.8	67	SSW	4	1.8	.....	2	.....	S	.....	0.02	0.5	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.34	745.3	29.74	755.4	72.5	22.5	60	SW	1.3	0.6	.....	8	.....	.....	.....	0.016	0.4	.....	Prof. Giovanni Clodig.
Milan	29.26	743.3	29.77	756.1	68.4	20.2	65	WSW	3.1	1.4	.....	9	N	.....	.....	0	0	.....	Prof. Schiaparelli.
Padua	29.64	752.9	29.75	755.6	70.0	21.1	55	WNW	4.3	1.9	.....	9	SE	.....	.....	0.063	1.6	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.87	733.4	29.76	755.9	68.4	20.2	60	E	3.8	1.7	.....	8	NE	.....	.....	0	0	.....	Prof. P. F. Denza.
Genoa	29.64	752.8	29.83	757.7	65.8	18.8	65	SW	3.8	1.7	.....	10	S	.....	.....	0.016	0.4	.....	Prof. G. M. Garibaldi.
Mondovi	27.91	708.8	29.78	756.4	67.8	19.9	57	S	.....	.....	2	9	.....	.....	.....	0.220	5.6	.....	Prof. D. C. Bruno.
Pesaro	29.71	754.5	29.75	755.7	66.7	19.3	73	N	7.4	3.3	.....	6	SW	.....	.....	0.102	2.6	.....	Prof. Luigi Guidi.
Florence	29.49	749.0	29.74	755.3	73.0	22.8	42	SW	.....	.....	2	7	.....	.....	.....	0.012	0.3	.....	Prof. Costantino Pitter.
Leghorn	29.72	755.0	29.81	757.1	66.9	19.4	68	.....	.....	.....	.....	6	.....	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.61	752.1	29.78	756.4	65.7	18.7	79	SW	3.8	1.7	.....	10	.....	.....	.....	0.374	9.5	.....	Prof. P. S. Ferrari.
Lecce	29.54	750.4	29.79	756.6	74.8	23.8	46	SSW	12.5	5.6	.....	5	S	.....	.....	0.079	2.0	.....	Prof. C. de Giorgi.
Cosenza	28.98	736.0	29.85	758.1	66.6	19.2	70	SSW	2.5	1.1	.....	20	SW	.....	.....	0.256	6.5	.....	Prof. D. Conti.
Cagliari	29.69	754.0	29.87	758.8	72.0	22.2	39	WNW	.....	.....	6	6	NW	.....	.....	0.004	0.1	.....	Prof. A. Pacinotti.
Palermo	29.68	753.9	29.93	760.2	73.8	23.2	41	SW	3.1	1.4	.....	6	.....	.....	.....	0	0	.....	Prof. G. Ciacciatore.
Syracuse	29.80	757.0	29.85	758.1	76.1	24.5	40	WSW	13.0	5.8	.....	5	WSW	.....	.....	0	0	.....	Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.25	743.0	29.76	756.0	65.1	18.4	82	SW	1.8	0.8	.....	9	W	.....	.....	0.488	12.4	.....	Prof. F. Brioschi.
Stelvio	22.08	560.8	.....	.....	45.5	7.5	58	E	.....	.....	2	rocks	N	.....	.....	0.559	14.2	Covered	Prof. P. F. Denza.
Valdobbia	22.12	561.8	.....	.....	39.7	4.3	84	SE	.....	.....	2	ion	NW	.....	.....	0	0	Overcast	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y....†	29.94	760.5	29.95	760.7	66.7	19.3	64	NNE	7.3	3.3	.....	3cs	0	.....	.....	0	0	Clear	K. Sasaki.
Kioto	29.81	757.2	29.98	761.5	59.1	15.1	57	NE	3.4	1.5	.....	0	0	.....	.....	0	0	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.82	757.4	30.02	762.5	66.6	19.2	74	SW	0.3	0.1	.....	.....	10s	.....	.....	0	0	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	29.92	759.9	29.99	761.7	62.7	17.1	84	SW	4.4	2.0	.....	0	0	.....	.....	0	0	Clear	The Staff.
Wakayama	29.93	760.2	29.98	761.5	65.3	18.5	58	ENE	3.0	1.3	.....	0	0	.....	.....	0	0	Clear	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.87	758.7	30.06	763.6	77.0	25.0	72	E	10.0	4.5	.....	0	2	.....	ESE	0.07	1.8	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanajuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez.
Leon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Leal.
Mazatlan	29.66	753.4	29.92	760.0	71.0	21.7	90	NE	0.9	0.4	.....	0	2n	.....	N	0	0	Clear	F. Quijano, U. E.
Mexico, Central Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff.
Pabellon, Aguascalientes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. P. Spina.
San Luis Potosi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Barroeta, M. D.
Tlacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.87	758.6	29.87	758.6	66.2	19.0	.....	W	.....	.....	3	.....	.....	.....	.....	0.157	4.0	.....	
Groningen	29.83	757.7	29.89	759.1	68.5	20.3	.....	E	.....	.....	4	.....	.....	.....	.....	0.122	3.1	.....	
Helder	29.87	758.7	29.87	758.7	58.3	14.6	.....	NE	.....	.....	2	.....	.....	.....	.....	0.102	2.6	.....	
Hellevoetsluis	29.84	758.0	29.84	758.0	66.6	19.2	83	NE	.....	.....	2	.....	.....	.....	.....	0.323	8.2	.....	
Utrecht	29.82	757.4	29.87	758.6	64.4	18.0	89	NE	.....	.....	2	.....	8	.....	.....	0.535	13.6	Very cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES.																			
Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.02	762.6	30.09	764.2	69.1	20.6	39	S	20.8	9.3			0			0	0		
Christiania	30.00	762.0	30.15	765.7	61.9	16.6	40	SW	7	3			0			0	0		
Gjesvær	29.86	758.5	29.89	759.1	32.9	0.5		WNW			4		10						
Lodingen	30.13	765.4	30.18	766.6	38.3	3.5	73	WSW			4–6		10			0.008	0.2		
PORTUGUESE SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.20	767.0	30.35	771.0	62.2	16.8	92	NE	4.9	2.2			4			0.639	1.0		Dr. J. A. Sampaio.
Campo Major	29.10	739.1	30.07	763.7	77.7	25.4	34	ESE	0.7	0.3			6			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.19	766.9	30.28	769.1	70.3	21.3	61	SW	3.8	1.7			10			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.83	757.6	30.18	766.6	68.9	20.5	46	NNW	13.6	6.1			8			0	0		The Staff.
Ponta Delgada, Azores	30.24	768.1	30.30	769.5	72.3	22.4	66	Calm	0	0			4			0.087	2.2		
RUSSIAN SERIES.																			
Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski																			Capt. Lasarew.
Archangel	29.87	758.6	29.89	759.1	33.6	0.9	70	WNW	18	8			10						Capt. Sseliwerstow.
Astrakhan	29.99	761.8	29.91	759.7	68.5	20.3	58	S	9	4			10ks						Capt. Wisganow.
Barnaul ‡	29.00	736.6	29.48	748.9	62.4	16.9	52	NNE	9	4			5					Light clouds	Meteorological Obs'y.
Dorpat	29.83	757.6	30.07	763.7	54.7	12.6	45	ESE	7	3			9k						Observatory.
Ekaterinburg	28.74	730.1	29.72	754.9	37.6	3.1	49	WSW	18	8			10n						Meteorological Obs'y.
Kasan	29.61	752.1	29.89	759.1	39.0	3.9	55	NNW	7	3			10n						Observatory.
Kertch	29.84	757.9	29.86	758.4	70.7	21.5	87	S	4	2			4						Lagorio & Sastyrez.
Kieff	29.12	739.6	29.73	755.1	67.1	19.5	43	NE	7	3		4c	0					Light clouds	Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.62	752.4	29.82	757.5	64.9	18.3	53	ESE	4	2			5						Meteorological Obs'y.
Moscow	29.43	747.4	29.98	761.4	46.8	8.2	32	N	7.8	3.5			6ks						Meteorological Obs'y.
Nertchinsk	27.82	706.5	30.11	764.9	45.7	7.6	62	N	2	1			2						Meteorological Obs'y.
Nikolaiev	29.72	755.0	29.80	756.8	63.5	17.5	87	N	4	2			9kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	29.72	754.8	29.86	758.4	71.1	21.7	66	Calm	0	0			7n						Physical Observatory.
St. Petersburg	30.04	763.1	30.04	763.5	44.6	7.0	48	Calm	0	0			10ks;n						Central Physical Obs'y.
Tashkend, Laboratory	28.26	717.7	29.71	754.7	88.5	31.4	31	NW	4	2			6						Teich, A. M.
Tiflis	28.49	723.7	29.85	758.1	74.7	23.7	46	W	9	4			9n						Physical Observatory.
Warsaw	29.39	746.5	29.80	756.9	68.2	20.1	39	NE	11	5			10ks						Astronomical Obs'y.
Wilna	29.80	749.2	29.91	759.6	63.0	17.2	35	NE	4	2			3						Berg, Assistant.
Yeniseisk	29.45	747.9	29.74	755.3	40.6	4.8	70	WNW	7	3			10						M. O. Marks.
SCOTTISH SERIES.																			
Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.05	763.3	58.5	14.7	74	E			1		0			0	0		Andrew Gibb.
Monach Lt. House, Hebrides			30.02	762.5	58	14.4	94	W			2	5	0	NW		0.1	3.	Hazy	J. Youngclause.
North Unst, Shetland Isl'ds			30.09	764.3				NE			1		7						Robert Burnet.
SPANISH SERIES.																			
Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.91	759.7	30.01	762.3	69.4	20.8	55	SSE	3.6	1.6			0			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.10	764.4	30.15	765.8	70.9	21.6	65	NW	2.2	1.0		2	7	NE		0.024	0.6	Almost cov'd	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.21	691.1			61.9	16.6	71	NE	4.5	2.0		0	8			0.087	2.2	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.88	708.2	30.04	763.0	72.9	22.7	38	S	4.9	2.2		0	4			0	0	Clouds	The Staff.
Murcia, Met. Obs'y ‡	29.87	758.8	30.02	762.5	83.8	28.8	30	NW	6.0	2.7		2	5	SE		0	0	Cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.21	741.9	30.09	764.2	67.8	19.9	73	SW	1.8	0.8			9			0	0	Almost cov'd	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.77	756.2	29.84	757.9	76.6	24.8	85	NE	6.3	2.8		3ck	7k;ks	SW	ESE	0.016	0.4	Cloudy	Benito Vines, S. J.
Manilla, Philippine Islands	29.82	757.3	29.87	758.6	85.8	29.9	70	SE	6.6	3.0		0	1s			0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.03	762.7	30.12	765.1	72.0	22.2	64	W	11.2	5.0		0	1		NW	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.84	757.9	29.93	760.2	83.8	28.8	74	SE	6.9	3.1		5s	3k	SE	SE	0	0		Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.75	755.7	29.90	759.4	81.2	29.0	72	WNW	3.5	1.8			1ks		WNW	0	0	Fair	José L. Fastovra.
SWEDISH SERIES.																			
Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.04	762.9	30.08	763.9	41.4	5.2	54	SW			4		5			0	0		
Umea	30.05	763.6	30.11	764.9	47.8	8.8	48	SW			6		1			0	0		
Hernosand	30.10	764.5	30.15	765.8	48.0	8.9	45	S			4		0			0	0		
Stockholm	30.01	762.3	30.19	766.8	49.3	9.6	31	ENE			6		0			0	0		
Wisby	30.06	763.5	30.12	765.0	42.4	5.8	79	NNE			6		0			0	0		
Sub-Series.																			
Upsala	30.11	764.7	30.19	766.9	50.9	10.5	32	NNE	10.7	4.8			0			0	0		Nils Ekholm
SWISS SERIES.																			
Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.56	725.5	29.98	761.5	56.5	13.6	85	SSW			1		10			0.898	22.8	Raining	The Observatory.
Zurich ‡	28.29	718.6	29.92	760.0	56.7	13.7	86	W			2–4		10			0.063	1.6	Covered	The Observatory.
TURKISH SERIES.																			
Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.80	757.0	77.4	25.2	51	SW	8	3.5			6	SW		0	0		The Observatory.
Valona			29.91	759.8	70.9	21.6		SW			1		2			0	0	Slightly cl'd'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.98	761.4	74.1	23.4	66	WNW			1	2ck	0	SE		0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.89	759.2	29.97	761.2	64	17.8	78	N	4	1.8			10s			Inap.	Inap.	Cloudy	
Alpena, Michigan	29.28	743.7	29.91	759.7	50	10.0	100	E	4	1.8			Fg			0.73	18.5	Light fog	
Atlanta, Georgia	28.79	731.3	29.89	759.2	67.0	19.4	50	E	7	3.1		0	0			0	0	Clear	
Atlantic City, New Jersey	29.91	759.7	29.92	760.0	66	18.9	79	W	7	3.1		0	Hz		Calm	0	0	Clear	
Augusta, Georgia	29.76	755.9	29.96	761.0	67.6	19.8	69	NE	2	0.9		0	Hz			0	0	Clear	
Baltimore, Maryland	29.90	759.4	29.94	760.5	69	20.6	65	SE	1	0.4		Hz	Hz			0	0	Dense haze	
Barnegat, New Jersey	29.88	758.9	29.90	759.4	72	22.2	71	SW	8	3.6		0	0			0	0	Clear	
Bismarck, Dakota	28.04	712.2	29.90	759.4	61	16.1	94	NW	4	1.8		10c	0	SE		0	0	Cloudy	
Boise City, Idaho	27.21	691.1	30.17	766.3	49.2	9.6	60	NW	4	1.8		5cs	0	W		0	0	Fair	
Boston, Massachusetts	29.80	756.9	29.95	760.7	62.3	16.8	48.3	NE	8	3.6			10s		W	0	0	Cloudy	
Brackettville, Texas	28.65	727.7	29.66	753.4	69.0	20.6	90	SE	6	2.7		0	0			0	0	Clear	
Brownsville, Texas	29.75	755.6	29.99	761.7	78	25.6	73	SE	4	1.8		0	0			0	0	Clear	
Buffalo, New York	29.21	741.9	29.88	758.9	63.8	17.7	86	NE	11	4.9			10s		W	0	0	Cloudy	
Burlington, Vermont	29.69	754.1	29.98	761.5	57.5	14.2	81	N	5	2.2			10s		NW	0.02	0.5	Cloudy	
Cairo, Illinois	29.56	750.8	29.93	760.2	74	23.3	76	Calm	0	0			0			0	0	Clear	
Campo, California	27.43	696.7	30.00	762.0	52	11.1	79	NW	3	1.3			Fg		W	0	0	Dense fog	
Camp Thomas, Arizona	27.20	690.9			53	11.7	48	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	29.94	760.5	29.96	761.0	62	16.7	94	Calm	0	0			Fg			0	0	Dense fog	
Cape May, New Jersey	29.90	759.4	29.93	760.2	64	17.8	89	SW	6	2.7		0	0			0	0	Clear	
Castroville, Texas	29.06	738.1	29.73	755.1	75	23.9	77	SE	1	0.4		0	5s		S	0	0	Fair	
Cedar Keys, Florida	29.89	759.2	29.91	759.7	76	24.4	73	Calm	0	0		0	0			0	0	Clear	
Champaign, Illinois	29.10	739.1	29.86	758.4	68.3	20.2	74	SW	4	1.8		0	0			0	0	Clear	
Charleston, S. Carolina	29.81	757.2	29.86	758.4	66	18.9	95	NW	12	5.4			10s		NW	0.25	6.3	Threatening	
Charlotte, N. Carolina	29.11	739.4	29.90	759.4	69.2	20.7	61	NE	5	2.2		c	Sk			0	0	Clear	
Chattanooga, Tennessee	29.16	740.7	29.93	760.2	66.5	19.2	81	Calm	0	0		0	Sk		Calm	0	0	Clear	
Cheyenne, Wyoming	24.03	610.4	29.97	761.2	45.2	7.3	61	NW	6	2.7		0	0			0	0	Clear	
Chicago, Illinois	29.18	741.2	29.83	757.7	73.4	23.0	59	SW	6	2.7		Hz	Hz			0	0	Light haze	
Chincoteague, Virginia	29.95	760.7	29.97	761.2	59	15.0	100	SW	9	4.0			Fg		Calm	0	0	Dense fog	
Cincinnati, Ohio	29.30	744.2	29.93	760.2	67	19.4	69	E	2	0.9		1c	Sk			0	0	Dense smoke	
Cleveland, Ohio	29.20	741.7	29.89	759.2	67.1	19.5	62	S	4	1.8		Hz	Sk			0	0	Dense smoke	
Coleman City, Texas																			
Columbus, Ohio	29.09	738.9	29.90	759.4	64	17.8	68	SW	2	0.9		0	Sk			0	0	Clear	
Concho, Texas	27.92	709.2	29.54	750.3	63	17.2	89	NE	4	1.8		0	0			0.50	12.7	Clear	
Corsicana, Texas	29.43	747.5	29.88	758.9	68	20.0	79	NE	8	3.6			10n			1.93	49.0	Heavy rain	
Davenport, Iowa	29.22	742.2	29.82	757.4	72	22.2	62	SW	4	1.8		4k	0	S		0	0	Fair	
Dayton, Washington T'y	28.30	718.8	29.97	761.2	47.8	8.8	70	S	2	0.9		10k	0	S		0.06	1.5	Cloudy	
Deadwood, Dakota	25.34	643.6			47	8.3	85	W	1	0.4		5cs	0			0	0	Fair	
Decatur, Texas	28.60	726.4	29.72	754.9	64	17.8	94	NE	12	5.4			10s			0.93	23.6	Cloudy	
Delaware Breakwater, Del.	29.92	760.0	29.94	760.5	63	17.2	94	SW	7	3.1		0	0			0	0	Clear	
Denison, Texas	28.98	736.1	29.74	755.4	64	17.8	94	SE	8	3.6			10s		SE	0.51	13.0	Threatening	
Denver, Colorado	24.76	628.9	29.98	761.5	50.5	10.3	75	SE	4	1.8		0	0			0	0	Clear	
Des Moines, Iowa	28.91	734.3	29.75	755.6	68	20.0	90	S	2	0.9		10k	0	S		0.08	2.0	Cloudy	
Detroit, Michigan	29.20	741.7	29.86	758.4	69.8	21.0	66	SW	5	2.2		2cs	0	W		0	0	Clear	
Dodge City, Kansas	27.24	691.9	29.44	747.8	60	15.6	82	NW	13	5.8			10ks		NW	0.08	2.0	Cloudy	
Dubuque, Iowa	29.15	740.4	29.80	756.9	74.1	23.4	76	S	1	0.4		0	Hz		Calm	0	0	Dense haze	
Duluth, Minnesota	29.18	741.2	29.85	758.2	49	9.4	100	NE	12	5.4			10s; fg		NE	0.13	3.3	Cloudy	
Eagle Pass, Texas	29.06	738.1	29.77	756.1	69.4	20.8	90	SE	8	3.6		5cs	5s	Calm	S	0.35	8.9	Cloudy	
Eagle Rock, Idaho	25.29	642.4	29.94	760.5	40	4.4	65	N	6	2.7		0	0			0	0	Clear	
Eastport, Maine	29.86	758.4	29.92	760.0	57.5	14.2	55	N	2	0.9		0	0			0	0	Clear	
El Paso, Texas	26.15	664.2			63	17.2	19	NW	14	6.3		0	0			0	0	Clear	
Erie, Pennsylvania	29.18	741.2	29.87	758.7	67	19.4	64	S	4	1.8		5k	Fg			0	0	Fair	
Escanaba, Michigan	29.19	741.4	29.82	757.4	57	13.9	94	E	3	1.3			10n		Calm	0.33	8.4	Light rain	
Florence, Arizona	28.39	721.1	29.99	761.7	61	16.1	40	NE	1	0.4		0	0			0	0	Clear	
Fort Apache, Arizona	25.05	636.3	30.50	774.7	39	3.9	55	NE	3	1.3		0	0			0	0	Clear	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota	28.21	716.5			63	17.2	83	N	6	2.7			10s			0.05	1.3	Cloudy	
Fort Benton, Montana	27.14	689.3			45	7.2	53	E	3	1.3		0	0			0.15	3.8	Clear	
Fort Buford, Dakota	27.90	708.6	29.68	753.9	65	18.3	74	Calm	0	0		0	0			0	0	Clear	
Fort Custer, Montana	26.80	680.7			53	11.7	80	S	4	1.8		c	0			0	0	Clear	
Fort Davis, Texas	25.14	638.5	30.10	764.5	58	14.4	58	SW	2	0.9		0	0			0	0	Clear	
Fort Elliott, Texas	27.10	688.3	29.31	744.5	58	14.4	76	NW	12	5.4		0	0			0.27	6.9	Clear	
Fort Gibson, Indian T'y	29.26	743.2	29.77	756.1	68	20.0	95	S	4	1.8			10n		Calm	0.76	19.3	Light rain	
Fort Grant, Arizona	25.23	640.8	30.03	762.7	57	13.9	31	E	6	2.7		0	0			0	0	Clear	
Fort Griffin, Texas	28.48	723.4	29.69	754.1	66.8	19.3	89	S	6	2.7		5cs	0			0	0	Fair	
Fort Keogh, Montana	27.38	695.4			59	15.0	69	SE	1	0.4		5c	0	SE		0	0	Fair	
Fort Macon, North Carolina	29.93	760.2	29.94	760.5	69	20.6	95	NE	12	5.4		2k	2s	Calm	Calm	0.01	0.3	Fair	
Fort McKavett, Texas	27.60	701.0	29.43	747.5	66.8	19.3	84	NE	5	2.2		0	0			0	0	Clear	
Fort Missoula, Montana	26.71	678.4			40	4.4	100	Calm	0	0		2cs	Fg			0.09	2.3	Fair	
Fort St. Michaels																			
Fort Shaw, Montana	26.35	669.3			47	8.3	77	NE	7	3.1		0	0			0.26	6.6	Clear	
Fort Sill, Indian Territory	28.60	726.4	29.68	753.9	61	16.1	94	S	1	0.4		10cs	0	W		0.68	17.3	Cloudy	
Fort Stevenson, Dakota	27.96	710.2			60	15.6	88	E	2	0.9			Fg		E	0	0	Dense fog	
Fort Verde, Arizona					50.8	10.4	40	SW			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.13	714.5	29.64	752.8	66	18.9	95	Calm	0	0		7k	0	S		0	0	Fair	
Galveston, Texas	29.82	757.4	29.86	758.4	78	25.6	78	S	9	4.0		0	8ks		SW; E	Inap.	Inap.	Cloudy	
Grand Haven, Michigan	29.21	741.9	29.83	757.7	70	21.1	66	S	15	6.7		8k	0	S		0	0	Fair	
Hatteras, North Carolina	29.95	760.7	29.97	761.2	65	18.3	100	NE	14	6.3			Fg			0.05	1.3	Dense fog	
Helena, Montana	25.78	654.8			48	8.9	78	S	2	0.9		0	0			0.50	12.7	Clear	
Henrietta, Texas	28.81	731.8	29.70	754.4	65	18.3	89	Calm	0	0			10s			0.73	18.5	Cloudy	
Indianapolis, Indiana	29.13	739.9	29.88	758.9	71.5	21.9	56	Calm	0	0		1k	Hz	Calm	Calm	0	0	Light haze	
Indianola, Texas	29.81	757.2	29.84	757.9	77.1	25.1	91	S	6	2.7		2cs	2ks	N	S	0	0	Fair	
Jacksboro, Texas	28.67	728.2	29.76	755.9	64	17.8	94	SE	8	3.6			10s		Calm	1.14	29.0	Cloudy	
Jacksonville, Florida	29.88	758.9	29.92	760.0	73	22.8	72	NE	3	1.3		0	0			0	0	Clear	
Keokuk, Iowa	29.20	741.7	29.82	757.4	72.5	22.5	63	S	2	0.9		0	Hz		Calm	Inap.	Inap.	Clear	
Key West, Florida	29.82	757.4	29.85	758.2	77.0	25.0	79	NE	12	5.4		0	8s		E	0.11	2.8	Cloudy	
Kittyhawk, North Carolina	29.99	761.7	30.01	762.2	57	13.9	100	NE	7	3.1			Fg			0.03	0.8	Dense fog	
Knoxville, Tennessee	28.97	735.8	29.94	760.5	66	18.9	71	NE	3	1.3		0	Sk		Calm	0	0	Clear	
La Crosse, Wisconsin	29.04	737.6	29.75	755.6	74	23.3	68	SE	3	1.3		0	5s			0.04	1.0	Fair	
La Mesilla, New Mexico	26.03	661.2	30.18	766.6	56	13.3	51	Calm	0	0		0	0			0	0	Clear	
Laredo, Texas	29.36	745.7	29.68	753.9	75	23.9	86	SE	4	1.8		0	0			0	0	Clear	
Leavenworth, Kansas	28.92	734.6	29.71	754.6	69	20.6	85	S	8	3.6			10s		S	0.03	0.8	Cloudy	
Lewiston, Idaho	29.19	741.4	29.83	757.7	55	12.8	48	NW	12	5.4			10s		NW	0	0	Cloudy	
Little Rock, Arkansas	29.56	750.8	29.86	758.4	70	21.1	90	Calm	0	0		5k	2s	SW	SW	0	0	Fair	
Los Angeles, California	29.66	753.4	30.03	762.7	51.2	10.7	86	SE	2	0.9		0	0			0	0	Clear	
Louisville, Kentucky	29.36	745.7	29.90	759.4	68.5	20.3	84	W	1	0.4		0	0			0	0	Clear	
Lynchburg, Virginia	29.29	744.0	29.95	760.7	66	18.9	64	E	1	0.4		0	0			0	0	Clear	
Madison, Wisconsin	28.85	732.8	29.78	756.4	69	20.6	85	S	4	1.8		5c	0	W		0	0	Fair	
Marquette, Michigan	29.16	740.7	29.86	758.4	45	7.2	92	NW	1	0.4			Fg			0.20	5.1	Dense fog	
Mason, Texas	28.23	717.0	29.91	759.7	70.2	21.2	80	Calm	0	0		0	0			0	0	Clear	
Memphis, Tennessee	29.60	751.8	29.93	760.2	74	23.3	63	Calm	0	0		0	0			0	0	Clear	
Milwaukee, Wisconsin	29.12	739.6	29.81	757.2	70	21.1	70	SW	5	2.2		2c	Sk			0	0	Fair	

MAY 28, 1881.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Barometer. Reduced to sea-level.		Tempera-ture of the Air.		Rel. Hum.	Wind. Direc-tion.	Wind. Velocity.		Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.85	758.2	29.92	760.0	69	20.6	85	N	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Montgomery, Alabama	29.71	754.6	29.93	760.2	68.2	20.1	79	N	2	0.9	.....	0	Hz	.....	.....	0	0	Clear.	
Moorhead, Minnesota	28.79	731.3	29.70	754.4	65.1	18.4	92	SE	3	1.3	.....	.....	10s	.....	S	0	0	Cloudy.	
Morgantown, W. Virginia	28.98	736.1	29.93	760.2	66	18.9	79	Calm	0	0	.....	0	Hz	.....	.....	0	0	Clear.	
Mt. Washington, N. H.	23.82	605.0	30.18	766.6	42	5.6	49	Calm	0	0	.....	4c;ck	Sk	NW	Calm	0	0	Fair	
Nashville, Tennessee	29.40	746.7	29.92	760.0	69.3	20.7	80	Calm	0	0	.....	0	Sk	.....	.....	0	0	Dense smoke	
New Haven, Connecticut	29.82	757.4	29.93	760.2	69	20.6	65	NE	9	4.0	.....	5cs	0	.....	.....	0	0	Fair	
New London, Connecticut	29.88	758.9	29.92	760.0	69	20.6	65	E	4	1.8	.....	7c	0	NE	.....	0.12	3.0	Fair	
New Orleans, Louisiana	29.87	758.7	29.92	760.0	75.2	24.0	78	Calm	0	0	.....	0	Sk	.....	.....	0	0	Clear	
Newport, Rhode Island	29.87	758.7	29.92	760.0	64.5	18.1	53	NE	6	2.7	.....	4ck	4s;sk	NW	Calm	0.04	1.0	Cloudy	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd.	29.89	759.2	29.92	760.0	57.5	14.2	75	NE	11	4.9	.....	.....	10s	.....	Calm	0.11	2.8	Cloudy	
New York, New York	29.74	755.4	29.91	759.7	71	21.7	75	NE	7	3.1	.....	5cs	Fg	N	.....	0	0	Fair	
Norfolk, Virginia	29.94	760.5	29.98	761.5	63	17.2	83	Calm	0	0	.....	.....	Fg	.....	.....	0	0	Dense fog	
North Platte, Nebraska	26.93	684.0	29.42	747.3	55	12.8	87	NW	10	4.5	.....	5k	5s	W	.....	0.44	11.2	Cloudy	
Olympia, Washington T'y	30.00	762.0	30.04	763.0	43.0	6.1	92	S	2	0.9	.....	.....	10s	.....	Calm	0.16	4.1	Cloudy	
Omaha, Nebraska	28.63	727.2	29.67	753.6	68	20.0	84	S	8	3.6	.....	.....	10s	.....	S	Inap.	Inap.	Cloudy	
Oswego, New York	29.61	752.1	29.92	760.0	56.5	13.6	98	NE	6	2.7	.....	.....	10s	.....	.....	0.02	0.5	Cloudy	
Pensacola, Florida	29.88	758.9	29.91	759.7	72	22.2	71	NW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Philadelphia, Pa.	29.86	758.4	29.91	759.7	67	19.4	79	W	8	3.6	.....	2k	Hz	W	.....	0	0	Fair	
Phœnix, Arizona	28.79	731.3	30.57	776.5	60	15.6	60	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Pike's Peak, Colorado	17.83	452.9	30.04	763.0	22	— 5.6	45	NE	26	11.6	.....	1cs	0	.....	.....	0.21	5.3	Clear.	
Ploche, Nevada	24.03	610.4	29.80	756.9	49	9.4	31	S	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Pittsburg, Pennsylvania	29.14	740.1	29.92	760.0	63.5	17.5	83	N	2	0.9	.....	1ck	Fg	W	Calm	0	0	Clear.	
Port Eads, Louisiana	29.92	760.0	29.93	760.2	73.3	22.9	85	SE	1	0.4	.....	0	Hz	.....	Calm	0	0	Clear	
Port Huron, Michigan	29.23	742.4	29.88	758.9	60.1	15.6	77	N	1	0.4	.....	8c	Fg	Calm	Calm	0	0	Fair	
Portland, Maine	29.89	759.2	29.94	760.5	63	17.2	47	NE	15	6.7	.....	5ck	5s	NE	Calm	0.01	0.3	Cloudy	
Portland, Oregon	30.03	762.7	30.11	764.8	48.9	9.4	82	S	2	0.9	.....	.....	10n	.....	S	0.05	1.3	Light rain	
Portsmouth, N. Carolina	.....	.....	.....	.....	64	17.8	100	NE	16	7.2	.....	.....	Fg	.....	NE	Inap.	Inap.	Dense fog	
Prescott, Arizona	24.79	629.6	30.15	765.8	41	5.0	49	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	29.86	758.4	29.87	758.7	73.5	23.1	78	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
Red Bluff, California	29.75	755.6	30.10	764.5	51.5	10.8	73	S	3	1.3	.....	0	0	.....	.....	0	0	Clear.	
Rio Grande City, Texas	29.61	752.1	29.82	757.4	72	22.2	90	SE	.....	.....	1	0	0	.....	.....	0	0	Clear	
Rochester, New York	29.34	745.2	29.94	760.5	58	14.4	88	NE	7	3.1	.....	.....	10s	.....	Calm	0.28	7.1	Cloudy	
Roseburg, Oregon	29.59	751.6	30.16	766.1	48	8.9	67	Calm	0	0	.....	8k	2ks	SW	SW	0	0	Cloudy	
Sacramento, California	30.02	762.5	30.10	764.5	49.2	9.6	71	SE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
St. Louis, Missouri	29.32	744.7	29.87	758.7	69.5	20.8	72	S	6	2.7	.....	1k	0	.....	.....	0	0	Clear	
St. Paul, Minnesota	28.92	734.6	29.70	754.4	68	20.0	90	Calm	0	0	.....	.....	Fg	.....	Calm	0.04	1.0	Light fog	
Salt Lake City, Utah	25.59	650.0	29.92	760.0	57	13.9	31	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
San Antonio, Texas	29.16	740.7	29.83	757.7	73.3	22.9	85	Calm	0	0	.....	0	1ks	.....	Calm	0	0	Clear	
San Diego, California	29.93	760.2	30.00	762.0	59.8	15.4	76	W	4	1.8	.....	.....	10s	.....	.....	0	0	Cloudy	
Sandusky, Ohio	29.24	742.7	29.88	758.9	71	21.7	49	SW	9	4.0	.....	5k	0	.....	.....	0	0	Fair	
Sandy Hook, New Jersey	29.89	759.2	29.92	760.0	66.0	18.9	84	W	4	1.8	.....	Hz	Hz	.....	.....	0	0	Dense haze	
San Francisco, California	30.06	763.5	30.12	765.0	50	10.0	82	W	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Santa Fé, New Mexico	23.25	590.5	29.79	756.7	49	9.4	37	N	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Savannah, Georgia	29.82	757.4	29.91	759.7	71	21.7	80	NW	5	2.2	.....	2cs	0	.....	.....	0	0	Fair	
Shreveport, Louisiana	29.67	753.6	29.90	759.4	74	23.3	81	SW	4	1.8	.....	0	7s	.....	.....	0	0	Fair	
Silver City, New Mexico	24.25	615.9	30.31	769.9	56	13.3	40	N	11	4.9	.....	0	0	.....	.....	0	0	Clear.	
Sitka, Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Smithville, North Carolina	29.90	759.4	29.93	760.2	69	20.6	95	E	14	6.3	.....	1c	5s	.....	.....	0.94	23.9	Fair	
Spokane Falls, Wash. Ter.	27.96	710.2	29.79	756.7	50	10.0	71	S	13	5.8	.....	.....	1on	.....	SW	0.01	0.3	Light rain	
Springfield, Illinois	29.23	742.4	29.87	758.7	68.5	20.3	72	S	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Springfield, Massachusetts	29.83	757.7	29.96	761.0	65	18.3	73	N	8	2.7	.....	.....	1on;fg	.....	NE	Inap.	Inap.	Light rain	
Stockton, Texas	26.82	681.2	29.82	757.4	60.0	15.6	100	SW	8	3.6	.....	0	0	.....	.....	0	0	Clear.	
St. Vincent, Minnesota	28.96	735.6	29.72	754.9	61	16.1	94	E	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Thatcher's Island, Mass.	29.99	761.7	30.04	763.0	63.9	17.7	83	NE	14	6.3	.....	.....	10ks	.....	NE	0	0	Cloudy	
Toledo, Ohio	29.25	742.9	29.90	759.4	74	23.3	55	SW	4	1.8	.....	2cs;hz	Sk	NE	.....	0	0	Dense smoke	
Tucson, Arizona	27.51	698.7	30.06	763.5	61	16.1	35	SE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.74	755.4	30.23	767.8	53.0	11.7	54	SW	16	7.2	.....	.....	10s	.....	SW	0	0	Cloudy	
Uvalde, Texas	28.77	730.7	29.56	750.8	69	20.6	85	E	1	0.4	.....	2cs	0	Calm	.....	0.12	3.0	Clear	
Vicksburg, Mississippi	29.68	753.9	29.93	760.2	67	19.4	89	SE	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Visalia, California	29.68	753.9	30.05	763.3	52	11.1	63	NW	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C.	29.84	757.9	29.95	760.7	66	18.9	74	S	2	0.9	.....	Hz	Hz	.....	.....	0	0	Dense haze.	
Wickenburg, Arizona	.....	.....	.....	.....	55	12.8	45	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	29.87	758.7	29.93	760.2	69	20.6	90	NE	4	1.8	.....	.....	10s	.....	Calm	0.07	1.8	Cloudy	
Winnemucca, Nevada	25.65	651.5	30.01	762.2	42	5.6	27	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Wood's Holl, Mass.	29.87	758.7	29.91	759.7	62	16.7	56	E	9	4.0	.....	.....	10s	.....	NW	0.03	0.8	Cloudy	
Yankton, Dakota	28.52	724.4	29.75	755.6	66	18.9	100	SE	9	4.0	.....	.....	10n	.....	SE	1.25	31.7	Light rain	
Yuma, Arizona	29.73	755.1	29.87	758.7	65.1	18.4	73	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.08	560.8	.....	.....	55.0	12.8	80	Calm	0	0	.....	5cs	2ks	.....	.....	0	0	Cloudy	Thomas Herman
Buff Bay Town, Jamaica. ‡	29.68	753.9	29.99	761.7	71	21.7	100	.....	.....	.....	.....	k	k	.....	.....	Blank			
Havana, Cuba, W. I.	29.84	757.9	29.89	759.2	78	25.6	82	Calm	0	0	.....	.....	8n	.....	E	0	0	Cloudy	A. Van Caneghem, Ass't.
Jakobshavn, Greenland	29.75	755.6	29.80	756.9	52.2	11.2	.....	NW	.....	.....	3	.....	2	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I.	29.87	758.7	29.88	758.9	72.7	22.6	96	Calm	0	0	.....	.....	10n	.....	.....	1.77	45.0	Heavy rain	Robert Johnstone.
Nuvassa, W. I.	29.78	756.4	29.86	758.4	80	26.7	91	SE	20	8.9	.....	.....	10	.....	.....	1.68	42.7	Cloudy	F. M. Everett.
Paramaribo, S. A.	30.00	762.0	30.00	762.0	81	27.2	83	E	.....	.....	2	3c	4k	E	.....	0.950	24.1	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.35	745.5	29.90	759.4	80	26.7	76	Calm	.....	.....	0	5cs	5ks	Calm	Calm	0.02	0.5	Hazy	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	73.4	23	.....	W	.....	.....	1	5ck	9ks	.....	SW	1.10	28.	.....	Earl Flint.
Santiago de Cuba, W. I.	29.86	758.4	29.89	759.2	76	24.4	90	Calm	0	0	.....	.....	10k	.....	.....	1.20	30.5	Heavy rain	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2c	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	30.03	762.7	30.08	764.0	34.0	1.1	95	SE	9	4.0	.....	.....	0	SE	.....	0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross																			Comm A. J.Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	29.99	761.7	69.5	20.8	73	W			4		4	WNW				1		D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab,																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 19° 43′, E. 58° 30′	29.58	751.3	84	28.9	87	SSW			5		0					4	SSW	Misty	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			77	25.0		SSW			2–3		4	SSE				2	SSE	D. clouds	Capt. E. B. Pusey.
H. M. S. Blanche, N. 15° 06′, W. 59° 40′	30.00	762 0	83	28.3	83	SE			3		3					3	SE	D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	29.81	757.2	66	18.9	59	ESE			1–2		5	SE						D. clouds	Com. F. W. Richards.
H. M. S. Champion, S. 13° 50′, W. 24° 02′	29.99	761.7	76	24.4	100	E			2		2					1	ESE	D. clouds	Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Chefoo Harbor, China	29.94	760.5	73	22.8	54	S			2		3							D. clouds	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S.Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, N. 3° 21′, W. 22° 31′	29.98	761.5	81	27.2	87	SSE			2		1	SSE				1	SE	Blue sky	Capt. J. C. Parvis.
H. M. S. Daring, N. 1° 40′, E. 102° 50′	29.82	757.4	84	28.9		W			3		3							D. clouds	Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.99	761.7	77	25.0	86	NNE			1		2	NNE						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 34′, W. 52° 41′	29.66	753.4	38.5	3.6	86	N			1		7	N						Showery	Capt. W. R. Kennedy.
H. M. S. Dryad, N. 23° 10′, E. 59° 14′	29.58	751.3	90	32.2		NW			1		1	SW				1	S	Blue sky	Capt. John Hext.
H. M. S. Eclipse, N. 3° 19′, E. 84° 20′	29.78	756.4	81	27.2		SW			4		3					3	SW	D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 1° 17′, E. 103° 51′	29.75	755.6	82	27.8		WNW			2		4	W				1	SW	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, S. 0° 18′, E. 174° 17′	29.87	758.7	84	28.9	83	ESE			1-2		2					1	SE	D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, S. 16° 37′, E. 71° 17′	29.96	761.0	79	26.1	82	E			2–3		1	ESE				3-4	ESE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn N. 13° 46′, E. 42° 48′	29.68	753.9	87	30.6	76	NNW			3		4	SE				2	NNW	D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo, N. 20° 36′, W. 85° 48′	29.83	757.7	84	28.9	83	N			1									D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish, Yokohoma, Japan	29.95	760.7	67	19.4	84	ESE			1		6					1	S	Misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	29.99	761.7	49	9.4	85	N			1		10							Drizzling	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.90	759.4	36	2.2	80	ENE			2		10							Overcast	Capt. L. F. Jones.
H. M. S. Griffin, N. 26° 04′, W. 78° 00′	29.84	757.9	80	26.7	85	ESE			1		5	ESE				1	ESE	Showery	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 34° 35′, W. 53° 20′	29.89	759.2	73	22.8		WSW			3		2					1	WSW	D. clouds	Capt. J. L. Way.
H. M. S. Inconstant, Melbourne, Australia	30.42	772.7	51.5	10.8	93	SE			1		1	Calm						Blue sky	Capt. C. C.P. Fitzgerald.
H. M. S. Iris, Adalia, Asiatic Turkey	29.96	761.0	70	21.1	57	SSE			2		4					1	SSE	D. clouds	Capt. E. H. Seymour.
H. M. S. IronDuke, N. 28° 11′, E. 123° 10′	29.97	761.2	68	20.0	95	ENE			3-5		10	WSW				6	ENE	Raining	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.99	761.7	64	17.8		SE			1		2	NW						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Kobe, Japan	29.99	761.7	69	20.6		[illegible]			0		5							D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Off Black Rocks, China Sea	29.84	757.9	83.5	28.6	80	NNE			2-3		4	NE				1	ENE	Showery	Capt. A. Carpenter.
H. M. S. Midge, Amoy, China	29.90	759.4				NE			3		4							D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 36° 07′, W. 5° 21	30.04	763.0	68	20.0	84	ESE			3		0							Blue sky	Capt. H. H. Rawson.
H. M. S. Modeste, S. 9° 00′, E. 101° 48′			81	27.2	83	SSE			2-4		9					4	SE	D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Goletta, Tunis, N. Africa	29.98	761.5	72	22.2	71	NW			2		5	NNW						D. clouds	Capt. G. C. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.83	757.7	56.5	13.6	60	NNW			1									Blue sky	Capt. E. B Drummond.
H. M. S. Orontes																			Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.85	758.2	80	26.7		NNE			1		7					1	SE	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, La Guayra, Venezuela, S.A.	29.86	758.4	83	28.3	79	Calm			0		6					2	NNE	Misty	Capt. H. H. Grenfel.
H. M. S. Rambler, Loando, Africa	29.91	759.7	75	23.9		WNW			1		1	WNW						Blue sky	Capt. Hon. A. C. Littleton.
H. M. S. Ready, Rangoon, India	29.74	755.4	86	30.0		SSW			2		4	SW				3	W	D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	30.02	762.5	48	8.9		Calm			0		7							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 27′, E. 55° 27′	29.98	761.5	81.4	27.4	77	SE			3		7							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 4° 56′, E. 74° 45′	29.52	749.8	85	29.4	83	WSW			2		2	NE				3	SW	D. clouds	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 16° 53′, W. 25° 00′	30.09	764.3	75	23.9	75	NE			6		2	NE				2	NNE	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A.	30.04	763.0	56	13.3	94	Calm			0		10	Calm						Misty	Capt. A. H. Markham.
H. M. S. Turquoise, S. 37° 06′, W. 73° 12′	29.56	750.8	58	14.4	94	N			2-6		10							Thund'r st'm	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.			77	25.0		E			1		10							Raining	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	30.27	768.8	62	16.7	72	SE			3-5		9	NW						Squally	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, N. 25° 10′ E. 50° 04′	29.74	755.4	88.5	31.4	57	NNW			3-5		0					5	NNE	Blue sky	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, Mossamedes, Benguela	30.01	762.2	66.6	19.2	74				3		3					1		D. clouds	Carlos Candid dos Reis, Comd't.
Quanza, Santiago, Cape Verd Id's	30.05	763.3	80.2	26.8	72	NE			3		2		NE			2	NE	D. clouds	Carlos M. de Silva Costa, Comd't.
Rio Lima																			S. C da Silva Costa, Comd't.
Sado																			G. A de Brito Capello, Comd't.
Tamega, Macao, China	29.91	759.8	79.2	26.2	84	SSE			2		10		SE					Overcast	P. I. de Ilio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.02	762.5	72	22.2	71	NW	5	2.2			0			0	0			Clear.	
N. Yard, Portsmouth, N. H.	29.94	760.5	60	15.6	71	NE	10	4.5		10c	0			0	0			Cloudy	
Naval Hospital, Yokahama, Japan	29.84	757.9	64.5	18.1	89	Calm			0		0			0	0			Clear	
Adams, Guayaquil, Peru	29.75	755.6	75	23.9	86	SW			1		8		SW			Long		Cloudy	
Alaska, Callao, Peru	29.93	760.2	64	17.8	89	E			1		10			0	0	Sm'h		Cloudy	
Alert, N. 19° 59′, E. 143° 09′ *	29.84	757.9	82	27.8	75	E			1		2		E			Long	E	Clear.	
Alliance, Norfolk, Va	30.00	762.0	63	17.2	94	E			1		Fg			0	0			Foggy	
Ashuelot, Kobe, Japan	30.00	762.0	67	19.4	60	Calm			0		0							Clear	
Colorado, New York, N. Y.	29.89	759.2	68	20.0	84	NW	3	1.3			2		N	0	0			Hazy	
Constitution, Norfolk, Va	29.90	759.4	60	15.6	94	Calm	0	0			0							Foggy	
Franklin, Norfolk, Va	29.95	760.7	61	16.1	88	SW	2	0.9			10			0	0			Foggy	
Galena, Villafranca, France	29.78	756.4	67	19.4	84	SSW			1		5		SSW	Li	ght	Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	29.94	760.5	55	12.8	80	SW	1.2	0.5			2		SW					Fair	
Jamestown, Sitka, Alaska *	30.11	764.8	47	8.3	85	Calm			0		10			0	0			Misty	
Kearsarge, N. 32° 55′, W. 78° 07′	29.88	758.9	74	23.3	81	S			2		8		SE			Sm'h		Fair	
Lackawanna, S. 14° 10′, W. 125° 10′ †	30.16	766.1	79	26.1	86	NNE			0-1		2		NE			Sm'h	NE	Fair	
Marion, Montevideo, Uruguay	30.08	764.0	56	13.3	87	N			1		5			0	0	Sm'h		Fair	
Michigan, Erie, Pennsylvania	29.93	760.2	68	20.0	56	SW	2	0.9			8		W					Fair	
Minnesota, Newport, R. I	29.93	760.2	60	15.6	76	NE			2		9		NW			Sm'h		Cloudy	
Monocacy, Yokohama, Japan	29.99	761.7	67	19.4	89	SW			1		0							Clear	
New Hampshire, N. 32° 47′, W. 78° 08′	29.86	758.4	75	23.9	77	ESE	8	3.6			8		E	0	0	Sm'h	E	Cloudy	
Nipsic, Villafranca, France	29.83	757.7	68	20.0	74	S			2		8					Sm'h		D. clouds	
Onward, Callao, Peru †	29.97	761.2	65	18.3	89	SE			2		10					Long	W	Cloudy	
Palos, Nagasaki, Japan	30.03	762.7	63	17.2	?	SE			1		10							Cloudy	
Passaic, Washington, D. C	29.97	761.2	66	18.9	100	S			3		0							Clear	
Pensacola, N. 42° 09′, W. 125° 23′	30.13	765.3	53	11.7	93	SW			3-4		8			0	0	Mod.		Squally	
Portsmouth, Elizabeth River, Va	29.98	761.5	61	16.1	100	Calm			0		2		S;W			Sm'h		Clear	
Powhatan, N. 32° 51′, W. 78° 02′	29.97	761.2	79	26.1	78	ESE			2-3		5		ESE			Mod.	SE	Fair	
Quinnebaug, N. 21° 10′, W. 51° 25′	30.08	764.0	79	26.1	82	SSE			3		8		ESE			Long	ESE	Fair	
Ranger, Acapulco, Mexico *	29.82	757.4	84	28.9	79	W			4		8		Calm	0	0	Sm'h		Fair	
Richmond, Yokohama, Japan	29.99	761.7	68	20.0	84	SW			2		10			0	0			Cloudy	
Saratoga, Norfolk, Va	29.99	761.7	60	15.6	100	E			1		2		Calm	0	0			Fair	
Shenandoah, Montevideo, Uruguay *	30.09	764.3	52	11.1	93	N			2		2					Sm'h		Fair	
St. Louis, League Island, Pa	29.51	749.5	69	20.6	85	W	8	3.6			2			0	0			Clear	
Swatara, Shanghai, China * †	29.98	761.5	72	22.2	71	ESE			1		10		Calm					Overcast	
Tennessee, New York, N. Y	29.91	759.7	69	20.6	88	NE	9	4.0			8		N	0	0	Sm'h		Hazy	
Ticonderoga, S. 50° 07′, W. 94° 35′	30.23	767.8	43	6.1	92	S			3		5		S	0	0	Mod.	S	Fair	
Trenton, Villafranca, France *	29.77	756.1	72	22.2	71	SSW			1		8			8 ho	urs	Sm'h		Cloudy	
Vandalia, N. Yard, League I'd., Pa	29.91	759.7	67	19.4	89	WSW			2		5		NW					Fair	
Wabash, Boston, Massachusetts	29.97	761.2	65	18.3	50	NNE	8	3.6			10		NW	0	0			Hazy	
Wachusetts, N. Yard, Mare I'd, Cal * †	30.07	763.8	51	10.6	93	W			1		0							Clear	
Wyoming, Norfolk, Va	29.96	761.0	61	16.1	88	Calm			0		Fg					Sm'h	SSE	Foggy	
Yantic, N. 37° 48′, W. 74° 13′ *	29.89	759.2	57	13.9	94	SW			2		0					Sm'h		Foggy	

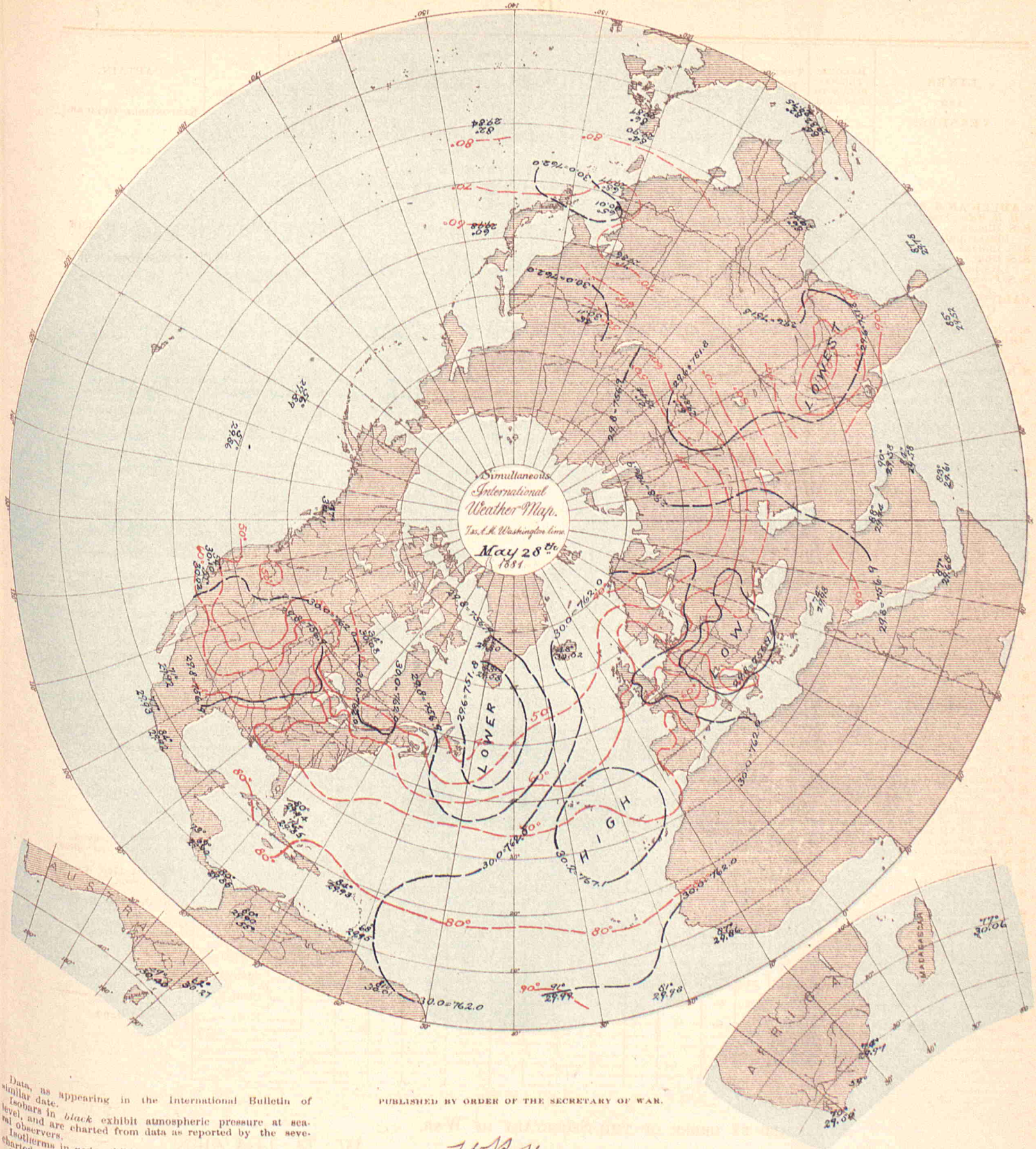
LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire,																			Capt. John Arbuckle.
Barque Belleisle, N. 21° 05′, W. 84° 00′	29.85	758.2	82	27.8	83	NE			1		4							D. clouds	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. N. Youlden.
S. S. Cipero, N. 42° 20′, W. 30° 45′	30.11	764.8	60.5	15.8	91	SSW			4		5							D. clouds	Capt. W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randell.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene,																			Capt. W. P. Hughes.
Ship Lochee, ‡ N. 42° 12′, W. 34° 53′	29.87	758.7	62.0	16.7	94	SSW			6		10							Drizzling	Capt. J. Racburn, R.N.R.
S. S. Lusitania																			Capt. O. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria, ‡ N. 6° 41′, W. 25° 58′	29.99	761.7	90.8	32.7	68	ENE			1		5							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 13° 15′, E. 55° 51′	29.61	752.1	83.0	28.3	91	SSW			6		8							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton, ‡																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 55° 46′, W. 9° 40′	30.10	764.5				N			2		2		W			Mod.	W	Fair	
S. S. Circassian, N. 55° 26′, W. 12° 45′	30.32	770.1	58	14.4	70	W			1		3k		W	2 hours		1	WSW	Misty	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			
S. S. Bothnia																			Capt. W. Watson.
S. S. Gallia, N. 42° 26′, W. 56° 27′	29.76	755.9	50	10.0		WNW			3		5		WSW	0	0	Sm'h		Fine	Capt. W. H. P. Haines.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			
S. S. Baltic, N. 40° 31′, W. 63° 10′	29.51	749.5	59	15.0	94	N			4		10					Sm'h		Raining	Capt. J. W. Jennings.
S. S. Britannic, N. 50° 16′, W. 21° 54′ †	30.09	764.3	52	11.1		W			2		5		NW			Sl't	NW	Showery	Capt. H. Parsell.
S. S. Celtic																			Capt. H. Perry.
S. S. Germanic, N. 40° 50′, W. 71° 00′ †	29.95	760.7	53	11.7		NNE			2		8?		N	0	0	Sm'h		Clear	Capt. Benj. Gleadell.
S. S. Republic, N. 48° 58′, W. 31° 39′ †	29.79	756.7	56	13.3	81	SSW			6		10		SW	2h'rs	drizz.	Cross	SW	Misty	Capt. Ch. W. Kennedy.
																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			
S. S. Hohenzollern																			Capt. H. Baur.
S. S. Köln, N. 37° 54′, W. 71° 22′	30.01	762.2	64.5	18.1	97	W			2-3		2		W	12 hours Fog		Sm'h	W	Clear	Capt. Th. Jüngst.
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebraup.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Philadelphia, Pa.	29.85	758.2	74	23.3	95	SW			2		2		SW			Sm'h	SW	Clear	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio, Liverpool, England...*†	30.12	765.0	66	18.9	89	NW			1		10		NW	Mode	rate			Cloudy	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, N. 48° 40', W. 21° 31'...*†	30.06	763.5	59	15.0	100	W			3		10		W			Mod.	W	Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 45° 22', W. 161° 48'...†	29.89	759.2	56	13.3	81	WSW			4		8		W	0	0	Mod.	wsw	Cloudy	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China...*†	30.04	763.0	79	26.1	91	SE			1		10		SE					Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 30° 46', E. 129° 36'.....	30.05	763.3	75	23.9	60	NE			1		10			0	0	Sl't	ESE	Cloudy	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon.....†	30.05	763.3	49.0	9.4	93	Calm			0		10			0	0			Cloudy	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, San Francisco, Cal.....†	30.12	765.0	47	8.3	70	SW			1		0							Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 34° 25', W. 120° 28'....†	30.02	762.5	57	13.9	75	NW			7		2?		NW			Long	NW	Cloudy?	Geo. H. Harrison.
S. S. Senator, San Francisco, Cal.....†	30.12	765.0	50	10.0	86	W			1		0							Clear	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal.....†	30.09	764.3	49	9.4	85	Calm			0		2							Clear	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal.....†	30.12	765.0	49	9.4	93	W			2		0			0	0			Clear	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 17° 52' W. 171° 58'.....	30.02	762.5	72	22.2	80	E			4		5		E			Long	E	Cloudy	A. Bannerman, 2d Officer.
S. S. City of New York, Sydney, N. S. W.....†	30.27	768.8	62	16.7	100	SE			4		10		SE					Raining	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 18° 13', W. 103° 19'....†	29.93	760.2	77	25.0	82	E			1		10s		E	0	0	Sm'h	W	Cloudy	Capt. D. S. Austin.
S. S. City of Peking, N. 37° 19', E. 145° 43'.....†	29.98	761.5	60	15.6	82	NNE			3		10		NE	0	0	Mod.	NE	Cloudy	Capt. G. G. Berry.
S. S. City of Sidney																			Capt. H. C. Dearborn.
S. S. City of Tokio, N. 38° 28', W. 147° 39'....†	29.86	758.4	57	13.9	75	WNW			2		0					R'gh	wsw	Clear	A. L. Ritchie, 2d Officer.
S. S. Colima, Panama, Panama.....†	29.86	758.4	78	25.6	91	S			2		8		NE	0.06	1.5			Cloudy	Capt. R. R. Searle.
S. S. Granada, N. 36° 40', W. 122° 10'...†	30.10	764.5	54	12.2	87	NW			6		0			0	0	R'gh	NW	Clear	Capt. M. Connolly.
S. S. Zealandia, S. 31° 46', E. 179° 09'.....	30.38	771.6	63	17.2	?	N			1		1		E	0	0	Sm'h	SE	Fine	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland, N. 44° 28', W. 45° 05'....†	29.55	750.6	51	10.6	79	WNW			6		10		NW	0.1	3.	Light	NW	Cloudy	Capt. Wm. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, Fall River, Mass.	29.90	759.4	64	17.8	58	NE	1	0.4			10k		NE	0.05	1.3			Cloudy	Capt J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, N. 19° 32', W. 74° —'...*†	29.98	761.5	82	27.8		ESE			4		10		ESE	Ra	in	Sm'h	ESE	Squally	Capt. B. F. Woodbury.
Brigantine George, N. 27° 45', W. 63° 40'....†	30.01	762.2	73	22.8		SW			5		10			Sho	wers	Sm'h		Squally	Capt. W H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Chesapeake bay, Md†	30.04	763.0	70	21.1	80	SW	3	1.3			4s			0	0			Clear	
Bark Sunbeam, Lisbon, Portugal.....†	30.22	767.6	75	23.9	60	N			6		5		N	0	0			Fair	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,

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



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

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

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

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

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

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W. B. Hazen

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

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 29, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco	‡		30.07	763.8	69.8	21.0	78	NE			3		1			0	0	Very fair	Dr. Ollive.
Nemours	‡		30.06	763.4	77.5	25.3	84	N			1		1			0	0	Very fair	Raynard.
Algiers	‡		30.07	763.8	73.4	23.0	68	NE			2		0			0	0	Clear	Nicolas.
La Calle	‡		30.06	763.4	71.6	22.0	77	NW			4		3			0	0	Pretty fair	Fonfréde.
Tunis	‡		30.04	763.1															Jacques.
Sfax	‡		30.12	765.0															Gau.
Saida	‡		30.09	764.3	75.9	24.4	25	E			2		7			0	0	Cloudy	Dumas.
Tebessa	‡		30.08	764.1	65.8	18.8	39	Calm			0		5			0.004	0.1	Cloudy	Watrin.
Geriville	‡																		Lonchamp.
Laghouat	‡		30.10	764.6	78.4	25.8	23	W			3		1			0	0	Very fair	Herbin.
Biskra	‡		30.09	764.2															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.22	767.6	30.31	769.9	44.6	7.0	87	ENE	3	1.3			0			0	0	Very fine	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.24	742.7	29.77	756.1	71.6	22.0	58	NE			3		10			Inap.	Inap.		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.14	740.1	29.89	759.2	63.0	17.2	74	NW	1.8	0.8			10			0.224	5.7		Dr. Wierzbicki.
Eperies	28.91	734.2	29.76	755.8	67.1	19.5	44	N			3	cs	58		S	0	0		Julius Mikolik.
Gratz	‡ 28.62	727.0	29.83	757.6	67.1	19.5	58	NNE			4		10			0	0		Andreas Rospini.
Hermannstadt	28.25	717.6	29.65	753.1	59.7	15.4	88	N			1		10			1.283	[illegible]6		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.59	726.1	29.91	759.7	57.6	14.2	91	SSW			1		10			0.650	16.5	Rainy	The Staff.
Lemberg	28.85	732.8	29.83	757.7	54.3	12.4	70	NE			3		10			Inap.	Inap.		Dr. T. Stanecki.
Pola	29.72	754.8	29.83	757.6	68.7	20.4	73	WNW			2		10			0.031	0.8		I. R. HydrographicOffice.
Szathmar	29.20	741.6	29.64	752.9	70.9	21.6	57	N			5		2			0.047	1.2		Beicht Petér, S. J.
Szegedin	29.45	747.9	29.72	754.8	65.5	18.6	81	Calm			0		10			0.827	21.0		Karl Stancel.
Trieste	29.74	755.3	29.84	757.9	69.8	21.0	68	Calm			0		8			0.370	9.4		Secco.
Vienna	29.19	741.3	29.88	758.9	68.7	20.4	56	N			3		2			0.004	0.1		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed May 30, 1882.

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

BRITISH SERIES.

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

Aberdeen	30.08	764.0	30.18	766.6	64.6	18.1	60	S	14	6.3			1			0	0	Blue sky	W. Boswell.
Armagh, Observatory	29.95	760.7	30.18	766.6	58.9	14.9	86	NNE	4	1.8									S. Call.
Bidston, Liverpool Obs'y			30.11	764.8	55.5	13.1	88	WNW	9	4.0			10					Misty	John Hartnup.
Bolton, Sharples	29.57	751.1	30.10	764.5	70.8	21.6	52	E	12	5.4			5					D. clouds	Thomas Mackereth.
Bradford, Yorkshire																0.01	0.3		J. McLandsbo ough, F.R.S
Bridgetown, Barbadoes	29.94	760.5	29.97	761.2	86	30.0	68	NE			2		4					D. clouds	Corpl. J. Surgener, A.H.C.
Cardington			30.06	763.5	72.0	22.2	46	E			0.6		7					D. clouds	John McLaren.
Chatham, School M. E	29.90	759.4	30.03	762.7	55.1	12.8	100	E			1		10					Overcast	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.87	758.7	30.10	764.5	60.0	15.6	77	NW			3		10					Overcast	The Staff.
Fort Napier, Natal	27.40	695.9	29.62	752.3	80.2	26.8	94	W			4		4?					Overcast?	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.63	752.6	29.86	758.4	88	31.1	84	W			1							Raining	Sgt. C. E. Keane.
Galway, Queen's College			29.98	761.5	65	18.3	40	N			2		10			0	0	Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.02	762.5	30.08	764.0	74.6	23.7	82	SW			5		0					Blue sky	2nd Cpl. C. Baldwin.
Glasgow, Observatory	29.84	757.9	30.05	763.3	68.0	20.0	55	N			2		0					Blue sky	Harry Urquhart.
Greenwich, Royal Obs'y	29.86	758.4	30.03	762.7	62.7	17.1	78	NE			1		9					Overcast	The Staff.
Guernsey	29.82	757.4	30.03	762.7	54	12.2	93	WNW			1		10					Misty	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.00	762.0	30.04	763.0	61.2	16.2	81	ENE	20	8.9			10					Threatening	The Staff.
Leicester, Museum	29.83	757.7	30.08	764.0	68.4	20.2	66	NE			1		10					Misty	J. E. Carryer.
Malta, Mediterranean	29.90	759.4	29.98	761.5	71.0	21.7	61	W			2		4			0	0	D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas	29.80	756.9	29.85	758.2	76.5	24.7	88	NE			1		9					Overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.57	751.1	30.09	764.3	58.7	14.8	95	NNE			2		10					Raining	John Mac Email.
Oxford, Radcliffe Obs'y	29.81	757.2	30.04	763.0	59.2	15.1	93	N			3		10					Threatening	The Staff.
Plymouth	29.98	761.5	30.06	763.5	63.5	17.5	74	NNW			3		10					Misty	John Merrifield.
Sandwick Manse, Orkneys			30.19	766.8	52.1	11.2	88	WNW	14	6.3			5					Misty	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.71	754.6	29.77	756.1	80.0	26.7	62	S			1		1					Blue sky	Serg't W. H. Lyne.
Sheffield	29.86	758.4	30.13	765.3	69.4	20.8	71	NE			2		8			0	0	D. clouds	W. F. Cooper.
Silloth Rectory	30.08	764.0	30.10	764.5	76.4	24.7	56	Calm			0		0			0	0	Blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.12	765.0	71.9	22.2	54	E	13	5.8			4					D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	29.80	756.9	30.06	763.5	58.8	14.9	95	E			2		10					Raining	Rev. C. H. Griffiths, F.M.S
Truro, Royal Institution	30.08	764.0	30.09	764.3	64	17.8	78	NW			4		10					Gloomy	W. Newcombe.
Valencia, Observatory	30.19	766.8	30.22	767.6	56.9	13.8	77	NW	19	8.5			4					Misty	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.88	758.9	29.92	760.0	51	10.6	73	S	4	1.8		0	0			0	0	Clear	H. J. Cundall, C. E.
Chatham, N. B.*	29.90	759.4	29.96	761.0	53	11.7	72	Calm	0	0		0	0			0	0	Clear	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	29.86	758.4	29.88	758.9	51	10.6	73	NW	2	0.9		2cs	0	Calm		0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.00	736.6	29.80	756.9	60	15.6	94	Calm	0	0		2c	5ks	E	E	0.410	10.4	Fair	James Stewart.
Fredericton, N. B																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.83	757.7	29.96	761.0	52	11.1	85	NW	2	0.9		0	0			0	0	Clear	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.47	748.5	29.80	756.9	62	16.7	95	E	1	0.4			10s			0.08	2.0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	29.65	753.1	29.84	757.9	59	15.0	81	SE	8	3.6			10s			0	0	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.12	739.6	29.80	756.9	60	15.6	98	S	3	1.3			10n		SW	0.84	21.3	Cloudy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.17	740.9	29.85	758.2	59	15.0	94	S	2	0.9		10c	0	W		0.02	0.5	Fair	H. Morgan.
Port Stanley, Ontario	29.22	742.2	29.84	757.9	63	17.2	95	E	5	2.2		2k	Hz	W		0.29	7.4	Hazy	M. Payne.
Quebec, Quebec*	29.60	751.8	29.91	759.7	57	13.9	63	NE			1	2c	2k	NE	NE	0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.36	745.7	29.81	757.2	55	12.8	90	SE	4	1.8			10s		SE	0.23	5.8	Light rain	W. H. McIntyre.
Saugeen, Ontario*	29.09	738.9	29.78	756.4	61	16.1	93	N	1	0.4		0	Hz			0.24	6.1	Clear	K. Stewart.
St. Andrews, N. B	29.88	758.9	29.93	760.2	55	12.8	78	Calm	0	0		0	0			0	0	Clear	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	29.88	758.9	29.92	760.0	62	16.7	40	SW	2	0.9		2ck	0	W		0	0	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.47	748.5	29.85	758.2	56	13.3	98	Calm	0	0			Fg			0.17	4.3	Foggy	Magnetic Observatory
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	29.90	759.4	29.96	761.0	51	10.6	86	SW	2	0.9		8c	0	N		0	0	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.62	752.3	29.87	758.7	46	7.8	100	NE	1	0.4			10n			0.03	0.8	Rainy	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't

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

CAPE COLONY SERIES.

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

Cape St. Francis Lt. House	29.58	751.3			66.3	19.1	72	W	21.3	9.5			10ks			0.120	3.0	Threatening	John Duthie.
Cape Town, C. G. H. Obs'y	29.58	751.3	29.62	752.3	59.0	15.0		NNW	17.0	7.6		5	5ks;n			0.962	24.4		The Staff, for D. Gill.
Worcester	*†. 28.41	721.6			64	17.8	63	WNW			1	3	5			0.13	3.3	Dull	C. Stokes.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.95	760.8	29.98	761.4	60.8	16.0	86	S	1.8	0.8			2			0	0	Fair	M. Marc Dechevrens, S.J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

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

San José	26.18	665.0	29.90	759.4	69.8	21.0	91						10s			Inap.	Inap.	Cloudy	Amand Maison.

DANISH SERIES.

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

Copenhagen	30.15	765.9	30.20	767.1	56.3	13.5	47	ESE	13	6			0						Oversergent Fischer.
Fanöe	30.19	766.9	30.21	767.4	60.6	15.9	49	W			4		1						Overloerer Lauridsen.
Godthaab, Greenland	29.54	750.4	29.59	751.5	46.0	7.8	68	NE			2		9						S. Kleinschmidt.
Stykkisholm, Iceland	30.00	762.1	30.05	763.2	56.1	13.4		S			2		2						A. O. Thorlacius.
Thorshavn	30.11	764.9	30.15	765.8	55.4	13.0	81	Calm	0	0			0						Overloerer Bergh.
Vestervig	30.10	764.5	30.19	766.9	58.3	14.6	61	WSW			4		2						Loerer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.44	747.8	30.08	764.0	65.8	18.8	67	WNW			1	20	kn		NE	0	•		M. Labroue, Director.
Alençon Normal School	29.52	749.8	30.07	763.8	63.3	17.4	85	NW			1		10n		NW	0.063	1.6	Covered	M. Nicot, Director.
Arras, Engineer School	29.76	755.9	30.02	762.4	59.9	15.5	87	NE			1		Fg			0	0	Foggy	M. Klein, Commandant.
Avignon, Normal School	29.85	758.4	29.94	760.4	73.4	23	49	N			4		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.46	748.2	30.00	762.1	63.3	17.4	67	SW			1		8kn		W	0.110	2.8	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.76	755.8	30.02	762.5	61.3	16.3	80	N			1		10			0.394	10.0	Covered	M. Frère Eugene Marie.
Besançon, Normal School	29.17	740.9	30.04	763.1	60.8	16	84	SW			1		10n		SW	0.04	1.	Raining	M. Gobin, Director.
Bordeaux, Observatory	29.85	758.2	30.11	764.8	67.8	19.9	69	NW			1		8		WNW	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.47	748.4	30.01	762.2	62.6	17	77	W			1		n		W	0.094	2.4		M. Postel, Director.
Brest, Naval Observatory	29.91	759.7	30.15	765.9	63.7	17.6	65	WNW			2		2		WNW	c	0		M. de Rermaree, Dir.
Caen, Normal School	29.93	760.1	30.27	768.9	62.8	17.1	88	W			1		10			0.098	2.5	Covered	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.70	754.4	30.02	762.4	64.2	17.9	86	WSW			1		8		W	0.039	1.0	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.49	749.0	30.00	761.9	59.0	15	85	WSW			1		10			0.04	1.	Covered	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.71	729.1	30.03	762.8	63.7	17.6	56	W			1		10			0	0	Covered	M. Alluard, Director.
Cluny, Normal School	29.21	741.9	30.04	763.1	59.0	15	84	W			2		7			0.004	0.1		M. de Villemontée, Dir.
Commercy, Normal School	29.15	740.4	30.00	762.1	63.7	17.6	92	W			1		10kn	W	W	0.059	1.5	Covered	Dr. Coulet, Director.
Gap, Normal School	27.38	695.5	29.83	757.6	69.4	20.8	46	NE			1		5k		SE	0	0	½ covered	M. Jeangirard, Director.
Grenasque, du. Rhone	28.82	732.0	29.96	761.0	76.6	24.8	49	NW			2		2		NW	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.21	742.0	29.97	761.1	65.5	18.6	63	NW			3		kn		S	0	0		M. Ablard, Director.
Guéret, Normal School	28.51	724.1	30.05	763.2	63.7	17.6	56	NW			1		kn		SE	0	0		M. Rivoire, Director.
Lamballe, Normal School	29.85	758.2	30.12	765.1	63.3	17.4	76	SSW			2		Fg		SSW	0	0	Foggy	M. Ollitrault, Director.
Lescar, Normal School	29.52	749.9	30.19	766.7	64.4	18	78	NW			1		k		S	0	0		M Chauvin, Director.
Lorient, Naval Observatory	30.10	764.4	30.20	767.0	66.2	19.0	54	WNW			3		2		WNW	0	0	¼ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.99	736.4	30.05	763.2	61.3	16.3	74	N			1		10		N	0.248	6.3	Covered	M. André, Director.
Mans, Normal School	29.73	755.2	30.04	762.9	68.2	20.1	63	NNW			1		8		NW	0	0	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.66	751.9	29.86	758.5	76.6	24.8	40	WNW			2		2		NW	0	0		M. Stephan, Director.
Montlouis Pinstituteur	24.89	632.2	30.13	765.2	53.6	12.0	50	NW	15.0	6.7			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.83	757.6	29.93	760.3	78.8	26	38	N			3	•	2		N	0	0	Slightly cl'dy	M. P. Galzin, Director.
Nancy, Normal School	29.25	743.0	30.01	762.2	59.4	15.2	89	WNW			1		10n			0.071	1.8	Covered	M. Hasse.
Nantes, Observatory	29.94	760.5	30.10	764.6	70.5	21.4	55	W			1-2		10n		WSW	0	0		M. Larocque, Director.
Nice	29.83	757.6	29.85	758.4	70.5	21.4	72	SE			3		1	SE	SE	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.89	759.3	30.00	762.0	71.8	22.1	35	NW	26.2	11.7			1		NW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.60	574.1			44.6	7.0							1		NE	0	0	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	28.94	735.0	29.97	761.2	71.6	22	37	N			1		2k			0	0	Slightly cl'dy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.20	640.1			43.3	6.3	100	WNW			4		10			0.008	0.2	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	30.10	764.5	30.13	765.3	73.4	23.0	54	WSW			2		5		SSW	0	0	½ covered	Lt. E. Decante, Director
Roche-sur-Yon, N. School	29.92	759.9	30.12	765.1	71.6	22.0	55	WSW			1		5		E	0	0	Cloudy	M. Moullot, Director.
Rodez, Normal School	27.94	709.6	30.05	763.3	62.2	16.8	73	NW			1		2		NW	0	0	Slightly cl'dy	M. Richard, Director.
Rouen, Normal School	29.92	760.0	30.01	762.2	59.0	15	91	W			3		8		W	0.098	2.5	Very cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.91	759.7	30.07	763.7	56.5	13.6	86	W			1		10		WSW	0	0	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.85	758.3	30.02	762.5	59.5	15.3	89	NW			1		10			0.583	14.8		M. Renou, Director.
Toulouse, Observatory	29.46	748.2	30.19	766.7	66.6	19.2	67	NW			2				W	0	0		M. Baillaud, Director.
Tours	29.85	758.1	30.04	763.1	71.2	21.8	49	WNW			2		8		WNW	0	0	¼ cover d	M. de Tastes.
Versailles, Observatory	29.53	750.0	30.02	762.5	58.3	14.6	93	NW			1					0.484	12.3		Dr. A. Bérigny, Director
Sub-Series.																			

GERMAN SERIES.

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

Bamberg	29.12	739.7	29.98	761.6	66.4	19.1	40	N			3		28			0.079	2.0		Prof. Dr. Hoh.
Berlin	29.94	760.4	30.11	764.7	70.2	21.2	24	NE			4		0			0	0		Prof. Dr. Arndt.
Breslau	29.50	749.3	30.03	762.8	65.3	18.5	33	NE			2		4			0	0		Royal University Obs'y.
Carlsruhe	29.57	751.1	29.99	761.8	62.2	16.8	84	SW			2		10	SW		0.744	18.9		Albert Senz.
Cassel	29.35	745.6	30.08	763.9	71.2	21.8	31	N			4		0			0	0		Dr. H. Möhl.
Frankfort on the Main	29.07	753.6	30.02	762.6	71.2	21.8	47	NE			1		5			0.150	3.8		Physical Society.
Friedrichshafen	28.57	725.6	29.97	761.2	64.4	18.0	74	SSW			3		10	WSW		0	0		Wilhelm, Chief Tel.
Hamburg	30.13	765.2	30.20	767.0	60.4	15.8	46	NE			3		0			0	0		Dr. R. Kleeman.
Kiel	30.18	766.6	30.20	767.0	47.5	8.6	45	ENE			2		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.67	753.6	29.97	761.1	61.9	16.6	58	ENE			3		2			0	0		Prof. Dr. Bruhns.
Magdeburg	29.80	759.9	30.08	764.1	68.0	20.0	55	NE			3		1k	NE		0	0		Dr. Assmann.
Memel	30.09	764.3	30.14	765.5	51.1	10.6	49	NW			4-5		0						Reinbrecht & Issermann.
Munich	28.15	715.0	30.01	762.3	55.4	13.0	95	W			2		10	W		1.575	40.0	Heavy rain.	Central Station.
Neufahrwasser	30.15	765.9	30.17	766.3	52.5	11.4	53	NNE			3		0			0	0		A. Lothes.
Neustadt, Palatinate	29.47	748.4	29.99	761.8	65.8	18.8	65	NNW			3		10			0.421	10.7		Dicknether.
Stuttgart	29.04	737.5	29.91	759.8	63.5	17.5	75	E			1		10			0.154	3.9		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.48	723.5	29.97	761.2	67.5	19.7	45	NE			6		4	NE		0.602	15.3		Prof. Kemlein.
Wustrow	30.19	766.9	30.22	767.5	55.6	13.1	89	NE			2		0			0	0		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Corrected for instrum'tal error and temperature. Mill	Reduced to sea-level. Inch.	Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.51	749.5	29.89	759.2	76.1	24.5		SW			3.0		5					½ clear	A. Wourlisch
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.64	752.9	29.69	754.2	91.2	32.9	61	SSW	21.0	9.4			0			0	0	Blue sky	
Deesa	29.15	740.4	29.60	751.8	105.6	40.9	27	WSW	9.7	4.3			0			0	0	Blue sky	
Bombay	29.70	754.5	29.74	755.4	87.6	30.9	74	SW	23.0	10.3			1	SW		0	0	D. clouds	
Poona, Yarrowda	27.87	707.9	29.69	754.1	87.0	30.6	49	W					7	N	S	0	0	D. clouds	
Belgaum	27.26	692.4	29.76	755.9	82.7	28.2	55	SW	11.0	4.9			3		SW	0	0	D. clouds	
Lahore	28.77	730.7	29.46	748.3	112.3	44.6	18	Calm	1.3	0.6			0			0	0	Blue sky	
Roorkee	28.66	727.9	29.51	749.5	104.3	40.2	34	Calm	4.5	2.0			0			0	0		
Agra	28.97	735.8	29.59	749.3	110.6	43.7	14	N	5.6	2.5						0	0		
Nagpur	28.56	725.3	29.56	750.9	95.2	35.1	40	W	4.6	2.1			9		W	0	0	Gloomy	
Jubbulpore	28.25	717.5	29.54	750.4	99.5	37.5	18	SW	4.1	1.8			9			0.03	0.8	Overcast	
Lucknow	29.21	742.0	29.57	751.1	101.4	38.6	23	ESE	5.0	2.2						0	0	Blue sky	
Allahabad	29.23	742.3	29.52	749.8	105.6	40.9	27	ENE	5.9	2.6			2			0	0	D. clouds	
Patna	29.41	747.0	29.58	751.4	94.9	34.9	46	NE	3.7	1.6			4	NE	NE	0	0	D. clouds	
Hazaribagh	27.61	701.4	29.54	750.4	94.8	34.9	34	E	7.0	3.1			1			0	0		
Cuttack	29.58	751.2	29.66	753.2	92.1	33.4	62	S	2.0	0.9			9			0	0		
Calcutta, Alipore	29.59	751.6	29.61	752.1	89.1	31.7	70	SW	8.0	3.6			0			0	0	Blue sky	
Dhubri	29.53	750.1	29.65	753.2	83.2	28.4	79	Calm	6.1	2.7			3			0.89	22.6	D. clouds	
Chittagong	29.58	751.4	29.67	753.6	85.3	29.6	75	W	3.4	1.5			2			0	0	Blue sky	
Sibsagar	29.34	745.2	29.67	753.6	84.6	29.2	77	NE	1.6	0.7			0		SSE	0.19	4.8	Blue sky	
Zanzibar, Africa			29.99	761.7	82.7	28.2	69	SSW	5	2.2			5			0	0	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.43	747.4	29.82	757.5	73.6	23.1	56	SW	1.3	0.6			8			0.079	2.0		Prof. Giovanni Clodig.
Milan	29.31	744.4	29.81	757.2	74.7	23.7	55	E	3.8	1.7			5	SSE		0	0		Prof. Schiaparelli.
Padua	29.72	755.0	29.83	757.7	73.6	23.1	58	SW	3.8	1.7			6	W		0.016	0.4		Prof. Dott. Lorenzoni.
Moncalieri	28.93	734.8	29.82	757.3	74.8	23.8	42	SSE	3.1	1.4			1			0.091	2.3		Prof. P. F. Denza.
Genoa	29.69	754.0	29.88	758.9	67.1	19.5	72	SW	4.3	1.9			4	SW		0.063	1.6		Prof. G. M. Garibaldi.
Mondovi	27.95	710.0	29.83	757.6	72.0	22.2	43	NE				4	2			0	0		Prof. D. C. Bruno.
Pesaro	29.80	756.9	29.85	758.1	68.4	20.2	67	N	10.5	4.7			9	W		0	0		Prof. Luigi Guidi.
Florence	29.57	751.1	29.82	757.4	72.1	22.3	60	WSW			2		7	NE		0.004	0.1		Prof. Costantino Pitter.
Leghorn	29.78	756.5	29.87	758.6	68.2	20.1	67						10	ENE		0	0		Prof. P. Monte.
Rome	29.65	753.0	29.82	757.3	75.0	23.9	47	WSW	11.2	5.0			7			0.083	2.1		Prof. P. S. Ferrari.
Lecce	29.59	751.5	29.83	757.7	72.0	22.2	48	SW	13.6	6.1			7	S		0	0		Prof. C. de Giorgi.
Cosenza	29.01	736.8	29.88	758.9	66.6	19.2	70	WSW	1.8	0.8			10	SW		0.882	22.4		Prof. D. Conti.
Cagliari	29.66	753.3	29.85	758.1	71.6	22.0	47	WNW			6		5	W		0	0		Prof. A. Pacinotti.
Palermo	29.68	753.8	29.93	760.1	69.3	20.7	58	W	12.5	5.6			9	W		0.039	1.0		Prof. G. Ciacciatore.
Syracuse	29.85	758.3	29.90	759.4	72.7	22.6	51	WSW	12.5	5.6			8	WNW		0.039	1.0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.35	745.4	29.87	758.6	61.5	16.4	93	WSW	1.8	0.8			10	W		0.193	4.9		Prof. F. Brioschi.
Stelvio	22.17	563.1			46.2	7.9	53	SE			1	10ck	0	N		0	0	Covered	Prof. P. F. Denza.
Valdobbia	22.19	563.7			44.1	6.7	76	N			2		10	WNW		0	0	Overcast	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.86	758.4	29.87	758.7	66.0	18.9	80	WNW	1.5	0.7			10s			0	0	Gloomy	K. Sasaki.
Kioto	29.73	755.1	29.90	759.4	63.6	17.6	72	S	1.7	0.8			10s			0.085	2.2	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.70	754.4	29.89	759.2	67.6	19.8	67	ENE	4.1	1.8			10s			0	0	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	29.91	759.7	29.98	761.5	66.7	19.3	80	SSE	8.7	3.9			10s			0	0	Fair	The Staff.
Wakayama	29.85	758.2	29.90	759.4	69.0	20.6	69	Calm	0	0			10s			0	0	Cloudy	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.93	760.2	30.12	764.9	76.2	24.6	72	ESE	7.5	3.4		0	2		SE	0	0	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.57	751.0	29.83	757.6	72.0	22.2	88	N	5.3	2.3			9n		WNW	0	0	Very cloudy	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.05	763.2	30.05	763.2	66.9	19.4		ENE			4					0.571	14.5		
Groningen	30.09	764.3	30.15	765.7	63.9	17.7		ENE			4					0	0		
Helder	30.11	764.8	30.11	764.8	57.6	14.2		ENE			4					0	0		
Hellevoetsluis	30.04	763.0	30.04	763.0	63.7	17.6	55	ENE			4					0.142	3.6		
Utrecht	30.03	762.7	30.08	763.9	66.4	19.1	37	E			3		2			0	0	Lightly cl'dy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
NORWEGIAN SERIES.																			
Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.13	765.2	30.19	766.8	64.4	18.0	55	W	8.7	3.9			0			0	0		
Christiania	29.93	760.3	30.08	763.9	74.5	23.6	28	SSW	9	4			1			0	0		
Gjæsvær	30.04	763.0	30.06	763.6	36.7	2.6		Calm			0		10						
Lodingen	30.16	766.0	30.21	767.2	41.4	5.2	78	W			4		9			0.004	0.1		
PORTUGUESE SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.12	765.0	30.27	768.9	63.5	17.5	96	SW	11.2	5.0			6			0	0		Dr. J. A. Sampaio.
Campo Major	29.10	739.0	30.06	763.6	77.4	25.2	34	NNE	4.3	1.9			6			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.21	767.3	30.30	769.6	68.2	20.1	67	SW	6.9	3.1			3			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.85	758.1	30.20	767.1	66.7	19.3	54	N	27.3	12.2			6			0	0		The Staff.
Ponta Delgada, Azores	30.27	768.8	30.34	770.6	69.1	20.6	78	S	4.3	1.9			3			0	0		
RUSSIAN SERIES.																			
Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski																			Capt. Lasarew.
Archangel	29.97	761.3	29.99	761.8	35.4	1.9	64	NW	13	6			8ks						Capt. Sseliwerstow.
Astrakhan	29.98	761.5	29.90	759.4	65.5	18.6	89	Calm	0	0			10s;n			Bla	nk		Capt. Wieganow.
Barnaul ‡	29.49	749.1	29.99	761.8	46.4	8.0	54	W	2	1			10						Meteorological Obs'y.
Dorpat	29.78	756.3	30.01	762.3	61.9	16.6	39	WNW	7	3			1k						Observatory.
Ekaterinburg	28.84	732.5	29.82	757.3	39.7	4.3	59	WSW	13	6			9n						Meteorological Obs'y.
Kasan	29.68	753.9	29.96	760.9	45.9	7.7	47	WNW	4	2			10						Observatory.
Kertch	29.82	757.3	29.84	757.8	66.9	19.4	89	S	9	4			4						Lagorio & Sastyrez.
Kieff	29.03	737.4	29.67	753.5	49.3	9.6	100	NNE	22	10			10n					Raining	Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.63	752.6	29.83	757.7	66.6	19.2	50	WSW	9	4			5			Bla	nk		Meteorological Obs'y.
Moscow	29.44	747.7	29.98	761.6	54.0	12.2	39	N	4	2			7ks						Meteorological Obs'y.
Nertchinsk	27.59	700.7	29.81	757.2	57.2	14.0	39	Calm	0	0			0						Meteorological Obs'y.
Nikolaiev	29.67	753.5	29.74	755.3	62.1	16.7	93	SW	13	6			10n						Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	29.68	753.8	29.82	757.4	81.9	27.7	43	SE	4	2			1k						Physical Observatory.
St. Petersburg	29.97	761.1	29.98	761.5	50.4	10.2	50	WNW	13	6			7ks;n						Central Physical Obs'y.
Tashkend, Laboratory	28.35	720.1	29.85	758.2	77.7	25.4	59	Calm	0	0			4						Teich, A. M.
Tiflis	28.52	724.4	29.89	759.1	71.6	22.0	57	W	4	2			10						Physical Observatory.
Warsaw	29.55	750.5	29.96	761.0	63.5	17.5	26	NNE	11	5			0						Astronomical Obs'y.
Wilna	29.59	751.6	30.00	762.1	61.0	16.1	34	N	4	2			1					Light clouds	Berg, Assistant.
Yeniseisk	29.54	750.4	29.84	757.9	34.9	1.6	88	W	9	4			10					Snowing	M. O. Marks.
SCOTTISH SERIES.																			
Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.18	766.6	58.0	14.4	77	E			2		0			0	0	Light clouds	Andrew Gibb.
Monach Lt. House, Hebrides			30.21	767.3	56	13.3	94	NE			3		Fg			0	0	Foggy	J. Youngclause.
North Unst, Shetland Isl'ds			30.08	764.0				SW			1		0						Robert Burnet.
SPANISH SERIES.																			
Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.92	760.0	30.02	762.6	68.0	20	71	E	3.6	1.6			1			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.13	765.3	30.19	766.7	74.1	23.4	60	NW	2.2	1.0		1	8	SE		0	0	Almost cov'd	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.24	691.9			60.3	15.7	72	NE	4.3	1.9		0	9			0	0	Almost cov'd	Domingo Martin.
Madrid, Royal Obs'y	27.87	707.9	30.02	762.6	74.1	23.4	49	SW	0.9	0.4		0	6			0.008	0.2	Clouds	The Staff.
Murcia, Met. Obs'y ‡	29.91	759.7	30.05	763.3	83.3	28.5	44	NNE	6.5	2.9		5	5	SW		0.169	4.3	Raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.26	743.3	30.15	765.7	66.7	19.3	70	NW	4.3	1.9			9			0.020	0.5	Almost cov'd	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.73	755.1	29.80	756.8	78.2	25.7	86	SE	1.3	0.6		1c	0			0.008	0.2	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.83	757.6	29.88	758.9	87.3	30.7	80	SSW	7.7	3.5		0	1ks			0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.02	762.5	30.12	765.0	69.8	21.0	65	NW	12.2	5.5		0	2		W	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.87	758.8	29.97	761.1	84.9	29.4	80	SE	8.5	3.8		6s	4k	SE	SE	0	0		Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.76	755.8	29.90	759.5	83.5	28.6	70	N	5.7	3.0		0				0	0	Fair	José L. Fastovra.
SWEDISH SERIES.																			
Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.07	763.8	30.11	764.8	48.2	9.0	51	S			2		5			0	0		
Umea	30.09	764.2	30.14	765.5	48.9	9.4	42	SE			4		1			0	0		
Hernosand	30.11	764.9	30.17	766.2	52.3	11.3	49	ESE			2		0			0	0		
Stockholm	29.93	760.3	30.11	764.8	60.1	15.6	22	NNE			2		0			0	0		
Wisby	30.07	763.8	30.13	765.3	51.4	10.8	56	W			4		0			0	0		
Sub-Series.																			
Upsala	30.03	762.8	30.12	765.0	57.7	14.3	32	NNE	15.0	6.7			0			0	0		Nils Ekholm
SWISS SERIES.																			
Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.59	726.2	29.97	761.3	69.1	20.6	58	S			1		7			0.059	1.5		The Observatory.
Zurich ‡	28.39	721.1	30.00	761.9	63.1	17.3	75	W			1		7			0.051	1.3	Raining	The Observatory.
TURKISH SERIES.																			
Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.82	757.5	79.9	26.6	50	SW	6	2.5			2		SW	0	0		The Observatory.
Valona			29.94	760.5	72.1	22.3		SW			1		10			0	0	Covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.02	762.4	75.9	24.4	69	NW			1		0			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.83	757.7	29.91	759.7	65.5	18.6	78	S	6	2.7	.....	.....	10s	.....	S	0.17	4.3	Cloudy	
Alpena, Michigan	29.14	740.1	29.76	755.9	60	15.6	94	Calm	0	0	.....	1c	2s	Calm	Calm	0.27	6.9	Fair	
Atlanta, Georgia	28.74	730.0	29.85	758.2	63.5	17.5	80	E	7	3.1	.....	8k	0	Calm	.....	0	0	Cloudy	
Atlantic City, New Jersey	29.95	760.7	29.96	761.0	63	17.2	94	S	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Augusta, Georgia	29.74	755.4	29.94	760.5	68.9	20.5	65	NE	6	2.7	.....	.....	10s	.....	N	0.02	0.5	Cloudy	
Baltimore, Maryland	29.91	759.7	29.96	761.0	69	20.6	85	E	1	0.4	.....	Hz	Hz	.....	.....	0	0	Dense haze	
Barnegat, New Jersey	29.91	759.7	29.93	760.2	65	18.3	84	S	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Bismarck, Dakota	28.04	712.2	29.89	759.2	65	18.3	73	Calm	0	0	.....	0	0	.....	.....	0.22	5.6	Clear	
Boise City, Idaho	27.13	689.1	30.09	764.3	51.2	10.7	72	N	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Boston, Massachusetts	29.81	757.2	29.96	761.0	59.3	15.2	80	Calm	0	0	.....	.....	10n	.....	NW	0.02	0.5	Light rain	
Brackettville, Texas	28.64	727.4	29.67	753.6	64.0	17.8	94	N	4	1.8	.....	0	0	.....	.....	0.57	14.5	Clear	
Brownsville, Texas	29.71	754.6	29.75	755.6	78	25.6	73	S	4	1.8	.....	5ck	0	SW	.....	0	0	Fair	
Buffalo, New York	29.14	740.1	29.80	756.9	65.7	18.7	82	SW	5	2.2	.....	5k	Hz	W	.....	Inap.	Inap.	Fair	
Burlington, Vermont	29.58	751.3	29.86	758.4	61.5	16.4	88	SE	1	0.4	.....	.....	10n	.....	S	Inap.	Inap.	Light rain	
Cairo, Illinois	29.46	748.3	29.83	757.7	74	23.3	76	S	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Campo, California	27.34	694.4	29.91	759.7	39.5	4.2	76	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Camp Thomas, Arizona	27.09	688.1	.....	.....	51	10.6	46	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Cape Henry, Virginia	29.96	761.0	29.98	761.5	71	21.7	85	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Cape May, New Jersey	29.93	760.2	29.96	761.0	66	18.9	79	S	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Castroville, Texas	28.99	736.3	29.67	753.6	67	19.4	95	E	2	0.9	.....	0	2s	.....	.....	0.17	4.3	Fair	
Cedar Keys, Florida	29.83	757.7	29.85	758.2	77	25.0	73	S	8	3.6	.....	2k	0	.....	.....	0	0	Clear	
Champaign, Illinois	29.01	736.8	29.77	756.1	69.5	20.8	80	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Charleston, S. Carolina	29.85	758.2	29.91	759.7	75	23.9	77	E	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Charlotte, N. Carolina	29.09	738.9	29.86	758.4	70.8	21.6	75	E	5	2.2	.....	10k	●	SE	.....	0	0	Cloudy	
Chattanooga, Tennessee	29.10	739.1	29.86	758.4	72	22.2	69	Calm	0	0	.....	1cs	0	Calm	.....	0	0	Clear	
Cheyenne, Wyoming	24.04	610.6	29.98	761.5	42	5.6	66	NW	6	2.7	.....	0	0	.....	.....	0.02	0.5	Clear	
Chicago, Illinois	29.12	739.6	29.77	756.1	73.8	23.2	55	SW	3	1.3	.....	Hz	Hz	.....	.....	0	0	Light haze	
Chincoteague, Virginia	29.97	761.2	29.99	761.7	62	16.7	100	SW	7	3.1	.....	0	1s	.....	Calm	0	0	Clear	
Cincinnati, Ohio	29.22	742.2	29.84	757.9	69	20.6	70	SE	2	0.9	.....	Hz	Hz	.....	.....	0	0	Dense haze	
Cleveland, Ohio	29.15	740.4	29.83	757.7	70	21.1	61	SE	3	1.3	.....	5k	0	W	.....	0	0	Fair	
Coleman City, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Columbus, Ohio	29.03	737.3	29.83	757.7	67	19.4	74	S	1	0.4	.....	0	Sk	.....	.....	0	0	Clear	
Concho, Texas	27.89	708.4	29.49	749.0	64	17.8	89	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Corsicana, Texas	29.31	744.5	29.76	755.9	69	20.6	80	Calm	0	0	.....	0	2s	.....	.....	1.94	49.3	Clear	
Davenport, Iowa	29.16	740.7	29.76	755.9	71	21.7	66	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Dayton, Washington T'y	28.32	719.3	30.02	762.5	39.6	4.2	73	SW	3	1.3	.....	2k	0	Calm	.....	0.02	0.5	Fair	
Deadwood, Dakota	25.35	643.9	.....	.....	47	8.3	77	SW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Decatur, Texas	28.61	726.7	29.74	755.4	63	17.2	83	SE	4	1.8	.....	5cs	0	.....	.....	0.60	15.2	Fair	
Delaware Breakwater, Del.	29.94	760.5	29.96	761.0	66	18.9	95	SW	13	5.8	.....	0	0	.....	.....	0	0	Clear	
Denison, Texas	28.98	736.1	29.74	755.4	63	17.2	94	NW	6	2.7	.....	.....	10s	.....	Calm	0.45	11.4	Cloudy	
Denver, Colorado	24.77	629.1	29.99	761.7	46.4	8.0	77	S	5	2.2	.....	0	0	.....	.....	0.01	0.3	Clear	
Des Moines, Iowa	28.83	732.3	29.66	753.4	68.5	20.3	84	S	6	2.7	.....	.....	10s	.....	S	0	0	Cloudy	
Detroit, Michigan	29.15	740.4	29.82	757.4	66.5	19.2	84	S	4	1.8	.....	1cs	0	W	.....	0.54	13.7	Clear	
Dodge City, Kansas	27.18	690.4	29.38	746.2	57	13.9	81	NW	22	9.8	.....	0	0	.....	.....	0	0	Clear	
Dubuque, Iowa	29.07	738.4	29.73	755.1	70	21.1	75	S	1	0.4	.....	0	0	.....	.....	0.17	4.3	Clear	
Duluth, Minnesota	29.09	738.9	29.76	755.9	50	10.0	100	NE	1	0.4	.....	.....	10n	.....	.....	0.18	4.6	Light rain	
Eagle Pass, Texas	29.05	737.9	29.76	755.9	66.4	19.1	89	Calm	0	0	.....	0	0	.....	.....	0.65	16.5	Clear	
Eagle Rock, Idaho	25.22	640.6	29.87	758.7	47	8.3	48	N	1	0.4	.....	.....	10s	.....	NW	0	0	Cloudy	
Eastport, Maine	29.87	758.7	29.94	760.5	55	12.8	63	S	1	0.4	.....	5c	Hz	NW	.....	0	0	Fair	
El Paso, Texas	26.09	662.7	.....	.....	64	17.8	8	NW	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Erie, Pennsylvania	29.13	739.9	29.80	756.9	71	21.7	71	E	2	0.9	.....	0	5s	.....	.....	0	0	Fair	
Escanaba, Michigan	29.10	739.1	29.72	754.9	58	14.4	100	S	6	2.7	.....	.....	10n	.....	Calm	1.13	28.7	Light rain	
Florence, Arizona	28.28	718.3	29.88	758.9	60	15.6	34	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Apache, Arizona	24.95	633.7	30.40	772.1	43	6.1	51	NE	5	2.2	.....	0	Sk	.....	Calm	0	0	Dense smoke	
Fort Assinnaboine, Montana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Bennett, Dakota	28.24	717.3	.....	.....	60	15.6	94	NW	2	0.9	.....	5k	0	NW	.....	0.11	2.8	Fair	
Fort Benton, Montana	27.11	688.6	.....	.....	58	14.4	53	Calm	0	0	.....	0	0	.....	.....	0.13	3.3	Clear	
Fort Buford, Dakota	27.92	709.2	29.71	754.6	54	12.2	74	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Custer, Montana	26.74	679.2	.....	.....	51	10.6	93	E	8	3.6	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Fort Davis, Texas	25.11	637.8	30.07	763.8	55	12.8	74	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Elliott, Texas	27.10	688.3	29.31	744.5	56	13.3	69	NW	4	1.8	.....	10e	0	Calm	.....	0.40	10.2	Cloudy	
Fort Gibson, Indian T'y	29.14	740.1	29.65	753.1	67	19.4	95	S	6	2.7	.....	10cs	0	S	.....	0.36	9.1	Cloudy	
Fort Grant, Arizona	25.15	638.8	29.95	760.7	60	15.6	24	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Griffin, Texas	28.44	722.4	29.65	753.1	69.0	20.6	65	S	8	3.6	.....	5ck	0	.....	.....	0	0	Fair	
Fort Keogh, Montana	27.40	695.9	.....	.....	55	12.8	86	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Macon, North Carolina	29.95	760.7	29.96	761.0	72	22.2	90	E	4	1.8	.....	2k	0	Calm	.....	0	0	Clear	
Fort McKavett, Texas	27.55	699.8	29.39	746.5	64.8	18.2	94	SW	2	0.9	.....	0	0	.....	.....	0.02	0.5	Clear	
Fort Missoula, Montana	26.65	676.9	.....	.....	56	13.3	57	W	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort St. Michaels	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Shaw, Montana	26.40	670.5	.....	.....	47	8.3	85	SW	4	1.8	.....	.....	10s	.....	SW	0.37	9.4	Cloudy	
Fort Sill, Indian Territory	28.55	725.2	29.61	752.1	62	16.7	88	SW	10	4.5	.....	2c	0	W	.....	0.17	4.3	Fair	
Fort Stevenson, Dakota	28.03	711.9	.....	.....	61	16.1	88	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Verde, Arizona	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fredericksburg, Texas	.....	.....	.....	.....	55	12.8	33	NE	1	.....	.....	0	0	.....	.....	0	0	Clear	
Galveston, Texas	28.06	712.7	29.56	750.8	66	18.9	89	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Grand Haven, Michigan	29.72	754.9	29.76	755.9	69	20.6	100	S	2	0.9	.....	.....	10s	.....	.....	0.94	23.9	Cloudy	
Hatteras, North Carolina	29.16	740.7	29.77	756.1	78	22.8	55	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Helena, Montana	29.96	761.0	29.98	761.5	73	22.8	81	E	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Henrietta, Texas	25.77	654.5	.....	.....	52	11.1	54	SW	4	1.8	.....	5k	0	Calm	.....	0	0	Fair	
Indianapolis, Indiana	28.77	730.7	29.67	753.6	61	16.1	94	W	10	4.5	.....	0	5s	.....	.....	0.35	8.9	Fair	
Indianola, Texas	29.04	737.6	29.78	756.4	72.5	22.5	62	Calm	0	0	.....	0	Hz	.....	Calm	0	0	Clear	
Jacksboro, Texas	29.75	755.6	29.78	756.4	73.2	22.9	85	Calm	0	0	.....	8cs	0	W	.....	Inap.	Inap.	Fair	
Jacksonville, Florida	28.65	727.7	29.74	755.4	65	18.3	89	SE	2	0.9	.....	5cs	0	Calm	.....	0.15	3.8	Fair	
Keokuk, Iowa	29.82	757.4	29.86	758.4	76	24.4	77	S	3	1.3	.....	2cs	0	.....	.....	0	0	Clear	
Key West, Florida	29.10	739.1	29.71	754.6	69.0	20.6	80	S	4	1.8	.....	0	Hz	.....	Calm	0	0	Clear	
Kittyhawk, North Carolina	29.79	756.7	29.82	757.4	80.4	26.9	76	NE	2	0.9	.....	2k	0	.....	.....	0.01	0.3	Fair	
Knoxville, Tennessee	29.99	761.7	30.01	762.2	67	19.4	89	SE	4	1.8	.....	c	Hz	.....	.....	0	0	Clear	
La Crosse, Wisconsin	28.93	734.8	29.89	759.2	67.5	19.7	72	Calm	0	0	.....	0	Sk	.....	Calm	0	0	Clear	
La Mesilla, New Mexico	28.98	736.1	29.69	754.1	71	21.7	80	S	7	3.1	.....	0	5s	.....	S	0.56	14.2	Fair	
Laredo, Texas	25.95	659.1	30.10	764.5	51	10.6	40	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Leavenworth, Kansas	29.34	745.2	29.67	753.6	70	21.1	85	NE	4	1.8	.....	5ck	0	NE	.....	0.56	14.2	Fair	
Lewiston, Idaho	28.80	731.5	29.59	751.6	67	19.4	84	SE	7	3.1	.....	.....	10s	.....	S	0.28	7.1	Cloudy	
Little Rock, Arkansas	29.22	742.2	29.86	758.4	49	9.4	85	SW	1	0.4	.....	.....	10ks	.....	Calm	0.06	1.5	Cloudy	
Los Angeles, California	29.48	748.8	29.78	756.4	68	20.0	90	SW	4	1.8	.....	.....	10s	.....	.....	0.40	10.2	Cloudy	
Louisville, Kentucky	29.55	750.6	29.91	759.7	48.2	9.0	85	SW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Lynchburg, Virginia	29.28	743.7	29.81	757.2	69.5	20.8	75	SW	1	0.4	.....	2c	Sk	.....	.....	0	0	Clear	
Madison, Wisconsin	29.28	743.7	29.94	760.5	67	19.4	69	S	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Marquette, Michigan	28.77	730.7	29.70	754.4	70	21.1	80	S	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Mason, Texas	29.05	737.9	29.75	755.6	47	8.3	92	NW	1	0.4	.....	.....	10s	.....	NW	0.21	5.3	Cloudy	
Memphis, Tennessee	28.17	715.5	29.86	758.4	64	17.8	89	S	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Milwaukee, Wisconsin	29.50	749.3	29.83	757.7	74	23.3	72	Calm	0	0	.....	Hz	Hz	Calm	Calm	0	0	Light haze	
	29.04	737.6	29.72	754.9	72	22.2	67	SW	5	2.2	.....	1c	Hz	.....	.....	0	0	Clear	

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.76	755.9	29.83	757.7	74	23.3	59	NW	2	0.9	.....	8cs	Hz	.....	.....	0	0	Dense haze.	
Montgomery, Alabama	29.64	752.8	29.86	758.4	68	20.0	79	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Moorhead, Minnesota	28.79	731.3	29.70	754.4	62	16.7	88	NE	3	1.3	.....	5k	0	N	.....	0.38	9.7	Fair	
Morgantown, W. Virginia	28.93	734.8	29.86	758.4	73	22.8	72	Calm	0	0	.....	5k	0	.....	.....	0	0	Fair	
Mt. Washington, N. H.	23.81	604.8	30.17	766.3	46	7.8	54	S	19	8.5	.....	.....	10s;sk	.....	S;C	0	0	Cloudy	
Nashville, Tennessee	29.33	745.0	29.83	757.7	72.3	22.4	76	NW	2	0.9	.....	0	Fg	.....	.....	0	0	Clear	
New Haven, Connecticut	29.82	757.4	29.94	760.5	59	15.0	82	NW	2	0.9	.....	.....	10s	.....	.....	0.04	1.0	Cloudy	
New London, Connecticut	29.93	760.2	29.98	761.5	58	14.4	82	S	1	0.4	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy	
New Orleans, Louisiana	29.77	756.1	29.83	757.7	75.0	23.9	77	Calm	0	0	.....	5c	Sk	.....	.....	0	0	Fair	
Newport, Rhode Island	29.91	759.7	29.96	761.0	57.5	14.2	87	E	4	1.8	.....	.....	10s	.....	NW	0.03	0.8	Cloudy	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	29.93	760.2	29.96	761.0	55.0	12.8	81	S	6	2.7	.....	.....	10s	.....	Calm	0	0	Cloudy	
New York, New York	29.78	756.4	29.95	760.7	59	15.0	88	S	4	1.8	.....	2cs	8s	W	.....	0	0	Cloudy	
Norfolk, Virginia	29.96	761.0	29.99	761.7	73	22.8	81	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
North Platte, Nebraska	26.91	683.5	29.37	746.0	60	15.6	82	NW	18	8.0	.....	5cs	5s	NW	NW	Inap.	Inap.	Cloudy	
Olympia, Washington T'y	30.04	763.0	30.07	763.8	40.0	4.4	91	S	1	0.4	.....	8ck	Fg	W	S	0.09	2.3	Cloudy	
Omaha, Nebraska	28.52	724.4	29.56	750.8	66.6	19.2	95	SE	1	0.4	.....	.....	10n	.....	.....	0.78	19.8	Light rain	
Oswego, New York	29.51	749.5	29.82	757.4	63.8	17.7	93	S	3	1.3	.....	.....	10s	.....	SW	0.17	4.3	Cloudy	
Pensacola, Florida	29.80	756.9	29.83	757.7	73	22.8	85	SW	4	1.8	.....	0	Hz	.....	Calm	0	0	Clear	
Philadelphia, Pa	29.90	759.4	29.95	760.7	61	16.1	82	E	3	1.3	.....	5k	Hz	NW	.....	0	0	Fair	
Phœnix, Arizona	28.67	728.2	30.42	772.7	63	17.2	62	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.88	454.1	30.09	764.3	23	— 5.0	60	N	20	8.9	.....	0	0	.....	.....	0.04	1.0	Clear	
Pioche, Nevada	23.97	608.8	29.74	755.4	50	10.0	26	SW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Pittsburg, Pennsylvania	29.08	738.6	29.86	758.4	66.2	19.0	81	Calm	0	0	.....	0	Fg	.....	Calm	0	0	Clear	
Port Eads, Louisiana	29.84	757.9	29.85	758.2	74.0	23.3	81	NW	2	0.9	.....	0	Hz	.....	Calm	0	0	Clear	
Port Huron, Michigan	29.18	741.2	29.81	757.2	64.0	17.8	89	S	8	3.6	.....	5c	Hz	Calm	Calm	0.10	2.5	Fair	
Portland, Maine	29.86	758.4	29.91	759.7	64	17.8	73	SW	3	1.3	.....	2ck	2s	W	Calm	0	0	Fair	
Portland, Oregon	30.06	763.5	30.13	765.3	48.8	9.3	85	S	4	1.8	.....	8k	2s	SW	SW	0.09	2.3	Cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	72	22.2	85	E	4	1.8	.....	0	5ks	.....	W	0	0	Fair	
Prescott, Arizona	24.70	627.4	30.06	763.5	45	7.2	46	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	29.80	756.9	29.82	757.4	75	23.9	86	NE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Red Bluff, California	29.57	751.1	29.92	760.0	57.0	13.9	63	NW	4	1.8	.....	0	2s	.....	Calm	0	0	Clear	
Rio Grande City, Texas	29.62	752.3	29.82	757.4	69	20.6	85	NE	.....	.....	2	.....	10s	.....	Calm	0	0	Cloudy	
Rochester, New York	29.22	742.2	29.80	756.9	67	19.4	89	W	4	1.8	.....	1cs	1Iz	Calm	.....	0.08	2.0	Clear	
Roseburg, Oregon	29.56	750.8	30.12	765.0	40	4.4	82	NE	1	0.4	.....	1cs	0	.....	.....	0	0	Clear	
Sacramento, California	29.85	758.2	29.93	760.2	55.5	13.1	81	Calm	0	0	.....	8c	0	.....	.....	0	0	Fair	
St. Louis, Missouri	29.21	741.9	29.76	755.9	69.0	20.6	75	S	5	2.2	.....	0	0	.....	.....	0	0	Clear	
St. Paul, Minnesota	28.86	733.0	29.65	753.1	64	17.8	94	NW	7	3.1	.....	.....	10n	.....	Calm	0.52	13.2	Light rain	
Salt Lake City, Utah	25.53	648.4	29.86	758.4	87	13.9	31	Calm	0	0	.....	10c	0	Calm	.....	0	0	Cloudy	
San Antonio, Texas	29.13	739.6	29.80	756.9	67.6	19.8	84	Calm	0	0	.....	0	1ks	.....	Calm	0.10	2.5	Clear	
San Diego, California	29.81	757.2	29.89	759.2	58.5	14.2	87	N	4	1.8	.....	.....	10s	.....	.....	0	0	Cloudy	
Sandusky, Ohio	29.18	741.2	29.82	757.4	72	22.2	71	SW	2	0.9	.....	5k	Hz	SW	.....	0	0	Fair	
Sandy Hook, New Jersey	29.91	759.7	29.94	760.5	62.0	16.7	83	SW	8	3.6	.....	10k	0	W	.....	0	0	Cloudy	
San Francisco, California	29.87	758.7	29.94	760.5	52	11.1	82	SW	3	1.3	.....	0	1s	.....	Calm	0	0	Clear	
Santa Fé, New Mexico	23.27	591.0	29.81	757.2	56	13.3	46	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Savannah, Georgia	29.79	756.7	29.88	758.9	72	22.2	85	N	3	1.3	.....	2k	5ks	SW	.....	0.64	16.3	Fair	
Shreveport, Louisiana	29.56	750.8	29.79	756.7	68	20.0	95	SE	4	1.8	.....	.....	10s	.....	.....	0.87	22.1	Cloudy	
Silver City, New Mexico	24.17	613.9	30.21	767.3	54	12.2	61	N	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Sitka Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	.....	
Smithville, North Carolina	29.91	759.7	29.95	760.7	73	22.8	81	E	8	3.6	.....	0	1ks	.....	SW	Inap.	Inap	Clear	
Spokane Falls, Wash. Ter.	28.01	711.4	29.86	758.4	43	6.1	75	S	10	4.5	.....	5k	0	S	.....	0.23	5.8	Fair	
Springfield, Illinois	29.13	739.9	29.76	755.9	68.5	20.3	72	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Springfield, Massachusetts	29.81	757.2	29.94	760.5	61	16.1	88	S	3	1.3	.....	.....	10s	.....	S	0.08	2.0	Cloudy	
Stockton, Texas	26.79	680.5	29.79	756.7	64.8	18.2	84	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	28.95	735.3	29.71	754.6	63	17.2	89	NE	2	0.9	.....	0	2s	.....	NE	0.26	6.6	Clear	
Thatcher's Island, Mass	29.90	759.4	29.95	760.7	55.0	12.8	81	SW	13	5.8	.....	.....	10s	.....	SW	0	0	Cloudy	
Toledo, Ohio	29.16	740.7	29.81	757.2	71	21.7	71	E	4	1.8	.....	2k	Sk	SW	Calm	0	0	Fair	
Tucson, Arizona	27.42	696.5	29.07	761.2	60	15.6	39	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.76	755.9	30.26	768.6	45.3	7.4	76	N	3	1.3	.....	0	2s	.....	.....	0	0	Clear	
Uvalde, Texas	28.96	735.0	29.76	755.9	67	19.4	79	S	2	0.9	.....	5k	0	Calm	.....	0.54	13.7	Fair	
Vicksburg, Mississippi	29.59	751.6	29.84	757.9	69	20.6	85	SE	5	2.2	.....	10ck	0	S	.....	0	0	Cloudy	
Visalia, California	29.52	749.8	29.89	759.2	50	10.0	79	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C.	29.84	757.9	29.95	760.7	71	21.7	80	S	4	1.8	.....	0	Hz	.....	.....	0	0	Clear	
Wickenburg, Arizona	.....	.....	.....	.....	56	13.3	40	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	29.89	759.2	29.94	760.5	73	22.8	81	Calm	0	0	.....	2k	0	Calm	.....	0	0	Clear	
Winnemucca, Nevada	25.59	650.0	29.95	760.7	48	8.9	29	SW	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Wood's Holl, Mass	29.92	760.0	29.96	761.0	58	14.4	88	SE	4	1.8	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
Yankton, Dakota	28.43	722.1	29.66	753.4	66	18.9	95	N	6	2.7	.....	.....	10n	.....	.....	0.76	19.3	Light rain	
Yuma, Arizona	29.60	751.8	29.74	755.4	65.6	18.7	79	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.10	561.3	.....	.....	55.0	12.8	80	Calm	0	0	.....	5cs	2ks	.....	.....	0	0	Cloudy	Thomas Herran.
Buff Bay Town, Jamaica‡	29.79	756.7	30.11	764.8	70	21.1	100	E	.....	.....	.....	k	k	.....	.....	Blank		.....	
Havana, Cuba, W. I.	29.79	756.7	29.84	757.9	79	26.1	78	Calm	0	0	.....	0	4ks	.....	Calm	Inap	Inap.	Fair	A. Van Caneghem, A‡
Jakobshavn, Greenland	29.61	752.1	29.66	753.4	50.0	10	.....	W	.....	.....	10	.....	0	.....	.....	0	0	.....	K. V. Möller.
Kingston, Jamaica, W. I.	29.88	758.9	29.89	759.2	73.2	22.9	99	Calm	0	0	.....	.....	10n	.....	.....	6.92	175.8	Heavy rain	Robert Johnstone.
Nassau, W. I.	29.79	756.7	29.87	758.7	79	26.1	86	SE	25	11.2	.....	8cs	2	SE	NW	2.32	58.9	Cloudy	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	78	25.6	91	E	.....	.....	2	.....	8ks	E	.....	0.740	18.8	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.44	747.8	30.00	762.0	79	26.1	85	Calm	.....	.....	0	.....	10ks	.....	Calm	3.05	77.5	Cloudy	Francesco J. Cisnero
Rivas, Nicaragua	.....	.....	.....	.....	75.2	24	.....	E	.....	.....	1	5ck	5ks	.....	SW	0.10	2.5	.....	Earl Flint.
Santiago de Cuba, W. I.	29.88	758.9	29.90	759.4	75	23.9	90	NE	3.6	1.6	.....	10k	0	.....	.....	5.73	145.5	Raining	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.96	761.0	30.01	762.2	36.0	2.2	95	S	10	4.5	.....	3k	0	SW	.....	0	0	Fair	J. Fortescue & W Wo

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper.	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0– 10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																			Comm. A. J. Errington.
H M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.02	762.5	68.2	20.1	69	W			3		3	W						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 18° 47′, E. 57° 37′	29.59	751.6	85	29.4	87	S			2	2	6	NE	SSW			3	SSW	D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			78	25.6		SW			2		0					1	SSE	Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N. 13° 20′, W. 59° 40′	30.02	762.5	83	28.3	83	E			4		3					3	E	D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 11′, E 18° 26′	29.62	752.3	61.5	16.4	77	NW			3–5		10	NW						Squally	Com. F. W. Richards.
H. M. S. Champion, S. 14° 55′, W. 25° 45′	30.03	762.7	77	25.0	95	E			3		1					1	SSE	Blue sky	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Chefoo Harbor, China	29.87	758.7	69	20.6	65	S			1									D. clouds	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.97	761.2	79	26.1	86	NE			1		4	NE						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 34′, W. 52° 41′	29.75	755.6	44	6.7	88	WSW			1		8	WSW						D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad, N. 23° 35′, E. 58° 35′	29.71	754.6	88	31.1		SE			2		1	SW				2	SE	Blue sky	Capt. John Hext.
H. M. S. Eclipse, N. 1° 43′, E. 85° 22′	29.78	756.4	84	28.9		SW			3-4		7					2	SW	D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald, N. 0° 45′, E. 173° 26′	29.82	757.4	84	28.9	83	SE			1-2		2	E				2	SE	D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, S. 16° 58′, E. 69° 44′	29.99	761.7	79	26.1	82	SSE			3		2	SSE				3	SSE		Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo N. 20° 23′, W. 86° 24′	29.82	757.4	85	29.4	87	SE			1		2	E				1	E	D. clouds	Comm. R. N. Custance.
H M. S. Flying Fish, Yokohama, Japan	29.95	760.7	70	21.1	80	S			1		6					1	NE	D. clouds	Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	30.03	762.7	49	9.4	85	Calm			0		10							Overcast	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.60	751.8	39	3.9	91	Calm			0		10							Foggy	Capt. L. F. Jones.
H. M. S. Griffon, N 25° 06′, W. 77° 19′	29.88	758.9	81	27.2	87	Calm			0		10							Raining	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 35° 18′, W. 49° 05′	29.91	759.7	72	22.2		WNW			2		3	NW				1	WSW	D. clouds	Capt. J. L. Way.
H. M. S. Inconstant, Melbourne, Australia	30.33	770.4	57.5	14.2	91	Calm			0		0							Blue sky	Capt. C. C. P. Fitzgerald.
H. M. S. Iris, N. 35° 21′, E. 27° 29′	30.00	762.0	70	21.1	90	SSW			2		9					1	SSW	D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 27° 59′, E. 123° 06′	29.89	759.2	68	20.0	100	NNE			4-6		10	SW				6	NE	Overcast	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.00	762.0	63	17.2		Calm			0		10	Calm						Overcast	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Kobe, Japan	29.75	755.6	69	20.6		W			1		0							Blue sky	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Off Black Rocks, China Sea	29.92	760.0	84.4	29.1	76	SE			3		8	SE				1	E	D. clouds	Capt. A. Carpenter.
H. M. S. Midge, N. 24° 47′, E. 118° 50′	29.90	759.4				NE			3		7	NE				2	NE	Showery	Capt. W. N. Lang.
H. M. S. Minotaur, N. 36° 07′, W. 5° 21′	30.05	763.3	69	20.6	87	SSW			6		5	SSW						Squally	Capt. H. M. Rawson.
H. M. S. Modeste, S. 10° 20′ E. 96° 18′	29.88	758.9	80	26.7	100	SSE			4-6		9					7	SSE	Squally	Capt. J. G. Mead.
H. M. S. Monarch, Goletta, Tunis, N. Africa	30.03	762.7	71	21.7	66	WNW			4		7	WNW						D. clouds	Capt. G. Tryon, C. B

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.90	759.4	55	12.8	74	Calm			0									Blue sky	Capt. E. B. Drummond.
H. M. S. Orontes																			
H. M. S. Pegasus																			Capt. R. P. Kinahan. Capt. T. G. Jones.
H. M. S Pelican, N. 8° 55′, W. 79° 30′	29.83	757.7	81	27.2		SE			2		9					2	SE	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, La Guayra, Venezuela, S. A	29.87	758.7	82	27.8	87	Calm			0		6					2	NNE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler, St. Paul de Loando, Benguela	29.92	760.0	73	22.8		WNW			2		0						Sm'h	Blue sky	Capt. Hon. A. C. Littleton.
H. M. S. Ready, Rangoon, India	29.73	755.1	83	28.3		Var.			1–4		5	SW				3	SW	Showery	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	30.03	762.7	48	8.9		Calm			0		2							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.89	759.2	80.4	26.9	85	S			5		6							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 3° 48′, E. 75° 19′	29.43	747.5	84	28.9	79	SW			2–3		2	SW				5	SW;SE	D. clouds	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 17° 59′, W. 24° 21′	30.14	765.5	74.5	23.6	74	NNE			5		3	NNE				5	NNE	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A	30.00	762.0	58	14.4	88	Calm			0		10	Calm						Overcast	Capt. A. H. Markham.
H. M. S. Turquoise, S. 37° 06′, W. 73° 12′						Calm			0										Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 37° 15′, E. 2° 50′	30.05	763.3	69	20.6	75	Var.			1										Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I			76	24.4		SE			2		10							Raining	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	30.12	765.0	60	15.6	82	S			1-3		10	N						Showery	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, N. 29° 42′, E. 48° 50′	29.75	755.6	90.5	32.5	58	NW			3–4		0					2	N	Dense mist	Capt. T. P. Nesham.
H. M. S. Zephyr, Shanghai, China	29.99	761.7	66	18.9	89	SE			1		4	S						D. clouds	Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, Mossamedes, Benguela	30.03	762.8	70.7	21.5	81	NW			2		6					1		D. clouds	Carlos Candido dos Reis, Comd't
Quanza, N. 14° 09′, W. 21° 29′	30.07	763.8	81.0	27.2	83	NE			4		3		NE			2	NE	D. clouds	Carlos M. da Silva Costa, Comd't
Rio Lima																			S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.83	757.6	81.9	27.7	85	SW			1		10		SW					Overcast	P. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga, N. 58° 04′, E. 10° 05′	30.13	765.4	62.4	16.9	72	NW			1		1							Blue sky	Capt. M. von Krusenstierna
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	29.93	760.2	73	22.8	76	W	3	1.3			5		W	0	0			Fair	
N. Yard. Portsmouth, N. H.	29.95	760.7	60	15.6	82	SSW	2	0.9		10c	0	E		0	0			Cloudy	
Naval Hospital, Yokahama, Japan	29.82	757.4	67	19.4	84	SW			1		5		SW	0	0			Hazy	
Adams, Guayaquil, Peru	29.76	755.9	73	22.8	95	SW			1		10					Long		Cloudy	
Alaska, Callao, Peru	29.89	759.2	64	17.8	89	S			1		8		SSE	0	0	Sm'h		Cloudy	
Alert, N. 18° 56′, E. 142° 38′ *	29.80	756.9	82	27.8	79	SSE			1		2		E			Long Sm'h	E	Clear	
Alliance, Norfolk, Va	29.98	761.5	68	20.0	95	Calm			0		0			0	0			Clear	
Ashuelot, Kobe, Japan	29.92	760.0	69	20.6	75	WNW			1		10		Calm					Overcast	
Colorado, New York, N. Y	29.96	761.0	60	15.6	88	SE	2	0.9			10		Calm	0	0			Overcast	
Constitution, Norfolk, Va	29.92	760.0	67	19.4	95	S	1	0.4			2							Clear	
Franklin, Norfolk, Va	29.93	760.2	70	21.1	90	S	5	2.2			0			0	0			Clear	
Galena, N. 41° 12′, E. 5° 23′	29.94	760.5	62	16.7	88	WNW			6		0					Sm'h		Clear	
Independence, N. Yard, Mare I'd, Cal	29.94	760.5	55	12.8	80	W	1.2	0.5			2		W					Fair	
Jamestown, Sitka, Alaska *	29.99	761.7	48	8.9	85	WNW			2		10			0	0	Sm'h		Cloudy	
Kearsarge, N. 34° 15′, W. 75° 43′	30.00	762.0	76	24.4	86	E			3		2		SSE			Mod.	SSE	Fair	
Lackawanna, S. 13° 32′, W. 128° 45′ †	30.09	764.8	80	26.7	91	ENE			4		10		NE			Sm'h	NE	Cloudy	
Marion, Montevideo, Uruguay	29.92	760.0	57	13.9	87	N			3		1		Calm	Mod	erate	Sm'h		Rainy	
Michigan, Erie, Pennsylvania	29.76	755.9	66	18.9	79	W	2	0.9			8							Fair	
Minnesota, Newport, R. I	29.95	761.0	61	16.1	88	ESE			1		9		WNW			Sm'h		Cloudy	
Monocacy, Yokohama, Japan	29.98	761.5	69	20.6	80	S			1		10		Calm					Cloudy	
New Hampshire, N. 34° 01′, W. 75° 44′	29.95	761.0	76	24.4	77	ESE	18	8.0			8		SE	0.16	4.1	Sm h	SE	Cloudy	
Nipsic, N. 41° 53′, E. 5° 29′	29.94	760.5	63	17.2	67	S			5		2					R'gh	NW	Blue sky	
Onward, Callao, Peru †	29.97	761.2	64	17.8	94	SSE			2		10		N			Long	W	Cloudy	
Palos, Nagasaki, Japan	29.97	761.2	68	20.0	95	S			1		10							Cloudy	
Passaic, Washington, D. C	29.94	760.5	69	20.6	85	SW			3		0							Clear	
Pensacola, N. 40° 30′, W. 125° 14′	30.10	764.5	53	11.7	86	NNE			2		8		NNE	Slig	ht	Sm'h		Fair	
Portsmouth. Hampton Roads, Va	29.99	761.7	72	22.2	90	SSW			2		2		SW			Sm'h		Clear	
Powhatan, N. 34° 22′, W. 75° 43′	29.97	761.2	78	25.6	78	WNW			2-3		2		ESE			Sm'h	E	Fair	
Quinnebaug, N. 21° 30′, W. 52° 50′	30.10	764.5	80	26.7	82	SSE			2		2		SE			Sm'h		Clear	
Ranger, Acapulco, Mexico *	29.76	755.9	81	27.2	78	W			2		8			0	0	Sm'h		Fair	
Richmond, N. 34° 33′, E. 132° 50′	29.99	761.7	69	20.6	85	WSW			3		5		WSW	0	0	Sm'h		Fair	
Saratoga, Norfolk, Va	29.98	761.5	68	20.0	84	SE			1		0			0	0			Clear	
Shenandoah, Montevideo, Uruguay *	29.87	758.7	58	14.4	82	NNE			2		10					Sm'h		Cloudy	
St. Louis, League Island, Pa	29.51	749.5	61	16.1	88	SE	1	0.4			2			0	0			Clear	
Swatara, Shanghai, China *†	29.96	761.0	68	20.0	74	SSW			1		10		Calm					D. clouds	
Tennessee, New York, N. Y	30.45	773.4	65	18.3	78	SSW	5	2.2			10		NW	0	0	Sm'h		Foggy	
Ticonderoga, S. 51° 24′, W. 91° 44′	30.02	762.5	42	5.6	100	SSW			5		5		SSW	Inap.	Inap.	Mod.	SSW	Fair	
Trenton, Villafranca, France *	29.82	757.4	72	22.2	76	E			2		5			1 h'r	light	Sm'h		Fair	
Vandalia, N. 39° 36′, W. 74° 00	29.94	760.5	69	20.6	80	SSW			1		0							Clear	
Wabash, Boston, Massachusetts	29.99	761.7	60	15.6	76	SW	2	0.9			10		SW	0.01	0.3			Light rain	
Wachusetts, N. Yard, Mare I'd, Cal *†	30.03	762.7	59	15.0	88	SW			1		0							Clear	
Wyoming, Norfolk, Va	29.97	761.2	68	20.0	90	Calm			0		0					Sm'h	SSE	Clear	
Yantic, N. 34° 57′, W. 75° 23′ *	29.91	759.7	74	23.3	76	SSE			3		2		SSE			Sm'h		Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N 21° 19′, W. 84° 08′	29.82	757.4	83	28.3	79	NW			1		3							D. clouds	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 45° 00′, W. 27° 06′	29.99	761.7	61	16.1	100	SSW			5		10					4	SW	Overcast.	W. N. Lailey.
City of Agra																			Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart ‡																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow ‡																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamports																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee, ‡ N. 44° 40′, W. 30° 07′	29.80	756.9	60.0	15.6	100	SW			5		10							Showery	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria ‡																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 13° 17′, E. 52° 39′	29.60	751.8	84.0	28.9	89	SSW			6		6							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 55° 41′, W. 17° 38′	30.10	764.5				SSE			5		10		SW			R'gh	W	Raining	
S. S. Circassian, N. 55° 00′, W. 21° 30′	30.12	765.0	52	11.1	93	SW			6		10kn		SW	2 hours		5	SW	Raining	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Ch. G. Francklyn.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia, N. 41° 21′, W. 64° 24′ *	29.96	761.0	54	12.2		NNW			2		0			0	0	Sm'h		Hazy	Capt. W. H. P. Hains.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic, N. 41° 28′, W. 56° 02′	29.98	761.5	60	15.6	55	Var.			1		2					Sm'h		D. clouds	Capt. H. Parsell.
S. S. Britannic, N. 51° 08′, W. 11° 31′ †	30.28	769.1	55	12.8		NW			2		1		NW			Sl't	NW	D. clouds	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, New York, N. Y. †	30.03	762.7	62	16.7		SE			2		0			0	0	Sm'h		Clear	Capt. Ch. W. Kennedy
S. S. Republic, N. 46° 57′, W. 38° 45′ †	29.92	760.0	54	12.2	67	W			4		5		WNW	3 hours		Mod.	wsw	Fair	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—OF BREMEN. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Thol.
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern																			Capt. Th. Jüngst.
S. S. Köln, N. 39° 07′, W. 66° 45′	30.05	763.3	64.0	17.8	92	E			1–2		8		E	0	0	Sm'h	E	Cloudy	Capt. F. Pfeiffer.
S. S. Leipzig																			Capt. G. Meyer.
S. S. Ohio																			Capt. C. Helmbourh.
S. S. Strassburg																			
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Skoldebrand.

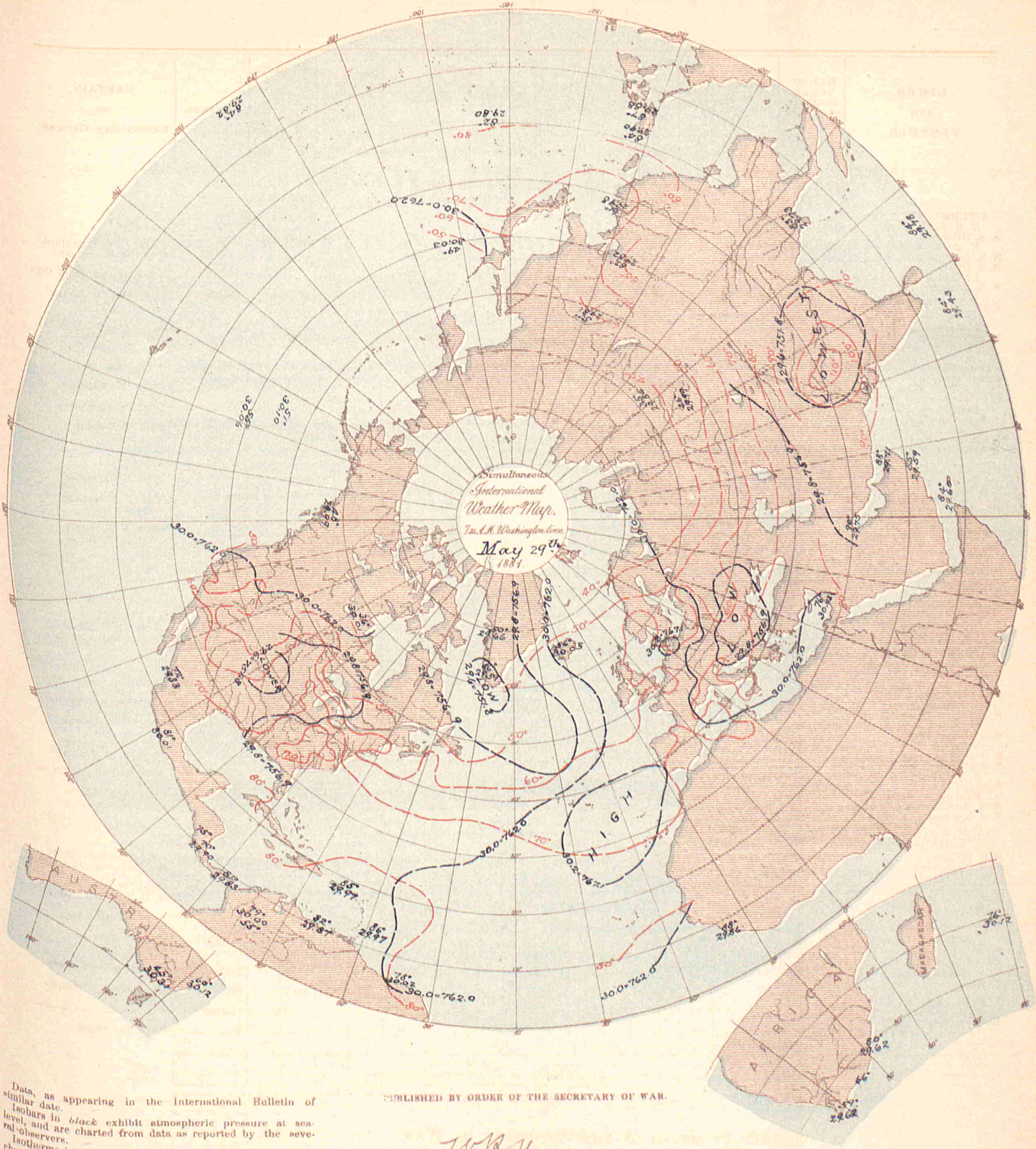
UNITED STATES MERCHANT-MARINE SERIES.

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

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, N. 38° 51′, W. 71° 23′	29.95	760.7	68	20.0	95	SW			2		2		W			Sm'h	W	Clear	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio, Liverpool, England *†	30.14	765.5	66	18.9	100	NNE			1		5		NNE	0	0			Fair	W. Shackford, Chief Off'r
S. S. Pennsylvania, N. 47° 10′, W. 27° 04′ *†	29.77	756.1	59	15.0	94	W			6		10		W			R'gh	W	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 44° 43′, W. 156° 00′ †	30.10	764.5	51	10.6	72	WNW			4		2		WNW	0	0	Mod.	WNW	Clear	Capt. H. Davison.
S. S. Gaelic, Hong Kong, China *†	30.04	763.0	79	26.1	91	SE			1		10		SE					Overcast	Capt. W. H. Kidley.
S. S. Oceanic, N. 28° 25′, E. 125° 03′	29.95	760.7	65	18.3	84	NNE			3		10		NE	0.06	1.5	Sl't	ESE	Cloudy	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 40° 34′, W. 124° 24′ †	30.01	762.2	51	10.6	86	N			5		0					Mod.	N	Clear	Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon †	30.05	763.3	50.0	10.0	79	Calm			0		8			0	0			Cloudy	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, San Francisco, Cal. †	29.94	760.5	50	10.0	79	NW			1		0							Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 36° 15′, W. 121° 48′ †	29.86	758.4	54	12.2	74	NW			5		2?		NW	0	0	Sm'h	NW	Cloudy?	Geo. H. Harrison.
S. S. Senator, N. 35° 32′, W. 121° 20′ †	29.96	761.0	55	12.8	87	NW			2		0					Mod.	NW	Clear	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal. †	29.91	759.7	51	10.6	86	Calm			0		2			0	0			Clear	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal. †	29.92	759.9	52	11.1	73	SW			1		2							Clear	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 14° 02′, W. 170° 02′	29.91	759.7	78	25.6	73	E			3		8		E			Long	E	Cloudy	A. Bannerman, 2d Officer
S. S. City of New York, Sydney, N. S. W. †	30.11	764.8	63	17.2	78	SSE			5		8		SE					Raining	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, Acapulco, Mexico †	30.01	762.2	81	27.2	74	NW			1		10kn		SE	2 ho	urs	Sm'h	W	Overcast	Capt. D. S. Austin.
S. S. City of Peking, N. 39° 09′, E. 150° 24′ †	30.03	762.7	49	9.4	70	NNE			5		10		NE	0	0	Light	NE	Cloudy	Capt. G. G. Berry.
S. S. City of Sidney																			Capt. H. C. Dearborn.
S. S. City of Tokio, N. 38° 30′, W. 152° 55′	30.06	763.5	55	12.8	80	NW			5		10		NW			Mod.	NW	Cloudy	A. L. Ritchie, 2d Officer
S. S. Colima, Panama, Panama †	29.88	758.9	82	27.8	91	SE			3		8		SSW	1.02	25.9			Raining	Capt. R. R. Searle.
S. S. Granada																			Capt. M. Connolly.
S. S. Zealandia, S. 35° 55′, E. 175° 58′	30.29	769.4	60	15.6	82	SW			2		0			0	0	Sm'h	S	Fine	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland, N. 42° 24′, W. 51° 45′	30.01	762.2	46	7.8	77	NW			2		0			0	0	Sm'h		Clear	Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Fall River, Mass	29.95	760.7	64	17.8	73	Calm	0	0			10k		SW	0.07	1.8			Cloudy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 19° 34′, W. 76° 50′ †	29.97	761.2	82	27.8		SSW			1		10		SSW	Ra	in	Sm'h	SE	Squally	Capt B. F. Woodbury.
Brigantine George, N. 27° 30′, W. 63° 30′ †	30.05	763.3	77	25.0		S			3		10			Sho	wers	Sm'h		Squally	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Md. †	30.04	763.0	63	17.2	94	E	1	0.4			5n			0	0			Cloudy	
Bark Sunbeam, Lisbon, Portugal †	30.22	767.6	71	21.7	61	N			6		5		N	0	0			Fair	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 30, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper.	Clouds. Direction. Lower	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco‡			30.11	764.8	69.8	21.0	77	NE			3		0			0	0	Clear	Dr. Ollive.
Nemours‡			30.00	761.9	78.8	26.0	90	NNW			1		0			0	0	Clear	Raynard.
Algiers‡			30.03	762.8	74.1	23.4	65	N			1		0			0.016	0.4	Clear	Nicolas.
La Calle‡			30.06	763.6	70.9	21.6	75	NNE			4		3			0	0	Pretty fair	Fonfréde.
Tunis‡			30.07	763.7															Jacques.
Sfax‡			30.10	764.6															Gau.
Saida‡			30.11	764.7	77.4	25.2	28	W			4		3			0	0	Pretty fair	Dumas.
Tebessa‡			30.09	764.3	66.6	19.2	32	SW			2		7			0.039	1.0	Very cloudy	Watrin.
Geriville‡																			Lonchamp.
Laghouat‡			30.08	764.0	78.4	25.8	28	N			3		1			0	0	Very fair	Herbin.
Biskra‡			30.10	764.5															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.02	762.5	30.11	764.8	51.4	10.8	88	SE	8	3.6			8			0	0	Dull	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.53	750.0	30.06	763.6	70.7	21.5	35	NE			3		2			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.36	745.7	30.11	764.9	64.8	18.2	40	NW	5.6	2.5			3			0	0		Dr. Wierzbicki.
Eperies	29.15	740.3	30.09	762.1	66.6	19.2	36	N			5	cs	5s		S	0	0		Julius Mikolik.
Gratz‡	28.84	732.5	30.06	763.4	69.6	20.9	45	NE			3		0			0.047	1.2		Andreas Rospini.
Hermannstadt	28.52	724.4	29.93	760.1	61.2	16.2	67	NE			3		10			0.031	0.8		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.82	732.0	30.14	765.6	62.4	16.9	53	ENE			1		2			0	0		The Staff.
Lemberg	29.03	737.4	30.00	762.0	62.2	16.8	49	NE			2		7			0	0		Dr. T. Stanecki.
Pola	29.95	760.6	30.06	763.4	72.0	22.2	43	ENE			4		0			0	0		I. R. HydrographicOffice.
Szathmar	29.50	749.4	29.96	760.9	68.7	20.4	37	NW			3		3			0	0		Beicht Peter, S. J.
Szegedin	29.72	754.9	29.99	761.8	65.8	18.8	66	N			3		5			0	0		Karl Stancel.
Trieste	29.98	761.4	30.08	764.0	75.4	24.1	38	E			1		3			0	0	Clear	Secco.
Vienna	29.44	747.7	30.14	765.6	65.8	18.8	33	NNE			2		1			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.26	768.6	30.36	771.1	49.5	9.7	92	ESE	9	4.0						0	0	Foggy	W. Boswell.
Armagh, Observatory	30.15	765.8	30.38	771.6	65.0	18.3	75	NE	1	0.4		2						D. clouds	S. Call.
Bidston, Liverpool Obs'y			30.34	770.6	69.1	20.6	37	SE	5	2.2		0						Misty	John Hartnup.
Bolton, Sharples	29.80	756.9	30.34	770.6	68.5	20.3	38	SSE	12	5.4		0						Blue sky	Thomas Mackereth.
Bradford, Yorkshire	29.96	761.0	30.36	771.1	66.0	18.9	44	SE			1	0				0	0	Blue sky	J.McLandsbo ough,F.R.S
Bridgetown, Barbadoes	29.96	761.0	30.00	762.0	87	30.6	69	NE			2	5						D. clouds	Corpl. J. Surgener,AH.C.
Cardington			30.30	769.6	75.0	23.9	34	NE			0.6	0						Blue sky	John McLaren.
Chatham, School M. E.	30.17	766.3	30.30	769.6	63.7	17.6	73	NE			2	0						Blue sky	Corpl. W. Beck, R. E.
Falmouth, Observatory	30.07	763.8	30.30	769.6	68.2	20.1	51	ESE			1	7						Overcast	The Staff.
Fort Napier, Natal	27.26	692.4	29.48	748.8	83.0	28.3	27	Calm			0	2						Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.63	752.6	29.86	758.4	87	30.6	88	NW			1							Raining	Sgt. C. E. Keane.
Galway, Queen's College			29.31	744.5	70	21.1	57	N			2	2				0	0	Blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	29.98	761.5	30.04	763.0	74.5	23.6	79	SW			4	0						Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.14	765.5	30.34	770.6	71.0	21.7	57	SW			4	1						Blue sky	Harry Urquhart.
Greenwich, Royal Obs'y	30.13	765.3	30.30	769.6	70.2	21.2	47	ENE			1	0						Blue sky	The Staff.
Guernsey	30.00	762.0	30.22	767.6	58	14.4	76	NE			3	0						Blue sky	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.26	768.6	30.30	769.6	69.0	20.6	43	E	24	10.7		0						Misty	The Staff.
Leicester, Museum	30.10	764.5	30.35	770.9	72.0	22.2	46	NE			1	0						Blue sky	J. E. Carryer.
Malta, Mediterranean	29.94	760.5	30.01	762.2	72.0	22.2	62	NW			2	3						Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.85	758.2	29.90	759.4	83.2	28.4	82	SE			1	7				Blank		D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.84	757.9	30.35	770.9	69.9	21.1	58	NE			2	0						Blue sky	John Mac Email.
Oxford, Radcliffe Obs'y	30.07	763.8	30.30	769.6	70.2	21.2	48	NE			3	0						Blue sky	The Staff.
Plymouth	30.20	767.1	30.28	769.1	70.2	21.2	52	SSW			1	0						Blue sky	John Merrifield.
Sandwick Manse, Orkneys			30.36	771.1	53.2	11.8	87	NW	9	4.0								Misty	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.72	754.9	29.78	756.4	70.4	21.3	76	N			2	8						D. clouds	Serg't W. H. Lyne.
Sheffield	30.10	764.5	30.38	771.6	69.4	20.8	51	ENE			1	0				0	0	Blue sky	W. F. Cooper.
Silloth Rectory	30.33	770.4	30.36	771.1	64.8	18.2	63	W			2	0				0	0	Blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.37	771.4	70.0	21.1	73	ESE	9	4.0		0						Blue sky	Rev. S. J. Perry.
Stratfield Turgiss	30.06	763.5	30.28	769.1	71.8	22.1	45	NE			2-3	0						Blue sky	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	30.29	769.4	30.30	769.6	72	22.2	54	N			4	0						Blue sky	W. Newcombe.
Valencia, Observatory	30.36	771.1	30.38	771.6	62.9	17.2	53	WNW	7	3.1		5						D. clouds	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.69	754.1	29.73	755.1	55	12.8	75	S	14	6.3		5c	5s			0	0	Fair	H. J. Cundall, C. E.
Chatham, N. B.*	29.62	752.3	29.68	753.9	56	13.3	75	S	5	2.2		2k	8ks	S	S	0	0	Cloudy	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	29.63	752.6	29.65	753.1	45	7.2	93	NE	10	4.5			10n		Calm	0	0	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.13	739.9	29.94	760.5	54	12.2	87	E	8	3.6		0.	5s			0.610	15.5	Fair	James Stewart.
Fredericton, N. B																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.66	753.4	29.79	756.7	49	9.4	98	SE	5	2.2			10ks			0	0	Cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.42	747.3	29.74	755.4	63	17.2	95	S	1	0.4		Hz	0	Calm		Inap.	Inap.	Hazy	S. Woods, M. A.
Little Glace Bay, N. S																			C. H. Rigby.
Montreal, Quebec*	29.54	750.3	29.74	755.4	60	15.6	95	NW	6	2.7			10n			0.32	8.1	Light rain	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.17	740.9	29.85	758.2	59	15.0	98	NE	16	7.2			10n		NE	0.26	6.6	Light rain	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.13	739.9	29.79	756.7	67	19.4	89	S	4	1.8		10c	0	W		0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.18	741.2	29.80	756.9	66	18.9	90	E	1	0.4			10n		W	0.01	0.3	Cloudy	M. Payne.
Quebec, Quebec*	29.40	746.7	29.71	754.6	61	16.1	94	W			1		10n		W	0.04	1.0	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.37	746.0	29.82	757.4	59	15.0	91	W	4	1.8			10s		N	0.76	19.3	Heavy rain	W. H. McIntyre.
Saugeen, Ontario*	29.13	739.9	29.84	757.9	54	12.2	94	NW	2	0.9			Fg			0	0	Foggy	K. Stewart.
St. Andrews, N .B	29.70	754.4	29.75	755.6	49	9.4	93	S	1	0.4			Fg			0.01	0.3	Foggy	
St. John, N. B																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	29.76	755.9	29.79	756.7	66	18.9	52	S	7	3.1		8c	0	W		0	0	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.41	747.0	29.78	756.4	63	17.2	9c	Calm	0	0		8k	Hz	W		0	0	Cloudy	Magnetic Observatory
Windsor, N. S																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	29.72	754.9	29.78	756.4	48	8.9	97	SW	3	1.3		Fg	Fg			0.08	2.0	Foggy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.76	755.9	30.01	762.2	46	7.8	92	SW	1	0.4		5k	5s			0	0	Fair	John Delany.
St. Pierre, N. F																			N. F. Land, Comd't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.62	752.3			59.3	15.2	75	SSW	43.2	19.3			10n					Raining	John Duthie.
Cape Town, C. G. H. Obs'y.	29.98	761.5	30.02	762.5	57.9	14.4		S	26.3	11.8		0	2ks			0.007	0.2		The Staff, for D. Gill.
Worcester*†	28.73	729.7			53.8	12.1	65	SSW			1	5	5			0.73	18.5	Overcast	C. Stokes.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.86	758.4	29.88	759.0	64.0	17.8	80	SE	1.8	0.8		2k	0			0	0	Fair	M. Marc Dechevrens, S.J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.19	665.2	29.91	759.7	67.1	19.5	90	SE			1	3ck	0			0.87	22.	Clear.	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.21	767.3	30.26	768.5	67.5	19.7	39	SE	11	5			0						Oversergent Fischer.
Fahde	30.23	767.9	30.25	768.4	63.3	17.4	76	W			4		1						Overloerer Lauridsen.
Godthaab, Greenland	29.57	751.0	29.61	752.1	33.4	0.8	96	SW			2		10					Foggy	S. Kleinschmidt.
Stykkisholm, Iceland	29.80	756.8	29.84	757.9	54.7	12.6		S			8		8					Raining	A. O. Thorlacius.
Thorshavn	30.24	768.0	30.27	768.9	51.8	11.0	81	S	9	4			10						Overloerer Bergh.
Vestervig	30.16	766.0	30.25	768.4	63.7	17.6	70	NNW			2		0						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.49	749.0	30.13	765.2	68.4	20.2	63	W			1	ck	0		N	0	0		M. Labroue, Director.
Alençon Normal School	29.68	753.8	30.23	767.8	63.3	17.4	81	NE			1		10n		N	0.024	0.6	Covered	M. Nicot, Director.
Arras, Engineer School	29.95	760.8	30.21	767.2	69.1	20.6	53	E			3		0			0	0	Clear	M. Klein, Commandant.
Avignon, Normal School	29.95	760.6	30.02	762.6	75.9	24.4	50	N			2		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.60	751.7	30.13	765.4	68.7	20.4	61	NE			1	0	8kn		NE	0.016	0.4	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.95	760.6	30.21	767.2	69.6	20.9	52	E			2		2		E	0.189	4.8	Slightly cl'dy	M. Frère Eugene Marie.
Besançon, Normal School	29.22	742.2	30.10	764.4	69.8	21	62	NE			1		ckn		SW	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.90	759.4	30.16	766.0	67.3	19.6	60	NNE			1		8		N	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.61	752.2	30.15	765.9	67.6	19.8	65	WNW			1	ck	0	WNW		0.059	1.5		M. Postel, Director.
Brest, Naval Observatory	30.04	763.0	30.28	769.2	62.6	17.0	77	N			1		10		N	0	0	Misty	M. de Rermaree, Dir.
Caen, Normal School	30.11	764.7	30.18	766.5	66.4	19.1	88	N			1		2			0	0	Slightly cl'dy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.84	757.9	30.15	765.7	77.0	25.0	53	E			2		5			0	0	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.63	752.7	30.13	765.4	72.3	22.4	68	NE			1		0			0.51	13.	Clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.78	731.0	30.11	764.8	65.1	18.4	67	N			1		10			0.012	0.3	Covered	M. Alluard, Director.
Cluny, Normal School	29.28	743.6	29.72	754.8	70.5	21.4	65	NW			1		5		NW	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.25	743.0	30.10	764.6	70.9	21.6	53	NNW			2		5ks	NNW	NNW	0.020	0.5	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.45	697.2	29.90	759.5	70.5	21.4	39	SW			6		5n		SW	0.110	2.8	½ covered	M. Jeangirard, Director.
Grenasque, du. Rhone	28.96	735.5	30.10	764.5	74.8	23.8	53	SW			2		5		S	0	0	½ covered	M. Kina, Director.
Grenoble, Normal School	29.30	744.1	30.04	763.1	69.8	21	65	NNW			2	ck	0			0	0		M. Ablard, Director.
Guéret, Normal School	28.58	725.8	30.14	765.6	66.6	19.2	55	N			1		kn		S	0	0		M. Rivoire, Director.
Lamballe, Normal School	29.65	758.3	30.13	765.2	60.8	16	81	NW			1		Fg		NW	0	0	Light fog	M. Ollitrault, Director.
Lescar, Normal School	29.56	750.8	30.22	767.5	67.6	19.8	72	W			1	cs	0	NW		0.016	0.4		M. Chauvin, Director.
Lorient, Naval Observatory	30.18	766.6	30.29	769.3	64.8	18.2	64	NNW			2		1c			0	0	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.97	735.9	30.02	762.4	62.2	16.8	68	NNW			1		5		NNW	0	0	Cloudy	M. André, Director.
Mans, Normal School	29.89	759.1	30.19	766.8	66.4	19.1	70	NNE			1		8		E	0	0	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.74	755.4	30.00	762.1	73.9	23.3	60	SW			1-2		3		NE	0.012	0.3	Stormy	M. Stephan, Director.
Montlouis l'instituteur	24.91	632.7	30.15	765.7	52.7	11.5	68	NW	16.8	7.5			8		NE	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.91	759.7	30.02	762.4	79.5	26.4	49	N			2		5	NNW	N	0	0	Cloudy	M. P. Galxin, Director.
Nancy, Normal School	29.39	746.4	30.13	765.2	73.4	23	50	NE			1	ck	n			0	0		M. Hasse.
Nantes, Observatory	30.06	763.4	30.22	767.6	64.8	18.2	78	NW			0-1		10		NNW	0	0	Covered	M. Larocque, Director.
Nice	30.00	761.9	30.03	762.7	69.8	21.0	65	E			3		5	E	E	0	0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.95	760.7	30.06	763.4	74.1	23.4	39	NE	11.2	5.0			1		NW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.62	574.4			39.2	4.0	100						5	SW	NE	0.063	1.6	Cloudy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.06	738.0	30.09	764.3	71.6	22	55	N			1	0	2k			0	0	Slightly cl'dy	M. Taillen.
Puy de Dôme Obs'y, Summit	25.29	642.4			45.1	7.3	100	N			2		10			0.016	0.4	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	30.16	766.1	30.19	766.9	75.6	24.2	59	WNW			1		5		NW	0	0	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.98	761.6	30.20	767.0	65.1	18.4	75	WSW			1		10		E	0	0	Covered	M. Mouillot, Director.
Rodez, Normal School	27.98	710.7	30.09	764.2	64.4	18	67	NW			1		10		E	0	0	Covered	M. Richard, Director.
Rouen, Normal School	30.09	764.3	30.18	766.5	74.1	23.4	35	NNE			1		2		NE	0.059	1.5	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	30.07	763.7	30.22	767.7	65.7	18.7	77	NNW			1		8		NE	0	0	Very cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.01	762.2	30.17	766.4	68.5	20.3	70	NE			2		8		NE	0	0		M. Renou, Director.
Toulouse, Observatory	29.48	748.8	30.21	767.3	65.5	18.6	66	NW			1					0.055	1.4		M. Bailland, Director.
Tours	29.97	761.3	30.17	766.3	66.6	19.2	72	NNE			1		10			0	0	Covered	M. de Tastes.
Versailles, Observatory	29.69	754.1	30.18	766.6	66.2	19.0	72	NE			2					0.008	0.2		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y																			M. Marié Dvy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.32	744.6	30.19	766.7	68.0	20.0	40	N			4		2k	NNE		0	0		Prof. Dr. Hoh.
Berlin	30.08	764.1	30.25	768.4	71.8	22.1	22	SE			1		0			0	0		Prof. Dr. Arndt.
Breslau	29.70	754.4	30.24	768.0	62.4	16.9	38	NW			1		0			0	0		Royal University Obs'y.
Carlsruhe	29.72	755.0	30.14	765.6	70.9	21.6	56	NE			2		1	NE		0	0		Albert Sens.
Cassel	29.49	749.0	30.21	767.2	67.6	19.8	24	N			4		1	N		0	0		Dr. H. Möhl.
Frankfort on the Main	29.85	758.3	30.21	767.4	71.2	21.8	30	NNE			1		3			0	0		Physical Society.
Friedrichshafen	28.68	728.4	30.08	764.0	67.3	19.6	52	NE			7		5	NE		0	0		Wilhelm, Chief Tel.
Hamburg	30.22	767.5	30.29	769.3	65.7	18.7	42	SE			1		0			0	0		Dr. R. Kleeman.
Kiel	30.24	768.2	30.26	768.6	52.7	11.5	45	SW			1		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.84	757.8	30.25	768.4	63.7	17.6	33	ENE			2		1			0	0		Prof. Dr. Bruhns.
Magdeburg	29.96	761.0	30.24	768.2	66.2	19.0	26	NE			1		0			0	0		Dr. Assmann.
Memel	30.15	765.8	30.20	767.0	50.9	10.5	88	NW			4		0			0	0		Reinbrecht & Issermann.
Munich	28.34	719.9	30.22	767.5	63.3	17.4	40	NE			3		2			0.079	2.0		Central Station.
Neufahrwasser	30.24	768.1	30.26	768.5	51.1	10.6	68	NNE			3		0			0	0		A. Lothes.
Neustadt, Palatinate	29.61	752.2	30.14	765.6	73.2	22.9	43	E			2		5			0	0		Dicknether.
Stuttgart	29.19	741.5	30.06	763.5	69.4	20.8	41	N			1		3	N		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.68	728.5	30.17	766.4	64.8	18.2	40	E			2		3	E		0	0		Prof. Kemlein.
Wustrow	30.28	769.2	30.31	769.8	57.9	14.4	54	WNW			2		0			0	0		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	OBSERVERS.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.50	749.2	29.88	758.9	75.7	24.3		W		5.0		0						Clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.64	752.9	29.69	754.2	89.9	33.2	66	S	20.0	8.9		1				0	0	Blue sky	
Deesa	29.15	740.5	29.61	752.0	101.4	38.6	35	SSW	13.1	5.8		4		SW	SW	0.38	9.6	D. clouds	
Bombay	29.72	754.8	29.76	755.8	86.7	30.4	76	SSW	26.0	11.6		2			SSW	0.20	5.1	D. clouds	
Poona, Yarrowda	27.89	708.3	29.69	754.0	93.0	33.9	35	W				2			W	0	0	D. clouds	
Belgaum	27.26	692.5	29.78	756.4	79.0	26.1	71	SW	14.0	6.3		7		E	SW	0.02	0.5	D. clouds	
Lahore	28.75	730.3	29.44	747.8	111.1	43.9	21	W	1.8	0.8		0				0	0	Blue sky	
Roorkee	28.62	726.9	29.46	748.4	105.3	40.7	36	Calm	4.1	1.8		3				0	0		
Agra	28.94	735.1	29.47	748.5	111.1	43.9	14	N	6.3	2.8		0				0	0		
Nagpur	28.52	724.5	29.51	749.6	104.7	40.4	22	NW	10.8	4.8		6			NW	0	0	D. clouds	
Jubbulpore	28.22	716.8	29.51	749.4	102.5	39.2	21	NNW	7.7	3.4		7				0	0	D. clouds	
Lucknow	29.14	740.1	29.50	749.3	102.4	39.1	35	NE	4.5	2.0		0				0	0	Blue sky	
Allahabad	29.18	741.0	29.48	748.7	94.7	34.8	47	E	2.8	1.2		8				0.06	1.5	Thnd'r str'm	
Patna	29.33	744.9	29.50	749.3	98.5	36.9	42	NE	3.9	1.7		4		NE	NE	0	0	D. clouds	
Hazaribagh	27.54	699.6	29.47	748.6	95.3	35.2	36	ESE	9.1	4.1		2				0	0		
Cuttack	29.49	749.0	29.57	751.0	85.0	29.4	63	SW	1.0	0.4		10				0	0	Gloomy	
Calcutta, Alipore	29.51	749.6	29.53	750.2	90.2	32.3	70	S	4.0	1.8		3			NW	0	0	D. clouds	
Dhubri	29.43	747.6	29.55	750.6	88.6	31.4	72	Calm	0.8	0.4		0				0	0		
Chittagong	29.48	748.7	29.56	750.9	87.9	31.1	76	WNW	3.7	1.6		5				0	0	Blue sky	
Sibsagar	29.22	742.1	29.54	750.4	89.1	31.7	73	NE	1.1	0.5		0				0	0	Blue sky	
Zanzibar, Africa			29.96	761.0	83.7	28.7	64	SE	5	2.2		2			SE	0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.67	753.7	30.07	763.8	74.3	23.5	51	SW	0.4	0.2		5				0.417	10.6		Prof. Giovanni Clodig.
Milan	29.58	751.2	30.08	764.0	68.9	20.5	63	NE	3.8	1.7		9		SE		0	0		Prof. Schiaparelli.
Padua	29.98	761.6	30.09	764.3	70.2	21.2	39	SSE	11.2	5.0		0				0.177	4.5		Prof. Dott. Lorenzoni.
Moncalieri	29.20	741.6	30.08	764.1	64.9	18.3	75	E	2.5	1.1		9				0.378	9.6		Prof. P. F. Denza.
Genoa	29.90	759.4	30.09	764.3	64.9	18.3	73	NW	1.8	0.8		10		NW		0.248	6.3		Prof. G. M. Garibaldi.
Mondovi	28.20	716.2	30.07	763.8	57.7	14.3	93	W			2	10				0.894	22.7		Prof. D. C. Bruno.
Pesaro	30.02	762.4	30.06	763.6	67.3	19.6	57	N	7.4	3.3		2				0	0		Prof. Luigi Guidi.
Florence	29.78	756.3	30.02	762.6	73.4	23.0	36	SW			2	10		NE		0	0		Prof. Costantino Pitter.
Leghorn	29.95	760.6	30.03	762.7	71.2	21.8	52					10		N		0	0		Prof. P. Monte.
Rome	29.78	756.4	29.95	760.7	76.3	24.6	43	WSW	3.8	1.7		9				0.004	0.1		Prof. P. S. Ferrari.
Lecce	29.71	754.7	29.96	760.9	71.2	21.8	57	NNW	15.4	6.9		7		N		0	0		Prof. C. de Giorgi.
Cosenza	29.12	739.6	29.99	761.7	71.6	22.0	71	SW	2.5	1.1		5		SSW		0.370	9.4		Prof. D. Conti.
Cagliari	29.78	756.5	29.97	761.3	73.9	23.3	49	NW			4	9		NW		0	0		Prof. A. Pacinotti.
Palermo	29.77	756.1	30.02	762.4	70.9	21.6	52	NE	5.6	2.5		6				0	0		Prof. G. Olaccintore.
Syracuse	29.91	759.7	29.95	760.8	73.4	23.0	56	E	6.9	3.1		6		WNW		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.45	748.1	29.97	761.1	70.9	21.6	64	W	1.3	0.6		9		WSW		0	0		Prof. F. Brioschi.
Stelvio	22.28	565.8			42.4	5.8	51	SSW			2	3ks		NE		0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.31	566.7			41.4	5.2	85	E			2	10		SW		0	0	Covered	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.68	753.9	29.69	754.1	67.8	19.9	72	SW	11.4	5.1		0	0			0	0	Clear	K. Sasaki.
Kioto	29.59	751.6	29.76	755.9	60.2	15.7	84	NNW	0.1	0.04			10s			0.040	1.0	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.59	751.6	29.78	756.4	65.4	18.6	83	W	1.6	0.7			0			0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	29.72	754.9	29.79	756.6	57.6	14.2	92	N	3.5	1.6		0	7s;ks			0.609	15.5	Fair	The Staff.
Wakayama	29.70	754.4	29.75	755.6	67.3	19.6	65	SSE	13.8	6.2		0	0			0	0	Clear	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.94	760.5	30.14	765.4	76.0	24.4	65	ESE	14.5	6.5		0	2		SE	0	0	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.63	752.5	29.88	759.0	77.0	25.0	77	SSW	0.9	0.4			10n		SE	0	0	Covered	F. Quijano, U. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.28	769.2	30.28	769.2	68.2	20.1		ENE			4					0	0		
Groningen	30.26	768.5	30.31	769.9	65.5	18.6		N			2					0	0		
Helder	30.32	770.0	30.32	770.0	60.3	15.7		NE			2					0	0		
Hellevoetsluis	30.28	769.0	30.28	769.0	67.8	19.9	64	ENE			3					0	0		
Utrecht	30.25	768.4	30.30	769.6	69.4	20.8	43	NE			2		2			0	0	Lightly cld'y	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Velocity.		Force	Clouds. Amount and kind.		Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.19	766.8	30.25	768.4	66.2	19.0	46	WNW	11.0	4.9			0			0	0		
Christiania	30.01	762.2	30.15	765.8	75.4	24.1	22	SW	7	3			0			0	0		
Gjesvær	29.95	760.7	29.97	761.3	36.5	2.5		NNW			2		10						
Lodingen	30.12	765.0	30.17	766.2	38.8	3.8	87	SW			6		10			0.083	2.1	Raining	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.08	763.9	30.23	767.9	63.3	17.4	100	S	11.2	5.0			7			0	0		Dr. J. A. Sampaio.
Campo Major	29.06	738.2	30.03	762.7	77.0	25.0	40	WNW	3.1	1.4			8			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.15	765.8	30.24	768.0	68.4	20.2	62	SSW	2.5	1.1			1			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.79	756.7	30.15	765.7	70.0	21.1	52	N	19.9	8.9			1			0	0		The Staff.
Ponta Delgada, Azores	30.22	767.7	30.30	769.5	69.1	20.6	78	S	7.4	3.3			3			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	29.94	760.5	29.96	761.0	37.9	3.3	68	W	2	1			10					Light clouds	Capt. Lasarew.
Archangel	29.77	756.1	29.69	754.0	77.2	25.1	59	SSW	11	5			6k;s			Blank		Light clouds	Capt. Sselilwerstow.
Astrakhan	29.43	747.6	29.93	760.2	51.6	10.9	43	W	18	8			8						Capt. Wisganow.
Barnaul ‡	29.85	758.3	30.10	764.4	59.9	15.5	37	ESE	4	2			0						Meteorological Obs'y.
Dorpat	28.88	733.6	29.85	758.1	46.0	7.8	28	W	11	5			10						Observatory.
Ekaterinburg	29.54	750.2	29.81	757.1	51.4	10.8	46	NNE	9	4			10						Meteorological Obs'y.
Kasan	29.69	754.2	29.71	754.7	64.4	18.0	92	NW	11	5			10					Raining	Observatory.
Kertch	29.23	742.4	29.86	758.5	56.3	13.5	39	N	9	4			5cks						Lagorio & Sastyrez.
Kieff																			Observatory.
Krotkowo	29.25	742.9	29.45	747.9	60.6	15.9	91	WNW	13	6			10			Blank			Cand. Fatjanow.
Lugan	29.37	745.9	29.92	759.9	49.6	9.8	41	N	4	2			9ks						Meteorological Obs'y.
Moscow	27.12	689.0	29.23	742.5	75.9	24.4	27	SW	4	2			3					Heavy cl'ds	Meteorological Obs'y.
Nertchinsk	29.72	754.9	29.79	756.7	56.3	13.5	68	NNE	31	14			10n						Meteorological Obs'y.
Nikolaiev																			Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	29.50	749.4	29.65	753.4	83.7	28.7	27	SW	7	3		2cs	0						Physical Observatory.
St. Petersburg	30.00	762.1	30.02	762.5	50.4	10.2	53	WNW	11	5		0s	7ks;n					Light clouds	Central Physical Obs'y.
Tashkend, Laboratory	28.28	718.3	29.74	755.5	86.4	30.2	40	Calm	0	0			1						Teich, A. M.
Tiflis	28.42	721.9	29.79	756.7	70.0	21.1	61	NNW	4	2			10ks						Physical Observatory.
Warsaw	29.70	754.3	30.11	764.9	63.7	17.6	24	N	16	7			0						Astronomical Obs'y.
Wilna	29.65	753.1	30.06	763.6	60.8	16.0	38	NNW	4	2			2						Berg, Assistant.
Yeniseisk	29.53	750.1	29.82	757.4	47.1	8.4	58	S	9	4			10						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.34	770.6	71.2	21.8	53	E			1		0			0	0	Hazy	Andrew Gibb.
Monach Lt. House, Hebrides			30.34	770.6	54	12.2	100	S			4	3	0	S		0	0	Hazy	J. Youngclause.
North Unst, Shetland Isl'ds			30.33	770.4				SW			1		0						Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.97	761.2	30.08	763.9	71.6	22	64	SSE	4.0	1.8			1			0	0	Clouds	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.97	761.1	30.02	762.5	60.1	15.6	89	N	2.7	1.2			10			0.492	12.5	Raining	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.24	692.0			51.4	10.8	94	NE	6.9	3.1		0	9			0.445	11.3	Almost cov'd	Domingo Martin.
Madrid, Royal Obs'y	27.91	708.8	30.14	765.5	57.4	14.1	79	NE	13.2	5.9			10			0.217	5.5	Covered	The Staff.
Murcia, Met. Obs'y ‡	29.89	759.1	30.03	762.8	79.9	26.6	48	SE	3.6	1.6		2	4	W		0.244	6.2	Raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.34	745.1	30.22	767.7	63.5	17.5	55	N	17.4	7.8			6			0.012	0.3	Cloudy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.78	756.4	29.85	758.1	77.4	25.2	87	ESE	2.2	1.0		0	0			0.240	6.1	Clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.76	756.0	29.82	757.3	86.0	30.0	70	NNW	12.1	5.5		0	7km	E		0	0	Cloudy	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.00	762.1	30.10	764.6	72.5	22.5	70	W	7.0	3.1		0	0			0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.95	760.8	30.04	763.1	82.8	28.2	88	S	0	0		7s	3k	S		0	0		Enrique Gades, Chief Engineer.
Tuguegarao, Philippine Ids	29.69	754.1	29.84	757.8	83.7	28.7	67	N	7.5	3.4			4ks	NNW		0	0	Partly cl'dy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.91	759.7	29.95	760.7	57.9	14.4	90	N			4		2			0	0		
Umea	29.92	760.0	29.97	761.3	70.9	21.6	23	N			4		1			0	0		
Hernosand	29.92	759.9	29.97	761.2	73.2	22.9	20	WNW			6		0			0	0		
Stockholm	29.95	760.8	30.13	765.3	67.3	19.6	26	WSW			2		0			0	0		
Wisby	30.10	764.5	30.16	766.0	52.2	11.2	52	NNW			2		0			0	0		
Sub-Series.																			
Upsala	29.99	761.7	30.08	763.9	72.0	22.2	27	W	8.5	3.8			0			0	0		Nils Ekholm
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.66	728.0	30.04	763.1	69.1	20.6	60	N			3		6			0	0	Cloudy	The Observatory.
Zurich, ‡	28.49	723.7	30.08	764.1	68.7	20.4	46	E			4-6		3			0	0	Clear	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.83	757.6	68.0	20.0	64	NW	22	10.0			10		N	0.287	7.3		The Observatory.
Valona			30.06	763.4	70.3	21.3		W			1		2			0	0	Slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.96	760.9	76.5	24.7	71	NW			1	1c	0			0	0		Prof. C. V. A. van Dyck.

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

UNITED STATES SERIES.

By authority of the Secretary of War.

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

Albany, New York	29.73	755.1	29.81	757.2	74.5	23.6	72	S	6	2.7		Hz	Hz			0.17	4.3	Dense haze.	
Alpena, Michigan	29.23	742.4	29.86	758.4	55.5	13.1	93	NE	10	4.5			10n		NE	0.48	12.2	Light rain	
Atlanta, Georgia	28.72	729.5	29.82	757.4	64.5	18.1	92	Calm	0	0			10s		Calm	0.57	14.5	Cloudy	
Atlantic City, New Jersey	29.92	760.0	29.93	760.2	64	17.8	94	S	10	4.5		1c	0	Calm		0	0	Clear.	
Augusta, Georgia	29.72	754.9	29.92	760.0	72.0	22.2	80	E	2	0.9		5cs	2s	SE	Calm	0.02	0.5	Fair.	
Baltimore, Maryland	29.87	758.7	29.92	760.0	71	21.7	80	S	1	0.4		0	0			0	0	Clear	
Barnegat, New Jersey	29.88	758.9	29.90	759.4	67	19.4	84	S	10	4.5		2cs	0	Calm		0	0	Clear	
Bismarck, Dakota	28.13	714.5	29.98	761.5	63	17.2	78	Calm	0	0		5c	0	SE		0	0	Fair.	
Boise City, Idaho	27.08	687.8	30.04	763.0	51.3	10.7	60	E	2	0.9		5cs	0	Calm		0	0	Fair.	
Boston, Massachusetts	29.64	752.8	29.78	756.4	72.0	22.2	68	W	13	5.8		0	0			0.01	0.3	Clear	
Brackettville, Texas	28.61	726.7	29.64	752.8	63.0	17.2	94	NW	12	5.4			10s			0.50	12.7	Cloudy	
Brownsville, Texas	29.74	755.4	29.79	756.7	76	24.4	86	SE	4	1.8		5k	0	S		0	0	Fair	
Buffalo, New York	29.10	739.1	29.76	755.9	68	20.0	60	W	2	0.9			10n		W	Inap.	Inap.	Light rain	
Burlington, Vermont	29.45	748.0	29.72	754.9	65.5	18.6	92	S	2	0.9			10s		W	0.15	3.8	Cloudy	
Cairo, Illinois	29.43	747.5	29.80	756.9	74	23.3	68	S	4	1.8		5c	0	W		0	0	Fair	
Campo, California	27.34	694.4	29.92	760.0	36.4	2.4	71	S	4	1.8		0	0			0	0	Clear	
Camp Thomas, Arizona	27.10	688.3			53	11.7	42	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	29.93	760.2	29.94	760.5	71	21.7	85	SE	5	2.2		2c	0			0	0	Clear.	
Cape May, New Jersey	29.89	759.2	29.92	760.0	65	18.3	89	S	12	5.4		1k	0			0	0	Clear.	
Castroville, Texas	28.93	734.8	29.61	752.1	70	21.1	66	S	10	4.5			10s			0	0	Threatening	
Cedar Keys, Florida	29.84	757.9	29.87	758.7	76	24.4	81	NE	4	1.8		5c	0			0	0	Fair	
Champaign, Illinois	29.02	737.1	29.78	756.4	69.3	20.7	70	SE	12	5.4		0	0			0	0	Clear.	
Charleston, S. Carolina	29.86	758.4	29.91	759.7	77	25.0	82	E	5	2.2		0	0			0	0	Clear.	
Charlotte, N. Carolina	29.08	738.6	29.87	758.7	66.6	19.2	90	NE	3	1.3			Fg			0.60	15.2	Dense fog	
Chattanooga, Tennessee	29.08	738.6	29.86	758.4	67	19.4	79	NE	4	1.8		1cs	0	Calm		0.02	0.5	Clear	
Cheyenne, Wyoming	24.06	611.1	30.00	762.0	44	6.7	68	SW	2	0.9		0	0			0	0	Clear	
Chicago, Illinois	29.12	739.6	29.77	756.1	75.5	24.2	52	W	3	1.3		Hz	0			0	0	Clear	
Chincoteague, Virginia	29.94	760.5	29.96	761.0	65	18.3	94	S	11	4.9		1k	0	S		0	0	Clear	
Cincinnati, Ohio	29.21	741.9	29.82	757.4	75	23.9	60	NE	2	0.9		4cs	5ks;s			0	0	Cloudy	
Cleveland, Ohio	29.11	739.4	29.79	756.7	73.2	22.9	55	S	6	2.7		8ck	0			Inap.	Inap.	Fair	
Coleman City, Texas																			
Columbus, Ohio	29.01	736.8	29.80	756.9	71	21.7	62	NE	3	1.3		0	Fg			0.04	1.0	Clear	
Concho, Texas	27.90	708.6	29.53	750.0	60	15.6	82	Calm	0	0		8k	0	S		0.19	4.8	Cloudy	
Corsicana, Texas	29.24	742.7	29.68	753.9	70	21.1	75	S	12	5.4		0	8ks		S	0.15	3.8	Cloudy	
Davenport, Iowa	29.15	740.4	29.75	755.6	72	22.2	67	S	1	0.4		4cs	0	Calm		0	0	Fair.	
Dayton, Washington T'y	28.12	714.2	29.77	756.1	44.7	7.1	68	N	6	2.7		2c	0	Calm		0	0	Clear	
Deadwood, Dakota	25.36	644.1			53	11.7	73	S	2	0.9		5k	0	SW		0.01	0.3	Fair.	
Decatur, Texas	28.55	725.2	29.65	753.1	70	21.1	75	NW	4	1.8		0	2s			0.21	5.3	Fair	
Delaware Breakwater, Del.	29.91	759.7	29.93	760.2	69	20.6	85	SW	14	6.3		5ck	0	SW		0	0	Fair	
Denison, Texas	28.88	733.5	29.64	752.8	66	18.9	95	SW	5	2.2		5cs	0	Calm		0.30	7.6	Fair	
Denver, Colorado	24.80	629.9	30.02	762.5	49.0	9.4	78	SE	5	2.2		0	0			0	0	Clear	
Des Moines, Iowa	28.89	733.8	29.73	755.1	66	18.9	89	S	1	0.4		2cs	5ks		S	0.20	5.1	Fair	
Detroit, Michigan	29.13	739.9	29.78	756.4	72.0	22.2	60	W	4	1.8		8c;cs	Hz	W		0	0	Cloudy	
Dodge City, Kansas	27.22	691.4	29.44	747.8	58	14.4	82	NW	19	8.5		5k	0	NW		0.06	1.5	Fair	
Dubuque, Iowa	29.11	739.4	29.77	756.1	71.6	22.0	58	S	1	0.4		2c	Hz	SW	Calm	0	0	Fair	
Duluth, Minnesota	29.26	743.2	29.93	760.2	50	10.0	100	NE	1	0.4			Fg		Calm	0.13	3.3	Dense fog	
Eagle Pass, Texas	28.99	736.3	29.70	754.4	63.2	17.3	94	SE	12	5.4			10s		Calm	0.74	18.8	Cloudy	
Eagle Rock, Idaho	25.25	641.3	29.90	759.4	47	8.3	48	N	3	1.3		5cs	0	NW		0	0	Fair	
Eastport, Maine	29.66	753.4	29.73	755.1	48	8.9	89	S	1	0.4			10s;fg			0.43	10.9	Cloudy	
El Paso, Texas	26.08	662.4			65	18.3	6	W	6	2.7		0	0			0	0	Clear	
Erie, Pennsylvania	29.10	739.1	29.77	756.1	71	21.7	71	W	3	1.3		0	0			0	0	Clear	
Escanaba, Michigan	29.26	743.2	29.90	759.4	55	12.8	93	N	16	7.2			10s		N	1.56	39.6	Cloudy	
Florence, Arizona	28.31	719.1	29.91	759.7	61	16.1	35	NE	2	0.9		0	0			0	0	Clear	
Fort Apache, Arizona	24.98	634.5	30.42	772.7	43	6.1	43	NE	4	1.8		0	Sk		Calm	0	0	Dense smoke	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota	28.32	719.3			60	15.6	94	W	1	0.4		5c	0	W		0	0	Fair	
Fort Benton, Montana	27.18	690.4			53	11.7	48	NW	1	0.4		0	0			0.70	17.8	Clear	
Fort Buford, Dakota	27.98	710.7	29.76	755.9	61	16.1	82	NW	8	3.6		5cs	0	Calm		0.02	0.5	Fair.	
Fort Custer, Montana	26.87	682.5			55	12.8	87	NW	8	3.6			10s		N	0	0	Cloudy	
Fort Davis, Texas	25.11	637.8	30.07	763.8	59	15.0	70	E	4	1.8		0	0			0	0	Clear	
Fort Elliott, Texas	27.23	691.6	29.47	748.5	56	13.3	57	NW	24	10.7		5c	0	NW		0	0	Fair	
Fort Gibson, Indian T'y	29.08	738.6	29.59	751.6	67	19.4	84	SE	4	1.8		10cs	0	SW		0.90	22.9	Cloudy	
Fort Grant, Arizona	25.16	639.1	29.96	761.0	62	16.7	18	NE	5	2.2		0	0			0	0	Clear	
Fort Griffin, Texas	28.44	722.4	29.65	753.1	65.8	18.8	74	Calm	0	0		0	0			0	0	Clear	
Fort Keogh, Montana	27.46	697.5			56	13.3	86	NE	14	6.3		0	0			0	0	Clear	
Fort Macon, North Carolina	29.93	760.2	29.94	760.5	74	23.3	90	SE	4	1.8		5c;k	0	Calm		0	0	Fair	
Fort McKavett, Texas	27.57	700.3	29.43	747.5	62.2	16.8	75	SW	4	1.8		10ck	0	NW		0.06	1.5	Clear	
Fort Missoula, Montana	26.75	679.4			48	8.9	70	W	4	1.8		0	0			0	0	Clear	
Fort St. Michaels																			
Fort Shaw, Montana	26.41	670.8			38	3.3	72	SW	2	0.9		2c	0	S		0.10	2.5	Clear	
Fort Sill, Indian Territory	28.46	722.9	29.52	749.8	66	18.9	79	NW	13	5.8		5ck	0	NW		0	0	Fair	
Fort Stevenson, Dakota	28.06	712.7			60	15.6	88	Calm	0	0		0	5s		Calm	0	0	Fair	
Fort Verde, Arizona												0	0			0	0	Clear	
Fredericksburg, Texas					55	12.8	22	S			1	0	0			0	0	Clear	
Galveston, Texas	28.08	713.2	29.59	751.6	66	18.9	84	Calm	0	0		0	8s			0.01	0.3	Cloudy	
Grand Haven, Michigan	29.73	755.1	29.78	756.4	76	24.4	82	SW	4	1.8		8cs	0			0.03	0.8	Fair	
Hatteras, North Carolina	29.18	741.2	29.79	756.7	72	22.2	67	Calm	0	0		2c	0	Calm		0	0	Clear	
Helena, Montana	29.94	760.5	29.96	761.0	74	23.3	81	SE	5	2.2		0	0			0	0	Clear	
Henrietta, Texas	25.83	656.1			55	12.8	43	S	1	0.4		0	0			0	0	Clear	
Indianapolis, Indiana	29.03	737.3	29.78	756.4	72	22.2	60	NW	1	0.4		3cs;ck	Hz	W	Calm	0	0	Fair	
Indianola, Texas	29.76	755.9	29.78	756.4	74.8	23.8	81	W	9	4.0		8cs	Hz	N		0	0	Fair	
Jacksboro, Texas	28.60	726.4	29.68	753.9	65	18.3	94	SW	2	0.9		5cs	0	SW		0.09	2.3	Fair	
Jacksonville, Florida	29.84	757.9	29.89	759.2	77	25.0	82	E	3	1.3		0	0			0.07	1.8	Clear	
Keokuk, Iowa	29.12	739.6	29.74	755.4	67.3	19.6	76	SE	6	2.7		5c	Hz	SW	Calm	Inap.	Inap.	Fair	
Key West, Florida	29.82	757.4	29.86	758.4	79.8	26.6	77	SE	2	0.9		2k	0	SE		0.61	15.5	Fair	
Kittyhawk, North Carolina	29.97	761.2	29.99	761.7	67	19.4	95	Calm	0	0		5c;ck	0			0	0	Fair	
Knoxville, Tennessee	28.91	734.3	29.89	759.2	63.5	17.5	85	S	3	1.3		0	2s	Calm		0.43	10.9	Fair	
La Crosse, Wisconsin	29.03	737.3	29.74	755.4	71.6	22.0	71	E	4	1.8		0	8s			0.10	2.5	Fair	
La Mesilla, New Mexico	25.95	659.1	30.10	764.5	53	11.7	36	Calm	0	0		0	0			0	0	Clear	
Laredo, Texas	29.45	748.0	29.78	756.4	65	18.3	94	N	8	3.6			10n		Calm	0.81	20.6	Light rain	
Leavenworth, Kansas	28.86	733.0	29.66	753.4	64	17.8	83	SE	4	1.8		5k	0	S		0.01	0.3	Fair	
Lewiston, Idaho	29.13	739.9	29.78	756.4	44	6.7	67	Calm	0	0		0	2s		Calm	0.10	2.5	Clear	
Little Rock, Arkansas	29.42	747.3	29.72	754.9	67	19.4	89	S	2	0.9		2ck	0	SW		0	0	Clear	
Los Angeles, California	29.54	750.3	29.90	759.4	57.2	14.0	87	NE	4	1.8			10s		Calm	0	0	Cloudy	
Louisville, Kentucky	29.26	743.2	29.78	756.4	73.0	22.8	72	W	4	1.8		0	0			0	0	Clear	
Lynchburg, Virginia	29.26	743.2	29.91	759.7	72	22.2	71	S	1	0.4		0	0			0	0	Clear	
Madison, Wisconsin	28.82	732.0	29.76	755.9	67	19.4	84	NE	1	0.4		0	0			0	0	Clear	
Marquette, Michigan	29.24	742.7	29.95	760.7	47	8.3	92	Calm	0	0			10n		Calm	0.83	21.1	Light rain	
Mason, Texas	28.17	715.5	29.86	758.4	64.7	18.2	78	NW	4	1.8			10s		NW	0.36	9.1	Cloudy	
Memphis, Tennessee	29.45	748.0	29.77	756.1	69	20.6	85	E	2	0.9			10s		E	0.29	7.4	Cloudy	
Milwaukee, Wisconsin	29.12	739.6	29.83	757.7	53	11.7	93	N	9	4.0			10s;fog			0	0	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'or 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.75	755.6	29.82	757.4	76	24.4	82	S	3	1.3			10ks		S	0.03	0.8	Threatening	
Montgomery, Alabama	29.63	752.6	29.86	758.4	68	20.0	90	E	2	0.9		9k	0	E		0.18	4.6	Cloudy	
Moorhead, Minnesota	28.89	733.8	29.81	757.2	62	16.7	88	E	5	2.2		5cs	0	SE		0	0	Fair	
Morgantown, W. Virginia	28.91	734.3	29.85	758.2	69	20.6	80	Calm	0	0		Hz	0			0	0	Clear	
Mt. Washington, N. H.	23.65	600.7	30.01	762.2	48	8.9	100	NW	57	25.5			Fg		NW	0.41	10.4	Dense fog	
Nashville, Tennessee	29.32	744.7	29.83	757.7	72.6	22.6	66	SE	2	0.9		2ck	0			Inap.	Inap.	Clear	
New Haven, Connecticut	29.75	755.6	29.86	758.4	66	18.9	84	S	5	2.2		5cs	Hz			0	0	Fair	
New London, Connecticut	29.84	757.9	29.88	758.9	68	20.0	84	NW	6	2.7		4k	0	NW		0	0	Fair	
New Orleans, Louisiana	29.73	755.1	29.79	756.7	73.3	22.9	79	SW	1	0.4		1c	5ks		S	Inap.	Inap.	Fair	
Newport, Rhode Island	29.82	757.4	29.87	758.7	59.9	15.5	90	SW	13	5.8		40k	Hz	NW		0	0	Fair	
New River, N. Carolina																			
New Shoreham, Rhode I'd	29.87	758.7	29.90	759.4	58.0	14.4	94	SW	16	7.2			Fg		Calm	0	0	Dense fog	
New York, New York	29.73	755.1	29.90	759.4	66	18.9	89	W	8	3.6		1cs	Hz			0	0	Clear	
Norfolk, Virginia	29.93	760.2	29.96	761.0	75	23.9	81	S	4	1.8		2ck	0			0	0	Clear	
North Platte, Nebraska	27.01	686.0	29.50	749.3	58	14.4	90	N	18	8.0			10s		N	0	0	Cloudy	
Olympia, Washington T'y	29.77	756.1	29.81	757.2	43.0	6.1	92	SW	1	0.4		8cs	Fg	SW	Calm	0	0	Cloudy	
Omaha, Nebraska	28.63	727.2	29.68	753.9	64.5	18.1	89	N	4	1.8			10s			0.70	17.8	Cloudy	
Oswego, New York	29.46	748.3	29.77	756.1	66.8	19.3	75	SW	1	0.4		0	0			Inap.	Inap.	Clear	
Pensacola, Florida	29.79	756.7	29.82	757.4	73	22.8	85	W	4	1.8			10s		SW	0	0	Cloudy	
Philadelphia, Pa	29.85	758.2	29.90	759.4	69	20.6	90	W	8	3.6		5k	0	W		0	0	Fair	
Phœnix, Arizona	28.65	727.7	30.39	771.9	65	18.3	63	E	4	1.8		0	0			0	0	Clear	
Pike's Peak, Colorado	17.90	454.7	30.11	764.8	28	— 2.2	66	NE	14	6.3		0	0			0.14	3.6	Clear	
Ploche, Nevada	23.96	608.6	29.73	755.1	52	11.1	23	SW	3	1.3		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.04	737.6	29.81	757.2	68	20.0	81	N	1	0.4		2ck	Fg	W	Calm	0	0	Clear	
Port Eads, Louisiana	29.81	757.2	29.82	757.4	73.2	22.9	85	S	18	8.0		0	8s		S	0.05	1.3	Fair	
Port Huron, Michigan	29.18	741.2	29.82	757.4	62.8	17.1	72	N	1	0.4		8cs	Hz	Calm	Calm	0.10	2.5	Fair	
Portland, Maine	29.70	754.4	29.75	755.6	57	13.9	81	SE	1	0.4			10s		NE	0.37	9.4	Cloudy	
Portland, Oregon	29.70	754.4	29.77	756.1	52.1	11.2	78	N	6	2.7		8c	0	S		0	0	Fair	
Portsmouth, N. Carolina					73.	22.8	72	NE	7	3.1		0	2ks		Calm	0	0	Clear	
Prescott, Arizona	24.70	627.4	30.06	763.5	47	8.3	41	SW	3	1.3		0	0			0	0	Clear	
Punta Rassa, Florida	29.83	757.7	29.84	757.9	76.5	24.7	82	E	5	2.2		1c	1ks	Calm	E	0	0	Fair	
Red Bluff, California	29.39	746.5	29.72	754.9	61.5	16.4	51	SE	3	1.3			10s		SW	0	0	Cloudy	
Rio Grande City, Texas	29.58	751.3	29.78	756.4	75	23.9	86	SE			2	5cs	2s	Calm	Calm	0.05	1.3	Fair	
Rochester, New York	29.17	740.9	29.75	755.6	69	20.6	61	W	6	2.7		Hz	Hz			0	0	Dense haze	
Roseburg, Oregon	29.18	741.2	29.74	755.4	48	8.9	85	E	1	0.4		10cs	0			0	0	Cloudy	
Sacramento, California	29.77	756.1	29.84	757.9	57.1	13.9	69	S	7	3.1		0	5s			0	0	Fair	
St. Louis, Missouri	29.21	741.9	29.76	755.9	69.0	20.6	80	SE	4	1.8		5c	0			0	0	Fair	
St. Paul, Minnesota	28.96	735.6	29.75	755.6	63	17.2	94	N	9	4.0			10n		N	0.23	5.8	Light rain	
Salt Lake City, Utah	25.56	649.2	29.89	759.2	54	12.2	49	Calm	0	0			10s		Calm	0	0	Cloudy	
San Antonio, Texas	29.07	738.4	29.74	755.4	68.0	20.0	79	Calm	0	0			10s		Calm	0.01	0.3	Threatening	
San Diego, California	29.81	757.2	29.88	758.9	60.5	15.8	77	Calm	0	0			10s			0	0	Cloudy	
Sandusky, Ohio	29.76	740.7	29.79	756.7	73	22.8	63	SW	5	2.2		5k	0			0	0	Fair	
Sandy Hook, New Jersey	29.86	758.4	29.89	759.2	68.5	20.3	88	SW	9	4.0		0	0			0	0	Clear	
San Francisco, California	29.82	757.4	29.89	759.2	53	11.7	86	SW	4	1.8		1cs	0	SW		0	0	Clear	
Santa Fé, New Mexico	23.25	590.5	29.79	756.7	55	12.8	33	SE	7	3.1		0	0			0	0	Clear	
Savannah, Georgia	29.82	757.4	29.90	759.4	77	25.0	82	SE	3	1.3		5k	0	SW		0	0	Fair	
Shreveport, Louisiana	29.47	748.5	29.70	754.4	65	18.3	95	SE	4	1.8		0	9s			0.85	21.6	Fair	
Silver City, New Mexico	24.21	614.9	30.19	766.8	60	15.6	44	N	6	2.7		0	0			0	0	Clear	
Sitka Alaska																0	0		
Smithville, North Carolina	29.90	759.4	29.94	760.5	76	24.4	86	E	7	3.1		1c	2ks	SW	SW	0	0	Fair	
Spokane Falls, Wash. Ter.	27.94	709.7	29.81	757.2	39	3.9	80	E	4	1.8		5cs	0			0	0	Fair	
Springfield, Illinois	29.14	740.1	29.77	756.1	69.5	20.8	75	SE	3	1.3		0	Hz			0	0	Clear	
Springfield, Massachusetts	29.69	754.1	29.82	757.4	72	22.2	76	S	6	2.7		2ck	0			0.46	11.7	Clear	
Stockton, Texas	26.81	681.0	29.81	757.2	64.0	17.8	94	S	6	2.7		0	0			0	0	Clear	
St. Vincent, Minnesota	29.06	738.1	29.83	757.7	58	14.4	94	Calm	0	0			10s		Calm	0.01	0.3	Cloudy	
Thatcher's Island, Mass	29.73	755.1	29.78	756.4	60.1	15.6	94	SW	17	7.6		0	0			0.34	8.6	Clear	
Toledo, Ohio	29.13	739.9	29.77	756.1	74	23.3	63	W	2	0.9		2ck	5ks;sk	SW	SW;C	Inap.	Inap.	Dense smoke	
Tucson, Arizona	27.40	695.9	29.95	760.7	62	16.7	27	SW	3	1.3		0	0			0	0	Clear	
Umatilla, Oregon	29.52	749.8	30.02	762.5	46.0	7.8	69	E	2	0.9		5cs	0	W		0	0	Fair	
Uvalde, Texas	28.92	734.6	29.71	754.6	66	18.9	84	E	9	4.0		0	0			0	0	Clear	
Vicksburg, Mississippi	29.54	750.3	29.79	756.7	71	21.7	75	SE	8	3.6		10k	0	SW		0	0	Cloudy	
Visalia, California	29.42	747.3	29.78	756.4	61	16.1	45	SE	5	2.2		0	0			0	0	Clear	
Washington, D. C.	29.80	756.9	29.91	759.7	74	23.3	76	S			1	0	0			0	0	Clear	
Wickenburg, Arizona					57	13.9	36	Calm			0	0	0			0	0	Clear	
Wilmington, N. Carolina	29.88	758.9	29.94	760.5	78	25.6	73	Calm	0	0		5k;c	0	SW		Inap.	Inap.	Fair	
Winnemucca, Nevada	25.48	647.2	29.84	757.9	48	8.9	49	NE	12	5.4		0	0			0	0	Clear	
Wood's Holl, Mass	29.83	757.7	29.87	758.7	61	16.1	88	SW	20	8.9		0	Fg		SW	0.01	0.3	Clear	
Yankton, Dakota	28.63	727.2	29.88	758.9	65	18.3	89	NE	6	2.7			10s		NE	0.24	6.1	Cloudy	
Yuma, Arizona	29.58	751.3	29.72	754.9	65.3	18.5	78	SW	1	0.4		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.12	561.8			54.5	12.5	80	Calm	0	0		10cs;k	0			0	0	Cloudy	Thomas Herran
Buff Bay Town, Jamaica. ‡	29.73	755.1	30.14	765.5	76	24.4	86	E				2c	2k						
Havana, Cuba, W. I.	29.84	757.9	29.89	759.2	80	26.7	74	Calm	0	0		0	0			0.19	4.8	Clear	A. Van Caneghem, Ass't.
Jakobshavn, Greenland	29.61	752.0	29.66	753.3	48.2	9		W			6	0	0			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	29.93	760.2	29.94	760.5	79.0	26.1	80	Calm	0	0		2ck		W		0	0	Fair	Robert Johnstone.
Navassa, W. I.	29.87	758.7	29.95	760.7	80	26.7	82	SE	18	8.0		8cs	2s	E	N	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.03	762.7	79	26.1	87	E			2		8ks			0.200	5.1	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.41	747.0	29.97	761.2	77	25.0	94	S			1		10ks		S	1.36	34.5	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					75.2	24		NW			1	5ck	5ks	SW	NW	0.94	24.		Earl Flint.
Santiago de Cuba, W. I.	29.92	760.0	29.95	760.7	77	25.0	90	Calm	0	0		4k	8k		S	1.09	27.7	Cloudy	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.88	758.9	29.93	760.2	37.0	2.8	95	W	9	4.0		10	0	W		0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross																			Comm A. J.Errington.
H. M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.05	763.3	69	20.6	75	W			1		3							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab,																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 17° 38′, E. 55° 52′	29.52	749.8	84	28.9	87	SW			3	2	8	NE	SW			1	SW	Misty	Comm. G. W. Haud.
H. M. S. Bittern, Constantinople, Turkey			73	22.8		NNE			2		8	NNW				1	NNE	D. clouds	Capt. E. B. Pusey.
H. M. S. Blanche, N. 13° 04′, W. 59° 36′	30.01	762.2	83	28.3	79	E			3		5					1	E	D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 11′, E. 18° 26′	30.02	762.5	57.5	14.2	63	SE			3-5		5	SE						Squally	Com. F. W. Richards.
H. M. S. Champion, S. 15° 57′, W. 27° 00′	30.06	763.5	77	25.0	69	ENE			2		1					3	SSE	Blue sky	Capt. G. R. Hope.
H. M. S Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Chefoo Harbor, China	29.86	758.4	68	20.0	89	Calm			0									D. clouds	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S.Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Eliott.
H. M. S. Dido																			Capt C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.98	761.5	77	25.0	91	ESE			2		8	ESE						Raining	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 34′, W. 52° 41′	29.93	760.2	45	7.2	84	ENE			1		6	NE						D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad. N. 23° 35′, E. 58° 35′	29.57	751.1	87	30.6		SE			3-4		4	S				3	SE	D. clouds	Capt. John Hext.
H. M. S. Eclipse, N. 0° 10′, E. 86° 20′	29.68	753.9	84	28.9		SW			4		8					3	SW	Gloomy	Capt. E. St. J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald, N. 1° 23′, E. 172° 55′	29.82	757.4	84	28.9	83	ESE			1		1	E						Blue sky	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, S. 17° 09′, E. 67° 46′	29.99	761.7	78	25.6	86	SSE			3							3-4	ESE		Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn N. 13° 46′, E. 42° 48′	29.66	753.4	86.5	30.3	86	NW			3		2					2	NW	Showery	Capt. P. Aldrich.
H. M. S. Flamingo, N. 18° 54′, W. 87° 06′	29.87	758.7	83	28.3	87	SE			2										Comm. R. N. Custance.
H. M. S. Flying Fish, Yokohoma, Japan	29.95	760.7	69.5	20.8	82	S			1		8							Misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	29.79	756.7	45	7.2	92	Calm			0		5							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.53	750.0	37	2.8	71	SSW			5		4					2	SSW	D. clouds	Capt. L. F. Jones.
H. M. S. Griffin, N. 25° 06′, W. 77° 19′	29.91	759.7	82	27.8	83	Calm			0		10							Overcast	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 35° 53′, W. 45° 11′	30.16	766.1	61	16.1		NNE			5		1					3	NNE	Blue sky	Capt. J. L. Way.
H. M. S. Inconstant, Melbourne, Australia	30.08	764.0	53	11.7	86	SE			1		3							D. clouds	Capt. C. C.P. Fitzgerald.
H. M. S. Iris, N. 34° 48′, E. 22° 55′	30.02	762.5	72	22.2	71	W			2-3		1	WSW				1	WNW	Blue sky	Capt. E. H. Seymour.
H. M. S. IronDuke, N. 27° 56′, E. 123° 02′	29.85	758.2	68	20.0	84	NE			3-4		6	SW				3	NE	D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.00	762.0	64	17.8		E			1		6	N						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Kobe, Japan	29.81	757.2	66	18.9		Calm			0		6							D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Off Black Rocks, China Sea	29.77	756.1	79.3	26.3	90	SE			1		10							Misty	Capt. A. Carpenter.
H. M. S. Midge, N. 24° 52′, E. 119° 30′ *	29.82	757.4				NE			3		6	NE						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 36° 07′, W. 5° 23	30.02	762.5	69.5	20.8	87	SW			2		4	SSW						D. clouds	Capt. H. H. Rawson.
H. M. S. Modeste, S. 10° 50′, E. 95° 50′	29.80	756.9	81	27.2	83	SSE			6		3	SSE				7	SSE	Squally	Capt. J. G. Mead.
H. M. S. Monarch, Goletta, Tunis, N. Africa	30.05	763.3	71	21.7	100	N			3		3	NNE						D. clouds	Capt. G. C. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.79	756.7	50.5	10.3	89	SSE			1									Foggy	Capt. E. B. Drummond.
H. M. S. Orontes																			
H. M. S. Pegasus																			Capt. R. P. Kinahan. Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.90	759.4	80.5	26.9		Calm			0		6					2	SE	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, La Guayra, Venezuela, S.A.	29.94	760.5	83	28.3	87	Calm			0		0					2	NNE	Blue sky	Capt. H. H. Grenfel.
H. M. S. Rambler, Loando, Africa	29.91	759.7	75	23.9		NW			1		1					Sm'h		Blue sky	Capt. Hon. A.C.Littleton.
H. M. S. Ready, Rangoon, India	29.68	753.9	81	27.2		S			2-4		9	SW				3	SW	Overcast	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	29.88	758.9	45	7.2		Calm			0		5							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.89	759.2	81.4	27.4	77	S			6		6							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 1° 50′, E. 75° 28′	29.43	747.5	85	29.4	76	SW			1-2		1					6	S	Blue sky	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 19° 29′, W. 23° 27′	30.18	766.6	72.5	22.5	74	NNE			4		3	NNE				4	NNE	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A.	30.05	763.3	55	12.8	93	Calm			0		10	Calm						Foggy	Capt. A. H. Markham.
H. M. S. Turquoise, S. 39° 10′, W. 74° 40′	30.04	763.0	50	10.0	93	S			3		8	SSW				3	SSW	D. clouds	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 36° 47′, W. 1° 27′	30.05	763.3	68	20.0	90	S			1										Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.			80	26.7		Calm			0		3							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	29.67	753.6	56	13.3	87	SW			3-5		10	SW						Raining	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, N. 30° 00′, E. 48° 30′	29.65	753.1	96.5	35.8	49	NW			6-7		0							Squally	Capt. T. P. Nesham.
H. M. S. Zephyr, Shanghai, China	29.84	757.9	68	20.0	90	SE			4		4	S						D. clouds	Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, Mossamedes, Benguela	30.02	762.4	71.2	21.8	82	NW			2		7					1		D. clouds	Carlos Candido dos Reis, Comd't.
Quanza, N. 12° 55′, W. 18° 30′	30.10	764.5	84.2	29.0	64	SE			1		3		SE	1 hour		1	SE	Raining	Carlos M. da Silva Costa, Comd't;
RioLima																			S. C. da Silva Costa, Comd't.
Sado, Tamega,																			G. A. de Brito Capello, Comd't.
Macao, China	29.84	758.0	74.3	23.5	91	NNE			5		10		N					Overcast	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga, N. 57° 59′, E. 9° 25′	30.24	768.2	59.9	15.5	79	S			1		0							Blue sky	Capt. M. von Krusenstierna
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	29.88	758.9	72	22.2	85	NW	2	0.9			8		SE	0	0			Fair	
N. Yard, Portsmouth, N. H.	29.76	755.9	63	17.2	83	Calm	0	0			0			0.1	3.			Clear	
Naval Hospital, Yokahama, Japan	29.66	753.4	60.5	15.8	88	N			1		5		N	Slight				Fair	
Adams Guayaquil, Peru	29.81	757.2	74	23.3	90	SSW			2		5		SW			Long		Fair	
Alaska, Callao, Peru	29.95	760.7	64	17.8	89	SE			1		8			0	0	Sm'h		Cloudy	
Alert, N. 18° 12′, E. 143° 51′ *	29.76	755.9	83	28.3	77	ENE			1		2		Calm			Sm'h		Clear	
Alliance, Norfolk, Va	29.97	761.2	73	22.8	90	S			1		5		SW	0	0			Fair	
Ashuelot, Kobe, Japan	29.76	755.9	66	18.9	74	NE			1		8		NW					Cloudy	
Colorado, New York, N. Y	29.89	759.2	69	20.6	80	SW	9	4.0			2		Calm	0	0			Light mist	
Constitution. Norfolk, Va	29.90	759.4	71	21.7	80	SSE	2	0.9			9?							Clear	
Franklin, Norfolk, Va	29.91	759.7	72	22.2	85	SSE	5	2.2			0			0	0			Clear	
Galena. N. 38° 51′, E. 2° 39′	30.07	763.8	68	20.0	84	SSE			2		2		NNE			Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	30.00	762.0	61	16.1	88	WNW	1.2	0.5			10		WNW					Cloudy	
Jamestown, Sitka, Alaska *	29.91	759.7	48	8.9	92	NNE			1		10			0	0			Cloudy	
Kearsarge, N. 36° 54′, W. 75° 52′	30.00	762.0	70	21.1	90	W			1		2		Calm			Sm'h		Fair	
Lackawanna, S. 12° 49′, W. 131° 10′ †	30.09	764.3	80	26.7	91	E			3-4		8		NE			Sm'h	E	Fair	
Marion, Montevideo, Uruguay	29.91	759.7	59	15.0	94	SSW			1		8		SW	0	0	Sm'h		Foggy	
Michigan, Erie, Pennsylvania	29.69	754.1	71	21.7	75	SW	2	0.9			0							Clear	
Minnesota, Newport, R. I	29.87	758.7	65	18.3	87	SW			4		5		SW			Sm'h		Misty	
Monocacy, Yokohama, Japan	29.81	757.2	62	16.7	88	NNW			1		5		Calm					Fair.	
New Hampshire. N. 37° 40′, W. 75° 38′	29.96	761.0	70	21.1	95	Calm	0	0			5		S	0	0	Sm'h	S	Fair	
Nipsic. N. 40° 11′, E. 1° 28′	30.11	764.8	72	22.2	62	NW			1		2					Sm'h		Hazy	
Onward, Callao, Peru †	29.97	761.2	64	17.8	94	Calm			0		10					Long	W	Cloudy	
Palos, Nagasaki, Japan	29.80	756.9	68	20.0	84	SSW			1		0							Clear	
Passaic, Washington, D. C	29.92	760.0	71	21.7	85	S			1		0							Clear	
Pensacola, N. 39° 20′, W. 124° 56′	30.01	762.2	54	12.2	93	ENE			2		8		ENE	Slight		Mod.		Fair	
Portsmouth. Hampton Roads, Va	29.96	761.0	70	21.1	?	SSW			2		2		SW			Sm'h		Clear	
Quinnebang, N. 21° 36′, W. 54° 00′	30.12	765.0	80	26.7	74	SSE			2		2		SE			Sm'h		Fair	
Ranger, Acapulco, Mexico *	29.80	756.9	83	28.3	63	Calm			0		0			0	0	Sm'h		Clear	
Richmond, N. 33° 25′, E. 135° 45′	29.79	756.7	67	19.4	79	NE			2		2		NE	1.1	28.	Sm'h		Fair	
Saratoga, Hampton Roads, Va	29.92	760.0	72	22.2	95	SSW			2		5		Calm	0	0			Cloudy	
Shenandoah, Montevideo, Uruguay *	29.87	758.7	58	14.4	100	SW			1		10					Sm'h		Cloudy	
St. Louis, League Island, Pa	29.48	748.8	70	21.1	90	SSW	10	4.5			2			0	0			D. clouds	
Swatara, Shanghai, China *†	29.85	758.2	71	21.7	71	S			1		0							Blue sky	
Tennessee, New York, N. Y	29.89	759.2	71	21.7	80	SSW	13	5.8			2		SW	0	0	Sm'h		Smoky	
Ticonderoga, S. 51° 33′, W. 88° 23′	30.36	771.1	39	3.9	82	SE			4		1		SE	0.04	1.0	Mod.	SSE	Cloudy	
Trenton, Villafranca, France *	30.00	762.0	73	22.8	72	E			3		8			3 b'rs	light	Sm'h		Fair	
Vandalia. Navy Yard, N. Y	29.87	758.7	74	23.3	90	SW			1		2		SW					Fair	
Wabash, Boston, Massachusetts	29.84	757.9	71	21.7	70	SW	11	4.9			2		W	0.03	0.8			Fair	
Wachusetts, N. Yard, Mare I'd, Cal *†	29.96	761.0	55	12.8	93	SW			2		8		S					Fair	
Wyoming, Norfolk, Va	29.94	760.5	74	23.3	86	Calm			0		2		NE			Sm'h	SSE	Clear	
Yantic, N. 33° 20′, W. 78° 15′ *	29.82	757.4	74	23.3	86	Var.			1-4		8		SE			Sm'h	SE	Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire,																			Capt. John Arbuckle.
Barque Belleisle, N. 21° 55′, W. 84° 26′	29.86	758.4	82	27.8	83	S			2		2							D. clouds	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. N. Youlden.
S. S. Cipero, N. 47° 25′, W. 23° 35′	30.10	764.5	59	15.0	100	SSW			4		10					4	SW	Overcast	Capt. W. N. Lailey.
City of Agra, N. 46° 27′, W. 10° 54′	30.40	772.1	57.5	14.2	81	N			3		0							Blue sky	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randell.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ N. 47° 00′, W. 26° 00′	29.93	760.2	58.5	14.7	100	SSW			7		10							Drizzling	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria, ‡ N. 7° 43′, W. 27° 49′	29.98	761.5	83	28.3	79	NNE			3		4							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 12° 40′, E. 48° 57′	29.57	751.1	86.5	30.3	96	WSW			5									Misty	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton, ‡																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 55° 10′, W. 25° 15′	30.04	763.0				SE			2		8		S			Mod.	W	Fair	
S. S. Circassian, N. 54° 10′, W. 29° 40′	30.22	767.6	53	11.7	73	WSW			2		5k		SW	0	0	3	W	D. clouds	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Gallia, N. 40° 28′, W. 72° 20′	29.80	756.9	56	13.3		S			3		Fog			0	0	Sm'h		Foggy	Capt. W. H. P. Hains.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic, N. 42° 36′, W. 48° 25′	30.16	766.1	52	11.1	86	Var.			1		6		N			Light	N	D. clouds	Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, New York, N. Y †	29.99	761.7	65	18.3		SSW			3		0			0	0	Sm'h		Clear	Capt. Ch. W. Kennedy.
S. S. Republic, N. 44° 37′, W. 45° 39′ †	30.16	766.1	54	12.2	87	W			2		0			0	0	Sm'h		Fine	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—OF BREMEN. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern																			
S. S. Köln, N. 40° 39′, W. 61° 48′	30.02	762.5	71.0	21.7	80	WSW			3-4		2		WSW	0	0	Sm'h	wsw	Clear	Capt. Th. Jüngst.
S. S. Leipzig, N. 49° 45′, W. 10° 20′	30.39	771.9	67.0	19.4		W			1		0			0	0	Sm'h	W		Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. N. 39° 12′, W. 64° 52′	29.92	760.0	74	23.3	95	W			3		2		W			Sm'h	W	Clear	Capt. J. W. Shackford. Capt. R. W. Sargent.
S. S. Indiana																			
S. S. Ohio, Liverpool, England	30.46	773.7	67	19.4	100	NW			1		5		NW	0	0			Fair	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, N. 45° 33′, W. 33° 16′	29.82	757.4	56	13.3	94	NW			4		10		NW			Mod.	NW	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 44° 04′, W. 150° 11′	30.06	763.5	51	10.6	72	NNW			5		8		N	0	0	High	NW	Cloudy	Capt. H. Davison.
S. S. Gaelic, N. 22° 18′, E. 115° 07′	29.99	761.7	79	26 1	95	NE			4		10		SE			Sm'h		Raining	Capt. W. H. Kidley.
S. S. Oceanic, N. 26° 07′, E. 121° 00′	29.92	760.0	72	22.2	76	NNE			4		8		N	0.04	1.0	Sl't	NE	Cloudy	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 45° 21′, W. 124° 05′	29.73	755.1	54	12.2	80	NNE			1		5		NE			Sm'h		Fair	Capt. Fred. Bolles.
S. S. Oregon, Columbia river	29.75	755 6	52.5	11.4	93	W			1		10		SW			Sm'h	wsw	Cloudy	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, San Francisco, Cal.	29.90	759.4	55	12.8	93	SW			2		0							Hazy	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, N. 34° 05′, W. 119° 13′	29.90	759.4	56	13.3	94	NE			1		10		NE			Sm'h		Hazy	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal.	29.85	758.2	50	10.0	86	Calm			0		5?			0	0			Clear?	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal.	29.88	758.9	52	11.1	79	SW			1		2							Clear	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 9° 39′ W. 168° 24′	29.84	757.9	78	25.6	100	N			3		10		N			Mod.	E	Raining	A. Bannerman, 2d Officer.
S. S. City of New York, Sydney, N. S. W.	29.65	753.1	54	12.2	100	SSE			4		10		SE					Raining	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, Acapulco, Mexico	29.89	759.2	79	26.1	78	Calm			0		0			0	0			Clear	Capt. D. S. Austin.
S. S. City of Peking, N. 41° 04′, E. 155° 11′	30.04	763.0	57	13.9	94	ENE			5		10		NE	0	0	Light	E	Cloudy	Capt. G. G. Berry.
S. S. City of Sidney																			Capt. H. C. Dearborn.
S. S. City of Tokio, N. 38° 30′, W. 158° 38′	30.22	767.6	53	11.7	67	NW			3		10		NW			Mod.	NW	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, Panama, Panama	29.92	760.0	80	26.7	82	NW			2		8		SW	0.20	5.1			Cloudy	Capt. R. R. Searle.
S. S. Granada																			Capt. M. Connolly.
S. S. Zealandia, S. 34° 00′, E. 173° 20′	30.24	768.1	62	16.7	66	W			3		0			0	0	Sm'h	SW	Fine	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland. N. 41° 37′, W. 58° 00′	30.11	764.8	56	13.3	87	SSE			5		10		SSW	0	0	Sm'h		Cloudy	Capt. Wm. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, Fall River, Mass	29.86	758.4	69	20.6	70	SW					2k		SW	0	0			Clear	Capt J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, ‡ N. 20° 25′, W. 79° 15′	30.00	762.0	82	27.8		SSE			3		2		SSE	0	0	Sm'h	SSE	Clearing	Capt. B. F. Woodbury.
Brigantine George, N. 26° 10′, W. 64° 10′	30.14	765.5	78	25.6		S			5		10		S	Sho	wers	Sm'h		Squally	Capt. W H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Chesapeake bay, Md†	30.04	763.0	73	22.8	90	SSW	2	0.9		2c	2s			0	0			Clear	
Bark Sunbeam, Lisbon, Portugal	30.17	766.3	76	24.4	56	NNE			6		0			0	0			Clear	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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W. B. Hazen

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

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON MAY 31, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Mogador, Morocco‡			30.05	763.2	70.2	21.2	80	NE			2		0			0	0	Clear	Dr. Ollive.
Nemours‡			29.95	760.7	74.7	23.7	80	NNW			2		1			0	0	Very fair	Raynard.
Algiers‡			29.99	761.7	72.7	22.6	68	NE			2		10			0.165	4.2	Covered	Nicolas.
La Calle‡			30.01	762.3	69.1	20.6	82	ENE			4		5			Inap.	Inap.	Cloudy	Fonfréde.
Tunis‡			30.01	762.2															Jacques.
Sfax‡			30.12	765.0															Gau.
Saida‡			30.06	763.5	80.1	26.7	21	NW			6		5			0	0	Cloudy	Dumas.
Tebessa‡			30.02	762.6	73.8	23.2	46	W			3		8			0	0	Very cloudy	Watrin.
Geryville‡																			Lonchamp.
Laghouat‡			30.00	761.9	79.5	26.4	36	S			3		2			0.071	1.8	Fair	Herbin.
Biskra‡			30.02	762.5															Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.76	755.8	29.86	758.4	55.3	12.9	91	SW	5	2.2			10			0.01	0.3	Dull	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.56	750.8	30.10	764.5	65.3	18.5	43	N			3		5			0.035	0.9	Raining	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.34	745.1	30.08	764.1	68.7	20.4	31	NW	3.8	1.7			0			0	0		Dr. Wierzbicki.
Eperies	29.18	741.1	30.03	762.8	68.5	20.3	32	N			4	2cs	0	S		0	0		Julius Mikolik.
Gratz‡	28.88	733.6	30.11	764.7	66.9	19.4	63	S			2		3			0	0		Andreas Rospini.
Hermannstadt	28.64	727.4	30.03	762.8	68.0	20.0	45	NE			2		6			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.79	731.3	30.10	764.4	69.1	20.6	55	NE			2		0			0	0		The Staff.
Lemberg	29.03	737.3	29.99	761.7	65.8	18.8	86	NW			2		5			0	0		Dr. T. Stanecki.
Pola	29.99	761.7	30.10	764.5	72.7	22.6	53	ENE			2		3			0	0		I. R. HydrographicOffice.
Szathmar	29.60	751.7	30.05	763.2	69.1	20.6	35	NW			3		0			0	0		Beicht Peter, S. J.
Szegedin	29.80	756.9	30.07	763.8	66.2	19.0	68	E			1		8			0	0		Karl Stancel.
Trieste	29.99	761.8	30.10	764.4	76.1	24.5	30	ENE			1		1			0	0	Clear	Secco.
Vienna	29.45	747.9	30.15	765.7	68.7	20.4	32	NW			2		1			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.25	768.3	30.35	770.9	64.7	18.2	59	SE	9	4.0			6			0	0	D. clouds	W. Boswell.
Armagh, Observatory	30.16	766.1	30.38	771.6	69.6	20.9	85	SE	3	1.3			0					Blue sky	S. Call.
Bidston, Liverpool Obs'y			30.36	771.1	69.0	20.6	44	WNW	10	4.5			5					D. clouds	John Hartnup.
Bolton, Sharples	29.81	757.2	30.34	770.6	73.4	23.0	42	SSW	18	8.0			0					Blue sky	Thomas Mackereth.
Bradford, Yorkshire	29.94	760.5	30.34	770.6	72.2	22.3	34	NE			1		0			0	0	Blue sky	J. McLandsbo ough, F.R.S
Bridgetown, Barbadoes	29.95	760.7	29.98	761.5	88	31.1	59	NE			3		7					Gloomy	Corpl. J. Surgener, A.H.C.
Cardington			30.34	770.6	78.0	25.6	36	NE			0.4		0					Blue sky	John McLaren.
Chatham, School M. E.	30.25	768.3	30.38	771.6	70.9	21.6	50	NE			1		0					Blue sky	Corpl. W. Beck, R. E.
Falmouth, Observatory	30.15	765.8	30.38	771.6	65.3	18.5	50	E			1		0					Blue sky	The Staff.
Fort Napier, Natal	27.74	704.6	29.96	761.0	53.2	11.8	53	SE			3		6?					Overcast ?	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.63	752.6	29.86	758.4	87	30.6	84	SW			1							Raining	Sgt. C. E. Keane.
Galway, Queen's College					74	23.3	40	N			2		2			0	0	Blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	29.94	760.5	29.99	761.7	72.2	22.3	84	NE			2		6					Gloomy	2nd Cpl. O. Baldwin.
Glasgow, Observatory	30.13	765.3	30.34	770.6	72.3	22.4	50	NE			4		3					Blue sky	Harry Urquhart.
Greenwich, Royal Obs'y	30.18	766.6	30.35	770.9	74.8	23.8	34	NNE			1		0					Blue sky	The Staff.
Guernsey	30.10	764.5	30.31	769.9	58.5	14.7	70	NE			2		0					Blue sky	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.33	770.4	30.37	771.4	71.0	21.7	78	NE	11	4.9			0					Misty	The Staff.
Leicester, Museum	30.10	764.5	30.35	770.9	73.6	23.1	45	SW			1		0					Blue sky	J. E. Carryer.
Malta, Mediterranean	29.93	760.2	30.01	762.2	74.4	23.6	63	W			1		1			0	0	Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.94	760.5	29.98	761.5	85.5	29.7	74	S			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.85	758.2	30.36	771.1	74.4	23.6	48	S			1		2					D. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	30.14	765.5	30.37	771.4	73.2	22.9	35	NE			1		0					Blue sky	The Staff.
Plymouth	30.30	769.6	30.37	771.4	72.2	22.3	39	E			2		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			30.33	770.4	56.5	13.6	82	W	16	7.2			10					Misty	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.98	761.5	30.04	763.0	67.4	19.7	54	NE			2		4			Blank		D. clouds	Serg't W. H. Lyne.
Sheffield	30.08	764.0	30.36	771.1	74.9	23.8	47	NE			1		1			0	0	Misty	W. F. Cooper.
Silloth Rectory	30.32	770.1	30.35	770.9	71.8	22.1	55	W			1		0			0	0	Blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.37	771.4	72.1	22.3	46	WSW	9	4.0			0					Blue sky	Rev. S. J. Perry.
Stratfield Turgiss	30.12	765.0	30.36	771.1	76.2	24.6	38	E			2		0					Blue sky	Rev. C. H. Griffiths, F.M.S
Truro, Royal Institution	30.36	771.1	30.36	771.1	77	25.0	42	S			2		0					Blue sky	W. Newcombe.
Valencia, Observatory	30.35	770.9	30.37	771.4	65.0	18.3	70	WSW	6	2.7			1					Misty	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	29.85	758.2	29.89	759.2	53	11.7	79	NE	1	0.4		0	0			0	0	Clear	H. J. Cundall, C. E.
Chatham, N. B.*	29.85	758.2	29.91	759.7	54	12.3	74	NE	1	0.4		0	0			0.01	0.3	Clear	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario																			James Smith, M. A
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec*	29.84	757.9	29.87	758.7	53	11.7	98	NW	1	0.4		0	0			0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.15	740.4	29.96	761.0	57	13.9	82	N	3	1.3		5k	5s	NW	NW	0	0	Cloudy	James Stewart.
Fredericton, N. B.																			Prof. Harrison.
Granton, Ontario																			James Grant.
Halifax, N. S.*	29.74	755.4	29.87	758.7	58	14.4	93	N	4	1.8		10n				0.022	0.6	Cloudy	A. Allison.
Hamilton, Ontario																			Geo. Dickson, B. A.
Kingston, Ontario*	29.57	751.1	29.90	759.4	61	16.1	66	NE	5	2.2		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S.																			C. H. Rigby.
Montreal, Quebec*	29.69	754.1	29.89	759.2	59	15.0	54	NE	4	1.8		0	Sk			0.02	0.5	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario																			J. R. Nason.
Parry Sound, Ontario*	29.26	743.2	29.94	760.5*	56	13.3	83	E	1	0.4		5k	0	W		0.02	0.5	Fair	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.23	742.4	29.90	759.4	62	16.7	95	NE	7	3.1		5c	0	W		0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.27	743.4	29.89	759.2	65	18.3	84	E	3	1.3		2ck	0	SW		0	0	Clear	M. Payne.
Quebec, Quebec*	29.57	751.1	29.89	759.2	54	12.2	74	N			1	2cs	Hz	N		0	0	Hazy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.49	749.0	29.95	760.7	46	7.8	88	NW	2	0.9		8c	0	W		0	0	Cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.21	741.9	29.90	759.4	60	15.6	80	E	5	2.2		8cs	0			0	0	Cloudy	K. Stewart.
St. Andrews, N. B.	29.80	756.9	29.85	758.2	54	12.2	94	NE	3	1.3			Fg			0.04	1.0	Foggy	
St. John, N. B.																			G. Murdock, C. E.
Stratford, Ontario																			C. J. Macgregor, M. A.
Sydney, C. B*	29.85	758.2	29.89	759.2	59	15.0	65	NW	3	1.3		2k	0	W		Inap.	Inap.	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.56	750.8	29.93	760.2	63	17.2	79	Calm	0	0		5cs	0	W		Inap	Inap.	Fair	Magnetic Observatory
Windsor, N. S.																			
Woodstock, Ontario																			Prof. Wolverton.
Yarmouth, N. S.*	29.79	756.7	29.85	758.2	57	13.9	97	Calm	0	0		Fg	Fg			0.17	4.3	Foggy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.52	749.8	29.77	756.1	47	8.3	92	NE	1	0.4		5k	5s			0	0	Fair	John Delany.
St. Pierre, N. F.																			N. F. Land, Comd't
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	30.19	766.8	..		55.0	12.8	78	SSW	44.0	19.7		0	8n			1.520	38.6	Heavy rain	John Duthie.
Cape Town, C. G. H. Obs'y	30.37	771.4	30.41	772.4	60.0	15.6		S	4	1.8		5ck	5			0.007	0.2		The Staff, for D. Gill.
Worcester*†	29.31	744.5			53	11.7	63	E			1	0	3			0	0	Fine	C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.92	759.9	29.94	760.5	65.3	18.5	73	ESE	6.5	2.9			0			0	0	Clear	M. Marc Dechevrens, S. J.

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

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

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

San José	25.17	664.7	29.89	759.2	68.0	20.0	91	SE			1		1			0.59	15.	Clear	Amand Maison.

DANISH SERIES.

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

Copenhagen	30.10	764.4	30.14	765.6	66.0	18.9	58	SE	9	4			0						Oversergent Fischer.
Fanöe	30.18	766.5	30.20	767.0	59.2	15.1	82	NW			4		1						Overloerer Lauridsen.
Godthaab, Greenland	29.69	754.0	29.73	755.1	36.0	2.2	87	SW			2		10					Foggy	S. Kleinschmidt.
Stykkisholm, Iceland	29.74	755.5	29.79	756.6	49.6	9.8		Calm			0		8					Raining	A. O. Thorlacius.
Thorshavn,	30.10	764.5	30.13	765.4	54.1	12.3	91	SW	20	9			10						Overloerer Bergh.
Vestervig	30.09	764.2	30.18	766.6	63.9	17.7	62	NW			2		0						Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.49	749.0	30.13	765.2	69.4	20.8	61	WNW			1	0	8n		S	0	0	Very cloudy	M. Labroue, Director
Alençon Normal School	29.74	755.4	30.29	769.4	69.1	20.6	79	N			1		0			0.067	1.7	Clear	M. Nicot, Director.
Arras, Engineer School	29.95	760.6	30.20	767.0	68.9	20.5	49	ENE			3		0			0	0	Clear	M. Klein, Commandant.
Avignon, Normal School	30.06	763.5	30.14	765.5	59.4	15.2	89	SE			1		10		SSW	0.764	19.4	Heavy rain	M. Giraud, Director.
Bar-sur-Seine	29.61	752.1	30.15	765.8	70.0	21.1	43	NE			1		0			0	0	Clear	M. Saillard, Director.
Beauvais, Normal School	30.01	762.2	30.27	768.8	69.3	20.7	36	NE			4		0			0	0	Clear	M. Frère Eugene Marie.
Besançon, Normal School	29.26	743.2	30.05	763.2	68.0	20	47	NE			1					0	0		M. Gobin, Director.
Bordeaux, Observatory	29.87	758.8	30.13	765.3	73.2	22.9	55	E			1		2			0.004	0.1	Slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	29.61	752.1	30.14	765.6	73.9	23.3	35	N			1		k		N	0	0		M. Postel, Director.
Brest, Naval Observatory	30.08	764.0	30.35	770.9	70.5	21.4	46	NNE			2		0			0	0		M. de Kermaree, Dir.
Caen, Normal School	30.20	767.1	30.27	768.9	66.4	19.1	78	N			1		0			0	0	Clear	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.85	758.1	30.16	766.1	77.0	25.0	32	E			2		0			0	0	Clear	M. Jadot, Director.
Charleville, Normal School	29.71	754.5	30.21	767.3	72.0	22.2	40	NE			1		0			0	0	Clear	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.76	730.6	30.09	764.2	69.1	20.6	39	NNE			1		5		N	0	0	¼ covered	M. Alluard, Director.
Cluny, Normal School	29.28	743.6	30.11	764.8	70.9	21.6	62	NE			2		1			0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.32	744.8	30.17	766.4	71.2	21.8	39	NNE			3		5ck	0	NNE	NNE	0	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.61	701.3	30.14	765.6	55.0	12.8	93	S			1		2			S	0.181	4.6	Light rain	M. Jeangirard, Director.
Gréasque, du. Rhone																			M. Kina, Director.
Grenoble, Normal School	29.34	745.2	30.09	764.3	66.2	19	63	SW			1	ck	0			0	0		M. Ablard, Director.
Guéret, Normal School	28.58	726.0	30.13	765.4	69.8	21	28	NE			2		k		NE	0	0		M. Rivoire, Director.
Lamballe, Normal School	30.03	762.8	30.30	769.6	70.9	21.6	57	E			2				E	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.59	751.6	30.26	768.7	60.1	15.6	69	SW			1		n		W	0.283	7.2		M. Chauvin, Director.
Lorient, Naval Observatory	30.17	765.3	30.27	768.9	78.8	26.0	36	NE			1		0			0	0	Clear	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.06	738.2	30.10	764.6	65.5	18.6	51	NE			1		8		NE	0	0	Very cloudy	M. André, Director.
Mans, Normal School	29.93	760.3	30.23	767.9	70.0	21.1	39	NE			3		0			0.12	3.	Clear	M. Piboen, Director.
Marseille, Observatory	29.84	757.8	30.11	764.7	58.8	14.9	84	NE			0-1		10		SSE	0.583	14.8		M. Stephan, Director.
Montlouis l'Instituteur	24.95	634.0	30.20	767.0	50.4	10.2	78	NE	9.4	4.2			6			0.051	1.3		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.97	761.3	30.08	764.0	67.3	19.6	85	NE			3		8		E	0.177	4.5	Stormy	M. P. Galzin, Director.
Nancy, Normal School	29.42	747.2	30.17	766.2	72.3	22.4	34	NE			1	0	5kn		NE	0	0	Cloudy	M. Hasse.
Nantes, Observatory	30.08	764.0	30.24	768.1	75.7	24.3	40	N			1-2		0			0	0	Hazy	M. Larocque, Director.
Nice	30.04	763.1	30.08	763.9	73.0	22.8	37	E			3		5	E	E	0.035	0.9	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.97	761.1	30.07	763.8	71.2	21.8	51	NE	11.2	5.0			8	N	NW	0.173	4.4		Dr. Fines.
Pic-du-Midi, Plantade	22.63	574.7			36.3	2.4	100						10	SW	NE	0.268	6.8	Snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.05	737.8	30.08	764.0	73.8	23.2	36	Calm			0		1c					Light rain	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.29	642.4			48.2	9.0	70	NE			3	0	5k			0.035	0.9	½ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.14	765.6	30.17	766.4	77.5	25.3	47	NNE			1		5		NE	0	0	½ covered	Lt. E. Decanie, Director
Roche-sur-Yon, N. School	29.97	761.1	30.17	766.4	74.7	23.7	55	N			1		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.96	710.2	30.08	764.0	59.7	15.4	83	NW			1		5			0.047	1.2	Cloudy	M. Richard, Director.
Rouen, Normal School	30.17	766.2	30.25	768.4	73.0	22.8	41	NE			2		0			0	0	Clear	M. Platrier, Director.
Saint Lô, Normal School	30.15	765.9	30.31	769.9	65.5	18.6	52	NE			2		0			0	0	Clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.06	763.6	30.23	767.8	71.4	21.9	38	NE			3		0			0	0		M. Renou, Director.
Toulouse, Observatory	29.46	748.2	30.19	766.7	59.9	15.5	100	NW			2					0.496	12.6		M. Bailland, Director.
Tours	29.98	761.6	30.18	766.6	74.1	23.4	41	E			2		2		E	0	0	¼ covered	M. de Tastes.
Versailles, Observatory	29.75	755.7	30.24	768.2	70.5	21.4	32	NE			3					0	0		Dr. A. Bérigny, Director
Sub-Series.																			

GERMAN SERIES.

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

Bamberg	29.31	744.5	30.18	766.6	72.0	22.2	33	N			3		2k	N		0	0		Prof. Dr. Hoh.
Berlin	30.02	762.6	30.19	766.8	73.4	23.0	19	SW			4		1			0	0		Prof. Dr. Arndt.
Breslau	29.67	753.6	30.21	767.2	68.7	20.4	31	NNW			2		1			0	0		Royal University Obs'y.
Carlsruhe	29.73	755.1	30.15	765.7	71.2	21.8	53	SE			1		1	NE		0	0		Albert Senz.
Cassel	29.48	748.8	30.19	766.9	72.0	22.2	26	NNW			2		0			0	0		Dr. H. Möhl.
Frankfort on the Main	29.85	758.3	30.21	767.4	70.7	21.5	29	NE			1		1			0	0		Physical Society.
Friedrichshafen	28.67	728.2	30.07	763.7	68.4	20.2	47	E			5		2	E		0	0		Wilhelm, Chief Tel.
Hamburg	30.15	765.7	30.22	767.5	70.3	21.3	52	SW			2		0			0	0		Dr. R. Kleeman.
Kiel	30.17	766.2	30.18	766.6	56.5	13.6	51	W			2		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.80	757.0	30.22	767.5	69.8	21.0	21	NNE			1		0			0	0		Prof. Dr. Bruhns.
Magdeburg	29.92	760.0	30.20	767.1	72.9	22.7	36	Calm			0		2ks			0	0		Dr. Assmann.
Memel																			Reinbrecht & Issermann.
Munich	28.34	719.7	30.21	767.3	66.4	19.1	34	NE			3		1			0	0		Central Station.
Neufahrwasser	30.08	764.1	30.10	764.5	70.5	21.4	31	NNW			4		0			0	0		A. Lothes.
Neustadt, Palatinate	29.68	753.9	30.21	767.3	72.9	22.7	43	ENE			1		0			0	0		Dicknether.
Stuttgart	29.20	741.6	30.06	763.0	70.7	21.5	30	N			1		0			0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.67	728.3	30.17	766.2	68.7	20.4	34	E			4		2	E		0	0		Prof. Kemlein.
Wustrow	30.17	766.3	30.19	766.9	58.6	14.8	75	N			1		0			0	0		Prof. J. Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.64	752.8	30.02	762.6	66.7	19.3		N			3.0		10					Covered	A. Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.58	751.3	29.63	752.6	89.2	31.8	73	S	25.0	11.2		4		Calm		0	0	D. clouds	
Deesa	29.11	739.4	29.56	750.8	103.3	37.9	32	W	16.1	7.2		6				0	0	D. clouds	
Bombay	29.70	754.4	29.74	755.4	88.6	31.4	70	SW	12.0	5.4		2		SW		0.02	0.5	D. clouds	
Poona, Yarrowda	27.89	708.4	29.68	754.0	93.8	34.3	34	W				1			W	0	0	D. clouds	
Belgaum	27.24	691.8	29.74	755.4	81.7	27.6	66	SW	12.0	5.4		3		SW		0	0	D. clouds	
Lahore	28.66	727.9	29.35	745.5	107.3	41.8	29	W	3.7	1.6		8				0	0	Misty	
Roorkee	28.52	724.3	29.36	745.8	103.9	39.9	23	NW	3.2	1.4		0				0	0		
Agra	28.87	733.4	29.40	746.8	108.1	42.3	22	W	6.5	2.9						0	0		
Nagpur	28.51	724.1	29.50	749.3	101.2	38.4	29	NW	11.8	5.3		5			W	0	0	D. clouds	
Jubbulpore	28.19	715.9	29.51	749.5	87.8	31.0	47	W	5.5	2.5		10				0.03	0.8	Overcast	
Lucknow	29.14	740.2	29.51	749.5	93.0	33.9	45	E	3.4	1.5						0	0	Blue sky	
Allahabad	29.18	741.2	29.49	749.0	83.7	28.7	73	ENE	3.7	1.6		3				0.45	11.4	D. clouds	
Patna	29.26	743.1	29.43	747.5	98.9	37.2	45	W	4.9	2.2		10		W	W	0	0	Overcast	
Hazaribagh	27.52	699.1	29.49	749.0	84.3	29.1	61	WNW	9.4	4.2		10				0	0	Thunder	
Cuttack	29.41	747.1	29.49	749.(	89.3	31.8	65	ESE	0.5	0.2		9				0.02	0.5	D. clouds	
Calcutta, Alipore	29.45	747.9	29.47	748.5	88.6	31.4	70	SW	8.0	3.6		5			E	0	0	D. clouds	
Dhubri	29.34	745.2	29.46	748.2	88.2	31.2	73	Calm	0.5	0.2		0				0	0		
Chittagong	29.40	746.9	29.49	749.1	85.7	29.8	84	SSW	3.7	1.6		7				0	0	Blue sky	
Sibsagar	29.15	740.5	29.48	748.7	91.8	33.2	68	NE	1.2	0.5		0				0	0	Blue sky	
Zanzibar, Africa			29.96	761.0	82.5	28.1	65	S	6	2.7		4				0	0	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.72	754.8	30.11	764.9	72.5	22.5	39	W	0.4	0.2		4				0.031	0.8		Prof. Giovanni Clodig.
Milan	29.61	752.2	30.12	765.0	71.8	22.1	46	SE	5.6	2.5		7				0	0		Prof. Schiaparelli.
Padua	30.04	762.9	30.14	765.6	71.2	21.8	30	ESE	8.1	3.6		1		WNW		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.23	742.5	30.12	765.0	60.8	16.0	67	NE	3.8	1.7		9				0.189	4.8		Prof. P. F. Denza.
Genoa	29.91	759.6	30.10	764.5	72.9	22.7	45	SW	6.3	2.8		10		W		0.043	1.1		Prof. G. M. Garibaldi.
Mondovi	28.24	717.3	30.11	764.9	63.1	17.3	58	NW			4	9				0.622	15.8		Prof. D. C. Bruno.
Pesaro	30.07	763.7	30.11	764.9	67.6	19.8	59	NE	8.1	3.6		2		SW		0	0		Prof. Luigi Guidi.
Florence	29.81	757.1	30.06	763.4	73.4	23.0	26	NE			6	1				0	0		Prof. Costantino Pitter.
Leghorn	29.98	761.5	30.06	763.6	76.6	24.8	33					4				0	0		Prof. P. Monte.
Rome	29.85	758.3	30.02	762.6	74.7	23.7	35	SSW	1.3	0.6		2				1.768	44.9		Prof. P. S. Ferrari.
Lecce	29.74	755.5	29.99	761.7	71.6	22.0	37	ENE	15.4	6.9		1				0	0		Prof. C. de Giorgi.
Cosenza	29.14	740.1	30.01	762.2	67.3	19.6	47	SSW	1.8	0.8		10		SW		0.661	16.8		Prof. D. Conti.
Cagliari	29.80	756.9	29.99	761.7	71.4	21.9	66	SE			2	1				0.067	1.7		Prof. A. Pacinotti.
Palermo	29.79	756.7	30.04	763.0	68.9	20.5	69	NE	6.9	3.1		7				0	0		Prof. G. Ciacciatore.
Syracuse	29.97	761.1	30.01	762.2	68.7	20.4	73	E	4.9	2.2		10		SW		0.024	0.6		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.49	749.1	30.00	762.1	69.8	21.0	60	E	1.8	0.8		10		SE		0.173	4.4		Prof. F. Brioschi.
Stelvio	22.32	566.8			44.2	6.8	61	W			2	10ks		NE		0	0	Covered	Prof. P. F. Denza.
Valdobbia	22.33	767.1			37.0	2.8	87	NE			2	10				0	0	Covered	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.78	756.4	29.80	756.9	64.2	17.9	78	NNE	4.8	2.1		ack;cs	0			0	0	Clear	K. Sasaki.
Kioto	29.66	753.3	29.83	757.7	57.0	13.9	80	NE	3.5	1.6		0	1s;ks			Inap.	Inap.	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.67	753.6	29.87	758.7	64.6	18.1	76	SW	1.0	0.4			0			0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	29.68	753.9	29.75	755.6	60.5	15.8	92	SSW	3.0	1.3		0	0			0	0	Clear	The Staff.
Wakayama	29.75	755.6	29.80	756.9	64.9	18.3	65	ENE	5.5	2.5		0	0			0	0	Clear	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.93	760.2	30.12	765.0	75.5	24.2	67	ESE	18.5	8.3		0	2		SE	0.06	1.5	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.64	752.7	29.89	759.2	76.5	24.7	82	W	0.9	0.4			10n		NE	0	0	Covered	F. Quijano, U. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.34	770.6	30.34	770.6	64.4	18.0		N			4					0	0		
Groningen	30.22	767.5	30.27	768.9	60.6	15.9		N			2					0	0		
Helder	30.30	769.6	30.30	769.6	57.4	14.1		NNE			2					0	0		
Hellevoetsluis	30.32	770.0	30.32	770.0	66.4	19.1	70	N			3					0	0		
Utrecht	30.25	768.3	30.30	769.5	69.3	20.7	55	N			2		2			0	0	Lightly cl'dy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.19	766.9	30.26	768.5	57.6	14.2	69	NNW	13.6	6.1			5			0	0		
Christiania	29.91	759.8	30.05	763.3	77.0	25.0	30	SW	9	4			5			0	0		
Gjæsvær	29.95	760.9	29.98	761.5	40.6	4.8		Calm			0		10						
Lodingen	30.00	762.1	30.05	763.3	40.6	4.8	95	WSW			4		10			0.098	2.5	Rain & fog.	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.01	762.2	30.17	766.2	63.0	17.2	76	W	3.8	1.7			4			0.413	10.5		Dr. J. A. Sampaio.
Campo Major	29.05	737.8	30.02	762.4	74.8	23.8	30	ENE	7.4	3.3			7			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.08	763.9	30.16	766.1	68.0	20.0	58	SW	2.5	1.1			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.74	755.4	30.10	764.4	71.6	22.0	41	NNE	13.6	6.1			0			0	0		The Staff.
Ponta Delgada, Azores	30.16	766.0	30.23	767.8	66.2	19.0	90	SW	9.4	4.2			10			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski																			Capt. Lasarew.
Archangel	29.85	758.1	29.87	758.6	39.0	3.9	65	NW	9	4			10						Capt. Sedliwerstow.
Astrakhan	29.68	753.9	29.60	751.8	55.4	13.0	70	WNW	31	14			10s;n			Blank			Capt. Wisganow.
Barnaul ‡	29.30	744.1	29.78	756.5	57.4	14.1	37	S	4	2			9						Meteorological Obs'y.
Dorpat	29.69	754.0	29.93	760.1	55.9	13.3	52	E	11	5			1k						Observatory.
Ekaterinburg	28.67	728.2	29.64	752.9	38.7	3.7	85	E	9	4			10					Light rain	Meteorological Obs'y.
Kasan	29.21	742.0	29.48	748.8	50.2	10.1	34	NE	20	9			10						Observatory.
Kertch	29.95	760.8	29.97	761.3	57.7	14.3	64	NW	9	4			9						Lagodio & Sastyrez.
Kieff	29.24	742.7	29.86	758.5	61.5	16.4	33	NW	7	3			7cks						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.61	752.0	29.81	757.1	56.7	13.7	52	NNW	13	6			7			Blank			Meteorological Obs'y.
Moscow	29.19	741.3	29.73	755.2	51.8	11.0	40	N	7.8	3.5			8ks						Meteorological Obs'y.
Nertchinsk	27.48	698.1	29.76	755.8	45.7	7.6	63	NNE	11	5			10						Meteorological Obs'y.
Nikolaiev	29.93	760.2	30.00	762.0	63.5	17.5	57	NW	4	2			9kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	29.30	744.1	29.44	747.7	86.4	30.2	25	SW	11	5			6ks						Physical Observatory.
St. Petersburg	29.87	758.8	29.89	759.2	50.5	10.3	48	NNE	7	3			8ks;n						Central Physical Obs'y.
Tashkend, Laboratory	28.13	714.6	29.59	751.5	88.5	31.4	44	Calm	0	0			0						Teich, A. M.
Tiflis	28.34	719.7	29.72	754.8	63.9	17.7	62	W	22	10			10ks						Physical Observatory.
Warsaw	29.65	753.2	30.07	763.7	68.5	20.3	31	NW	11	5			0						Astronomical Obs'y.
Wilna	29.49	749.1	29.90	759.4	67.5	19.7	38	WNW	4	2			2						Berg, Assistant.
Yeniseisk	29.62	752.4	29.91	759.8	43.9	6.6	80	SSW	11	5			10					Raining	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.36	771.1	75.0	23.9	40	NW			2		0			0	0	Hazy	Andrew Gibb.
Monach Lt. House, Hebrides			30.33	770.4	55	12.8	93	S			4	3	0	S		0	0	Hazy	J. Youngclause.
North Unst, Shetland Isl'ds			30.71?	780.0?				SW			3		0						Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.97	761.2	30.08	763.9	72.1	22.3	56	SE	2.7	1.2			3			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.17	766.3	30.22	767.7	66.2	19.0	65	E	2.2	1.0			10			0.028	0.7	Covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.23	691.6			58.6	14.8	75	NE	9.2	4.1		0	4			0	0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.87	707.8	30.04	763.1	68.9	20.5	51	NE	15.9	7.1		0	9			0	0	Almost cov'd	The Staff.
Murcia, Met. Obs'y ‡	29.89	759.3	30.04	763.1	66.4	19.1	89	E	3.6	1.6		5	5	WNW		2.095	53.2	Covered	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.22	742.1	30.10	764.4	70.0	21.1	54	NE	11.9	5.3			4			0	0	Cloudy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.87	758.6	29.93	760.2	81.3	27.4	81	E	3.4	1.5		4c;ck	1k	SW	S	0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.71	754.7	29.75	756.0	86.6	30.3	75	SSW	11.7	5.3		0	0			0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.93	760.1	30.02	762.6	73.2	22.9	64	WSW	10.1	4.5		0	2		W	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.95	760.6	30.04	762.9	83.8	28.8	78	SE	0	0		2s	2k		SE	0.642	16.3	Clear	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.67	753.7	29.82	757.4	80.3	25.8	89	NW	2.6	1.3			9kn		W	0.01	0.3	Very cloudy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.97	761.3	30.01	762.3	49.6	9.8	52	S			2		5			0	0		
Umea	29.93	760.3	29.98	761.6	51.4	10.8	45	S			4		2			0	0		
Hernosand	29.96	761.0	30.01	762.3	59.2	15.1	28	WSW			2		0			0	0		
Stockholm	29.85	758.1	30.02	762.6	68.0	20.0	21	NW			2		1			0	0		
Wisby	30.02	762.6	30.08	764.1	55.1	13.4	50	NNE			2		0			0	0		
Sub-Series.																			
Upsala	29.93	760.1	30.01	762.3	68.5	20.3	28	N	7.6	3.4			2			0	0		Nils Ekholm
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.70	728.9	30.10	764.4	65.1	18.4	53	N			1		9			0	0	Covered	The Observatory.
Zurich	28.50	723.8	30.08	764.1	70.2	21.2	45	E			4-6		3			0	0	Clear	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.09	764.2	63.3	17.4	52	NE	13	6.0			3		NE	0	0		The Observatory.
Valona			30.09	764.3	72.5	22.5		W			1		2			0	0	Slightly cld'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.90	759.5	81.1	27.3	60	WSW			2		1k			0	0		Prof. C. V. A. van Dyck.

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

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

Albany, New York	29.83	757.7	29.90	759.4	70	21.1	70	N	4	1.8		0	8ks			0	0	Fair	
Alpena, Michigan	29.32	744.7	29.95	760.7	55	12.8	93	E	4	1.8		8c	2s	SE		0.02	0.5	Cloudy	
Atlanta, Georgia	28.76	730.5	29.86	758.4	66.5	19.2	92	E	4	1.8			10s		Calm	0.15	3.8	Cloudy	
Atlantic City, New Jersey	29.89	759.2	29.90	759.4	64	17.8	89	S	7	3.1		1c	0	Calm		0	0	Clear	
Augusta, Georgia	29.76	755.9	29.96	761.0	71.0	21.7	85	E	3	1.3		2cs	0	SE		0.91	23.1	Fair	
Baltimore, Maryland	29.85	758.2	29.90	759.4	75	23.9	77	S	5	2.2		0	Hz			0	0	Clear	
Barnegat, New Jersey	29.86	758.4	29.88	758.9	70	21.1	85	S	8	3.6		2ck	0	Calm		0	0	Clear	
Bismarck, Dakota	28.21	716.5	30.07	763.8	62	16.7	83	NE	25	11.2		0	0			0	0	Clear	
Boise City, Idaho	27.21	691.1	30.17	766.3	53.4	11.9	61	NW	2	0.9		0	0			0	0	Clear	
Boston, Massachusetts	29.72	754.9	29.87	758.7	70.0	21.1	69	E	6	2.7		0	Hz			0.76	19.3	Clear	
Bracketville, Texas	28.64	727.4	29.66	753.4	70.0	21.1	85	Calm	0	0		0	0			0	0	Clear	
Brownsville, Texas	29.74	755.4	29.79	756.7	79	26.1	67	S	4	1.8		5k	0	S		0.10	2.5	Fair	
Buffalo, New York	29.19	741.4	29.86	758.4	64.2	17.9	78	NE	11	4.9		5ck	Sk	W		Inap.	Inap.	Fair	
Burlington, Vermont	29.61	752.1	29.89	759.2	62.0	16.7	80	N	2	0.9		0	0			0.05	1.3	Clear	
Cairo, Illinois	29.50	749.3	29.87	758.7	72	22.2	80	SE	4	1.8		8ck	0	S		0	0	Fair	
Campo, California	27.39	695.7	29.96	761.0	39	3.9	73	S	4	1.8		0	0			0	0	Clear	
Camp Thomas, Arizona	27.16	689.9			53	11.7	36	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	29.91	759.7	29.93	760.2	73	22.8	85	SW	9	4.0		8c	0			0	0	Fair	
Cape May, New Jersey	29.86	758.4	29.89	759.2	69	20.6	90	S	6	2.7		0	0			0	0	Clear	
Castroville, Texas	29.02	737.1	29.70	754.4	71	21.7	75	NW	4	1.8		0	0			0	0	Clear	
Cedar Keys, Florida	29.91	759.7	29.93	760.2	80	26.7	66	SW	4	1.8		1c	1ks		S	0	0	Clear	
Champaign, Illinois	29.05	737.9	29.82	757.4	62.2	16.8	83	N	7	3.1		c	0			0	0	Clear	
Charleston, S. Carolina	29.89	759.2	29.94	760.5	79	26.1	82	SE	1	0.4		0	5ks		W	0	0	Fair	
Charlotte, N. Carolina	29.09	738.9	29.86	758.4	68.4	20.2	90	SW	1	0.4			10s		S	0	0	Cloudy	
Chattanooga, Tennessee	29.12	739.6	29.88	758.9	69	20.6	85	SE	5	2.2		5cs	5ks	Calm	S	0	0	Cloudy	
Cheyenne, Wyoming	24.16	613.7	30.10	764.5	44	6.7	92	Calm	0	0		0	0			0.11	2.8	Clear	
Chicago, Illinois	29.18	741.2	29.85	758.2	58.0	14.4	78	SE	6	2.7		8c	0			0	0	Fair	
Chincoteague, Virginia	29.91	759.7	29.93	760.2	66	18.9	100	SW	10	4.5			Fg			0	0	Dense fog	
Cincinnati, Ohio	29.22	742.2	29.84	757.9	73	22.8	63	E	5	2.2		4c	Sk			0	0	Fair	
Cleveland, Ohio	29.16	740.7	29.85	758.2	68.9	20.5	80	NE	5	2.2		4ck;cs	1s	W		Inap.	Inap.	Fair	
Coleman City, Texas																			
Columbus, Ohio	29.03	737.3	29.82	757.4	68	20.0	74	NE	1	0.4		5ck	Fg	W		0.04	1.0	Fair	
Concho, Texas	28.00	711.2	29.62	752.3	65	18.3	78	Calm	0	0		0	0			0	0	Clear	
Corsicana, Texas	29.33	745.0	29.78	756.4	68	20.0	95	N	4	1.8			10ks			0.29	7.4	Cloudy	
Davenport, Iowa	29.22	742.2	29.82	757.4	69	20.6	70	E	4	1.8		4cs	0	E		0.59	15.0	Fair	
Dayton, Washington T'y	28.24	717.3	29.90	759.4	48.5	9.2	77	S	3	1.3		2k	0	Calm		0	0	Fair	
Deadwood, Dakota	25.46	646.7			51	10.6	72	SW	2	0.9		5cs	0	W		0.02	0.5	Fair	
Decatur, Texas	28.63	727.2	29.74	755.4	68	20.0	84	N	10	4.5			10s			0.19	4.8	Cloudy	
Delaware Breakwater, Del.	29.86	758.4	29.88	758.9	71	21.7	80	SW	16	7.2		0	0			0	0	Clear	
Denison, Texas	28.97	735.8	29.73	755.1	67	19.4	95	N	4	1.8			10s		N	0.39	9.9	Cloudy	
Denver, Colorado	24.90	632.4	30.12	765.0	53.1	11.7	86	S	2	0.9		0	0			0.39	9.9	Clear	
Des Moines, Iowa	29.00	736.6	29.85	758.2	63	17.2	94	N	2	0.9			10s		N	0	0	Cloudy	
Detroit, Michigan	29.19	741.4	29.86	758.4	62.3	16.8	83	N	7	3.1		0	Hz			0.06	1.5	Clear	
Dodge City, Kansas	27.40	695.9	29.65	753.1	57	13.9	87	N	11	4.9		0	0			0.15	3.8	Clear	
Dubuque, Iowa	29.19	741.4	29.86	758.4	66.2	19.0	78	S	2	0.9		5k	Hz	S	Calm	0.02	0.5	Fair	
Duluth, Minnesota	29.29	744.0	29.97	761.2	48	8.9	93	NE	2	0.9			10s		NE	0	0	Cloudy	
Eagle Pass, Texas	29.06	738.1	29.77	756.1	69.2	20.7	90	Calm	0	0		0	0			0	0	Clear	
Eagle Rock, Idaho	25.24	641.1	29.89	759.2	51	10.6	53	SW	18	8.0		0	0			0	0	Clear	
Eastport, Maine	29.80	756.9	29.86	758.4	48.5	9.2	95	E	11	4.9			Fg	E		0.08	2.0	Dense fog	
El Paso, Texas	26.14	663.9			67	19.4	9	Calm	0	0		0	0			0	0	Clear	
Erie, Pennsylvania	29.16	740.7	29.85	758.2	63	17.2	89	NE	2	0.9			Fg			0	0	Dense fog	
Escanaba, Michigan	29.29	744.0	29.93	760.2	57	13.9	100	N	7	3.1			10n		Calm	0.93	23.6	Light rain	
Florence, Arizona	28.36	720.3	29.96	761.0	60	15.6	34	SW	2	0.9		0	0			0	0	Clear	
Fort Apache, Arizona	25.07	636.8	30.52	775.2	42	5.6	42	NE	4	1.8		0	Sk		Calm	0	0	Dense smoke	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota	28.40	721.3			64	17.8	83	N	2	0.9		5k	0	NW		0	0	Fair	
Fort Benton, Montana	27.14	689.3			61	16.1	50	SW	10	4.5			10ks		SW	0	0	Cloudy	
Fort Buford, Dakota	28.03	711.9	29.82	757.4	60	15.6	65	E	2	0.9		2cs	0	W		0	0	Clear	
Fort Custer, Montana	26.82	681.2			53	11.7	93	E	4	1.8		5c	0	NE		0	0	Fair	
Fort Davis, Texas	25.18	639.6	30.14	765.5	55	12.8	74	NE	1	0.4		0	0			0	0	Clear	
Fort Elliott, Texas	27.23	691.6	29.45	748.0	60	15.6	65	NW	20	8.9		5k	0	NW		0	0	Fair	
Fort Gibson, Indian T'y	29.25	742.9	29.77	756.1	65	18.3	94	Calm	0	0			10s		N	0	0	Cloudy	
Fort Grant, Arizona	25.23	640.8	30.03	762.7	62	16.7	14	E	4	1.8		0	0			0	0	Clear	
Fort Griffin, Texas	28.58	725.9	29.80	756.9	68.6	20.3	70	SW	14	6.3		10cs	0	N		0	0	Cloudy	
Fort Keogh, Montana	27.51	698.7			55	12.8	86	NE	1	0.4		2c	0			0	0	Fair	
Fort Macon, North Carolina	29.92	760.0	29.93	760.2	76	24.4	86	SE	2	0.9		8cs;k	0	Calm		0	0	Fair	
Fort McKavett, Texas	27.05	702.3	29.51	749.5	63	17.2	78	SW	3	1.3		0	0			0	0	Clear	
Fort Missoula, Montana	26.71	678.4			59	15.0	70	NE	4	1.8		0	0			0	0	Clear	
Fort St. Michaels																			
Fort Shaw, Montana	26.33	668.8			53	11.7	80	NE	3	1.3		8ck	0	SW		0	0	Cloudy	
Fort Sill, Indian Territory	28.62	726.9	29.69	754.1	65	18.3	94	N	12	5.4			10s		N	0	0	Cloudy	
Fort Stevenson, Dakota	28.19	716.0			59	15.0	88	Calm	0	0		0	0			Inap.	Inap	Clear	
Fort Verde, Arizona					54.2	12.3	26	W			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.13	714.5	29.62	752.3	68	20.0	74	NW	2	0.9		1ck	0	N		0	0	Fair	
Galveston, Texas	29.73	755.1	29.77	756.1	79	26.1	82	SW	13	5.8		2ck	5ks	NW	SW	0	0	Fair	
Grand Haven, Michigan	29.23	742.4	29.86	758.4	61	16.1	88	NE	8	3.6			10s		Calm	0	0	Cloudy	
Hatteras, North Carolina	29.93	760.2	29.95	760.7	74	23.3	90	SE	5	2.2		0	0			0	0	Clear	
Helena, Montana	25.75	654.0			63	17.2	47	S	3	1.3		5k	0	Calm		0	0	Fair	
Henrietta, Texas																			
Indianapolis, Indiana	29.05	737.9	29.80	756.9	71	21.7	66	N	1	0.4		0	0			0.25	6.3	Clear	
Indianola, Texas	29.77	756.1	29.80	756.9	77.2	25.1	91	SW	19	8.5		0	1ks		Calm	0	0	Clear	
Jacksboro, Texas																			
Jacksonville, Florida	29.90	759.4	29.94	760.5	78	25.6	73	S	3	1.3		0	0			0	0	Clear	
Keokuk, Iowa	29.21	741.9	29.83	757.7	67.5	19.7	81	NE	1	0.4			8ks		NE	0.04	1.0	Cloudy	
Key West, Florida	29.93	760.2	29.99	761.0	82.9	28.3	76	S	4	1.8		2k	0	S		0	0	Fair	
Kittyhawk, North Carolina	29.95	760.7	29.98	761.5	74	23.3	90	SW	7	3.1		5k;c	0	W		0	0	Fair	
Knoxville, Tennessee	28.93	734.8	29.90	759.4	68.5	20.3	88	S	3	1.3		3c;k	0	Calm		0.04	1.0	Fair	
La Crosse, Wisconsin	29.12	739.6	29.85	758.2	65	18.3	89	NE	3	1.3			10n			0.65	16.5	Heavy rain	
La Mesilla, New Mexico	26.04	661.4	30.19	766.8	53	11.7	48	Calm	0	0		0	0			0	0	Clear	
Laredo, Texas	29.36	745.7	29.68	753.9	71	21.7	85	Calm	0	0		0	0			0.20	5.1	Clear	
Leavenworth, Kansas	29.01	736.8	29.81	757.2	66	18.9	84	NW	2	0.9		4ck	0	SW		Inap.	Inap.	Fair	
Lewiston, Idaho	29.13	739.9	29.77	756.1	57	13.9	62	E	1	0.4		0	2s		Calm	0	0	Clear	
Little Rock, Arkansas	29.46	748.3	29.76	755.9	67	19.4	95	E	6	2.7			10s		SE	0.03	0.8	Cloudy	
Los Angeles, California	29.63	752.6	29.99	761.7	51.3	10.7	79	NE	3	1.3		0	0			0	0	Clear	
Louisville, Kentucky	29.26	743.7	29.81	757.2	72.0	22.0	76	SW	11	4.9		2cs	5ks			0.05	1.3	Cloudy	
Lynchburg, Virginia	29.24	742.7	29.89	759.2	73	22.8	72	Calm	0	0		0	0			0	0	Clear	
Madison, Wisconsin	28.88	733.5	29.83	757.7	63	17.2	94	E	2	0.9			Fg		Calm	1.35	34.3	Dense fog	
Marquette, Michigan	29.27	743.4	29.98	761.5	45	7.2	92	Calm	0	0			Fg			Inap.	Inap.	Dense fog	
Mason, Texas	28.23	717.0	29.92	760.0	69.2	20.7	75	Calm	0	0		0	0			0	0	Clear	
Memphis, Tennessee	29.57	751.1	29.84	757.9	69	20.6	90	Calm	0	0		5cs	2s	SW	SE	0.09	2.3	Fair	
Milwaukee, Wisconsin	29.17	740.9	29.89	759.2	54	12.2	93	N	3	1.3			Fg			0	0	Dense fog	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.80	756.9	29.88	758.9	77	25.0	86	SE	7	3.1		5k	0	SW		0.56	14.2	Fair	
Montgomery, Alabama	29.67	753.6	29.90	759.4	73.1	22.8	81	S	1	0.4		2c	0			0.07	1.8	Clear.	
Moorhead, Minnesota	28.97	735.8	29.89	759.2	63	17.2	84	S	6	2.7		5k	2s	S		0	0	Fair	
Morgantown, W. Virginia	28.91	734.3	29.85	758.2	70	21.1	75	Calm	0	0		2cs	0			0	0	Fair	
Mt. Washington, N. H.	23.79	604.3	30.15	765.8	42	5.6	75	W	15	6.7		0	2s;sk		W;C	0.06	1.5	Clear	
Nashville, Tennessee	29.34	745.2	29.86	758.4	71.2	21.8	79	S	2	0.9		5ck	0	S		Inap.	Inap.	Fair	
New Haven, Connecticut	29.75	755.6	29.86	758.4	70	21.1	75	N	9	4.0		Hz	Hz			0	0	Dense haze.	
New London, Connecticut	29.82	757.4	29.87	758.7	72	22.2	75	NW	2	0.9		0	0			0	0	Clear	
New Orleans, Louisiana	29.78	756.4	29.83	757.7	74.3	23.5	86	S	5	2.2		8c	Hz	SW		0	0	Fair	
Newport, Rhode Island	29.82	757.4	29.87	758.7	67.2	19.6	76	W	2	0.9		1cs	Hz	Calm		0	0	Fair	
New River, N. Carolina																			
New Shoreham, Rhode I'd	29.83	757.7	29.85	758.4	64.8	18.2	84	Calm	0	0		0	0			0	0	Clear	
New York, New York	29.71	754.6	29.88	758.9	73	22.8	72	NW	2	0.9		0	Fg			0	0	Clear	
Norfolk, Virginia	29.90	759.4	29.94	760.5	70	24.4	85	SW	6	2.7		2c	0			0	0	Clear	
North Platte, Nebraska	27.13	689.1	29.96	753.4	55	12.8	93	NW	5	2.2		0	0			0	0	Clear	
Olympia, Washington T'y	29.84	757.9	29.88	758.9	53.5	11.9	90	N	1	0.4			1on		S	Inap.	Inap.	Light rain	
Omaha, Nebraska	28.79	731.3	29.84	757.9	64.5	18.1	94	N	6	2.7			1os		N	0.12	3.0	Cloudy	
Oswego, New York	29.59	751.6	29.90	759.4	56.3	13.5	93	Calm	0	0			Fg			0	0	Dense fog	
Pensacola, Florida	29.85	758.2	29.88	758.9	76	24.4	86	S	10	4.5		0	1s		W	0.88	22.4	Clear	
Philadelphia, Pa	29.83	757.7	29.88	758.9	72	22.2	80	W	5	2.2		0	Hz			0	0	Clear	
Phœnix, Arizona	28.75	730.2	30.52	775.2	62	16.7	56	E	3	1.3		0	0			0	0	Clear	
Pike's Peak, Colorado	17.98	456.7	30.19	766.8	32	0.0	69	NE	14	6.3		0	0			0.17	4.3	Clear	
Ploche, Nevada	24.04	610.6	29.81	757.2	51	10.6	16	S	2	0.9		10c	0	Calm		0	0	Cloudy	
Pittsburg, Pennsylvania	29.08	738.6	29.85	758.2	67.3	19.6	82	NE	1	0.4		4ck	Fg	N	Calm	0.12	3.0	Fair	
Port Eads, Louisiana	29.86	758 4	29.87	758.7	70.0	24.4	82	S	12	5.4		7c;k	0	S		0	0	Fair	
Port Huron, Michigan	29.24	742.7	29.90	759.4	55.0	12.8	87	NE	8	3.6		0	Hz		Calm	0	0	Clear	
Portland, Maine	29.82	757.4	29.87	758.7	65	18.3	73	N	4	1.8		2k	5s	NW	Calm	1.04	26.4	Fair	
Portland, Oregon	29.87	758.7	29.95	760.7	53.4	11.9	92	SE	8	3.6			10s		S	0.03	0.8	Cloudy	
Portsmouth, N. Carolina					78	25.6	86	Calm	0	0		0	5ks		Calm	0	0	Fair	
Prescott, Arizona	24.78	629.4	30.14	765.5	46	7.8	40	SW	3	1.3		0	0			0	0	Clear	
Punta Rassa, Florida	29.91	759.7	29.92	760.0	83.5	28.6	70	SW	13	5.8		1c	1ks	SW	SW	0	0	Fair	
Red Bluff, California	29.66	753.4	30.00	762.0	60.0	15.6	88	S	2	0.9			10s		S	0.02	0.5	Cloudy	
Rio Grande City, Texas	29.61	752 1	29.82	757.4	71	21.7	95	Calm	0	0		0	0			0.34	8.6	Clear	
Rochester, New York	29.30	744.2	29.89	759.2	65	18.3	78	E	4	1.8		5ck	Hz	NW		0	0	Fair	
Roseburg, Oregon	29.41	747.0	29.97	761.2	54	12.2	97	Calm	0	0			1on			0.05	1.3	Light rain	
Sacramento, California	29.94	760.5	30.01	762.2	62.7	17.1	83	SW	3	1.3		0	5s		SW	0	0	Fair	
St. Louis, Missouri	29.20	743.2	29.81	757.2	69.0	20.6	75	NW	8	3.6		10c	0	SE		0	0	Cloudy	
St. Paul, Minnesota	29.03	737.3	29.83	757.7	62	16.7	88	N	8	3.6			10s		N	0.33	8.4	Cloudy	
Salt Lake City, Utah	25.57	649.5	29.90	759.4	65	18.3	26	Calm	0	0		0	0			0	0	Clear	
San Antonio, Texas	29.13	739.9	29.80	750.9	70.3	21.3	85	Calm	0	0		0	0			0	0	Clear	
San Diego, California	29.85	758.2	29.92	760.0	54.8	12.7	87	NE	4	1.8		0	0			0	0	Clear	
Sandusky, Ohio	29.20	741.7	29.84	757.9	69	20.6	80	NE	11	4.9		5ck	0			0	0	Fair	
Sandy Hook, New Jersey	29.84	757.9	29.87	758.7	69.2	20.7	84	W	2	0.9		0	Hz			0	0	Clear	
San Francisco, California	29.90	701.0	30.02	762.5	62	16.7	94	SW	3	1.3			1on		SW	0.16	4.1	Light rain	
Santa Fé, New Mexico	23.37	593.6	29.91	759.7	60	15.6	34	SE	8	3.6		0	0			0	0	Clear	
Savannah, Georgia	29.80	758.4	29.95	760.7	74.5	23.6	90	S	2	0.9			Fg			0	0	Dense fog	
Shreveport, Louisiana	29.49	749.0	29.72	754.9	68.8	20.4	90	S	2	0.9		0	2s			0.03	0.8	Fair	
Silver City, New Mexico	24.20	616.2	30.26	768.6	60	15.6	44	N	7	3.1		0	0			0	0	Clear	
Sitka, Alaska																0	0		
Smithville, North Carolina	29.92	760.0	29.95	760.7	77	25.0	86	Calm	0	0		5k	1ks	SW		0	0	Cloudy	
Spokane Falls, Wash. Ter.	27.93	709.4	29.75	755.6	50	10.0	86	E	1	0.4		0	0			0.03	0.8	Clear	
Springfield, Illinois	29.19	741.4	29.83	757.7	70	21.1	75	NE	5	2.2		4c	Hz	W		0.25	6.3	Fair	
Springfield, Massachusetts	29.74	755.4	29.87	758.7	72	22.2	71	N	6	2.7		0	0			Inap.	Inap.	Clear	
Stockton, Texas	29.93	084.0	29.93	760.2	62.1	16.7	72	Calm	0	0		0	0			0	0	Clear	
St. Vincent, Minnesota	29.10	739.1	29.87	758.7	60	15.6	97	NW	2	0.9			10s		Calm	0.60	15.2	Cloudy	
Thatcher's Island, Mass	29.82	757.4	29.87	758 7	67.4	19.7	89	NW	4	1.8		0	0			0	0	Clear	
Toledo, Ohio	29.18	741.2	29.83	757.7	68	20.0	84	S	4	1.8		10ck	Sk	Calm	Calm	0	0	Cloudy	
Tucson, Arizona	27.46	697.5	29.91	759.7	62	16.7	32	SE	3	1.3		0	0			0	0	Clear	
Umatilla, Oregon	29.63	752.0	30.12	765.0	53.5	11.9	73	E	4	1.8			10s		SW	Inap.	Inap.	Cloudy	
Uvalde, Texas	28.91	734.3	29.70	754.4	70	21.1	85	E	1	0.4		2c	0	Calm		0	0	Clear	
Vicksburg, Mississippi	29.53	750.0	29.78	756.4	68	20.0	90	SE	6	2.7			1on		S	0.25	6.3	Light rain	
Visalia, California	29.01	752.1	29.97	761.2	58	14.4	82	NW	1	0.4		0	0			0	0	Clear	
Washington, D. C.	29.79	756.7	29.90	759.4	74	23.3	68	S	3	1.3		0	0			0	0	Clear	
Wickenburg, Arizona					50	13.3	29	Calm			0	0	0			0	0	Clear	
Wilmington, N. Carolina	29.80	758.4	29.91	759.7	75	23.9	90	Calm	0	0		5c	2s	Calm	Calm	0	0	Fair	
Winnemucca, Nevada	25.66	651.8	30.02	762.5	48	8.9	49	SW	4	1.8		0	5ks		SW	0	0	Fair	
Wood's Holl, Mass	29.82	757.4	29.85	758.2	62	16.7	83	W	3	1.3		1cs	Hz	SW		0	0	Clear	
Yankton, Dakota	28.68	728.5	29.93	760.2	64	17.8	73	N	4	1.8		0	0			0.02	0.5	Clear	
Yuma, Arizona	29.65	753.1	29.80	756.9	66.5	19.2	69	NW	1	0.4		0	0			0	0	Clear	
Sub-series.																			
Bogota, U. S. Columbia	22.11	561.6			53.5	11.9	77	Calm	0	0		2k	0			Inap.	Inap.	Fair	Thomas Herran.
Buff Bay Town, Jamaica.‡	29.75	755.6	30.06	763.5	70	24.4	81	E				2c	2k			Bla	nk		
Havana, Cuba, W. I.	29.92	760.0	29.97	761.2	82	27.8	78	Calm	0	0		4cs	0	Calm		0	0	Fair	A. Van Caneghem, Ass't.
Jakobshavn, Greenland	29.03	752.7	29.09	754.0	32.9	0.5		Calm			0		10			0	0		K. V. Möller.
Kingston, Jamaica, W. I.	29.97	761.2	29.98	761.5	81.8	27.7	80	Calm	0	0		0	2ks		E	0.34	8.6	Fair	Robert Johnstone.
Navassa, W. I.	29.91	759.7	29.99	761.7	81	27.2	78	E	13	5.8		0	5k		E	0.01	0.3	Hazy	F. M. Everett.
Paramaribo, S. A.	30.01	762.2	30.01	762.2	80	26.7	87	E			2	3c	5k	E		0.040	1.0	Fair	Dr. O. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.42	747.3	29.97	761.2	80	26.7	76	Calm			0		10s		S	0	0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					75.2	24		N			1	7ck	0	SE		0.47	12.		Earl Flint.
Santiago de Cuba, W. I.	29.89	759.2	29.92	760.0	80	26.7	86	Calm	0	0		4ks	2k		SW	0.05	1 3	Fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.78	756.4	29.83	757.7	40.0	4.4	96	W	12	5.4		2k	2s	NW	W	0	0	Fair	J. Fortescue & W Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																			Comm. A. J. Errington.
H M. S. Alert																			Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.05	763.3	69.5	20.8	75	NNW			1		3							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 17° 36′, E. 56° 19′	29.44	747.8	85	29.4	83	SW			5-6		10					7	SW	Overcast	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			64	17.8		NNE			2-3		2	NNE				2	NNE	D. clouds	Capt. E. B. Pusey.
H. M. S. Blanche, N. 13° 04′, W. 59° 36′	30.02	762.5	83	28.3	79	E			3		6					1	E	D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 34° 11′, E 18° 26′	30.16	766.1	58	14.4	58	SE			3-4		3	SE						D. clouds	Com. F. W. Richards.
H. M. S. Champion, S. 17° 30′, W. 29° 00′	30.07	763.8	77	25.0	77	NE			4		2	Calm				3	SSE	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Chefoo Harbor, China	29.65	753.1	72	22.2	58				2		0							Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer																			Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M S. Daring																			Capt. F. J. Eliott.
H. M. S. Dido																			Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.96	761.0	77.5	25.3	93	NE			2		1	WNW						Blue sky	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 34′, W. 52° 41′	29.67	753.6	49.5	9.7	89	NW			1-2		10							Overcast	Capt. W. R. Kennedy.
H. M. S. Dryad, N. 23° 35′, E. 58° 35′	29.51	749.5	87	30.6		SE			1		2	S				1	SE	D. clouds	Capt. John Hext.
H. M. S. Eclipse, S. 1° 00′, E. 87° 24′	29.78	756.4	87	30.6		SW			3-4		3					4	SW	D. clouds	Capt. E. St. J. Garforth.
H M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald, N. 1° 23′, E. 172° 55′	29.84	757.9	83	28.3	87	N			1-2		10	NNE						Showery	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, S. 17° 04′, E. 64° 55′	30.01	762.2	78	25.6	86	SSE			4		1	ESE				3	SSE	Blue sky	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn N. 13° 40′, E. 42° 41′	29.56	750.8	87	30.6	80	NNW			3-4		2	ESE				1	NW	D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo N. 18° 42′, W. 87° 04′	29.88	758.9	85	29.4	87	ESE			1-2		2	E						D. clouds	Comm. R. N. Custance.
H M. S. Flying Fish, Yokohama, Japan	29.76	755.9	64.5	18.1	?	SW			1		6	NE				1	NE	D. clouds	Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	29.90	759.4	53	11.7	80	NNE			1		10							Showery	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.43	747.5	37	2.8	81	WSW			3		7								Capt. L. F. Jones.
H. M. S. Griffon, N 25° 06′, W. 77° 19′	29.98	761.5	83	28.3	71	Calm			0		0							Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 36° 22′, W. 41° 45′	30.31	769.9	62	16.7		E			2		8					2	Con	D. clouds	Capt. J. L. Way.
H. M. S. Inconstant, Melbourne, Australia	29.88	758.9	54	12.2	93	Calm			0		8							Drizzling	Capt. C. C. P. Fitzgerald.
H. M. S. Iris, N. 35° 10′, E. 18° 35′	30.04	763.0	70	21.1	75	W			2		3					1	WNW	D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke, N. 28° 30′, E. 123° 17′	29.89	759.2	69	20.6	85	E			2-3		5	W				1		D. clouds	Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.99	761.7	62	16.7		Calm			0		7	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Kobe, Japan	29.82	757.4	65	18.3		E			2		4							D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, Off Black Rocks, China Sea	29.67	753.6	76.7	24.8	81	NNE			2-3		10					2	NNE	Raining	Capt. A. Carpenter.
H. M. S. Midge, N. 25° 09′, E. 119° 19′	29.78	756.4				NE			3		4	NE				1	NE	D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur, N. 35° 57′, W. 7° 31′	29.93	760.2	72	22.2	90	NE			2		0							Blue sky	Capt. H. H. Rawson.
H. M. S. Modeste, S. 12° 00′ E. 93° 05′	29.82	757.4	80	26.7	91	SSE			5-6		4					7	SSE	Squally	Capt. J. G. Mend.
H. M. S. Monarch, Goletta, Tunis, N. Africa	30.05	763.3	66	18.9	84	ENE			2		1	ENE						Blue sky	Capt. G. Tryon, C. B

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S Northampton, Halifax, Nova Scotia	29.83	757.7	60.5	15.8	97	Calm			0									D. clouds	Capt. E. B. Drummond.
H. M. S. Orontes																			Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S Pelican, N. 8° 55′, W. 79° 30′	29.86	758.4	80	26.7		NW			1		3					1	SE	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, N. 0° 37′, W. 66° 57′	29.96	761.0	82	27.8	83	NNE			1		0					1	NNE	Blue sky	Capt. H. H. Grenfel.
H. M. S. Rambler, St. Paul de Loando, Benguela	29.98	761.5	72	22.2		WSW			2		9					Sm'h		D. clouds	Capt. Hon. A.C.Littleton.
H. M. S. Ready, Rangoon, India	29.58	751.3	81	27.2		S			1		1	SW						Blue sky	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	29.85	758.2	51	10.6		Calm			0		10							Raining	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 37′, E. 55° 27′	29.88	758.9	81.4	27.4		SE			3		6							D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 0° 05′, E. 75° 26′	29.42	747.3	84	28.9	75	SW			3		3	S				3	S	D. clouds	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 21° 07′, W. 22° 37′	30.16	766.1	73.5	23.1	69	NNE			2			NNE				3	NNE	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A	30.01	762.2	51	10.6	86	N			1		4	Calm						D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise, S. 41° 00′, W. 75° 30′	29.97	761.2	46	7.8	92	SSW			6-8		5	SSW				6	SSW	Squally	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I			82	27.8		SE			2		4							Showery	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	29.81	757.2	60	15.6	88	Calm			0		8	Calm						D. clouds	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, N. 30° 21′, E. 48° 03′	29.69	754.1	95.5	35.3	60	NW			4-6		0							Misty	Capt. T. P. Nesham.
H. M. S. Zephyr, Shanghai, China	29.79	756.7	68	20.[illegible]90		S			4		2	SE						D. clouds	Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, Mossamedes, Benguela	30.03	762.7	73.8	23.2	76	NNW			3		10					1		Overcast	Carlos Candido dos Reis, Comd't
Quanza, N. 12° 23′, W. 16° 51′	30.04	763.0	84.2	29.0	62	SE			1		10			2 h	ours	1	SE	Raining	Carlos M. da Silva Costa, Comd t
Rio Lima																			S. C. da Silva Costa, Comd't.
Sado																			G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.80	756.9	73.4	23.0	87	NW			2		10			20 h	ours			Raining	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga, N. 57° 13′, E. 7° 18′	30.19	766.7	55.4	13.0	74	NW			3		5							D. clouds	Capt. M. von Krusenstierna
H. M. Frigate Vanadis																			Com. Th. Ulner.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	29.87	758.7	78	25.6	78	S	14	6.8			5		S	0.21	5.3			Fair	
N. Yard, Portsmouth, N. H	29.88	758.9	66	18.9	89	N	2	0.9		2c	0	N		0.1	.3			Fair	
Naval Hospital, Yokahama, Japan	29.59	751.6	64.5	18.1	89	Calm			0		2		W	0.05	1.3			Clear	
Adams, S. 2° 17′, W. 79° 49	29.71	754.6	73	22.8	90	SW			1		2		SW			Long		Fair	
Alaska, Callao, Peru	29.93	760.2	63	17.2	89	Calm			0		10			0	0	Sm'h		Hazy	
Alert, N. 18° 02′, E. 143° 30′ *	29.78	756.4	85	29.4	76	E			1		5		Calm			Long Sm'h	E	Clear	
Alliance, Norfolk, Va	29.93	760.2	73	22.8	90	SSW			1		5			0	0			Fair	
Ashuelot, Kobe, Japan	29.79	756.7	63	17.2	78	ENE			4		2		Calm					Fair	
Colorado, New York, N. Y	29.86	758.4	68	20.0	100	Calm	0	0			0			0	0			Clear	
Constitution, Norfolk, Va	29.89	759.2	73	22.8	85	WSW	1	0.4			8?							Clear	
Franklin, Norfolk, Va	29.89	759.2	72	22.2	95	SW	8	3.6			0			0	0			Clear	
Galena, N. 37° 52′, E. 0° 21′	30.03	762.7	70	21.1	82	ENE			3		10		E			Sm'h		Cloudy	
Jamestown, Sitka, Alaska *	29.67	753.6	54	12.2	93	SSW			1		10			0	0			Cloudy	
Kearsarge, Hampton Roads, Va	29.98	761.5	71	21.7	90	SSW			2		2					Sm'h		Fair	
Lackawanna, S. 11° 59′, W. 133° 30′ †	30.12	765.0	82	27.8	96	ESE			2-3		2		ESE			Sm'h	ESE	Fair	
Marion, Montevideo, Uruguay	30.09	764.3	56	13.3	69	SSE			2		0			0	0	Sm'h		Clear	
Michigan, Erie, Pennsylvania	29.77	756.1	63	17.2	89	SW	1	0.4										Foggy	
Minnesota, Newport, R. I	29.87	758.7	68	20.0	95	N			1		0					Sm'h		Hazy	
Monocacy, Yokohama, Japan	29.74	755.4	67	19.4	89	SW			1		2		Calm					Fair	
New Hampshire, Norfolk, Va	29.97	761.2	71	21.7	95	SSE	6	2.7			5		Calm	0	0			Fair	
Nipsic, N. 37° 47′, W. 0° 14′	30.03	762.7	69	20.6	75	E			4		10					Sm'h		Misty	
Onward, Callao, Peru †	29.98	761.5	63	17.2	89	SSE			1		8		NW			Long	W	Cloudy	
Palos, Nagasaki, Japan	29.77	756.1	70	21.1	95	SE			1		5							Fair	
Passaic, Washington, D. C	29.92	760.0	73	22.8	85	SW			2		0							Clear	
Pensacola, N. 39° 16′, W. 124° 45′	29.97	761.2	55	12.8	100	SE			2		2			0	0	Mod.		Clear	
Portsmouth, Hampton Roads, Va	29.96	761.0	71	21.7	100	SW			2		2		SW			Sm'h		Clear	
Powhatan, Norfolk, Va	29.92	760.0	76	24.4	91	S			3		2		S					Fair	
Quinnebaug, N. 21° 38′, W. 55° 16′	30.13	765.3	80	26.7	82	SE			3		2		SE			Long	SE	Clear	
Ranger, Acapulco, Mexico *	29.79	756.7	77	25.0	77	Calm			0		0			0	0	Sm'h		Clear	
Richmond, N. 34° 20′, E. 133° 28′	29.80	756.9	70	21.1	66	WSW			2		2		W	0	0			Fair	
Saratoga, Hampton Roads, Va	29.92	760.0	73	22.8	90	SW			2		2		Calm	0	0			Fair	
Shenandoah, Montevideo, Uruguay *	30.09	764.3	55	12.8	62	S			2		0					Sm'h		Clear	
St. Louis, League Island, Pa	29.43	747.5	75	23.9	90	Calm	0	0			5			0	0			Fair	
Swatara, Shanghai, China *†	29.77	756.1	71	21.7	71	SE			2		0							Blue sky	
Tennessee, New York, N. Y	29.88	758.9	79	26.1	82	N	2	0.9			0			0	0	Sm'h		Clear	
Ticonderoga, S. 51° 52′, W. 86° 03′	30.32	770.1	42	5.6	100	SSW			4		10		SSW	Inap.	Inap.	Mod.	S	Cloudy	
Trenton, N. 42° 23′, E. 7° 02′ *	30.05	763.3	72	22.2	58	SW			2		8			6 hours		Sm'h		Fair	
Vandalia, New York, N. Y	29.84	757.9	72	22.2	90	Calm			0		0							Clear	
Wabash, Boston, Massachusetts	29.90	759.4	71	21.7	85	NE	2	0.9			5		NW	1.03	26.2			Hazy	
Wachusetts, N. Yard, Mare I'd, Cal *†	30.08	764.0	62	16.7	94	SW			1		10							Misty	
Yantic, N. 30° 45′, W. 80° 00′ *	29.87	758.7	76	24.4	100	SW			3		2		SW			Sm'h		Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 22° 50′, W. 85° 00′	29.93	760.2	83	28.3	79	SE			4		6							D. clouds	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 49° 57′, W. 19° 18′	30.18	766.6	57.2	14.0	98	SE			4		7					3	S; WSW	D. clouds	Capt. W. N. Lalley.
City of Agra, N. 44° 48′, W. 12° 13′	30.29	769.4	61.5	16.4	79	NE			2		3							D. clouds	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ N. 49° 00′, W. 19° 30′	30.16	766.1	57.3	14.1	100	S			7		9							Drizzling	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Meriola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 8° 49′, W. 29° 39′	30.00	762.0	82.3	27.9	79	NE			3		9							Overcast	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 12° 40′, E. 46° 33′	29.57	751.1	86.5	30.3	98	WSW			4		6							D. clouds	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 53° 46′, W. 32° 35′	30.06	763.5				SW			3		5		SW			Sm'h	W	Fair	
S. S. Circassian, N. 52° 50′, W. 37° 00′	30.21	767.3	50	10.0	79	SW			3		7ks		W	0	0	1	WSW	D. clouds	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Algeria																			Capt. W. Watson.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic, N. 45° 24′, W. 41° 16′	30.04	763.0	56	13.3	75	SSW			5		10		SSW; SW	3 hours		R'gh	WSW	Raining	Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Glendell.
S. S. Germanic, New York, N. Y. †	29.98	761.5	78	25.6		N			3		0			0	0			Clear	Capt. Ch. W. Kennedy.
S. S. Republic, N. 42° 51′, W. 52° 39′ †	29.98	761.5	59	15.0	88	WSW			3		10			3 hrs	hv'y	Sm'h		Foggy	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern																			
S. S. Köln, N. 41° 43′, W. 56° 36′	29.97	761.2	68.5	20.3	95	WNW			3-4		2		W	0	0	Mod.	W	Clear	Capt. Th. Jüngst
S. S. Leipzig, N. 49° 32′, W. 17° 12′	30.30	769.6	63.0	17.2		S			3		2		S	0	0	Long	W	Fair	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, N. 39° 57′, W. 58° 26′	29.94	760.5	70	21.1	95	SW			4		10		SW			Sm'h	SW	Overcast	Capt. J. W. Shackford.
S. S. Indiana																			Capt. R. W. Sargent.
S. S. Ohio, Liverpool, England *†	30.45	773.4	68	20.0	95	W			2		2		W	0	0			Fair	W. Shackford, Chief Off'r
S. S. Pennsylvania, N. 43° 41′, W. 40° 00′ *†	30.13	765.3	57	13.9	94	SW			4		10		SW			Mod.	SW	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 43° 37′, W. 146° 11′ †	30.07	763.8	53	11.7	80	NNE			6		8		NE	0	0	High	NE	Cloudy	Capt. H. Davison.
S. S. Gaelic, N. 24° 10′, E. 118° 46′ *†	29.94	760.5	72	22.2	85	NE			4		10		NE			Mod.	NE	Raining	Capt. W. H. Kidley.
S. S. Oceanic, N. 23° 20′, E. 117° 20′	29.83	757.7	72	22.2	85	ENE			4		10		E	0.05	1.3	Sm'h		Cloudy	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, N. 41° 20′, W. 124° 40′ †	29.99	761.7	53.5	11.9	93	S			2		10					Mod.	SSW	Foggy	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon																			Capt. J. N. Ingalls.
S. S. Dakota, N. 47° 00′, W. 124° 50′ *†	29.82	757.4	55	12.8	93	ESE			4		10		SE			Mod.	SE	Hazy	Capt. H. G. Morse.
S. S. Idaho, N. 39° 30′, W. 124° 40′ †	30.00	762.0	52	11.1	100	SE			3							Light	W	Foggy	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, N. 32° 35′, W. 117° 20′ †	29.92	760.0	61	16.1	88	E			1		2					Sm'h		Fair	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal. †	30.02	762.5	61	16.1	94	Calm			0		10							Raining	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal. †	30.01	762.2	61	16.1	94	SW			1		10							Raining	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 5° 06′, W. 167° 19′	29.94	760.5	82	27.8	83	ENE			2		2		NE			Sm'h	E	Clear	A. Bannerman, 2d Officer
S. S. City of New York, Sydney, N. S. W. †	29.79	756.7	64	17.8	100	W			1		10		W					Cloudy	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 15° 30′, W. 96° 20′ †	29.89	759.2	83	28.3	79	NW			1	5ck?	0	E				H'vy	W	Clear?	Capt. D. S. Austin.
S. S. City of Peking, N. 42° 59′, E. 159° 55′ †	29.64	752.8	46	7.8	100	ENE			6		10		E	0	0	Mod.	E	Cloudy	Capt. G. G. Berry.
S. S. City of Sidney																			Capt. H. C. Dearborn.
S. S. City of Tokio, N. 38° 30′, W. 164° 22′ †	30.27	768.8	55	12.8	68	SW			3		10		SW			Sm'h	NW	Cloudy	A. L. Ritchie, 2d Officer
S. S. Colima, Panama, Panama †	29.93	760.2	79	26.1	86	NW			2		2		N	0	0			Clear	Capt. R. R. Searle.
S. S. Granada																			Capt. M. Connolly.
S. S. Zealandia, S. 30° 28′, E. 168° 03′	30.09	764.3	58	14.4	76	W			3		1		SW	0	0	Sm'h	SW	Fine	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland, N. 41° 08′, W. 64° 02′ †	29.98	761.5	53	11.7	93	W			2					0	0	Sm'h		Foggy	Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Fall River, Mass.	29.84	757.9	69	20.6	70	Calm	0	0			0			0	0			Clear	Capt. J. Jorgenson.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle, N. 21° 18′, W. 79° 56′ *†	30.06	763.5	83	28.3		SSE			1		2		SSE	0	0	Sm'h	SSE	Fair	Capt B. F. Woodbury.
Brigantine George, N. 25° 30′, W. 64° 15′ †	30.15	765.8	80	26.7		S			1		0			0	0	Sm'h		Fine	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, N. E. River Head, Md. †	30.02	762.5	74	23.3	90	SW	2	0.9		0	2s			0	0			Fine	
Bark Sunbeam, Lisbon, Portugal †	30.07	763.8	80	26.7	59	NE			4		0			0	0			Clear	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON

MONTHLY SUMMARY

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

MAY, 1881.

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for May, 1881.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
Algerian Series.	° ′	° ′																								
Mogador	N. 31 30	W. 9 44	11.29 a.m.	56	17	.....	.....	30.06	763.4	70.5	21.4	78.0	...	.....	1	7	.....	.....	1	20	2	.....	.....	2	0.08	2.0
Nemours	N. 35 06	W. 1 51	12.01 p.m.	20	6	.....	.....	30.01	762.2	70.9	21.6	88.1	6	4	6	5	4	.....	2	4	.....	.....	.....	2	0.26	6.7
Algiers	N. 36 47	E. 3 04	0.20 p.m.	325	99	.....	.....	30.05	763.2	69.1	20.6	65.3	8	3	6	2	1	.....	1	10	.....	.....	.....	3	1.44	36.7
La Calle	N. 36 54	E. 8 26	0.42 p.m.	36	11	.....	.....	30.04	763.0	68.9	20.5	73.6	5	10	2	2	1	2	3	6	.....	.....	.....	4	1.78	45.2
Tunis	N. 36 47	E. 10 11	0.49 p.m.	46	14	.....	.....	30.03	762.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sfax	N. 34 45	E. 10 36	0.50 p.m.	?	?	.....	.....	30.11	764.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saida	N. 34 51	E. 0 10	0.09 p.m.	2844	867	.....	.....	30.06	763.5	70.3	21.3	50.3	9	8	5	1	2	.....	3	3	.....	.....	.....	6	1.56	39.5
Tebessa	N. 35 24	E. 8 06	0.40 p.m.	2890	881	.....	.....	30.08	764.0	64.8	18.2	47.1	3	2	9	2	1	3	.....	.....	11	.....	.....	6	4.43	112.6
Geriville	N. 33 45	E. 1 10	0.13 p.m.	4285	1306	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Laghouat	N. 33 48	E. 2 51	0.19 p.m.	2556	770	.....	.....	30.07	763.7	73.9	23.3	32.6	10	2	5	.....	10	.....	4	.....	.....	.....	.....	1	2.20	56.0
Biskra	N. 34 51	E. 5 40	0.31 p.m.	2410	125	.....	.....	30.06	763.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Australian Series.																										
Melbourne	S. 37 50	E. 144 58	9.47 p.m.	91	28	29.99	761.7	30.08	764.0	55.6	13.1	79.2	14	4	1	3	3	2	1	3	...	.....	.....	6	1.99	50.5
Sub-Series.																										
Austro-Hungarian Series.																										
Agram	N. 45 47	E. 15 53	1.12 p.m.	536	163	29.44	747.7	29.97	761.2	66.0	18.9	51.7	1	2	2	4	.....	7	4	9	2	.....	.....	5	0.89	22.6
Cracow	N. 50 04	E. 20 00	1.28 p.m.	722	220	29.26	743.2	30.01	762.2	61.9	16.6	62.1	5	6	3	3	1	1	9	3	.....	.....	.....	7	2.12	53.8
Eperies	N. 48 58	E. 21 15	1.33 p.m.	820	250	29.09	738.8	29.95	760.7	64.0	17.8	53.1	18	.....	.....	.....	2	4	.....	.....	7	.....	.....	6	2.60	65.9
Gratz	N. 47 04	E. 15 28	1.10 p.m.	1171	357	28.75	730.2	29.97	761.2	64.0	17.8	54.4	1	4	4	6	8	3	1	4	.....	.....	.....	4	0.35	8.8
Hermannstadt	N. 45 47	E. 24 13	1.45 p.m.	1352	412	28.50	723.9	29.89	759.3	66.0	18.9	60.2	5	6	.....	.....	7	5	4	4	.....	.....	.....	6	6.80	172.6
Kremsmünster	N. 48 04	E. 14 08	1.04 p.m.	1260	384	28.68	728.4	30.00	762.1	59.4	15.2	67.7	5	.....	3	9	3	.....	.....	10	1	.....	.....	5	11.58	294.1
Lemberg	N. 49 50	E. 24 00	1.44 p.m.	978	298	28.99	736.3	29.93	760.1	62.4	16.9	61.4	.....	7	.....	.....	5	8	2	9	.....	.....	.....	6	1.41	35.8
Pola	N. 44 52	E. 13 51	1.03 p.m.	105	32	29.88	759.0	29.99	761.8	66.6	19.2	55.8	.....	4	7	1	.....	9	8	2	.....	.....	.....	4	1.78	45.1
Szathmar	N. 47 46	E. 22 53	1.39 p.m.	430	131	29.47	748.4	29.91	759.8	68.9	20.5	52.2	5	11	3	2	3	2	1	4	.....	.....	.....	4	2.29	58.1
Szegedin	N. 46 15	E. 36 49	2.35 p.m.	256	78	29.67b	753.5b	29.95b	760.6b	65.7	18.7	61.6b	5a	4	3	5	3	2	2	.....	6	.....	.....	5	3.82	97.0
Trieste	N. 45 39	E. 13 46	1.04 p.m.	85	26	29.91	759.6	30.01	762.3	67.5	19.7	48.8	.....	4	.....	1	.....	2	3	11	10	.....	.....	5	2.41	61.2
Vienna	N. 48 12	E. 16 22	1.14 p.m.	663	202	29.32	744.7	30.06	763.4	62.2	16.8	56.4	4	10	4	.....	1	7	4	1	.....	.....	.....	5	3.81	96.7
Belgian Series.																										
Brussels	N. 50 51	E. 4 22	0.26 p.m.	187	57	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Furnes	N. 51 04	E. 2 40	0.19 p.m.	20	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maeseyck	N. 51 06	E. 5 48	0.32 p.m.	115	35	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
British Series.																										
Aberdeen	N. 57 10	W. 2 06	0.00 m.	86	26	29.94	760.5	30.04	763.0	51.6	10.9	69.3	1	2	1	1	5	12	5	4	.....	.....	.....	5	2.55	64.8
Armagh	N. 54 21	W. 6 39	11.42 a.m.	206	63	.....	.....	30.05	763.3	56.7	13.7	71.1	2	2	2	11	3	3	2	6	.....	.....	.....	5	.....	.....
Bidston	N. 53 24	W. 3 04	11.58 a.m.	180	85	.....	.....	30.00	763.5	56.5	13.6	62.8	1	4	12	4	3	2	3	2	.....	.....	.....	5	.....	.....
Bolton	N. 53 35	W. 2 28	11.58 a.m.	481	145	29.52	749.8	30.05	763.3	57.8	14.3	63.8	2	2	8	2	6	4	4	3	.....	.....	.....	6	.....	.....
Bradford	N. 53 48	W. 1 47	0.01 p.m.	362	110	29.65	753.1	30.05	763.3	57.2	14.0	60.9	.....	3	5	5	2	4	3	4	.....	.....	.....	6	.....	.....
Bridgetown	N. 13 04	W. 59 37	8.10 a.m.	28	9	29.91	759.7	29.94	760.5	84.8	29.3	70.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	8.78	223.0
Cardington	N. 52 08	W. 0 27	0.06 p.m.	109	33	.....	.....	30.07	763.8	63.6	17.6	61.6	5	7	4	6	.....	5	1	25	.....	.....	.....	5	.....	.....
Chatham	N. 51 25	E. 0 33	0.10 p.m.	120	37	29.99	761.7	30.12	765.0	58.9	14.9	66.2	3	1	4	9	1	1	4	8	.....	.....	.....	5	.....	.....
Falmouth	N. 50 09	W. 5 04	11.48 a.m.	200	61	29.91	759.7	30.14	765.5	57.2	14.0	67.8	.....	5	3	9	2	4	8	.....	.....	.....	.....	6	.....	.....
Fort Napier	S. 30 00	E. 31 00	2.12 p.m.	2200	671	27.60	701.0	29.82	757.4	71.1	21.7	69.6	.....	1	2	3	1	3	2	10	9	.....	.....	5	.....	.....
Free Town	N. 8 30	W. 13 14	11.15 a.m.	224	68	29.60	751.8	29.83	757.7	88.0	31.1	86.5	.....	9	9	8	.....	2	1	2	.....	.....	.....	1	.....	.....
Galway	N. 53 15	W. 9 03	11.32 a.m.	25	8	.....	.....	29.92b	760.0b	59.8	15.4	71.8	1	3	18	6	1	1	1	.....	.....	.....	.....	6	2.72	69.1
Gibraltar	N. 36 08	W. 5 21	11.47 a.m.	50	15	30.01	762.2	30.06	763.5	70.2	21.2	82.3	.....	.....	.....	6	.....	.....	.....	11	.....	.....	.....	7	.....	.....
Glasgow	N. 55 53	W. 4 17	11.51 a.m.	90	27	29.75	755.6	29.95	760.7	56.0	13.3	62.4	2	.....	2	9	3	2	5	8	.....	.....	.....	3	.....	.....
Greenwich	N. 51 29	0 00	0.08 p.m.	159	48	29.93	760.2	30.10	764.5	61.4	16.3	60.7	5	3	.....	11	2	.....	4	6	.....	.....	.....	7	.....	.....
Guernsey	N. 49 27	W. 2 41	11.58 a.m.	204	62	29.89	759.2	30.11	764.8	55.4	13.0	77.3	1	3	3	6	4	2	.....	12	.....	.....	.....	6	.....	.....
Kew	N. 51 28	W. 0 19	0.07 p.m.	34	10	30.07	763.8	30.11	764.8	60.3	15.7	54.3	5	3	1	10	2	.....	5	5	.....	.....	.....	4	.....	.....
Leicester	N. 52 39	W. 1 08	0.04 p.m.	245	75	29.82	757.4	30.07	763.8	60.2	15.7	60.7	4	1	1	14	1	2	.....	7	1	.....	.....	6	.....	.....
Malta	N. 36 00	E. 14 30	1.06 p.m.	111	34	29.91	759.7	29.98	761.5	68.2	20.1	72.7	1	7	4	1	.....	6	.....	12	.....	.....	.....	7	.....	.....
Nassau	N. 25 04	W. 77 22	6.58 a.m.	44	13	29.93	760.2	29.98	761.5	78.6	25.9	82.5	2	1	2	1	6	8	2	9	.....	.....	.....	4	1.67	42.4
Oscott	N. 52 28	W. 1 55	0.00 m.	483	147	29.36	750.8	30.08	764.0	58.8	14.9	65.9	7	1	2	3	10	2	1	3	2	.....	.....	7	.....	.....
Oxford	N. 51 46	W. 1 17	0.03 p.m.	212	64	29.87	758.7	30.10	764.5	59.8	15.4	63.0	4	2	3	8	4	2	2	4	2	.....	.....	6	.....	.....
Plymouth	N. 50 22	W. 4 10	11.51 a.m.	69	21	30.05	763.3	30.12	765.0	59.8	15.4	67.7	1	3	2	10	6	3	6	.....	.....	.....	.....	7	.....	.....
Sandwick Manse	N. 59 05	W. 3 20	11.54 a.m.	94	29	.....	.....	30.02	762.5	50.7	10.4	77.2	.....	3	5	4	5	0	5	3	.....	.....	.....	5	.....	.....
Scutari Cemet'y	N 41 00	E. 29 03	2.04 p.m.	60	18	29.84a	757.9a	29.90a	759.4a	66.1	18.9	71.0	5	1	.....	8	7	1	.....	9	.....	.....	.....	5	.....	.....
Sheffield	N. 53 23	W. 1 28	0.02 p.m.	260	79	29.81	757.2	30.09	764.3	60.6	15.9	67.8	1	.....	1	11	3	.....	1	12	2	.....	.....	6	.....	.....
Silloth Rectory	N. 54 52	W. 3 22	11.54 a.m.	28	9	30.02	762.5	30.05	763.3	58.8	14.9	69.5	.....	1	18	3	6	1	.....	1	2	.....	.....	4	3.01	76.5
Stonyhurst	N. 53 51	W. 2 28	11.58 a.m.	363	110	.....	.....	30.07	763.8	57.2a	14.0a	62.7a	.....	1	4	11	4	.....	6	5	.....	.....	.....	7	.....	.....
Stratfield Turgiss	N. 51 17	W. 0 53	0.04 p.m.	197	60	29.88	758.9	30.10	764.5	62.1	16.7	57.2	.....	2	5	9	.....	.....	7	8	.....	.....	.....	6	.....	.....
Truro	N. 50 16	W. 5 04	11.53 a.m.	43	13	30.11	764.8	30.13	765.3	63.1	17.3	65.1	2	10	3	7	1	1	5	2	.....	.....	.....	4	.....	.....
Valencia	N. 51 55	W. 10 18	11.27 a.m.	20	6	30.05	763.3	30.08	764.0	58.1	14.5	67.9	1	5	6	10	1	5	3	.....	.....	.....	.....	5	.....	.....

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for May, 1881.																				Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.															
						Actual.		Reduced.					Directions.									Total Movement.						
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.		Inch.	Mill.
CANADIAN SERIES.	o /	o /																										
Bathurst	N. 47 39	W. 65 43	7.45 a.m.	4	1																							
Charlottetown	N. 46 14	W. 63 10	7.55 a.m.	38	12	30.06	763.5	30.10	764.5	44.6	7.0	80.5	3	4	2	2	6	3	3	7	1	4814	7747	8	2.53	64.3
Chatham	N. 47 03	W. 65 29	7.45 a.m.	50	15	30.06	763.5	30.12	765.0	44.6	7.0	81.1	5	4	3	.....	5	1	1	7	5	3403	5476	7	4.97	126.2
Cornwall	N. 45 01	W. 74 43	7.09 a.m.	175	53																							
Dalhousie	N. 48 04	W. 66 21	7.32 a.m.	30	9																							
Father Point	N. 48 31	W. 68 28	7.34 a.m.	20	6	30.08	764.0	30.11	764.8	41.6	5.3	85.2	3	11	.....	1	.....	.....	.....	15	1	11400	18346	5	2.70	68.6
Fort Garry	N. 49 51	W. 97 07	5.39 a.m.	758	231	29.15	740.4	29.96	761.0	48.4	9.1	87.5	3	3	5	1	8	3	5	1	2	6263	10079	8	2.07	52.6
Fredericton	N. 45 57	W. 66 39	7.41 a.m.	59	18																							
Granton	N. 43 12	W. 81 21	6.43 a.m.	1015	309																							
Halifax	N. 44 39	W. 63 36	7.53 a.m.	122	37	29.98	761.5	30.11	764.8	45.5	7.5	82.8	3	6	2	2	2	3	7	5	1	.....	.....	5	2.48	63.0
Hamilton	N. 43 16	W. 79 53	6.49 a.m.	332	101																							
Kingston	N. 44 14	W. 76 30	7.02 a.m.	335	102	29.69	754.1	30.02	762.5	52.8	11.6	85.5	2	1	3	2	9	3	2	8	1	3632	5845	5	3.57	90.7
Little Glace Bay	N. 46 11	W. 59 58	8.08 a.m.	34	10																							
Montreal	N. 45 31	W. 73 33	7.13 a.m.	187	57	29.85	758.2	30.04	763.0	52.9	11.6	75.3	4	1	4	3	3	3	1	12	.....	.....	.....	7	3.25	82.5
Moose Factory	N. 51 16	W. 80 56	6.44 a.m.	30	9																							
Parry Sound	N. 45 19	W. 80 01	6.48 a.m.	641	195	29.36	745.7	30.05	763.3	53.1	11.7	77.0	1	2	1	2	3	4	4	6	8	4507	7253	5	3.75	95.2
Peterborough	N. 44 17	W. 78 20	6.54 a.m.	688	210																							
Port Dover	N. 42 47	W. 80 13	6.47 a.m.	635	194	29.36	745.7	30.05	763.3	54.5	12.5	76.8	3	3	1	3	6	1	.....	9	5	4650	7483	5	1.08	27.4
Port Stanley	N. 42 40	W. 81 13	6.43 a.m.	592	180	29.41	747.0	30.05	763.3	54.2	12.3	83.5	3	3	4	1	1	2	13	4	.....	.....	.....	4	1.57	39.9
Quebec	N. 46 48	W. 71 12	7.23 a.m.	293	89	29.74	755.4	30.06	763.5	46.9	8.3	78.6	1	5	4	.....	.....	.....	6	12	3	.....	.....	4	2.03	51.6
Rockliffe	N. 46 10	W. 77 48	6.57 a.m.	418	127	29.59	751.6	30.05	763.3	49.6	9.8	83.2	1	3	3	.....	.....	4	2	1	17	4914	7908	6	4.23	107.4
Saugeen	N. 44 30	W. 81 21	6.42 a.m.	641	208	29.32	744.7	30.03	762.7	54.0	12.2	80.1	6	2	2	5	4	8	3	1	.....	5999	9654	4	1.47	37.3
St. Andrews	N. 43 04	W. 81 06	6.34 a.m.	?	?	29.02	737.1	30.07	763.8	46.4	8.0	82.2	2	5	.....	4	2	4	6	4	4	.....	.....	4	8.71	221.2
St. John, N.B.	N. 45 17	W. 66 03	7.44 a.m.	150	46																							
Stratford	N. 43 23	W. 81 00	6.44 a.m.	1182	360																							
Sydney	N. 46 08	W. 60 10	8.07 a.m.	27	8	30.08	764.0	30.12	765.0	45.3	7.4	75.1	3	3	3	6	4	2	2	6	2	4117	6626	8	3.01	76.5
Toronto	N. 43 39	W. 79 23	6.50 a.m.	350	150	29.68	753.9	30.06	763.5	54.9	12.7	78.8	4	4	2	3	1	.....	4	5	8	5254	8455	5	2.23	56.6
Woodstock	N. 43 08	W. 80 47	6.48 a.m.	980	299																							
Yarmouth	N. 43 50	W. 66 02	7.44 a.m.	61	19	29.00	736.6	30.07	763.8	47.4	8.6	86.1	2	2	4	4	3	3	7	2	4	3778	6080	5	7.76	197.1
Sub-Series.																												
St. Johns, N. F.	N. 47 34	W. 52 42	8.37 a.m.	230	70	29.91	759.7	30.16	766.1	41.0	5.0	89.7	.....	1	5	1	2	5	3	14	.....	.....	.....	5	3.95	100.3
St. Pierre	N. 46 47	W. 56 08	8.24 a.m.	?	?																							
CAPE COLONY SERIES.																												
Cape St. Francis	S. 34 10	E. 24 53	1.48 p.m.	25	7	29.93	760.2	.....	.....	62.6	17.0	87.4	.....	.....	8	11	4	1	6	.....	1	.....	.....	6	7.05	179.0
Cape Town	S. 34 02	E. 18 29	1.22 p.m.	27	8	29.96	761.0	30.00	762.0	63.1	17.3	.....	2	13	1	1	10	3	.....	.....	1	.....	.....	7	6.81	173.0
Worcester *,†	S. 33 36	E. 19 26	1.26 p.m.	?	?	28.87	733.3	.....	.....	63.6	17.6	55.7	1	15	3	...	1	5	6	.....	...	.....	.....	6	2.35	59.7
CHINESE SERIES.																												
Zi-Ka-Wei	N. 31 12	E. 121 26	8.14 p.m.	23	7	29.95	760.7	29.97	761.3	61.5	16.4	88.5	.....	3	2	.....	1	9	10	5	1	.....	.....	7	3.49	88.6
COSTA RICAN SERIES.																												
San José	N. 9 56	W. 84 00	6.15 a.m.	3757	1145	26.19	665.2	29.91	759.7	67.5	19.7	.....	.....	.....	.....	.....	.....	13	.....	7	11	.....	.....	5	6.97	177.0
DANISH SERIES.																												
Copenhagen	N. 55 41	E. 12 36	0.58 p.m.	46	13	30.02	762.6	30.07	763.8	54.5	12.5	64.2	3	6	1	2	8	2	7	1	1	.....	.....	5	.....	.....
Fanöe	N. 55 27	E. 8 24	0.42 p.m.	20	6	30.05	763.2	30.07	763.8	54.5	12.5	72.4	1	4	10	9	1	.....	5	1	.....	.....	.....	5	.....	.....
Godthaab	N. 64 11	W. 51 46	8.41 a.m.	36	11	29.69	754.1	29.73	755.2	36.7	2.6	79.8	9	3	1	4	3	.....	.....	4	7	.....	.....	7	.....	.....
Stykkisholm	N. 65 05	W. 22 46	10.37 a.m.	36	11	29.82	757.4	29.80	758.5	43.5	6.4	.....	.....	.....	.....	2	4	14	7	1	3	.....	.....	5	.....	.....
Thorshavn	N. 62 02	W. 6 44	11.41 a.m.	29	9	29.97	761.3	30.01	762.2	47.3	8.5	75.7	.....	1	1	4	4	4	4	9	4	.....	.....	7	.....	.....
Vestervig	N. 56 47	E. 8 20	0.41 p.m.	82	25	29.95	760.8	30.05	763.3	52.3	11.3	76.4	2	5	3	10	3	1	2	5	.....	.....	.....	4	.....	.....
FRENCH SERIES.																												
Agen	N. 44 12	E. 0 38	0.11 p.m.	604	184	29.46	748.2	30.17	766.3	65.8	18.8	50.4	9	7	5	1	1	5	2	1	.....	.....	.....	.....	0.85	21.5
Alençon	N. 48 25	E. 0 06	0.09 p.m.	476	145	29.60	751.9	30.15	765.9	59.9	15.5	73.4	9	3	4	4	4	.....	2	5	.....	.....	.....	5	2.50	63.6
Arras	N. 50 17	E. 2 47	0.19 p.m.	239	73	29.87c	758.8c	30.13c	765.3c	59.4c	15.2c	54.1d	9	4	6	4	...	2	4	7	.....	.....	.....	.....	0.16	4.2
Avignon	N. 43 57	E. 4 38	0.26 p.m.	65	20	29.94	760.4	30.02	762.4	70.0	21.1	44.8	17	1	5	.....	4	4	.....	.....	.....	.....	.....	1	2.91	73.8
Bar-sur-Seine	N. 48 06	E. 4 22	0.25 p.m.	518	158	29.54	750.4	30.09	764.3	61.9	16.6	55.1	3	2	1	6	3	4	8	4	.....	.....	.....	7	1.32	33.6
Beauvais	N. 49 26	E. 2 04	0.16 p.m.	246	75	29.86	758.5	30.12	765.0	62.2	16.8	48.1	5	2	8	3	1	1	6	5	.....	.....	.....	5	1.46	37.2
Besançon	N. 47 14	E. 6 01	0.32 p.m.	829	250	29.22	742.2	30.09	764.3	61.3	16.3	60.7	2	2	.....	2	1	2	10	3	1	11	.....	.....	2.31	58.7
Bordeaux	N. 44 50	E. 0 32	0.06 p.m.	243	74	29.84	757.8	30.10	764.4	65.3	18.6	53.6	3	5	1	2	3	4	7	6	.....	.....	.....	6	2.30	58.5
Bourges	N. 47 10	E. 2 24	0.17 p.m.	510	156	29.56	750.7	30.10	764.6	63.5	17.5	52.4	8	3	9	1	2	.....	3	5	.....	.....	.....	.....	1.75	44.4
Brest	N. 48 23	W. 4 29	11.50 a.m.	213	65	29.91	759.8	30.16	766.0	62.6	17.0	66.1	4	2	2	11	3	2	.....	7	.....	.....	.....	6	4.97	126.3
Caen	N. 49 11	W. 0 21	0.07 p.m.	69	21	30.03	762.7	30.11	764.7	62.4	16.9	71.6	4	6	7	6	1	1	1	5	.....	.....	.....	4	1.52	38.6
Châlons-sur-Marne	N. 48 57	E. 4 23	0.25 p.m.	294	90	29.77	756.1	30.09	764.2	65.8	18.8	59.2	2	3	5	5	7	1	4	2	2	.....	.....	5	0.82	20.9
Charleville	N. 49 46	E. 4 42	0.27 p.m.	476	145	29.58	751.4	30.09	764.3	62.4	16.9	59.7	1	3	5	8	4	2	6	2	.....	.....	.....	4	1.32	33.4
Clermont-Fd	N. 45 45	E. 3 04	0.20 p.m.	1273	388	28.72	729.5	30.06	763.4	63.0	17.2	51.7	14	6	2	.....	2	3	2	2	.....	.....	.....	5	2.64	67.0
Cluny	N. 46 26	E. 4 39	0.27 p.m.	787	240	29.26	743.2	30.09	764.2	63.9	17.7	56.5	9	4	4	1	4	2	.....	7	.....	.....	.....	4	1.60	40.7
Commercy	N. 48 45	E. 5 35	0.30 p.m.	817	249	29.23	742.5	30.10	764.4	62.6	17.0	53.0	6	4	11	3	2	.....	2	3	.....	.....	.....	5	0.91	23.0
Gap	N. 44 34	E. 6 04	0.32 p.m.	2427	740	27.48	697.9	29.96	760.9	64.4	18.0	50.5	4	1	.....	1	4	5	3	13	.....	.....	.....	.....	2.18	55.5
Gréasque a	N. 43 24	E. 5 37	0.31 p.m.	1056	322	28.92	734.6	30.06	763.6	68.9	20.5	42.4	.....	.....	.....	.....	2	14	10	4	.....	.....	.....	4	1.21	30.8
Grenoble	N. 45 11	E. 5 43	0.31 p.m.	715	218	29.26	743.2	30.02	762.4	63.9	17.7	50.8	4	15	7	2	.....	.....	1	2	.....	.....	.....	.....	3.34	84.9
Guéret	N. 46 10	E. 1 52	0.16 p.m.	1486	453	28.53	724.6	30.10	764.6	59.7	15.4	53.9	4	5	4	7	.....	.....	4	7	.....	.....	.....	.....	2.39	60.7
Lamballe	N. 48 28	W. 2 31	11.59 a.m.	252	77	29.89	759.2	30.16	766.0	60.4	15.8	64.5	13	5	3	1	5	1	2	1	.....	.....	.....	.....	1.43	36.3
Lescar	N. 43 21	W. 0 26	0.06 p.m.	525	160	29.35	750.6	30.22	767.6	64.4	18.0	70.4	6	5	9	5	.....	1	3	2	.....	.....	.....	.....	3.96	100.7
Lorient	N. 47 44	W. 3 21	11.55 a.m.	86	26	30.09	764.2	30.19	766.8	63.5	17.5	68.3	2	1	1	13	4	2	1	7	.....	.....	.....	5	1.18	29.9
Lyons	N. 45 45	E. 4 49	0.27 p.m.	574	175	29.02	737.1	30.06	763.6	62.2	16.8	50.6	11	8	.....	1	2	4	2	3	.....	.....	.....	5	1.87	47.6
Mans	N. 48 01	E. 0 12	0.09 p.m.	285	87	29.84	757.8	30.14	765.6	60.8	16.0	58.4	5	6	6	2	1	2	5	4	.....	.....	.....	5	1.32	33.6
Marseilles	N. 43 18	E. 5 23	0.29 p.m.	246	75	29.73	755.1	30.00	762.0	68.5	20.3	46.3	.....	5	14	6	1	3	1	1	.....	.....	.....	3	0.71	17.9
Mont-Louis	N. 42 30	E. 2 07	0.16 p.m.	5203	1586	24.93	633.1	30.10	764.6	51.6	10.9	53.5	2	9	4	4	3	3	4	2	.....	.....	.....	5	1.12	28.5
Montpelier	N. 43 36	E. 3 54	0.24 p.m.	102	31	29.91	759.6	30.01	762.3	69.6	20.9	56.6	7a	8	.....	1	4	6	5	1	2	.....	.....	2	1.12	28.5
Nancy	N. 48 41	E. 6 11	0.33 p.m.	712	217	29.33	744.9	30.08	764.1	61.7	16.5	49.8	8	3	8	1	4	2	.....	5	.....	.....	.....	5	0.69	17.6
Nantes	N. 47 13	W. 1 33	0.02 p.m.	134	41	30.00	762.0	30.15	765.9	63.5	17.5	56.0	5	5	2	9	3	.....	.....	7	.....	.....	.....	6	2.08	52.7
Nice	N. 43 41	E. 7 16	0.37 p.m.	29	9	29.95	760.8	29.98	761.6	66.4	19.1	64.4	.....	.....	4	2	4	10	11	.....	.....	.....	.....	5	3.16	80.4
Perpignan	N. 42 42	E. 2 53	0.19 p.m.	98	30	29.95	760.7	30.03	762.7	67.8	19.9	42.5	10	4	.....	.....	1	6	5	.....	5	.....	.....	3	0.29	7.4
Pic du Midi (Pitde)	N. 42 15	W. 0 08	0.08 p.m.	7763	2366	22.58	573.5	.....	.....	39.6	4.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4	6.93	176.1
Privas	N. 44 45	E. 4 35	0.26 p.m.	997	304	28.99	730.3	30.03	762.7	66.6	19.2	44.7	18a	.....	.....	6	6	.....	.....	.....	.....	.....	.....	3	1.32	33.5
Puy de Dome	N. 45 46	E. 2 58	0.20 p.m.	4813	1467	25.21	640.2	.....	.....	42.3	5.7	83.5	5	4	4	4	3	2	2	7	.....	.....	.....	6	3.56	90.5
Rochefort	N. 45 56	W. 0 58	0.04 p.m.	29	9	30.12	765.0	30.15	765.9	67.8	19.9	55.6	2	3	5	7	3	1	1	9	.....	.....	.....	5	0.44?	11.1?
Roche-sur-Yon	N. 46 40	W. 1 26	0.14 p.m.	198	60	29.92	759.9	30.14	765.5	64.6	18.1	58.7	2	3	5	8	1	1	2	9	.....	.....	.....	4	1.11	28.3
Rodez	N. 44 21	E. 2 35	0.18 p.m.	2050	625	27.93	709.5	30.03	763.3	61.3	16.3	52.6	b	17	2	.....	1	2	2	5	.....	.....	.....	4	2.07	52.6
Rouen	N. 49 26	E. 1 14	0.13 p.m.	80	24	30.04	762.9	30.12	765.0	62.6	17.0	56.1	4	1	6	3	5	3	2	7	.....	.....	.....	5	0.98	25.0
Saint Lô	N. 49 06	W. 1 05	0.04 p.m.	134	41	29.99	761.8	30.15	765.8	59.4	15.2	65.1	2	6	6	4	1	4	4	.....	.....	.....	.....	5	1.93	49.1
Saint Maur	N. 48 48	E. 2 21	0.18 p.m.	162	49	.....	.....	30.11	764.9	63.0	17.2	49.4	9	3	2	5	6	.....	.....	6	.....	.....	.....	2	2.82	71.6
Toulouse	N. 43 37	E. 1 27	0.14 p.m.	636	194	29.40	746.8	30.13	765.3	67.3	19.6	55.5	.....	22	1	.....	.....	8	.....	.....	.....	.....	.....	.....	2.32	58.9
Tours	N. 47 24	E. 0 41	0.11 p.m.	171	52	29.92a	759.9a	30.11a	764.8a	63.3a	17.4a	50.7a	1	4	5	7	...	.....	6	8	.....	.....	.....	6	2.46	62.4
Versailles	N. 48 48	E. 2 07	0.16 p.m.	445	136	29.62	752.3	30.11	764.8	61.7	16.5	49.6	4	5	5	5	1	.....	2	9	.....	.....	.....	.....	1.53	38.9
SUB SERIES.																												
Paris, Montsouris	N. 48 50	E. 2 20	0.18 p.m.	256	78	29.84	757.9	30.13	765.3	62.8	17.1	51.8	5	4	2	8	4	.....	2	6	.....	.....	.....	.....	1.36	34.6

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for May, 1881.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
German Series.	° ′	° ′																								
Bamberg	N. 49 54	E. 10 53	0.51 p.m.	774	236	29.22	742.1	30.08	764.1	62.6	17.0	45.5	7	.....	5	5	.....	2	2	7	3	.....	.....	4	3.18	80.8
Berlin	N. 52 30	E. 13 23	1.02 p.m.	157	48	29.90	759.5	30.08	763.9	66.0	18.9	39.5	2	4	3	7	.....	2	5	7	1	.....	.....	6	1.50	38.1
Breslau	N. 51 07	E. 17 02	1.17 p.m.	482	147	29.54	750.4	30.08	763.9	63.3	17.4	45.8	2	4	5	.....	6	1	3	10	.....	.....	.....	6	0.80	20.2
Carlsruhe	N. 49 01	E. 8 25	0.42 p.m.	404	123	29.65	753.1	30.07	763.8	62.4	16.9	62.2	4	2	2	10	.....	2	2	9	.....	.....	.....	6	0.99	25.2
Cassel	N. 51 19	E. 9 28	0.46 p.m.	669	204	29.35	745.5	30.07	763.7	63.1	17.3	43.4	8	7	2	1	10	1	1	1	.....	.....	.....	5	0.71	18.0
Frankfort on M.	N. 50 08	E. 8 41	0.43 p.m.	338	103	29.75	755.6	30.11	764.7	65.7	18.7	39.4	6	3	2	9	2	1	2	6	.....	.....	.....	5	0.39	9.8
Friedrichshafen	N. 47 39	E. 9 29	0.45 p.m.	1355	413	28.63	727.1	30.05	763.2	59.7	15.4	60.8	.....	.....	2	8	5	3	4	9	.....	.....	.....	6	3.21	81.6
Hamburg	N. 53 33	E. 9 58	0.48 p.m.	66	20	30.03	762.8	30.10	764.5	59.7	15.4	61.0	3	5	3	10	.....	1	3	5	1	.....	.....	6	1.12	28.4
Kiel	N. 54 20	E. 10 04	0.49 p.m.	13	4	30.06	763.6	30.08	764.0	49.5	9.7	61.1	4	2	7	9	1	.....	2	6	.....	.....	.....	5	1.32	33.4
Leipsic	N. 51 20	E. 12 24	0.58 p.m.	390	119	29.67	753.5	30.08	764.0	62.6	17.0	50.7	3	3	1	8	3	.....	2	11	.....	.....	.....	7	3.35	85.1
Magdeburg	N. 52 09	E. 11 37	0.54 p.m.	269	82	29.80	756.8	30.08	764.0	63.9	17.7	54.8	5	2	4	5	4	.....	2	7	2	.....	.....	6	1.18	30.0
Memel *a*	N. 55 43	E. 21 07	1.32 p.m.	39	12	30.06	763.6	30.11	764.8	54.7	12.6	60.0	3	10	6	3	3	1	.....	4	.....	.....	.....	5	.....	.....
Munich	N. 48 09	E. 11 34	0.55 p.m.	1732	528	28.24	717.3	30.11	764.8	59.4	15.2	53.5	1	4	8	2	.....	3	3	8	2	.....	.....	6	6.82	173.1
Neufahrwasser	N. 54 24	E. 18 40	1.25 p.m.	16	5	30.10	764.4	30.11	764.8	55.9	13.3	58.0	10	5	3	1	4	1	2	5	.....	.....	.....	5	0.47	11.9
Neustadt *c*	N. 49 21	E. 8 08	0.41 p.m.	479	146	29.54	750.3	30.07	763.8	63.5	17.5	52.2	1	5	17	3	1	.....	.....	1	.....	.....	.....	5	0.59	14.9
Stuttgart	N. 48 47	E. 9 11	0.45 p.m.	879	268	29.11	739.5	29.99	761.8	63.0	17.2	49.0	10	2	7	4	.....	.....	5	3	.....	.....	.....	5	1.37	34.9
Weissenburg	N. 49 02	E. 10 58	0.52 p.m.	1414	431	28.57	725.7	30.06	763.6	61.2	16.2	50.3	3	5	9	1	.....	2	4	6	1	.....	.....	7	3.44	87.3
Wustrow	N. 54 21	E. 12 24	0.58 p.m.	23	7	30.08	764.1	30.11	764.7	55.8	13.2	76.2	8	.....	7	5	3	.....	1	7	.....	.....	.....	5	0.14	3.5
Greek Series.																										
Athens	N. 37 58	E. 23 43	1.43 p.m.	266	81	29.56	750.9	29.95	760.6	72.0	22.2	.....	1	1	3	7	9	.....	.....	10	.....	.....	.....	3	.....	.....
Indian Series.																										
Kurachee	N. 24 47	E. 67 04	4.36 p.m.	49	15	29.65	753.1	29.70	754.4	89.1	31.7	71.5	.....	.....	2	17	12	.....	.....	.....	.....	.....	.....	1	0	0
Deesa	N. 24 16	E. 72 14	4.57 p.m.	465	142	29.16	740.7	29.01	752.1	104.9	40.5	19.3	2	3	16	6	3	.....	.....	1	.....	.....	.....	2	0.28	7.1
Bombay	N. 18 54	E. 72 49	5.00 p.m.	37	11	29.72	754.9	29.75	755.6	87.9	31.1	71.0	.....	3	18	8	2	.....	.....	.....	.....	.....	.....	2	0.23	5.8
Poona	N. 18 28	E. 74 10	5.05 p.m.	1849	564	27.88	708.1	29.68	753.9	93.8	34.3	30.6	1	2	20	8	.....	.....	.....	.....	.....	.....	.....	2	0	0
Belgaum	N. 15 52	E. 74 42	5.07 p.m.	2550	777	27.24	691.9	29.73	755.1	84.0	28.9	59.4	1	1	6	19	3	1	.....	.....	.....	.....	.....	4	1.26	32.0
Lahore	N. 31 34	E. 74 20	5.05 p.m.	732	223	28.83	732.3	29.54	750.3	100.9	38.3	22.7	3	6	9	3	.....	1	5	2	2	.....	.....	2	0.95	24.1
Roorkee	N. 29 52	E. 77 36	5.20 p.m.	887	270	28.70	729.0	29.56	750.8	96.2	35.7	32.0	.....	7	6	2	2	1	3	.....	10	.....	.....	1	0.90	22.9
Agra	N. 27 10	E. 78 05	5.20 p.m.	555	169	29.02	737.1	29.55	750.6	104.2	40.1	24.7	5	5	8	1	3	4	3	1	1	.....	.....	0	0	0
Nagpur	N. 21 09	E. 79 11	5.24 p.m.	1025	312	28.56	725.4	29.55	750.6	104.6	40.3	19.2	3	16	4	3	1	2	.....	1	1	.....	.....	4	0.76	19.3
Jubulpore	N. 23 09	E. 79 59	5.28 p.m.	1351	412	28.29	718.6	29.58	751.3	100.9	38.3	15.9	3	14	2	1	2	.....	1	1	7	.....	.....	3	0.27	6.9
Lucknow	N. 26 59	E. 81 00	5.32 p.m.	369	112	29.22	742.2	29.58	751.3	97.3	36.3	32.2	4	8	3	.....	.....	2	4	6	4	.....	.....	0	0.62	15.7
Allahabad	N. 25 26	E. 81 52	5.35 p.m.	307	94	29.26	743.2	29.56	750.8	99.4	37.4	33.3	3	3	1	.....	.....	.....	7	8	9	.....	.....	1	0.76	19.3
Patna	N. 25 37	E. 85 08	5.49 p.m.	183	56	29.43	747.5	29.60	751.8	92.8	33.8	50.7	8	.....	.....	.....	.....	.....	12	11	.....	.....	.....	4	5.02	127.5
Hazaribagh	N. 24 00	E. 85 24	5.50 p.m.	2007	612	27.64	702.0	29.59	751.6	90.2	32.3	38.7	5	6	2	2	.....	2	10	3	1	.....	.....	4	3.79	96.3
Cuttack	N. 20 29	E. 85 54	5.52 p.m.	80	24	29.56	750.8	29.64	752.8	89.3	31.8	59.3	1	.....	3	2	16	4	2	2	1	.....	.....	5	1.13	28.7
Calcutta	N. 22 33	E. 88 19	6.01 p.m.	21	7	29.62	752.3	29.64	752.8	85.8	29.9	70.6	1	.....	.....	5	13	3	5	2	2	.....	.....	4	7.49	190.2
Dhubri	N. 26 07	E. 89 50	6.08 p.m.	118	36	29.56	750.8	29.64	752.8	81.5	27.5	78.5	.....	1	.....	3	1	2	13	3	8	.....	.....	4	14.08	357.6
Chittagong	N. 22 21	E. 91 50	6.15 p.m.	87	26	29.63	752.6	29.72	754.9	82.5	28.1	80.2	.....	.....	4	6	8	3	3	3	4	.....	.....	5	0.70	17.8
Sibsagar	N. 26 59	E. 94 40	6.27 p.m.	333	112	29.39	746.5	29.72	754.9	81.5	27.5	79.9	.....	.....	.....	6	6	2	3	14	.....	.....	.....	7	11.86	301.2
Zanzibar *a*	S. 6 10	E. 39 11	2.45 p.m.	22	7	.....	.....	29.97	761.2	84.2	29.0	78.4	*b*	.....	1	5	15	6	.....	1	.....	.....	.....	7	11.96	303.8
Italian Series.																										
Udine	N. 46 04	E. 13 14	1.01 p.m.	381	116	29.61	752.1	30.01	762.3	67.1	19.5	48.7	4	.....	1	7	3	4	2	2	8	.....	.....	6	3.70	94.0
Milan	N. 45 28	E. 9 11	0.45 p.m.	482	147	29.47	748.5	29.98	761.5	68.7	20.4	48.4	1	3	1	8	2	5	8	3	.....	.....	.....	5	0	0
Padua	N. 45 24	E. 11 53	0.56 p.m.	102	31	29.91	759.7	30.01	762.2	67.1	19.5	50.0	4	1	1	3	2	8	7	3	2	.....	.....	5	3.09	78.5
Moncalieri	N. 44 59	E. 7 41	0.39 p.m.	853	260	29.09	738.9	29.98	761.4	65.5	18.6	54.1	5	4	.....	.....	5	9	4	4	.....	.....	.....	5	5.20	132.1
Genoa	N. 44 25	E. 8 55	0.44 p.m.	157	48	29.82	757.3	30.01	762.3	65.3	18.5	57.3	3	3	1	14	3	3	1	3	.....	.....	.....	4	3.61	91.6
Mondovi	N. 44 22	E. 7 48	0.39 p.m.	1824	556	28.10	713.6	29.98	761.4	62.6	17.0	51.2	6	7	12	.....	2	1	1	2	.....	.....	.....	5	4.98	126.6
Pesaro	N. 43 55	E. 12 53	1.00 p.m.	46	14	29.94	760.5	29.99	761.8	63.9	17.7	63.6	5	7	2	1	.....	.....	8	8	.....	.....	.....	5	1.09	27.6
Florence *a*	N. 43 46	E. 11 14	0.53 p.m.	240	73	29.72	754.8	29.97	761.2	68.9	20.5	45.2	3	3	6	9	1	1	3	4	.....	.....	.....	5	2.15	54.5
Leghorn *j*	N. 43 32	E. 10 18	0.49 p.m.	79	24	29.91	759.7	29.99	761.8	67.5	19.7	59.7	.....	4	5	4	2	.....	2	4	.....	.....	.....	6	0	0
Rome	N. 41 54	E. 12 29	0.58 p.m.	164	50	29.80	756.8	29.97	761.1	70.2	21.2	47.4	1	1	6	13	4	3	2	1	.....	.....	.....	5	4.18	106.1
Lecce	N. 40 21	E. 18 22	1.21 p.m.	236	72	29.71	754.5	29.96	760.9	69.1	20.6	52.7	3	10	4	1	8	2	.....	2	1	.....	.....	4	1.23	31.3
Cosenza	N. 39 18	E. 16 15	1.13 p.m.	840	256	29.09	738.8	29.97	761.1	68.5	20.3	71.5	.....	4	2	7	6	7	4	1	.....	.....	.....	6	3.88	98.6
Cagliari	N. 39 13	E. 9 10	0.45 p.m.	180	55	29.77	756.1	29.97	761.1	68.5	20.3	52.9	.....	8	3	.....	6	11	1	2	.....	.....	.....	4	0.89	22.6
Palermo	N. 38 07	E. 13 22	1.02 p.m.	236	72	29.75	755.7	30.01	762.2	67.6	19.8	56.3	2	8	3	1	1	.....	4	13	2	.....	.....	6	1.07	27.1
Syracuse	N. 37 03	E. 15 18	1.09 p.m.	43	13	29.92	760.0	29.97	761.1	69.1	20.6	62.3	.....	.....	.....	2	5	5	14	5	.....	.....	.....	7	0.43	11.0
Sub-Series.																										
Naples	N. 40 52	E. 14 18	1.05 p.m.	489	149	29.43	747.6	29.95	760.8	68.0	20.0	62.9	.....	2	6	11	4	3	5	.....	.....	.....	.....	6	3.63	92.1
Stelvio	N. 46 37	E. 10 32	0.50 p.m.	8343	2543	22.20	563.9	.....	.....	38.5	3.6	55.3	1	.....	2	8	1	6	8	7	.....	.....	.....	6	1.28	32.6
Valdobbia	N. 45 47	E. 12 00	0.56 p.m.	8360	2548	22.22	564.3	.....	.....	41.7	5.4	71.0	3	2	3	.....	.....	10	12	1	.....	.....	.....	4	4.84	123.0
Japanese Series.																										
Hiroshima	N. 34 20	E. 132 27	8.58 p.m.	14	4	29.93	760.3	29.95	760.6	62.4	16.9	79.7	10	.....	4	9	6	.....	1	.....	1	.....	.....	6	11.86	301.2
Kioto	N. 35 01	E. 135 46	9.11 p.m.	162	49	29.81	757.1	29.98	761.4	60.1	15.6	80.9	6	9	.....	.....	6	1	2	6	1	.....	.....	5	8.41	213.6
Nagasaki	N. 32 44	E. 129 51	8.47 p.m.	189	58	29.78	756.3	29.98	761.4	63.9	17.7	83.5	3	.....	2	15	3	.....	2	5	1	.....	.....	7	0	0
Tokei	N. 35 40	E. 139 45	9.27 p.m.	63	19	29.92	759.9	29.98	761.6	61.0	16.1	86.3	10	1	.....	1	10	3	4	3	1	.....	.....	6	2.06	52.4
Wakayama	N. 34 14	E. 135 09	9.09 p.m.	48	15	29.92	760.0	29.97	761.2	63.5	17.5	78.4	2	.....	3	2	8	1	2	7	6	.....	.....	5	6.74	171.1
Mauritius Ser's.																										
Mauritius	S. 20 06	E. 57 33	3.58 p.m.	181	55	29.88	758.9	30.07	763.8	76.5	24.7	71.6	2		1	.....	.....	2	19	7	.....	.....	.....	5	4.77	121.2
Mexican Series.																										
Leon	N. 21 07	W. 101 35	5.22 a.m.	5902	1799	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mazatlan	N. 23 11	W. 106 17	5.03 a.m.	249	76	29.65	753.2	29.91	759.7	71.8	22.1	89.1	4	1	1	.....	1	.....	17	7	.....	.....	.....	4	Inap.	Inap.
Mexico	N. 19 26	W. 99 00	5.32 a.m.	7490	2283	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pabellon	N. 22 04	W. 102 04	5.20 a.m.	6312	1924	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Puebla	N. 19 02	W. 98 03	5.36 a.m.	7113	2168	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Luis Potosi	N. 22 10	W. 100 51	5.25 a.m.	6211	1893	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tlacotalpam	N. 18 37	W. 95 32	5.46 a.m.	13	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Zacatecas	N. 22 44	W. 102 26	5.18 a.m.	8100	2469	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for May, 1881.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
Netherland Series.	° ′	° ′																								
Flushing	N. 51 24	E. 3 35	0.22 p.m.	0	0	30.13	765.2	30.13	765.2	58.8	14.9	.....	6	2	12	4	.....	.....	4	3	.....	.....	.....	.....	2.98	75.7
Groningen	N. 53 12	E. 6 34	0.34 p.m.	0	0	30.04	763.0	30.10	764.4	58.1	14.5	.....	6	6	2	7	.....	.....	3	7	.....	.....	.....	.....	1.48	37.5
Helder	N. 52 58	E. 4 45	0.27 p.m.	0	0	30.10	764.4	30.10	764.4	53.1	11.7	.....	2	3	1	6	7	.....	.....	12	.....	.....	.....	.....	1.99	50.5
Hellevoetsluis	N. 51 49	E. 4 80	0.25 p.m.	0	0	30.11	764.7	30.11	764.7	65.3	18.5	71.2	5	3	4	8	1	1	1	7	1	.....	.....	.....	3.32	84.3
Utrecht	N. 52 05	E. 5 07	0.29 p.m.	43	13	30.06	763.6	30.11	764.9	61.3	16.3	56.9	5	3	2	10	1	3	3	4	.....	.....	.....	5	3.39	86.0
Norwegian Series.																										
Bergen	N. 60 24	E. 5 20	0.29 p.m.	49	15	29.95	760.6	30.00	762.1	53.8	12.1	58.8	3	9	6	.....	10	2	.....	.....	1	.....	.....	5	5.10	129.4
Christiania	N. 59 55	E. 10 45	0.51 p.m.	134	41	29.91	759.8	29.98	761.5	57.2	14.0	50.5	2	1	.....	10	12	2	1	3	.....	.....	.....	6	1.38	35.1
Gjæsvær	N. 71 07	E. 25 22	1.49 p.m.	23	7	29.82	757.5	29.85	758.1	31.6	—0.2	.....	1	3	9	6	1	3	.....	4	4	.....	.....	9	.....	.....
Lodingen	N. 68 24	E. 16 01	1.12 p.m.	43	13	29.90	759.5	29.95	760.7	37.6	3.1	70.2	6	1	4	10	1	.....	.....	5	4	.....	.....	7	3.36	85.4
Portuguese Series.																										
Angra	N. 38 39	W. 27 14	10.19 a.m.	144	44	30.10	764.5	30.25	768.4	61.9	16.6	81.6	3	2	10	2	2	2	4	6	.....	.....	.....	5	1.22	31.0
Campo Major	N. 39 02	W. 6 59	11.40 a.m.	945	288	29.05	737.9	30.03	762.7	70.7	21.5	40.5	6	1	11	2	1	.....	3	6	1	.....	.....	5	1.34	33.9
Funchal	N. 32 38	W. 16 55	11.00 a.m.	82	25	30.04	762.9	30.13	765.2	68.4	20.2	57.9	1	.....	1	21	1	1	1	4	.....	.....	.....	4	0.80	20.2
Lisbon	N. 38 42	W. 9 08	11.31 a.m.	335	102	29.75	755.6	30.10	764.6	67.3	19.6	52.7	9	5	2	.....	3	2	.....	10	.....	.....	.....	4	1.17	29.8
Ponta Delgada	N. 37 45	W. 25 41	10.25 a.m.	66	20	30.19	766.9	30.27	768.8	65.1	18.4	68.0	6	3	2	4	5	1	1	6	3	.....	.....	5	1.14	28.9
Russian Series.																										
Akmolinski	N. 51 03	E. 71 22	4.54 p.m.	?	?	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Archangel	N. 64 33	E. 40 32	2.50 p.m.	16	5	29.94	760.4	29.95	760.8	41.9	5.5	70.1	1	7	6	5	3	2	3	1	3	.....	.....	8	.....	.....
Astrakhan	N. 46 21	E. 48 02	3.20 p.m.	‖ 72	‖ 22	29.99	761.7	29.90	759.5	71.4	21.9	51.5	3	3	1	2	5	9	4	3	1	.....	.....	7	.....	.....
Barnaul ‡	N. 53 20	E. 83 47	5.45 p.m.	482	147	29.47	748.5	29.96	761.0	59.0	15.0	34.4	6	7	5	5	3	.....	1	.....	4	.....	.....	5	.....	.....
Dorpat	N. 58 23	E. 26 43	1.55 p.m.	223	68	29.83	757.6	30.07	763.8	55.8	13.2	50.8	4	.....	6	7	3	.....	4	6	1	.....	.....	5	.....	.....
Ekaterinburg	N. 56 49	E. 60 35	4.11 p.m.	876	267	28.98	736.2	29.93	760.1	61.3	16.3	36.2	.....	2	13	7	.....	5	2	1	1	.....	.....	8	.....	.....
Kasan	N. 55 47	E. 49 08	3.25 p.m.	249	76	29.70	754.4	29.97	761.2	63.3	17.4	43.8	3	5	3	7	1	4	1	2	5	.....	.....	7	.....	.....
Kertch	N. 45 21	E. 36 29	2.34 p.m.	20	6	29.92	759.9	29.94	760.5	63.1	17.3	82.3	2	6	1	1	8	4	.....	5	4	.....	.....	4	.....	.....
Kieff	N. 50 26	E. 30 31	2.10 p.m.	600	183	29.31	744.5	29.94	760.5	63.0	17.2	52.6	12	2	1	.....	4	2	2	8	.....	.....	.....	5	.....	.....
Krotkowo																										
Lugan	N. 48 35	E. 39 20	2.46 p.m.	187	57	29.69	754.2	29.89	759.3	69.8	21.0	45.2	3	4	2	4	4	2	8	3	1	.....	.....	6	.....	.....
Moscow	N. 55 46	E. 37 40	2.39 p.m.	512	156	29.48	748.7	30.02	762.4	60.8	16.0	45.8	9	4	3	1	10	2	1	.....	1	.....	.....	5	.....	.....
Nertchinsk	N. 51 19	E. 119 37	8.07 p.m.	1942	592	27.58	700.5	29.87	758.6	44.4	6.9	42.2	4	8	2	3	1	.....	1	1	11	.....	.....	4	.....	.....
Nikolaiev	N. 46 58	E. 31 58	2.16 p.m.	62	19	29.88	759.0	29.95	760.8	68.0	20.0	65.6	7	2	1	3	6	1	4	6	1	.....	.....	6	.....	.....
Nikolaievsk *a*	N. 53 08	E. 140 45	9.31 p.m.	59	18	29.67	753.6	29.76	755.8	37.2	2.9	75.5	.....	.....	2	.....	.....	5	4	.....	19	.....	.....	.....	0.80	20.2
Nukuss	N. 42 27	E. 59 37	4.07 p.m.	216	66	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pekin	N. 39 57	E. 116 29	7.54 p.m.	125	38	29.72	755.0	29.87	758.6	70.5	21.4	45.9	.....	3	.....	7	2	2	.....	1	16	.....	.....	4	.....	.....
St. Petersburg	N. 59 56	E. 30 16	2.09 p.m.	16	5	30.03	762.7	30.04	763.0	49.1	9.5	58.3	3	8	9	4	1	2	.....	3	1	.....	.....	6	.....	.....
Tashkend	N. 41 19	E. 69 16	4.45 p.m.	1621	494	28.37	720.6	29.86	758.5	77.9	25.5	49.9	.....	1	2	.....	.....	2	1	.....	25	.....	.....	4	.....	.....
Tiflis	N. 41 43	E. 44 47	3.07 p.m.	1342	409	28.52	724.5	29.89	759.3	70.3	21.3	49.2	.....	8	4	1	2	9	2	.....	5	.....	.....	7	.....	.....
Warsaw	N. 52 13	E. 21 02	1.32 p.m.	394	120	29.63	752.5	30.04	763.0	62.4	16.9	49.2	7	4	3	2	3	2	4	6	.....	.....	.....	5	.....	.....
Wilna	N. 54 51	E. 25 18	1.49 p.m.	387	118	29.64	752.9	30.05	763.3	62.1	16.7	47.5	6	3	5	5	5	2	1	3	1	.....	.....	5	.....	.....
Yeniseisk	N. 58 27	E. 92 09	6.16 p.m.	128	39	29.69	754.0	29.98	761.6	43.0	6.1	58.8	8	3	5	3	8	2	.....	1	1	.....	.....	7	.....	.....
Scottish Series.																										
Leith	N. 55 58	W. 3 10	11.55 a.m.	83	25	.....	.....	30.09	764.3	52.3	11.3	67.1	1	2	10	4	.....	1	11	2	.....	.....	.....	6	1.76	44.7
Monach Lt. House	N. 57 31	W. 7 42	11.37 a.m.	150	46	.....	.....	30.00	762.0	53.0	11.7	93.6	.....	1	3	5	8	5	4	5	.....	.....	.....	6	2.30	58.4
North Unst	N. 60 51	W. 0 53	0.04 a.m.	230	70	.....	.....	30.02	762.5	.....	.....	.....	2	1	5	6	3	4	3	7	.....	.....	.....	6	.....	.....
Spanish Series.																										
Barcelona	N. 41 23	E. 2 11	0.16 p.m.	98	30	29.95	760.6	30.05	763.3	68.7	20.4	56.4	.....	.....	.....	5	5	14	6	1	.....	.....	.....	1	0.24	6.1
Bilbao	N. 43 15	W. 2 59	11.56 a.m.	52	16	30.09	764.2	30.14	765.6	68.7	20.4	62.5	9	14	1	.....	1	1	4	1	.....	.....	.....	6	3.37	85.5
Burgos	N. 42 20	W. 3 46	11.53 a.m.	2821	860	27.16	689.9	.....	.....	59.4	15.2	74.6	4	.....	.....	3	5	.....	.....	19	.....	.....	.....	4	2.31	58.6
Madrid	N. 40 25	W. 3 42	11.53 a.m.	2152	656	27.85	707.3	30.02	762.5	69.3	20.7	47.2	.....	2	1	10	4	2	3	9	.....	.....	.....	3	0.09	2.4
Murcia ‡	N. 37 59	W. 1 10	0.03 p.m.	141	43	29.90	759.4	30.04	763.1	78.4	25.8	44.1	2	5	.....	.....	1	6	12	4	1	.....	.....	5	2.51	63.8
Santiago	N. 42 53	W. 8 28	11.34 a.m.	863	263	29.17	741.0	30.05	763.3	65.8	18.8	58.2	4	4	1	9	.....	.....	.....	13	.....	.....	.....	4	2.12	53.9
Sub-Series.																										
Havana	N. 23 08	W. 82 28	7.39 a.m.	62	19	29.88	759.0	29.95	760.8	76.3	24.6	80.6	.....	1	1	2	1	4	12	8	2	.....	.....	3	3.37	85.5
Manilla	N. 14 35	E. 121 00	8.12 p.m.	56	17	29.82	757.4	29.87	758.7	85.5	29.7	67.9	2	3	1	.....	6	8	10	1	.....	.....	.....	2	6.82	173.2
San Fernando	N. 36 28	W. 6 13	11.43 a.m.	95	29	29.98	761.5	30.08	764.1	69.4	20.8	59.1	.....	1	12	2	1	2	9	4	.....	.....	.....	4	1.53	38.8
San Juan de Porto Rico	N. 18 30	W. 66 10	7.44 a.m.	82	25	29.88	759.0	29.98	761.4	79.2	26.2	86.2	.....	.....	.....	.....	4	21	6	.....	.....	.....	.....	7	5.74	145.7
Tuguegarao	N. 17 37	E. 121 30	8.15 p.m.	125	38	29.78	756.4	29.92	759.9	82.8	28.2	74.0	7	12	5	1	2	2	1	1	.....	.....	.....	5	0.65	16.4
Swedish Series.																										
Haparanda	N. 65 47	E. 24 03	1.44 p.m.	29	9	29.93	760.1	29.96	761.0	40.6	4.8	65.0	8	2	1	5	13	.....	.....	2	.....	.....	.....	7	1.63	41.5
Umea	N. 63 50	E. 20 17	1.29 p.m.	39	12	29.94	760.5	30.00	761.9	47.7	8.7	56.7	3	5	.....	10	5	2	.....	5	1	.....	.....	6	1.12	28.5
Hernosand	N. 62 32	E. 17 57	1.20 p.m.	46	14	29.97	761.1	30.02	762.4	48.2	9.0	54.6	1	2	4	4	9	4	2	5	.....	.....	.....	5	0.73	18.5
Stockholm	N. 59 20	E. 18 04	1.20 p.m.	144	44	29.84	758.0	30.02	762.5	52.9	11.6	53.8	3	2	6	4	7	1	2	5	1	.....	.....	6	1.63	41.4
Wisby	N. 57 39	E. 18 19	1.20 p.m.	52	16	29.98	761.5	30.04	763.0	48.7	9.3	67.4	7	4	7	7	.....	2	1	3	.....	.....	.....	4	1.15	29.2
Sub-Series.																										
Upsala	N. 59 51	E. 17 37	1.19 p.m.	79	24	29.91	759.7	30.00	761.9	53.4	11.9	56.8	7	2	4	6	4	3	.....	5	.....	.....	.....	6	1.41	35.7
Swiss Series.																										
Geneva	N. 46 12	E. 6 08	0.33 p.m.	1338	408	28.63	727.3	30.04	763.0	61.0	16.1	50.7	20	.....	.....	7	3	.....	.....	1	.....	.....	.....	5	2.01	51.0
Zurich ‡	N. 47 22	E. 8 40	0.43 p.m.	1542	470	28.44	722.4	30.06	763.5	61.7	16.5	59.0	2	6	7	.....	.....	.....	10	2	4	.....	.....	5	2.60	66.1
Turkish Series.																										
Constantinople	N. 41 00	E. 28 59	2.02 p.m.	?	?	.....	.....	29.94	760.5	65.1	18.4	62.3	8	2	.....	9	.....	1	2	9	.....	.....	.....	6	2.54	64.5
Valona	N. 40 27	E. 19 27	1.25 p.m.	?	?	.....	.....	30.02	762.5	70.2	21.2	.....	.....	2	11	15	2	1	.....	.....	.....	.....	.....	4	4.45	113.0
Sub-Series.																										
Beirut	N. 33 54	E. 35 28	2.30 p.m.	111	34	.....	.....	29.92	759.9	75.6	24.2	63.0	2	5	4	13	.....	.....	.....	7	.....	.....	.....	3	0	0

‖ Below sea level.

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea. Feet.	Met'rs	Mean Barometer. Actual. Inch.	Mill.	Reduced. Inch.	Mill.	Mean Temperature. Fah.	Cent.	Mean Rel. Humidity.	Wind. Directions. N	NW	W	SW	S	SE	E	NE	C	Total Movement. Miles	Kil.	Average Cloudiness. 0–10	Total Precipitation. Inch.	Mill.
U. S. SERIES.	° ′	° ′																								
Albany	N. 42 40	W. 73 45	7.13 a.m.	75	23	30.00	762.0	30.08	764.0	61.6	16.4	70.1	5	.....	4	2	13	.....	1	6	.....	3944	6347	6	3.90	99.1
Alpena	N. 45 05	W. 83 28	6.34 a.m.	609	185	29.41	747.0	30.05	753.3	50.9	10.5	80.8	3	8	8	1	4	.....	5	1	1	5464	8793	4	5.02	127.5
Atlanta	N. 33 45	W. 84 23	6.31 a.m.	1131	345	28.90	734.0	30.02	752.5	64.5	18.1	75.3	1	5	2	.....	.....	2	14	6	1	5912	9514	5	1.27	32.3
Atlantic City	N. 39 22	W. 74 25	7.11 a.m.	13	4	30.08	754.0	30.09	754.3	56.1	13.4	89.4	2	1	3	4	5	1	4	10	1	7126	11468	4	1.68	42.7
Attou, Aleutian	N. 52 38	E. 172 30	11.38 p.m.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Augusta	N. 33 28	W. 81 54	6.41 a.m.	183	56	29.90	759.4	30.10	754.5	68.0	20.0	73.7	1	4	1	2	.....	5	7	8	3	3259	5245	3	1.35	34.3
Baltimore	N. 39 18	W. 76 38	7.02 a.m.	45	14	30.05	753.3	30.09	754.3	63.1	17.3	71.7	7	4	2	.....	8	2	5	3	.....	3844	6186	4	2.30	58.4
Barnegat	N. 39 48	W. 74 09	7.12 a.m.	20	6	30.05	753.3	30.07	753.8	56.8	13.8	85.1	3	.....	1	6	4	2	6	9	.....	8077	12998	4	1.77	45.0
Bismarck	N. 46 48	W. 100 38	5.25 a.m.	1693	516	28.16	715.3	30.01	752.2	52.5	11.4	74.1	3	6	1	.....	.....	7	5	3	6	8502	13940	5	2.27	57.7
Boise City	N. 43 46	W. 116 05	4.24 a.m.	2750	838	27.17	690.1	30.13	755.3	46.9	8.3	68.0	3	5	11	1	2	3	1	2	3	4347	6995	4	0.07	1.8
Boston	N. 42 21	W. 71 04	7.23 a.m.	142	43	29.93	750.2	30.08	754.0	53.4	11.9	77.7	2	2	3	7	.....	1	5	7	4	5530	8900	6	4.10	105.7
Brackettville.....c.	N. 29 17	W. 100 51	5.27 a.m.	1170	356	28.75	730.2	29.77	755.1	67.1	19.5	89.5	1	1	3	.....	1	4	16	.....	2	6290	10123	6	5.29	134.4
Brownsville	N. 26 00	W. 97 30	5.38 a.m.	43	13	29.85	758.4	29.91	759.7	74.7	23.7	85.0	1	.....	.....	.....	2	16	4	2	6	4688	7544	4	3.43	87.1
Buffalo	N. 42 53	W. 78 55	6.52 a.m.	664	202	29.34	745.2	30.04	753.0	53.0	11.7	79.9	1	.....	3	15	.....	.....	4	8	.....	4800	7725	4	2.18	55.4
Burlington	N. 44 29	W. 73 13	7.15 a.m.	268	82	29.76	755.9	30.05	753.3	55.1	12.8	80.6	12	.....	2	3	11	2	1	.....	.....	5217	8395	7	2.27	57.7
Cairo	N. 37 00	W. 89 12	6.11 a.m.	377	115	29.56	753.4	30.04	753.0	68.1	20.1	80.9	2	.....	.....	.....	5	2	5	4	13	3316	5336	4	2.44	62.0
Campc	N. 32 22	W. 116 08	4.22 a.m.	2500	762	27.35	694.7	29.92	760.0	45.2	7.3	72.3	.....	5	7	4	11	.....	3	1	.....	4517	7269	3	0.12	3.0
Camp Thomas	N. 32 04	W. 110 05	4.49 a.m.	2710	826	27.13	689.1	.....	.....	54.3	12.4	50.2	.....	.....	1	.....	.....	1	.....	.....	29	.....	.....	1	0.07	1.8
Cape Henry	N. 36 56	W. 76 00	7.04 a.m.	16	5	30.06	753.5	30.08	764.0	62.8	17.1	81.0	2	4	3	4	4	5	1	7	1	8753	14102	4	1.34	34.0
Cape May.........b.	N. 38 56	W. 74 58	7.08 a.m.	27	8	30.04	753.0	30.07	753.8	57.4	14.1	84.9	3	.....	1	1	9	3	2	10	.....	8922	14358	4	3.51	89.2
Castroville	N. 29 25	W. 98 50	5.33 a.m.	780	238	29.14	740.1	29.82	757.4	69.0	20.6	82.8	1	2	5	3	8	7	2	1	2	3803	6120	7	3.09	93.7
Cedar Keys	N. 29 12	W. 83 02	6.36 a.m.	22	7	30.00	752.0	30.02	752.5	72.3	22.4	79.9	3	4	2	1	1	.....	3	16	1	6757	10890	2	2.25	57.1
Champaign	N. 40 07	W. 88 14	6.15 a.m.	767	234	29.22	742.2	30.00	752.0	60.8	16.0	78.2	6	.....	1	4	5	7	4	3	1	7883	12685	3	3.63	92.2
Charleston........h.	N. 32 45	W. 79 55	6.49 a.m.	52	16	30.00	752.0	30.05	763.5	69.7	20.9	79.3	6	3	1	2	.....	3	6	10	.....	6474	10419	3	0.48	12.2
Charlotte	N. 35 13	W. 80 51	6.45 a.m.	808	246	29.23	742.4	30.02	752.5	66.1	18.9	69.9	8	.....	.....	5	4	2	2	10	.....	3770	6057	4	2.25	57.4
Chattanooga	N. 35 04	W. 85 15	6.27 a.m.	783	239	29.27	743.4	30.06	763.5	64.9	18.3	80.6	1	5	2	.....	4	3	2	4	10	3052	5877	4	4.46	113.3
Cheyenne	N. 41 12	W. 104 42	5.09 a.m.	6089	1856	24.06	611.1	30.00	752.0	43.0	6.1	73.9	4	10	2	6	4	.....	.....	2	3	6532	10512	3	1.14	29.0
Chicago	N. 41 52	W. 87 35	6.18 a.m.	661	201	29.33	745.0	30.01	752.2	58.6	14.8	72.2	6	2	2	8	1	4	5	2	1	5508	8951	2	1.85	47.0
Chincoteague	N. 37 55	W. 75 20	7.06 a.m.	18	5	30.05	763.5	30.08	754.0	57.5	14.2	91.3	2	.....	2	8	2	5	.....	12	.....	10318	16605	3	1.73	43.9
Cincinnati	N. 39 06	W. 84 26	6.30 a.m.	620	189	29.42	747.3	30.05	763.5	64.0	17.8	71.3	2	2	.....	2	5	5	8	7	.....	3543	5702	3	2.23	56.6
Cleveland	N. 41 30	W. 81 47	6.42 a.m.	690	210	29.34	745.2	30.05	763.5	57.4	14.1	75.7	5	.....	1	3	7	9	1	5	.....	5500	9012	4	0.74	18.8
Coleman City ....f.	N. 31 55	W. 99 10	5.32 a.m.	1750	533	28.15	715.0	29.78	750.4	62.3	16.8	88.2	1	1	.....	1	6	7	.....	1	8	4570	7355	5	2.70	68.6
Columbus	N. 39 57	W. 83 03	6.36 a.m.	805	245	29.22	742.2	30.04	753.0	61.2	16.2	72.1	4	2	2	3	5	1	5	7	2	4628	7448	4	2.00	50.8
Concho	N. 31 22	W. 100 20	5.26 a.m.	1900	579	28.03	711.9	29.66	753.4	62.7	17.1	88.0	.....	1	1	1	6	1	4	1	16	6167	9925	6	6.82	173.2
Corsicana	N. 32 05	W. 96 30	5.41 a.m.	448	136	29.51	749.5	29.96	751.0	69.2	20.7	81.2	1	2	1	1	12	3	.....	1	10	3829	6162	5	14.33	364.0
Davenport	N. 41 32	W. 90 30	6.06 a.m.	615	187	29.38	746.2	30.00	762.0	62.4	16.9	69.1	1	2	1	4	4	4	8	5	2	5345	8502	4	1.34	34.0
Dayton	N. 46 23	W. 117 50	4.16 a.m.	1660	505	28.30	718.8	29.98	751.5	45.5	7.5	63.0	8	1	2	6	9	2	.....	1	2	3029	5840	3	0.45	11.4
Deadwood	N. 44 22	W. 103 34	5.14 a.m.	4600	1402	25.38	644.6	.....	.....	45.6	7.6	74.4	1	.....	2	14	3	1	3	5	2	2771	4459	4	3.70	94.0
Decatur ....e.	N. 33 10	W. 97 30	5.38 a.m.	1150	350	28.75	730.2	29.88	758.9	67.8	19.9	79.7	1	1	2	1	2	17	1	1	.....	4644	7474	7	5.82	147.8
Del. Breakwater	N. 38 48	W. 75 05	7.08 a.m.	20	6	30.06	763.5	30.08	764.0	57.7	14.3	88.4	.....	1	1	9	2	2	.....	14	2	9565	15554	5	1.23	31.2
Denison	N. 33 50	W. 96 40	5.41 a.m.	767	234	29.16	740.7	29.92	760.0	69.5	20.8	84.7	3	2	1	3	11	5	6	.....	.....	3984	6412	7	8.03	204.0
Denver	N. 39 45	W. 105 04	5.08 a.m.	5294	1614	24.80	629.9	30.02	752.5	49.2	9.6	73.7	3	2	5	2	13	4	1	1	.....	4092	7551	3	2.21	56.1
Des Moines	N. 41 35	W. 93 40	5.53 a.m.	849	259	29.11	739.4	29.97	751.2	60.3	15.7	84.3	2	1	1	4	7	7	2	6	1	4594	7393	7	3.82	97.0
Detroit	N. 41 21	W. 83 07	6.36 a.m.	661	201	29.35	745.7	30.04	753.0	58.6	14.8	74.2	9	1	2	3	6	4	2	4	.....	6593	10510	4	2.45	62.2
Dodge City	N. 37 39	W. 100 08	5.27 a.m.	2512	756	27.37	695.2	29.61	752.1	57.0	13.9	88.3	5	4	1	3	8	5	.....	4	1	10570	17020	6	12.82	325.6
Dubuque	N. 42 30	W. 90 44	6.05 a.m.	665	203	29.32	744.7	30.01	752.2	60.6	15.9	70.9	1	5	1	.....	9	4	7	2	2	3759	6049	5	2.20	55.9
Duluth	N. 46 48	W. 92 08	6.00 a.m.	644	184	29.35	745.5	30.03	752.7	47.1	8.4	83.4	3	1	1	.....	.....	.....	1	21	4	3318	5340	5	1.77	45.0
Eagle Pass	N. 28 40	W. 100 15	5.26 a.m.	780	238	29.14	740.1	29.85	758.2	68.8	20.4	85.3	.....	3	.....	1	1	17	1	.....	8	5122	8243	5	8.10	207.3
Eagle Rock	N. 43 30	W. 112 04	4.40 a.m.	4650	1417	25.24	641.1	29.89	759.2	41.1	5.1	60.5	10	3	1	11	3	.....	1	.....	2	8025	12910	3	0.74	18.8
Eastport	N. 44 55	W. 66 54	7.40 a.m.	61	18	30.01	752.2	30.08	754.0	45.7	7.6	78.2	4	5	.....	2	7	1	2	9	1	7183	11560	5	13.22	335.8
El Paso	N. 31 46	W. 106 32	5.02 a.m.	3760	1145	25.16	664.5	.....	.....	60.1	15.6	51.1	.....	7	3	.....	1	1	5	8	6	3732	6005	2	1.83	46.5
Erie	N. 42 07	W. 80 10	6.47 a.m.	681	208	29.33	745.0	30.04	753.0	57.7	14.3	78.5	1	3	5	4	6	3	1	8	.....	5840	9398	4	2.10	54.9
Escanaba	N. 45 46	W. 87 14	6.20 a.m.	612	186	29.39	745.5	30.04	753.0	50.0	10.0	80.4	14	1	1	1	3	3	2	2	4	5208	8381	4	7.91	200.9
Florence	N. 33 03	W. 111 17	4.43 a.m.	1480	451	28.33	719.6	29.93	750.2	59.8	15.4	41.1	.....	.....	3	2	.....	.....	.....	18	8	2164	3482	1	0.13	3.3
Fort Apache	N. 33 47	W. 109 58	4.49 a.m.	5050	1539	24.98	634.5	30.42	772.7	42.3	5.7	54.8	.....	.....	.....	.....	.....	1	15	15	.....	6332	10174	2	0.35	8.9
Fort Assinnaboine	N. 48 37	W. 109 43	4.49 a.m.	2710	826	27.12n	688.8n	.....	.....	44.0n	6.7	59.7	2	1	11	7	.....	.....	1	4	4	4004	6444	3	0.90	22.9
Fort Bennett	N. 44 42	W. 100 38	5.25 a.m.	1510	457	28.37	720.6	.....	.....	54.6	12.6	78.4	3	8	2	2	2	10	2	1	1	7091	11412	7	4.10	104.1
Fort Benton......h.	N. 47 51	W. 110 40	4.45 a.m.	2700	823	27.15	689.6	.....	.....	46.0	7.8	61.5	.....	1	7	5	.....	.....	1	3	6	1816	2923	4	1.43	36.3
Fort Buford	N. 48 03	W. 103 58	5.12 a.m.	1900	579	27.98	710.7	29.81	757.2	46.7	8.2	79.1	1	5	3	1	2	2	3	5	9	6245	10050	4	1.00	25.4
Fort Custer	N. 45 48	W. 107 38	4.58 a.m.	3040	927	26.84	681.7	.....	.....	46.0	7.8	78.6	3	6	2	2	2	10	4	1	1	5462	8790	4	1.80	45.7
Fort Davis	N. 30 30	W. 103 45	5.13 a.m.	4940	1506	25.15	638.8	30.11	754.8	56.4	13.6	71.1	2	.....	4	10	4	2	4	3	2	4573	7359	3	6.31	160.3
Fort Elliott	N. 35 31	W. 100 27	5.28 a.m.	2550	808	27.21	691.1	29.44	747.8	56.8	13.8	77.8	2	8	.....	.....	4	8	2	4	3	9205	14815	7	5.27	133.9
Fort Gibson	N. 35 43	W. 95 16	5.48 a.m.	540	165	29.40	746.7	29.92	750.0	67.3	19.6	87.5	.....	.....	.....	.....	4	11	8	.....	8	3523	5670	6	6.96	176.8
Fort Grant	N. 32 25	W. 109 56	4.49 a.m.	4860	1481	25.17	639.3	29.97	751.2	57.4	14.1	28.6	6	2	.....	1	2	1	8	9	2	6030	9704	2	0.26	6.6
Fort Griffin	N. 32 53	W. 99 21	5.33 a.m.	1250	384	28.58	725.9	29.80	756.9	66.5	19.2	80.6	5	.....	1	2	4	5	5	1	8	5904	9501	6	3.70	94.0
Fort Keogh	N. 46 17	W. 105 55	5.05 a.m.	2372	723	27.47	697.7	.....	.....	47.2	8.4	75.2	2	6	3	1	.....	6	2	6	5	6122	9852	3	0.76	19.3
Fort Macon	N. 30 48	W. 99 58	5.28 a.m.	2240	683	27.09	703.3	29.56	750.8	63.4	17.4	82.0	1	.....	2	8	9	4	6	1	.....	5931	9545	5	5.25	133.6
Fort McKavett	N. 34 42	W. 76 40	7.01 a.m.	14	3	30.05	753.3	30.06	753.5	66.2	19.0	85.5	9	2	1	2	3	3	4	7	.....	7705	12401	5	1.74	44.2
Fort Missoula	N. 46 50	W. 114 01	4.32 a.m.	3140	957	25.73	678.9	.....	.....	47.8	8.8	71.9	3	7	3	5	2	2	1	5	3	3990	6421	4	0.29	7.4
Fort St. Michael	N. 63 48	W. 162 00	1.20 a.m.	30	9	29.85	758.4	29.90	759.4	27.3	−2.6	100.0	10	2	4	4	3	2	2	1	3	7290	11732	5	2.66	67.6
Fort Shaw	N. 47 29	W. 111 46	4.41 a.m.	3550	1082	26.38	670.0	.....	.....	39.4	4.1	67.7	3	3	14	3	1	1	1	5	.....	6365	10243	4	1.46	37.1
Fort Sill	N. 34 40	W. 98 30	5.34 a.m.	1200	366	28.71	729.2	29.78	755.4	63.8	17.7	90.2	7	3	.....	1	9	.....	4	2	5	6787	10922	6	6.04	153.4
Fort Stevenson d.	N. 47 36	W. 101 23	5.22 a.m.	1750	534	28.11	714.0	.....	.....	51.6	10.9	82.8	3	4	2	.....	4	3	4	1	6	5928	9540	5	2.31	58.7
Fort Verde	N. 34 24	W. 111 53	4.38 a.m.	?	?	.....	.....	.....	.....	53.4	11.9	73.7	2	3	7	10	8	.....	.....	1	.....	.....	.....	2	0.07	1.8
Fredericksburg	N. 30 20	W. 98 40	5.33 a.m.	1700	518	28.21	716.5	29.73	755.1	64.8	18.2	85.5	1	2	4	9	1	3	.....	.....	11	4073	7520	5	6.30	160.0
Galveston	N. 29 18	W. 94 50	5.49 a.m.	40	12	29.93	750.2	29.97	751.2	74.4	23.6	84.7	.....	3	4	6	10	5	.....	.....	3	6503	10502	5	3.50	88.9
Grand Haven	N. 43 05	W. 86 18	6.23 a.m.	620	189	29.39	746.5	30.03	752.7	59.3	15.2	71.9	1	4	.....	4	3	1	2	11	5	6844	11014	3	1.19	30.2
Hatteras	N. 35 14	W. 75 30	7.05 a.m.	19	6	30.04	753.0	30.00	753.5	65.9	18.8	84.9	3	1	3	2	2	4	3	13	.....	10520	16940	4	1.13	28.7
Helena	N. 46 33	W. 112 02	4.40 a.m.	4100	1250	25.80	655.3	.....	.....	48.5	9.2	50.3	9	.....	1	1	16	.....	.....	.....	4	5131	8257	3	1.60	40.6
Henrietta.........f.	N. 33 42	W. 98 00	5.36 a.m.	980	300	28.94	735.1	29.85	758.2	66.2	19.0	85.4	.....	1	1	2	.....	15	2	2	2	4529	7289	7	3.00	75.2
Indianapolis	N. 39 47	W. 86 06	6.24 a.m.	753	229	29.24	742.7	30.00	752.0	64.4	18.0	65.4	8	1	2	.....	4	4	4	2	6	2803	4511	3	3.78	95.6
Indianola	N. 28 32	W. 96 38	5.42 a.m.	25	8	29.93	750.2	29.95	751.0	73.7	23.2	88.2	.....	2	1	1	15	9	1	.....	2	7958	12807	5	2.62	66.5
Jacksboro........a.	N. 33 10	W. 98 00	5.35 a.m.	1120	341	28.78	731.0	29.88	758.9	65.6	18.7	83.9	.....	2	.....	4	7	13	2	2	.....	5084	8182	7	3.53	89.7
Jacksonville	N. 30 24	W. 81 40	6.41 a.m.	43	13	29.98	751.5	30.03	752.7	73.6	23.1	77.0	1	1	2	3	3	.....	6	15	.....	5227	8412	2	2.61	66.3
Keokuk	N. 40 23	W. 91 25	6.02 a.m.	618	188	29.35	745.5	29.98	751.5	63.3	17.4	75.1	1	1	.....	2	8	5	8	5	1	5595	9005	6	1.35	34.3
Key West	N. 24 32	W. 81 48	6.41 a.m.	27	8	29.94	750.5	29.98	751.5	78.0	25.6	73.7	3	1	3	.....	1	6	8	7	2	6325	10179	3	4.01	101.9
Kitty Hawk	N. 36 00	W. 75 23	7.05 a.m.	22	7	30.08	754.0	30.10	754.5	62.3	16.8	85.1	3	2	3	5	1	2	1	12	2	10430	16785	5	0.80	20.3
Knoxville	N. 35 56	W. 83 58	6.32 a.m.	980	299	29.08	738.6	30.07	763.8	63.0	17.2	80.7	2	1	1	3	4	.....	3	10	6	3459	5567	4	1.14	29.0
La Crosse	N. 43 48	W. 91 23	6.03 a.m.	702	214	29.25	742.9	29.95	750.7	62.4	16.9	69.4	4	1	2	2	10	6	3	3	.....	4735	7622	5	3.13	79.5
La Mesilla	N. 32 17	W. 105 48	5.01 a.m.	3900	1189	26.03	661.2	30.18	756.6	55.2	12.9	58.1	2	1	.....	1	1	3	.....	.....	23	1981	3188	3	1.75	44.4
Laredo	N. 27 32	W. 99 25	5.30 a.m.	460	136	29.47	748.5	29.80	755.9	71.5	21.9	88.4	4	.....	.....	.....	1	18	2	3	3	3902	6280	6	7.75	196.8
Leavenworth	N. 39 19	W. 94 58	5.48 a.m.	842	256	29.10	739.1	29.92	760.0	64.2	17.9	77.5	4	2	1	.....	5	9	7	2	1	4941	7952	7	3.65	92.7
Lewiston	N. 46 25	W. 116 59	4.20 a.m.	780	238	29.21	741.9	29.85	758.4	47.2	8.4	51.2	.....	2	5	4	1	.....	8	5	6	2981	4797	5	0.23	5.8
Little Rock	N. 34 40	W. 92 12	5.59 a.m.	298	91	29.68	753.9	29.99	751.7	66.9	19.4	90.7	1	2	.....	2	5	.....	5	3	13	3117	5010	6	5.51	140.0
Los Angeles	N. 34 03	W. 118 16	4.15 a.m.	371	113	29.57	751.1	29.93	750.2	54.5	12.4	83.6	1	.....	2	1	2	5	5	13	3	4327	6954	5	0.01	0.3
Louisville	N. 38 18	W. 85 52	6.25 a.m.	530	162	29.47	748.5	30.01	752.2	65.7	18.7	77.4	8	.....	5	4	4	2	3	5	.....	4457	7173	3	2.35	59.7
Lynchburg	N. 37 30	W. 79 02	6.52 a.m.	652	199	29.41	747.0	30.07	753.8	65.7	18.7	67.9	.....	2	1	1	3	1	2	8	13	1995	3210	3	2.20	55.9
Madison	N. 43 03	W. 89 30	6.10 a.m.	949	289	29.02	737.1	29.99	751.7	58.1	14.5	79.5	2	3	3	.....	8	3	8	4	.....	5750	9254	3	4.25	107.9
Marquette	N. 46 33	W. 87 36	6.19 a.m.	673	205	29.33	745.0	30.04	753.0	52.0	11.1	71.7	1	8	2	6	2	1	3	1	7	4818	7754	4	4.47	113.5
Mason	N. 30 42	W. 99 02	5.32 a.m.	1620	494	28.30	718.8	30.02	752.5	65.7	18.7	83.4	.....	3	3	3	13	.....	1	.....	8	4035	6494	4	5.29	134.4
Memphis	N. 35 07	W. 90 07	6.08 a.m.	321	98	29.70	754.4	30.03	752.7	69.6	20.9	78.1	1	.....	.....	.....	3	1	4	1	21	1830	2993	5	2.80	71.1
Milwaukee	N. 43 03	W. 87 54	6.17 a.m.	697	212	29.30	744.2	30.02	752.5	55.0	12.8	75.2	10	3	.....	6	2	1	2	4	3	5555	8950	3	2.55	64.8
Mobile	N. 30 42	W. 87 59	6.16 a.m.	69	21	29.95	750.7	30.02	752.5	70.5	21.4	81.1	8	7	1	.....	1	8	2	4	.....	5352	8613	4	1.44	36.6
Montgomery	N. 32 22	W. 86 23	6.23 a.m.	219	66	29.82	757.4	30.05	753.3	68.0	20.0	79.2	3	1	1	.....	1	6	10	9	.....	3633	5847	4	1.41	35.8
Moorhead	N. 46 52	W. 96 40	5.41 a.m.	923	281	28.98	736.1	29.92	760.0	53.3	11.8	82.2	4	3	1	.....	7	10	2	3	1	8659	13935	6	2.80	71.1
Morgantown	N. 39 36	W. 79 52	6.48 a.m.	963	293	29.07	738.4	30.04	763.0	60.9	16.1	79.0	5	1	1	4	1	1	.....	1	17	3112	5008	4	3.28	83.3
Mt. Washington	N. 44 16	W. 71 16	7.22 a.m.	6272	1902	23.83	605.3	30.19	756.8	37.1	2.8	83.7	1	14	1	1	2	5	3	3	1	20183	32400	6	12.50	317.5

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for May, 1881.																				Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.															
						Actual.		Reduced.					Directions.									Total Movement.						
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.		Inch.	Mill.
U.S. Series—*Continued.*	° ′	° ′																										
Nashville	N. 36 11	W. 86 53	6.21 a.m.	507	154	29.52	749.8	30.04	763.0	67.2	19.6	78.5	2	2	5	2	3	6	6	2	3	2663	4286	4	3.67	93.2
New Haven	N. 41 17	W. 72 57	7.16 a.m.	107	32	29.96	761.0	30.08	764.0	55.6	13.1	80.7	6	2	.....	4	4	2	3	8	2	4676	7525	6	3.89	98.8
New London	N. 41 22	W. 72 09	7.19 a.m.	47	14	30.05	763.3	30.10	764.5	56.3	13.5	81.1	5	3	5	5	4	2	6	1	.....	4775	7684	5	4.85	123.2
New Orleans	N. 29 58	W. 90 07	6.08 a.m.	52	16	29.95	760.7	30.00	762.0	72.6	22.6	81.0	.....	1	2	1	3	9	5	2	8	4426	7123	3	3.20	81.3
Newport	N. 41 29	W. 71 19	7.23 a.m.	44	13	30.03	762.7	30.08	764.0	53.0	11.7	84.4	10	1	1	9	.....	2	4	2	2	5477	8814	5	2.90	73.7
New River	N. 34 30	W. 77 23	6.58 a.m.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Shoreham	N. 41 10	W. 71 37	7.22 a.m.	27	8	30.05	763.3	30.08	764.0	51.6	10.9	85.5	4	.....	1	6	2	1	1	9	7	9007	14495	3	5.51	140.0
New York	N. 40 43	W. 74 00	7.12 a.m.	164	50	29.91	759.7	30.09	764.3	56.5	13.6	84.4	4	1	4	2	2	3	9	6	.....	5826	9376	6	2.33	59.2
Norfolk	N. 36 51	W. 76 19	7.03 a.m.	30	9	30.04	763.0	30.09	764.3	64.1	17.8	80.0	2	2	3	6	2	1	2	10	3	5677	9136	5	1.49	37.8
North Platte	N. 41 08	W. 100 53	5.24 a.m.	2841	866	27.08	687.8	29.61	752.1	53.4	11.9	85.1	4	8	1	.....	6	5	3	4	.....	11418	18375	7	4.84	122.9
Olympia	N. 47 02	W. 122 56	3.56 a.m.	36	11	30.03	762.7	30.07	763.8	42.8	6.0	88.6	8	.....	1	.....	8	9	.....	3	2	3294	5301	7	1.54	39.1
Omaha	N. 41 16	W. 96 00	5.45 a.m.	1113	339	28.84	732.5	29.91	759.7	61.9	16.6	82.9	6	1	1	1	10	6	2	4	.....	6511	10478	8	7.94	201.7
Oswego	N. 43 29	W. 76 35	7.01 a.m.	304	93	29.72	754.9	30.04	763.0	55.2	12.9	80.1	1	1	5	4	10	3	.....	6	1	4381	7050	4	2.41	61.2
Pensacola	N. 30 25	W. 87 12	6.19 a.m.	30	9	29.99	761.7	30.02	762.5	71.9	22.2	81.1	5	5	2	2	4	3	2	8	.....	5432	8742	3	1.40	35.6
Philadelphia	N. 39 57	W. 75 10	7.07 a.m.	52	16	30.03	762.7	30.08	764.0	58.3	14.6	83.2	.....	.....	9	1	2	2	11	6	.....	6781	10913	5	2.71	68.8
Phœnix	N. 33 18	W. 112 00	4.40 a.m.	1120	341	28.72	729.5	30.50	774.7	59.4	15.2	66.2	3	.....	1	2	1	.....	18	1	5	1721	2770	2	0.12	3.0
Pikes Peak	N. 38 48	W. 104 59	5.07 a.m.	14134	4308	17.84	453.1	30.05	763.3	21.6	—5.8	52.2	2	2	1	13	1	.....	.....	9	3	11269	18135	3	3.71	94.2
Pioche	N. 37 57	W. 114 26	4.30 a.m.	6110	1862	23.98	609.1	29.75	755.6	47.2	8.4	41.3	3	7	3	3	11	.....	.....	.....	4	5360	8626	2	0.21	5.3
Pittsburg	N. 40 32	W. 80 02	6.48 a.m.	776	236	29.25	742.9	30.05	763.3	59.3	15.2	78.5	6	3	6	2	2	.....	1	7	4	3668	5903	4	2.34	59.4
Port Eads	N. 29 00	W. 89 15	6.11 a.m.	7	2	30.00	762.0	30.01	762.2	72.8	22.7	87.6	2	3	.....	2	3	7	12	2	.....	7221	11621	2	0.41	10.4
Port Huron	N. 42 58	W. 82 29	6.38 a.m.	633	193	29.39	746.5	30.05	763.3	53.6	12.0	78.9	10	.....	.....	4	7	1	3	6	.....	6470	10412	4	2.41	61.2
Portland, Maine	N. 43 40	W. 70 16	7.27 a.m.	45	14	30.02	762.5	30.07	763.8	52.9	11.6	75.8	4	3	3	4	2	3	1	.....	3	4787	7704	5	1.38	35.1
Portland, Oregon	N. 45 30	W. 122 28	3.57 a.m.	67	20	30.02	762.5	30.09	764.3	47.9	8.8	78.8	4	10	1	2	7	3	1	.....	3	4787	7704	5	1.38	35.1
Portsmouth	N. 35 02	W. 76 04	7.04 a.m.	40	12	.....	.....	.....	.....	66.3	19.1	78.4	2	3	2	4	.....	.....	3	16	1	10870	17493	5	2.13	54.1
Prescott	N. 34 29	W. 112 13	4.38 a.m.	5340	1628	24.70	627.4	30.06	763.5	44.2	6.8	49.7	.....	1	.....	12	16	.....	.....	.....	2	5383	8663	2	0.44	11.2
Punta Rassa	N. 26 36	W. 82 10	6.40 a.m.	13	4	29.95	760.7	29.97	761.2	74.3	23.5	76.5	2	2	2	1	.....	1	8	14	1	7429	11956	3	3.13	79.5
Red Bluff	N. 40 10	W. 122 16	3.59 a.m.	350	106	29.57	751.1	29.91	759.7	58.3	14.6	65.5	10	8	.....	1	8	2	.....	.....	2	4728	7609	3	0.79	20.1
Rio Grande City	N. 26 22	W. 98 45	5.33 a.m.	230	70	29.76	755.9	29.94	760.5	72.0	22.2	87.2	.....	1	.....	.....	.....	.....	21	3	1	7008	11278	6	2.93	74.4
Rochester	N. 43 08	W. 77 51	6.58 a.m.	589	179	29.42	747.3	30.03	762.7	57.3	14.1	78.6	.....	2	9	5	1	2	5	4	3	4724	7602	4	5.86	148.8
Roseburg	N. 43 10	W. 123 16	3.55 a.m.	511	156	29.52	749.8	30.09	764.3	45.3	7.4	82.3	7	1	.....	1	....	1	2	1	18	3092	4976	4	0.73	18.5
Sacramento	N. 38 35	W. 121 31	4.02 a.m.	70	21	29.85	758.2	29.93	760.2	55.7	13.2	77.8	2	.....	.....	2	9	13	.....	2	3	5428	8735	2	Inap.	Inap.
Saint Louis	N. 38 37	W. 90 15	6.07 a.m.	568	173	29.44	747.8	30.08	764.0	64.2	17.9	79.7	3	2	.....	2	9	5	5	5	.....	6041	9722	6	3.96	100.6
Saint Paul	N. 44 53	W. 93 05	5.56 a.m.	811	247	29.14	740.1	29.95	760.7	57.4	14.1	78.3	6	4	.....	2	.....	11	5	1	3	6147	9892	6	4.34	110.2
Saint Vincent	N. 48 58	W. 97 03	5.40 a.m.	804	245	29.11	739.4	29.89	759.2	50.9	10.5	82.6	1	9	2	1	5	8	2	1	2	7450	11989	6	4.00	101.6
Salt Lake City	N. 41 10	W. 112 00	4.40 a.m.	4348	1325	25.58	649.7	29.90	759.4	52.0	11.1	43.8	2	1	.....	.....	.....	.....	.....	4	21	3773	6072	4	2.55	64.8
San Antonio	N. 29 28	W. 98 22	5.34 a.m.	676	206	29.25	742.9	29.93	760.2	68.7	20.4	88.9	.....	.....	.....	1	1	6	1	1	21	2595	4176	6	4.70	119.4
San Diego	N. 32 32	W. 117 08	4.20 a.m.	67	20	29.83	757.7	29.90	759.4	59.0	15.0	78.9	4	6	3	4	3	.....	2	4	5	5045	8119	9	0.04	1.0
Sandusky	N. 41 27	W. 82 43	6.37 a.m.	639	195	29.38	746.2	30.04	763.0	60.1	15.6	74.5	3	3	2	7	5	2	2	7	.....	8459	13597	4	0.98	24.9
Sandy Hook	N. 40 28	W. 74 01	7.12 a.m.	34	10	30.05	763.3	30.08	764.0	57.4	14.1	86.8	.....	2	5	6	.....	5	5	7	1	7229	11634	5	3.33	84.6
San Francisco	N. 37 48	W. 122 26	3.58 a.m.	60	18	29.90	759.4	29.97	761.2	52.8	11.6	85.2	.....	1	10	11	3	1	.....	4	4	8776	14123	5	0.22	5.6
Santa Fé	N. 35 41	W. 106 10	5.04 a.m.	7049	2148	23.27	591.0	29.81	757.2	49.0	9.4	53.5	6	2	.....	1	.....	9	6	1	6	4964	7989	4	2.31	58.7
Savannah	N. 32 05	W. 81 08	6.44 a.m.	87	26	29.97	761.2	30.06	763.5	70.8	21.6	78.6	6	2	3	1	3	1	5	11	.....	5349	8608	4	0.83	21.1
Shreveport	N. 32 30	W. 93 45	5.54 a.m.	227	69	29.76	755.9	29.99	761.7	69.8	21.0	87.5	.....	.....	1	2	5	10	6	5	2	3455	5560	6	8.63	219.2
Silver City	N. 32 48	W. 108 15	4.55 a.m.	5890	1795	24.22	615.2	30.34	770.6	49.5	9.7	51.1	7	4	.....	.....	2	.....	.....	.....	18	2324	3740	2	1.01	25.7
Sitka	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.10	78.7
Smithville	N. 33 55	W. 78 01	6.56 a.m.	33	10	30.04	763.0	30.07	763.8	66.7	19.3	88.2	11	4	2	.....	2	1	4	3	4	6460	10396	5	2.25	57.1
Socorro *b*	N. 34 05	W. 106 55	5.01 a.m.	4565	1391	25.35	643.9	29.41	747.0	55.6	13.1	36.9	1	2	.....	2	4	7	.....	4	3	4588	7384	2	0.51	13.0
Spokane Falls, W. T.	N. 47 39	W. 117 24	4.18 a.m.	1910?	582?	27.99	710.9	29.85	758.2	41.7	5.4	63.5	1	.....	1	4	11	1	2	4	7	4897	7881	5	0.50	12.7
Springfield, Ill	N. 39 48	W. 89 48	6.10 a.m.	644	196	29.36	745.7	30.02	762.5	63.0	17.2	78.0	.....	2	2	3	9	2	5	8	.....	5347	8605	3	2.86	72.6
Springfield, Mass.	N. 42 06	W. 72 36	7.18 a.m.	120	37	29.95	760.7	30.08	764.0	56.5	13.6	79.9	8	1	.....	1	13	1	2	5	.....	3377	5435	7	4.85	123.2
Stockton	N. 30 50	W. 102 50	5.16 a.m.	3010	917	26.90	683.2	29.90	759.4	60.4	15.8	89.6	1	3	2	6	4	8	.....	7	7	8662	13940	5	2.28	57.4
Thatcher's Island	N. 42 36	W. 70 34	7.26 a.m.	48	15	30.03	762.7	30.09	764.3	50.4	10.2	87.7	5	4	1	3	8	1	.....	9	.....	9196	14799	5	7.22	183.4
Toledo	N. 41 40	W. 83 32	6.34 a.m.	651	198	29.37	746.0	30.04	763.0	61.0	16.1	72.5	7	1	6	3	6	.....	1	6	1	6106	9826	5	0.45	11.4
Tucson *a*	N. 32 14	W. 110 56	4.44 a.m.	2369	722	27.42	696.5	29.97	761.2	60.0	15.6	38.8	1	.....	.....	2	2	19	5	1	.....	3215	5174	1	0.04	1.0
Umatilla	N. 45 55	W. 119 21	4.11 a.m.	340	103	29.72	754.9	30.22	767.6	46.6	8.1	68.8	1	1	6	5	5	9	4	.....	.....	6208	9991	4	0.06	1.5
Uvalde	N. 29 13	W. 99 40	5.29 a.m.	930	283	28.96	735.6	29.76	755.9	67.4	19.7	84.0	2	.....	.....	1	4	11	7	.....	6	2611	4202	6	6.44	163.6
Vicksburg	N. 32 23	W. 90 54	6.04 a.m.	244	74	29.77	756.1	30.02	762.5	69.2	20.7	81.5	3	.....	.....	1	1	16	6	1	3	3757	6046	5	4.39	111.5
Visalia	N. 36 20	W. 119 16	4.11 a.m.	348	106	29.52	749.8	29.89	759.2	56.5	13.6	69.5	5	14	2	2	.....	5	2	1	.....	2944	4738	1	0.29	7.4
Washington, D. C.	N. 38 53	W. 77 01	7.00 a.m.	106	32	29.98	761.5	30.09	764.3	61.9	16.6	76.2	4	2	2	2	10	1	2	6	2	3422	5507	4	1.86	47.2
Wickenburg	N. 33 58	W. 112 42	4.37 a.m.	?	?	.....	.....	.....	.....	55.0	12.8	47.9	2	1	2	1	2	.....	.....	.....	23	.....	.....	2	0.07	1.8
Wilmington	N. 34 11	W. 78 10	6.56 a.m.	52	16	30.01	762.2	30.06	763.5	66.6	19.2	81.4	5	1	2	2	1	2	5	5	8	3588	5774	4	2.11	53.6
Winnemucca	N. 41 00	W. 119 21	4.17 a.m.	4327	1319	25.60	650.2	29.96	761.0	44.7	7.1	50.0	1	.....	.....	6	6	.....	2	18	.....	6128	9862	3	1.02	25.9
Wood's Holl	N. 41 33	W. 70 40	7.26 a.m.	35	11	30.04	763.0	30.08	764.0	53.4	11.9	84.0	6	3	3	7	1	2	3	2	4	7504	12076	5	2.39	60.7
Yankton	N. 42 45	W. 97 30	5.38 a.m.	1228	374	28.69	728.7	29.96	761.0	60.0	15.6	78.2	5	1	1	1	5	8	2	6	2	6721	10816	5	9.88	251.0
Yuma	N. 32 44	W. 114 36	4.30 a.m.	141	43	29.65	753.1	29.79	756.7	65.2	18.4	63.0	4	3	3	3	4	4	1	3	6	4141	6664	1	0	0
Sub-Series.																												
Bogota *a*	N. 4 36	W. 74 14	7.41 a.m.	8704	2653	22.09	561.1	.....	.....	54.1	12.3	81.7	.....	.....	.....	.....	.....	.....	.....	.....	30	.....	.....	7	4.25	107.9
Buff Bay Town, Jam. *c*	N. 18 15	W. 76 39	7.01 a.m.	?	?	.....	.....	.....	.....	.....	.....	82.8	.....	.....	1	.....	.....	3	24	.....	.....	.....	.....	3	.....	.....
Havana	N. 23 09	W. 82 22	6.39 a.m.	50	15	29.95	760.7	30.00	762.0	78.0	25.6	74.7	.....	1	.....	.....	.....	2	.....	.....	28	.....	.....	7	3.02	76.7
Jakobshavn	N. 69 13	W. 50 55	8.44 a.m.	43	13	29.77	756.1	29.82	757.4	36.3	2.4	.....	7	3	5	4	1	2	.....	.....	9	.....	.....	5	0	0
Kingston	N. 18 58	W. 76 48	7.01 a.m.	10	3	29.93	760.2	29.94	760.5	86.3	30.2	76.8	8	.....	.....	.....	.....	.....	.....	.....	23	.....	.....	5	12.14	308.4
Navassa	N. 18 25	W. 75 03	7.43 a.m.	77	23	29.86	758.4	29.94	760.5	79.5	26.4	81.2	5	.....	.....	.....	.....	5	14	7	.....	.....	.....	6	15.85	402.6
Paramaribo	N. 5 50	W. 55 13	8.27 a.m.	6	2	30.00	762.0	30.00	762.0	79.4	26.3	86.3	.....	.....	.....	.....	.....	4	26	1	.....	.....	.....	9	11.27	286.2
Puerto Berrio	N. 6 32	W. 74 28	7.10 a.m.	542	165	29.41	747.0	29.97	761.2	78.1	25.6	87.1	1	.....	.....	.....	5	.....	.....	.....	25	.....	.....	9	14.38	365.2
Rivas *c*	N. 11 26	W. 85 47	6.25 a.m.	150	46	.....	.....	.....	.....	77.5	25.3	.....	2	3	2	5	1	5	3	7	.....	.....	.....	7	5.08	129.0
Santiago deCubac	N. 19 55	W. 75 50	7.04 a.m.	21	6	29.92	760.0	29.94	760.5	77.5	25.3	79.9	8	.....	.....	1	1	.....	.....	1	20	.....	.....	9	14.32	363.7
St. Thomas	N. 18 20	W. 64 56	7.48 a.m.	110	33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
York Factory	N. 57 02	W. 92 56	5.58 a.m.	45	14	30.03	762.7	30.08	764.0	28.3	— 2.1	94.6	2	5	5	2	3	1	3	10	.....	.....	.....	7	3.79	96.3

The following table of Ocean Square mean data, from observations taken at 7 A. M. Washington or 0.08 P. M. Greenwich mean time, is computed from the isobars, isotherms and wind directions of the daily international charts, which latter are based upon the data obtained from the logs of vessels for the month of MAY, 1881.

OCEAN SQUARE BOUNDED BY—	BAROMETER.		TEMPERATURE.		PREVAIL'G WIND.	FORCE 0–10	OCEAN SQUARE BOUNDED BY—	BAROMETER.		TEMPERATURE.		PREVAIL'G WIND.	FORCE 0–10
	INCH.	MILL.	FAH.	CENT.				INCH.	MILL.	FAH.	CENT.		
° ° ° °							° ° ° °						
N. 30 & 35 W. 10 & 15	30.10	764.5	68.2	20.1	NE	2.9	N. 50 & 55 W. 35 & 40	29.96	761.0	47.9	8.8	NW	3.9
35 40 10 15	30.12	765.0	65.6	18.7	NE	3.5	10 15 40 55	30.05	763.3	77.9	25.5	NE	3.6
35 40 15 20	30.16	766.1	64.7	18.2	SW	3.2	15 20 40 45	30.09	764.3	76.8	24.9	NE	3.6
30 35 15 20	30.13	765.3	67.5	19.7	SW	1.8	15 20 45 50	30.08	764.0	76.9	24.9	NE	3.5
40 45 10 15	30.10	764.5	63.9	17.7	NE	3.1	10 15 45 50	30.05	763.3	78.4	25.8	NE	3.3
45 50 10 15	30.11	764.8	59.2	15.1	SW	3.7	20 25 40 45	30.14	765.5	74.1	23.4	E	3.5
45 50 15 20	30.11	764.8	59.1	15.1	SW	4.1	25 30 40 45	30.18	766.6	70.8	21.3	NE	3.5
40 45 15 20	30.14	765.5	61.5	16.4	SW	3.9	25 30 45 50	30.14	765.5	70.6	21.4	NE	3.6
50 55 10 15	30.05	763.3	56.6	13.7	SW	4.3	20 25 45 50	30.11	764.8	75.0	23.9	E	3.6
55 60 10 15	29.99	761.7	52.4	11.3	SW	4.1	30 35 40 45	30.20	767.1	64.7	18.2	NE	3.5
55 60 15 20	29.97	761.2	51.6	10.9	SW	3.8	35 40 40 45	30.18	766.6	60.7	15.9	NE	3.5
50 55 15 20	30.04	763.0	55.1	12.8	SW	4.4	35 40 45 50	30.15	765.8	60.6	15.9	NE; NW	3.6
10 15 20 25	29.99	761.7	79.8	26.6	NE	3.4	30 35 45 50	30.16	766.1	65.5	18.6	SE	3.4
15 20 20 25	30.03	762.7	76.6	24.8	NE	3.3	40 45 40 45	30.13	765.3	55.2	12.9	SW	3.8
15 20 25 30	30.06	763.5	75.7	24.3	NE	3.4	45 50 40 45	30.04	763.0	50.2	10.1	NW	4.1
10 15 25 30	30.02	762.5	78.5	25.8	NE	3.5	45 50 45 50	30.09	764.3	46.8	8.2	SW; NE	3.7
20 25 20 25	30.09	764.3	73.6	23.1	NE	3.2	40 45 45 50	30.12	765.0	53.1	11.7	NE; W	3.9
25 30 20 25	30.14	765.5	70.9	21.6	NE	3.3	50 55 40 45	29.96	761.0	45.5	7.5	NW	3.5
25 30 25 30	30.17	766.3	70.5	21.4	NE	3.4	55 60 40 45	29.86	758.4	42.3	5.7	NE	3.3
20 25 25 30	30.13	765.3	70.7	21.5	NE	3.5	55 60 45 50	29.84	757.9	40.6	4.8	NW	3.2
30 35 20 25	30.20	767.1	67.2	19.6	SW	2.6	50 55 45 50	29.99	761.7	43.5	6.4	NE	3.5
35 40 20 25	30.23	767.8	64.3	17.9	NE	2.8	10 15 50 55	30.02	762.5	79.4	26.3	NE	2.8
35 40 25 30	30.25	768.3	63.6	17.6	NE	2.8	15 20 50 55	30.04	763.0	77.8	25.4	E	2.7
30 35 25 30	30.23	767.8	66.6	19.2	NE	3.2	15 20 55 60	30.00	762.0	81.0	27.2	NE	2.4
40 45 20 25	30.17	766.3	60.5	15.8	SW	3.3	20 25 50 55	30.08	764.0	75.5	24.2	E	3.2
45 50 20 25	30.08	764.0	57.1	13.9	SW	4.1	25 30 50 55	30.10	764.5	71.5	21.9	NE	3.2
45 50 25 30	30.07	763.8	56.5	13.6	SW	4.1	25 30 55 60	30.08	764.0	73.2	22.9	NE	3.4
40 45 25 30	30.17	766.3	59.9	15.5	SW	3.8	20 25 55 60	30.05	763.3	76.7	24.8	E	3.2
50 55 20 25	30.01	762.2	53.5	11.9	SW	4.0	30 35 50 55	30.11	764.8	64.2	17.9	SE	3.3
55 60 20 25	29.95	760.7	49.8	9.9	NE; SW	3.9	35 40 50 55	30.11	764.8	61.1	16.2	SE	3.6
55 60 25 30	29.93	760.2	48.8	9.3	SW	3.5	35 40 55 60	30.08	764.0	62.3	16.8	SE; S	3.5
50 55 25 30	29.98	761.5	51.7	10.9	SW	4.2	30 35 55 60	30.08	764.0	68.4	20.2	SE	3.1
10 15 30 35	30.05	763.3	78.3	25.7	NE	3.5	40 45 50 55	30.11	764.8	49.6	9.8	E	3.4
15 20 30 35	30.08	764.0	75.9	24.4	NE	3.5	40 45 55 60	30.10	764.5	49.6	9.8	NW	3.4
15 20 35 40	30.10	764.5	76.4	24.7	NE	3.7	20 25 60 65	30.03	762.7	77.7	25.4	SE	2.8
10 15 35 40	30.05	763.3	78.1	25.6	NE	3.5	25 30 60 65	30.05	763.3	73.8	23.2	NE	3.5
20 25 30 35	30.15	765.8	72.8	22.7	NE	3.4	25 30 65 70	30.04	763.0	74.1	23.4	NE	3.3
25 30 30 35	30.19	766.8	70.0	21.1	NE	3.3	20 25 65 70	30.01	762.2	77.0	25.0	SE	3.1
25 30 35 40	30.19	766.8	70.1	21.2	NE	3.8	30 35 60 65	30.04	763.0	71.0	21.7	SE	2.9
20 25 35 40	30.15	765.8	73.1	22.8	NE	3.8	35 40 60 65	30.06	763.5	62.7	17.1	SW	3.5
30 35 30 35	30.23	767.8	66.1	18.9	SW; NE	3.2	35 40 65 70	30.06	763.5	62.9	17.2	NE; S	4.0
35 40 30 35	30.23	767.8	62.5	16.9	SW	3.2	30 35 65 70	30.04	763.0	70.2	21.2	NE	3.1
35 40 35 40	30.22	767.6	61.6	16.4	NW; SW	3.5	40 45 60 65	30.08	764.0	49.6	9.8	NE; SE	3.1
30 35 35 40	30.23	767.8	65.7	18.7	SW	3.5	40 45 65 70	30.07	763.8	49.2	9.6	NW; NE	3.3
40 45 30 35	30.17	766.3	58.8	14.9	SW	4.0	25 30 70 75	30.01	762.2	75.5	24.2	NE	2.5
45 50 30 35	30.05	763.3	54.7	12.6	SW	4.4	25 30 75 80	29.98	761.5	76.9	24.9	NE	2.3
45 50 35 40	30.05	763.3	53.3	11.8	SW; NW	4.6	30 35 70 75	30.06	763.5	68.6	20.3	NE	3.1
40 45 35 40	30.11	764.8	56.9	13.8	SW	4.0	35 40 70 75	30.08	764.0	61.2	16.2	NE	3.4
50 55 30 35	29.97	761.2	49.7	9.8	SW	3.7	30 35 75 80	30.06	763.5	67.4	19.7	NE; SW	2.8
55 60 30 35	29.89	759.2	45.9	7.7	SW	3.2							
55 60 35 40	29.88	758.9	44.7	7.1	NE; SW	3.5							

The following table shows the position of Ocean Squares, the total number of observations and the number of days on which observations were taken for each square during the month of MAY, 1881.

OCEAN SQUARE BOUNDED BY—	NO. DAYS.	NO. OBS.	OCEAN SQUARE BOUNDED BY—	NO. DAYS.	NO. OBS.	OCEAN SQUARE BOUNDED BY—	NO. DAYS.	NO. OBS.
° ° ° °			° ° ° °			° ° ° °		
N. 0 & 5 W. 20 & 25	1	1	N. 20 & 25 W. 70 & 75	5	5	N. 35 & 40 W. 65 & 70	9	10
0 5 25 30	2	2	20 25 75 80	2	2	35 40 70 75	15	24
5 10 25 30	8	8	25 30 15 20	2	2	35 40 75 80	11	14
5 10 30 35	1	1	25 30 20 25	2	2	40 45 5 10	3	3
5 10 45 50	2	2	25 30 25 30	2	3	40 45 10 15	2	2
5 10 50 55	2	2	25 30 30 35	4	5	40 45 15 20	4	6
10 15 15 20	2	2	25 30 35 40	1	1	40 45 20 25	3	3
10 15 20 25	2	2	25 30 40 45	1	1	40 45 25 30	4	4
10 15 25 30	2	2	25 30 45 50	2	2	40 45 30 35	5	6
10 15 30 35	1	1	25 30 55 60	1	1	40 45 35 40	8	7
10 15 35 40	2	2	25 30 60 65	8	8	40 45 40 45	7	7
10 15 40 45	2	2	25 30 65 70	2	2	40 45 45 50	14	20
10 15 45 50	1	1	25 30 70 75	1	1	40 45 50 55	17	22
10 15 55 60	5	6	25 30 75 80	3	3	40 45 55 60	15	21
10 15 60 65	2	2	30 35 5 10	1	1	40 45 60 65	18	19
10 15 65 70	3	3	30 35 10 15	4	4	40 45 65 70	11	13
10 15 70 75	2	2	30 35 15 20	4	4	40 45 70 75	10	11
15 20 20 25	2	2	30 35 20 25	3	5	45 50 5 10	6	6
15 20 25 30	4	5	30 35 25 30	1	1	45 50 10 15	10	12
15 20 30 35	1	1	30 35 35 40	1	1	45 50 15 20	12	13
15 20 35 40	4	4	30 35 40 45	4	6	45 50 20 25	10	11
15 20 40 45	2	2	30 35 45 50	1	1	45 50 25 30	14	21
15 20 50 55	1	1	30 35 55 60	1	1	45 50 30 35	15	21
15 20 55 60	2	2	30 35 55 60	1	1	45 50 35 40	10	15
15 20 60 65	24	24	30 35 60 65	9	9	45 50 40 45	7	8
15 20 65 70	2	2	30 35 65 70	3	3	45 50 45 50	2	2
15 20 70 75	7	7	30 35 70 75	3	3	45 50 50 55	27	29
20 25 15 20	1	1	30 35 75 80	9	10	50 55 5 10	5	7
20 25 20 25	5	5	30 35 80 85	3	3	50 55 10 15	9	13
20 25 25 30	2	2	35 40 5 10	27	34	50 55 15 20	9	13
20 25 30 35	5	5	35 40 10 15	8	9	50 55 20 25	8	8
20 25 35 40	7	7	35 40 15 20	2	2	50 55 25 30	3	3
20 25 40 45	7	8	35 40 20 25	1	1	50 55 30 35	4	4
20 25 45 50	6	6	35 40 35 40	3	4	50 55 35 40	2	2
20 25 50 55	12	12	35 40 40 45	3	3	55 60 5 10	2	2
20 25 55 60	6	6	35 40 45 50	2	2	55 60 10 15	2	2
20 25 60 65	4	4	35 40 55 60	6	6	55 60 15 20	1	1
20 25 65 70	2	2	35 40 60 65	7	9	55 60 20 25	2	2

GENERAL REMARKS.

All data which appears in the DAILY BULLETIN OF SIMULTANEOUS METEOROLOGICAL OBSERVATIONS are copied from the regular exchanges of this office. The barometer readings for land stations, in the first and second columns, are reduced to freezing and their respective standards; those in the third and fourth columns to sea-level. When necessary, corrections for instrumental error, temperature and reduction to sea-level are applied at this office. In the Naval and Marine Series, corrections for temperature and reduction to sea-level are always applied, while those for instrumental error, only when such corrections can be ascertained with close approximation, as by comparison when vessels are at or near land stations. Relative humidity generally requires computation from the hygrometrical observations. When rain has fallen, but neither the amount or duration is recorded, the word "blank" is published in the rain-fall column. The weather is generally published as given. The following symbols and abbreviations are common to all series, viz.: †, aneroid; *, instrumental error not known; ‡, observations taken at 7.35 a. m., Washington mean time; c, cirrus; k, cumulus; s, stratus; n, nimbus; d, scud; f, fracto; p, pallio; hz, haze; fg, fog; sk, smoke; inap, inappreciable; d. clouds, detached clouds. The movement of the air is published as given on the originals, when indicated by velocity in miles per hour, in meters per second, or by force, all variations of the latter being reduced to the common scale of 0 to 10. Those stations reporting the movement in pounds pressure per square foot are reduced to force on the common scale, and those in kilometers per hour, to meters per second and miles per hour. The distinction between upper and lower clouds is carefully made in the United States and a portion of the Canadian series, and the various formations are indicated by the letters above given and their combinations. In the MONTHLY SUMMARY OF INTERNATIONAL SIMULTANEOUS METEOROLOGICAL OBSERVATIONS the position of stations (latitude and longitude) are obtained from Keith Johnson's Index Geographicus, except where more exact information is furnished. The elevations of stations are obtained either from the annual, semi-annual and monthly publications of the various meteorological bureaus here represented, or from the original forms, upon which are entered the daily observations. In the United States series the elevations are computed from the latest surveys, and are carefully revised each month, in order to note any change in the elevation of the barometer cistern at any station. It is believed for the most part, that throughout the European and other series, the elevations as given, represent the height of the barometer cistern above sea-level; at least this should be the case. The local time, where omitted or not given correctly in the originals, is carefully computed at this office. Generally, all conversions are made at this office. A letter placed opposite the name of a station or some portion of the data credited thereto, indicates that a certain number of observations are missing, corresponding to the relative position in the alphabet of the letter so used. The following remarks relate to the individual peculiarities in the *methods* of recording and the *times* of taking the international simultaneous meteorological observations, under the auspices of the various Meteorological Bureaus:

ALGERIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level; temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10. The rain-fall is measured at 7 a. m., local time, and the amount indicated in millimeters.

AUSTRALIAN SERIES.—At Melbourne the conversions are published as given in the originals. The movement of the air is indicated by velocity in miles per hour. The kind of clouds is not given except by inference from general weather terms.

AUSTRO-HUNGARIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. At the following stations rainfall is measured at local time: Lemburg, 7 p. m.; Vienna, 2 p. m.; Trieste, 7 a. m. The weather is given by the Vienna symbols or in general terms. At Gratz, observations are taken at 2 p. m., local time.

BELGIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The weather is occasionally given by the Vienna symbols. Except for Brussels, the distinction between upper and lower clouds is not made. At Furnes, observations are taken at 12.26 p. m., local time, and at Maeseyck at 1 p. m., local time.

BRITISH SERIES.—In general the originals do not give rain-fall or distinction between upper and lower clouds. Relative humidity, except for Bradford and Silloth Rectory, is not given on the originals, but is computed from hygrometrical observations. At Cardington, Galway, Oxford and Sandwick Manse the barometers are given as read off. At Free Town the barometer is reduced to freezing on the originals, but not to sea-level. The movement of the air is indicated by force, on a scale of 0 to 12, except pounds pressure per square foot at Greenwich. At the following stations rain-fall is measured at local time: Bradford, 9 a. m.; Nottingham, 6 p. m.; and Aberdeen, 10 a. m. The wind direction is given to 32 points and weather by the Beaufort notation.

CANADIAN SERIES.—The originals give the barometer reduced to sea-level in English inches and the temperature in Fahrenheit. Charlottetown, St. Andrews, Windsor and those stations marked with a star (*) give the clouds on a scale of 0 to 4, while the remainder report them on a scale of 0 to 10.

CAPE COLONY SERIES.—At Cape Town the barometer is given on the original as corrected for temperature only. Upper and lower clouds are given on a scale of 0 to 10 and the kind occasionally indicated by abbreviating Poëy's classification.

CHINESE SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is given in meters per second and the direction to 16 points. The kind of clouds is occasionally given, and the degree of cloudiness on the scale of 0 to 10; distinction between upper and lower clouds is sometimes made. The weather is given in general (French) terms. The rain-fall is given in millimeters and measured at the moment of simultaneous observation.

COSTA RICAN SERIES.—At San Jose the originals give the barometer as corrected for temperature only and the thermometer in Centigrade. Relative humidity is not given on the originals, but is computed from the hygrometrical observations. Upper and lower clouds are given, the amount on a scale of 0 to 10 and the kind by Howard's classification. The rain-fall is apparently measured at midnight.

DANISH SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force, on a scale of 0 to 6. The weather is occasionally given by the Vienna symbols, but it is not certain that they always refer to the moment of simultaneous observations, except at Copenhagen. No distinction is made between upper and lower clouds and the direction of movement, together with the rain-fall, is entirely omitted.

FRENCH SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 6, except in meters per second, for Mont Louis and Perpignan. In general, the rain-fall is measured at 9 a. m., local time, but at Lyons at the moment of simultaneous observation. The direction of upper and lower clouds is given, but no distinction is made as to kind. The degree of cloudiness is given on a scale of 0 to 4 at Clermont-Ferrand, Commune de Greasque and Puy de Dome, while at other stations the scale of 0 to 10 is employed, or general weather terms, from which the amount of cloudiness is inferred. The weather is given in general terms, except occasionally by the Vienna symbols at Mont Louis and Perpignan.

GERMAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10, except at Carlsruhe, where the scale of 0 to 4 is used. No distinction is made between upper and lower clouds except at Magdeburg where distinction is also made as to direction and kind, but not as to amount. The amount is given on a scale of 0 to 10, but the kind is rarely given. The weather is given in Vienna symbols or in general terms.

GREEK SERIES.—The originals give the barometer corrected for temperature only and the thermometer in Centigrade. Hygrometrical observations are not given, and the rain-fall is omitted. The kind of clouds is occasionally given, and the amount is inferred from the general weather terms. The movement of the air is indicated by force on the scale of 0 to 10.

INDIAN SERIES.—The barometric observations refer to the Calcutta standard, which requires a correction of —0.011 inch, or 0.28 m. m. as compared with the Kew standard. The wind-velocity given is the average rate of wind since the observation of the preceding day. All conversions are published as given in the originals, where the data are recorded to an additional decimal. The weather is given by the Beaufort notation, Vienna symbols, or special symbols. Attention is called to changes made in the latitude, longitude and elevation of stations of this series, on advice received from the Indian Meteorological office since last summary was published; all previous issues should be corrected to conform to the present.

ITALIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by velocity in kilometers per hour or by force on a scale of 0 to 4 as at Mondovi, Florence and Cagliari. No distinction is made between upper and lower clouds and the amount is given on a scale of 0 to 10. The weather is given in Vienna symbols.

JAPANESE SERIES.—The rain-fall is measured at 9.30 a. m., local time, and the conversions are all published as given in the originals. Distinction is generally made between upper and lower clouds and the amount is given on the scale of 0 to 10. The weather is given in general terms.

MAURITIUS SERIES.—All conversions are published as given in the originals. The direction of the wind is given to 64 points and the rain-fall is measured at 9.30 a. m., local time.

MEXICAN SERIES.—All conversions (subject to correction at this office) are published as given in the originals. The kind of clouds is given, and also the direction and amount of both upper and lower. The degree of cloudiness is indicated on the scale of 0 to 10.

NETHERLANDS SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by pressure in kilograms per square meter, except at Hellevoetsluis, which gives force on the scale of 0 to 12. The humidity is not given on the originals, but for two stations it is computed from the hygrometrical observations. The weather is only given for Utrecht, from which the amount of cloudiness at that station is inferred.

NORWEGIAN SERIES.—The originals give the barometer in millimeters, reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by velocity in meters per second or by force on a scale of 0 to 6. The weather is occasionally given by Vienna symbols. At Bergen, observations upon the weather and degree of cloudiness are made at 2 p. m., local time.

PORTUGUESE SERIES.—In the originals the barometer is given in millimeters and the temperature in Centigrade. The movement of the air is indicated by velocity in kilometers per hour, except at Angra, which gives force on the scale of 0 to 9. The weather is occasionally given by the Vienna symbols. The rain-fall is measured at noon of each day.

RUSSIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. At Astrakhan, the barometer cistern is below sea-level. The movement of the air is indicated by velocity in meters per second. No distinction is made between upper and lower clouds; the amount is given on the scale of 0 to 10 and the kind occasionally. The weather is occasionally given by the Vienna symbols. The rain-fall is not given. At Barnaul, observations are taken at 6.18 p. m., local time.

SCOTTISH SERIES.—The originals give the barometer as read off and the movement of the air is indicated by force on a scale of 0 to 6. Distinction is made between upper and lower clouds as to degree, and the amount of cloudiness is given on a scale of 0 to 10. The direction of upper clouds is given separately. The rain-fall, temperature and humidity are not given at North Unst. The wind direction is given to 32 points.

SPANISH SERIES.—The originals give the barometer at Barcelona, Bilbao, Burgos, Murcia and Santiago as corrected for temperature only. The movement of the air, except for sub-series, is given in kilometers per hour. The kind of clouds is occasionally given and the degree of cloudiness on a scale of 0 to 10. The rain-fall at San Juan is measured at 4 p. m., local time and at San Fernando at midnight. The weather is given in general (Spanish) terms.

SWEDISH SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force, on a scale of 0 to 6, except in meters per second for Upsala. The kind of clouds is not given, but the degree of cloudiness is indicated on a scale of 0 to 10. The rain-fall is measured at 8 a. m., local time, and the weather is occasionally given by the Vienna symbols.

SWISS SERIES.—The originals give the barometer in millimeters, corrected for temperature only and the thermometer in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10 and at Zurich on a scale of 0 to 4. The rain-fall at Zurich is measured at 9 a. m., local time, and the remainder of the observation is taken at 1.13 p. m., local time.

TURKISH SERIES.—The originals give the barometer in millimeters reduced to sea-level. The temperature is given in Centigrade. The movement of the air is indicated by force on a scale of 0 to 7 for Valona and on a scale of 0 to 12 for Beirut. At Constantinople the velocity is given in meters per second. The kind of clouds is not given, but the amount is indicated on a scale of 0 to 10, except at Valona, at which station it is inferred from the general weather terms.

UNITED STATES SERIES.—The originals generally give the barometer reduced to sea-level and the temperature in Fahrenheit. At Bogota the barometer is corrected for temperature only; at Navassa and Puerto Berrio is given as read off, and at Rivas is omitted. The amount of cloudiness is given on the scale of 0 to 4, except for Rivas, Paramaribo and York Factory. The movement of the air is generally indicated by velocity in miles per hour, except on a scale of 0 to 10 for Bogota, Paramaribo and Rivas, and 0 to 12 for Puerto Berrio. The wind direction is generally given to 16 points, except 8 points for Bogota and 32 points for Rivas. The rain-fall at Rivas is given in centimeters and millimeters. At Buff Bay Town, Jamaica, observations are taken at 7.36 a. m., local time. On May 12th, the elevation of barometer cistern at La Crosse, changes from 702 feet, or 214 meters, to 725 feet, or 221 meters, and at Indianapolis, on April 30th, from 746 feet, or 227 meters, to 753 feet, or 229 meters.

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

GERMAN NAVAL SERIES.—No vessels reporting.

PORTUGUESE NAVAL SERIES.—The originals give the barometer in millimeters, corrected for temperature only and the thermometer in Centigrade. The movement of the air is indicated by force on the scale of 0 to 10. The humidity is not given, but is computed from the hygrometrical observations. The kind of clouds is not given, but the amount is indicated on the scale of 0 to 10; the direction of movement is given without distinction between upper and lower. The height of sea disturbance is given on the scale of 0 to 9, and the weather by the Beaufort notation. The rain-fall is not measured, but the duration is generally given in hours and minutes.

SWEDISH NAVAL SERIES.—The originals give the barometer as read off. The movement of the air is indicated by force on the scale of 0 to 12, and the direction is corrected for magnetic variation at this office. The humidity is not given, but is computed from the hygrometrical observations. The rain-fall is omitted. The height of the sea-swell is given on the scale of 0 to 9, and the weather by the Beaufort notation.

UNITED STATES NAVAL SERIES.—The originals give the barometer as read off. The humidity is not given, but is computed from the hygrometrical observations The sea-swell and the weather are given in general terms. The direction of the wind is compass direction, corrected for variation.

BRITISH MERCHANT-MARINE SERIES.—Same as the Naval, except that frequently the direction of the wind is given to the true meridian.

GERMAN MERCHANT-MARINE SERIES.—Same as U. S. Naval.

SWEDISH MERCHANT-MARINE SERIES.—Same as Swedish Naval.

UNITED STATES MERCHANT-MARINE SERIES.—Same as U. S. Naval.

ERRATA.

DAILY BULLETIN, MAY, 1881—2d, page 6, United States Series, Cape May, temperature 39° Fahrenheit, or 3.9° Centigrade, should read 59° Fahrenheit, or 15.0° Centigrade.

5th, page 5, Swiss Series, the weather at Geneva should be ———, and the word "cloudy" appear opposite Zurich.

7th, page 8th, British Naval Series, H. M. S. Garnet, N. 35° 54′, should read S. 35° 54′.

9th, page 3, French Series, Cluny, reduced barometer 30.20 inches, should read 30.29 inches; Gréasque, reduced barometer 30.07 inches, should read 30.06 inches; German Series, Berlin, temperature, Fahrenheit 48.6°, should read 46.8°.

10th, page 2, British Series, Glasgow, barometers 1.00 inch, or 25.40 millimeters too low, should read, actual barometer 30.50 inches, or 774.7 m. m.; reduced barometer 30.71 inches, or 780.0 m. m.

11th, page 5, Norwegian Series, Gjæsvær, reduced millimeter barometer 746.4, should read 764.4; Scottish Series, North Unst, rainfall 0.0, should be —, same correction on 22d.

14th, page 5, Turkish Series, Beirut, reduced barometer 29.93 inches, should read 29.95.

17th, page 10, United States Naval Series, Jamestown, Sitka Alaska, barometer 29.69 inches, or 754.1 m. m., should read 29.99 inches, or 761.7 m. m.

18th, page 1, Austro-Hungarian Series, Eperies, rainfall 0.030 inches, should read 0.039 inches.

23d, page 1, Austro-Hungarian Series, Kremsmunster, rainfall 0.848 inches, should read 0.846 inches.

25th, page 4, Indian Series, Hazaribagh, rainfall 0.0, should be —.

26th, page 9, British Naval Series, H. M. S. Wolverene, humidity 36, should read 56.

31st, page 9, British Naval Series, H. M. S. Phœnix, N. 0° 37′, should read N. 10° 37′.

Monthly Summary.—See note under head of Indian Series, in General Remarks.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR:

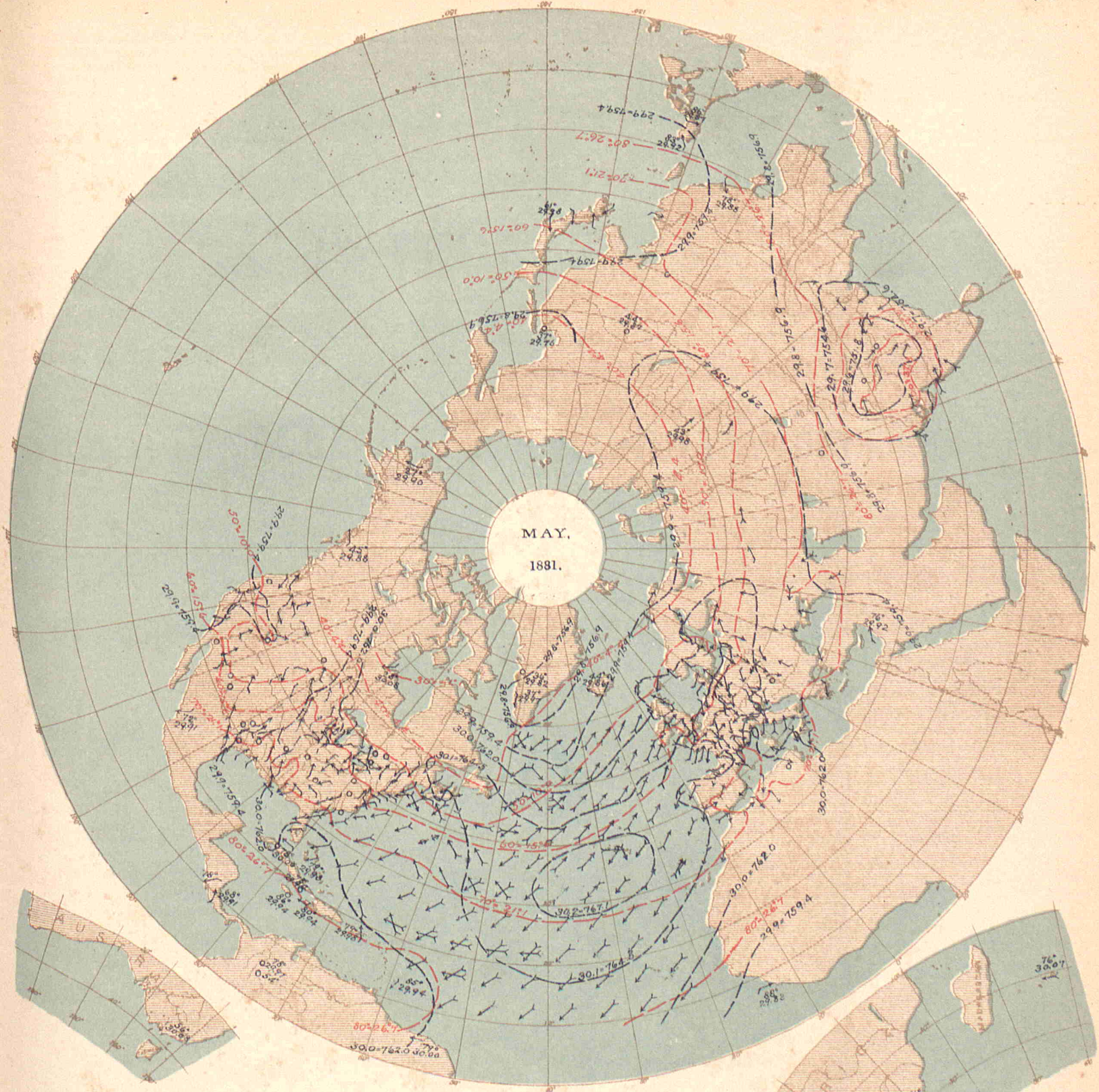
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Office of the Chief Signal Officer,

UNITED STATES ARMY.

Charted from Actual Observations taken Simultaneously, Series commencing January, 1877.

No. IV.



PREVAILING WINDS.

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

Symbols.	Force.	Velocity.	
		Miles per hour.	Metres per second.
○	0	0	0
→	1, 2	0 to 9	0 to 4.0
→	3, 4	9.1 to 22.5	4.1 to 10.1
→	5, 6	22.6 to 40.5	10.1 to 18.1
→	7, 8	40.6 to 67.5	18.1 to 30.2
→	9, 10	67.6 up.	30.2 & over.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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

ISOBARS AND ISOTHERMS.

Isobars in *black*; detached barometer means in English inches.

Isotherms in *red*; detached temperature means in degrees Fahrenheit.

Broken lines, are doubtful.

INTERNATIONAL MONTHLY CHART.

Showing mean pressure, mean temperature, mean force and prevailing direction of winds at 7:00 A. M., Washington mean time, for the month of May 1881. based on the daily charts of the International Bulletin.

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

INTERNATIONAL

SIMULTANEOUS METEOROLOGICAL OBSERVATIONS

INCLUDING A MONTHLY SUMMARY WITH DAILY BULLETINS AND ACCOMPANYING CHARTS.

FOR THE MONTH OF JUNE, 1881.

PRINTED FOR EXCHANGE WITH CO-OPERATING OBSERVERS.

WASHINGTON, D. C.:
JULY, 1882.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 1, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours‡			29.96	761.0	71.8	22.1	84	N			3		1						
Algiers‡			30.00	761.9	71.6	22.0	74	NNW			2		0			0	0	Very fair	Raynard.
La Calle‡			29.97	761.3	77.0	25.0	62	S			5		5			0	0	Clear	Nicolas.
Tunis‡			29.95	760.6												0.118	3.0	Cloudy	Fonfrède.
Sfax‡			30.00	762.0															Jacques.
Saida‡			30.01	762.3	60.8	21.0	41	N			2		4						Gau.
Tebessa‡			29.98	761.4	68.4	20.2	48	Calm			0		9			0	0	Cloudy	Dumas.
Geriville‡					70.2	21.2	42	SW			1		0			0.362	9.2	Covered	Watrin.
Laghouat‡			29.95	760.8	81.0	27.2	29	W			2		1			0	0	Clear	Lonchamp.
Biskra‡			29.96	761.0	84.6	29.2	63	SE			1		6			0	0	Very fair	Herbin.
																0	0	Cloudy	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.69	754.1	29.78	756.4	53.0	11.7	74	NNE	9	4.0			3			0	0	Fine	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.47	748.5	30.00	762.0	69.8	21.0	42	E			1		8			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.21	741.9	29.95	760.8	70.5	21.4	36	W	6.9	3.1			6			0.028	0.7		Dr. Wierzbicki.
Eperies	29.06	738.0	29.90	759.4	71.6	22.0	33	N			2	4cs	0	S		0	0		Julius Mikolik.
Gratz‡	28.79	731.2	30.00	762.0	67.5	19.7	60	E			3		3			0.173	4.4		Andreas Rospini.
Hermannstadt	28.51	724.1	29.89	759.1	69.8	21.0	45	NW			1		2			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.68	728.4	29.98	761.4	70.2	21.2	47	NE			1		0			0	0		The Staff.
Lemberg	28.90	734.1	29.85	758.3	67.6	19.8	74	NE			2		6			0	0		Dr. T. Stanecki.
Pola	29.89	759.3	30.00	762.0	75.5	24.7	35	NE			3		1			0	0		I. R. Hydrographic Office.
Szathmar	29.46	748.3	29.91	759.6	72.9	22.7	37	NW			2		0			0	0		Beicht Peter, S. J.
Szegedin	29.69	754.2	29.97	761.1	70.9	21.6	44	N			1		5			0	0		Karl Stancel.
Trieste	29.93	760.3	30.04	762.9	72.1	22.3	52	NW			1		7			0	0		Secco.
Vienna	29.32	744.8	30.02	762.4	71.6	22.0	36	NNW			1		2			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed June 2, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.14	765.5	30.23	767.8	67.3	19.6	48	SSE	11	4.9	.....	.....	1	.....	.....	0	0	Blue sky	W. Boswell.
Armagh, Observatory	30.02	762.5	30.24	768.1	72.4	22.4	51	SW	5	2.2	.....	.....	1	.....	.....	.....	.....	D. clouds	S. Call.
Bidston, Liverpool Obs'y	.....	.....	30.27	768.8	68.2	20.1	42	NW	7	3.1	.....	.....	0	.....	.....	.....	.....	Blue sky	John Hartnup.
Bolton, Sharples	29.70	754.4	30.23	767.8	71.8	22.1	40	NW	6	2.7	.....	.....	0	.....	.....	.....	.....	Blue sky	Thomas Mackereth.
Bradford, Yorkshire	29.79	756.7	30.19	766.8	72.2	22.3	45	NW	.....	.....	1	.....	2	.....	.....	0	0	D. clouds	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.93	760.2	29.96	761.0	87	30.6	67	NE	.....	.....	2	.....	4	.....	.....	.....	.....	D. clouds	Corpl. J. Surgener, A.H.C.
Cardington	.....	.....	30.20	767.1	78.0	25.6	29	NE	.....	.....	0.6	.....	2	.....	.....	.....	.....	Blue sky	John McLaren.
Chatham, School M. E.	30.11	764.8	30.24	768.1	74.9	23.8	48	NE	.....	.....	1	.....	3	.....	.....	.....	.....	D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	30.04	763.0	30.26	768.6	72.6	22.6	43	SSE	.....	.....	1	.....	2	.....	.....	.....	.....	Foggy	The Staff.
Fort Napier, Natal	27.86	707.6	30.08	764.0	55.3	12.9	43	Calm	.....	.....	0	.....	3	.....	.....	.....	.....	Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	88	31.1	84	Calm	.....	.....	0	.....	.....	.....	.....	.....	.....	Raining	Sgt. C. E. Keane.
Galway, Queen's College	.....	.....	30.18	766.6	72	22.2	42	E	.....	.....	2	.....	2	.....	.....	.....	.....	Blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	29.99	761.7	30.04	763.0	71.6	22.0	88	E	.....	.....	3	.....	7	.....	.....	.....	.....	Gloomy	2nd Cpl. C. Baldwin.
Glasgow, Observatory	29.92	760.0	30.13	765.3	72.5	22.5	90	SW	.....	.....	3	.....	0	.....	.....	.....	.....	Blue sky	Harry Urquhart.
Greenwich, Royal Obs'y	30.04	763.0	30.21	767.3	77.2	25.1	37	E	.....	.....	1	.....	0	.....	.....	.....	.....	Blue sky	The Staff.
Guernsey	30.01	762.2	30.22	767.6	68.5	20.3	74	NE	.....	.....	1	.....	0	.....	.....	.....	.....	Blue sky	Dr. S. E. Hoskins, F.R.S.
Kew, Observatory	30.18	766.6	30.22	767.6	73.9	23.3	37	N	7	3.1	.....	.....	2	.....	.....	.....	.....	Misty	The Staff.
Leicester, Museum	29.95	760.7	30.19	766.8	77.8	25.4	95	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	Blue sky	J. E. Carryer.
Malta, Mediterranean	29.92	760.0	30.00	762.0	72	22.2	71	SE	.....	.....	2	.....	7	.....	.....	.....	.....	D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas	29.95	760.7	30.00	762.0	84.2	29.0	82	S	.....	.....	1	.....	10	.....	.....	.....	.....	Overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.72	754.9	30.23	767.8	74.6	23.7	48	NNW	.....	.....	2	.....	0	.....	.....	.....	.....	Blue sky	John Mac Email.
Oxford, Radcliffe Obs'y	30.01	762.2	30.23	767.8	75.9	24.4	68	NE	.....	.....	1	.....	0	.....	.....	.....	.....	Misty	The Staff.
Plymouth	30.17	766.3	30.24	768.1	74.4	23.6	82	S	.....	.....	1	.....	2	.....	.....	.....	.....	D. clouds	John Merrifield.
Sandwick Manse, Orkneys	.....	.....	30.23	767.8	59	15.0	82	W	12	5.4	.....	.....	8	.....	.....	.....	.....	D. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.88	758.9	29.95	760.7	71.8	22.1	50	NE	.....	.....	2	.....	1	.....	.....	.....	.....	Blue sky	Serg't W. H. Lyne.
Sheffield	29.97	761.2	30.24	768.1	73.9	23.3	50	NE	.....	.....	1	.....	2	.....	.....	0	0	D. clouds	W. F. Cooper.
Silloth Rectory	30.21	767.3	30.24	768.1	70.4	21.3	52	W	.....	.....	2	.....	0	.....	.....	0	0	Blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	30.26	768.6	71.1	21.7	41	WSW	10	4.5	.....	.....	0	.....	.....	.....	.....	Blue sky	Rev. S. J. Perry.
Stratfield Turgiss	30.01	762.2	30.22	767.6	78.9	26.1	34	NE	.....	.....	1	.....	0	.....	.....	.....	.....	Blue sky	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.25	768.3	30.27	768.8	80	26.7	55	N	.....	.....	4	.....	0	.....	.....	.....	.....	Blue sky	W. Newcombe.
Valencia, Observatory	30.22	767.6	30.24	768.1	67.9	19.9	52	SE	30	13.4	.....	.....	2	.....	.....	.....	.....	Misty	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B	.....	.....	.....	.....	52.0	11.1	.....	NW	5	2.2	.....	3ck	0	.....	.....	0	0	Blue sky	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.73	755.1	29.78	756.4	50	10.0	62	NE	15	6.7	.....	0	0	.....	.....	0	0	Clear	H. J. Cundall, C. E.
Chatham, N. B.*	29.75	755.6	29.81	757.2	51	10.6	48	NW	8	3.6	.....	2c	0	NW	.....	0	0	Fair	G. A. Blair.
Chicontimi, Quebec	.....	.....	.....	.....	43.2	6.2	.....	N	.....	.....	3	0	2ks	.....	.....	0	0	Blue sky	Rev. V. A. Huart.
Cornwall, Ontario	29.67	753.6	29.86	758.4	53.7	12.1	61	NE	.....	.....	3	10cs	0	W	.....	0	0	D. clouds	James Smith, M. A
Dalhousie, N. B	29.92	760.0	29.96	761.0	54.0	12.2	.....	W	.....	.....	1 *	0	0	.....	.....	0	0	Blue sky	H. A. Johnson.
Father Point, Quebec*	29.88	758.9	29.91	759.7	49	9.4	70	N	15	6.7	.....	0	0	.....	.....	0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.11	739.4	29.92	760.0	56	13.3	84	SE	4	1.8	.....	2cs	5s	NW	NW	0	0	Fair	James Stewart.
Fredericton, N. B	29.77	756.1	29.83	757.7	57.0	13.9	36	NW	6	2.7	.....	0	0	.....	.....	0	0	.....	Prof. Harrison.
Granton, Ontario	28.76	730.5	29.84	757.9	56.0	13.3	100	NE	.....	.....	1	.....	10n	.....	.....	0.87	22.1	Raining	James Grant.
Halifax, N. S.*	29.61	752.1	29.74	755.4	55	12.8	98	W	4	1.8	.....	.....	10n	.....	.....	0.024	0.6	Cloudy	A. Allison.
Hamilton, Ontario	29.46	748.3	29.84	757.9	59.3	15.2	90	NE	.....	.....	1	10cs	0	NE	.....	0.25	6.3	Raining	Geo. Dickson, B. A.
Kingston, Ontario*	29.50	749.3	29.82	757.4	58	14.4	58	N	17	7.6	.....	.....	10s	.....	.....	0	0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S	29.66	753.4	29.70	754.4	57.5	14.2	79	NE	.....	.....	2	.....	10n	.....	.....	0	0	Cloudy	C. H. Rigby.
Montreal, Quebec*	29.70	754.4	29.90	759.4	50	10.0	51	NE	16	7.2	.....	2ck	8ks	NW	NW	0	0	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario	30.11	764.8	30.15	765.8	34.0	1.1	77	Calm	.....	.....	0	.....	10n	.....	.....	.....	.....	Raining	J. R. Nason.
Parry Sound, Ontario*	29.24	742.7	29.92	760.0	55	12.8	56	NE	12	5.4	.....	2k	0	NW	.....	0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario	29.14	740.1	29.87	758.7	59.9	15.5	59	E	.....	.....	2	.....	9ks	.....	.....	0	0	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.15	740.4	29.83	757.7	57	13.9	94	NE	14	6.3	.....	.....	10n	.....	SW	0.03	0.8	Threatening	H. Morgan.
Port Stanley, Ontario	29.19	741.4	29.83	757.7	57	13.9	94	NE	10	4.5	.....	.....	10n	.....	E	0.37	9.4	Heavy rain	M. Payne.
Quebec, Quebec*	29.60	751.8	29.92	760.0	49	9.4	57	NE	.....	.....	1	0	0	.....	.....	0	0	Clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.52	749.8	29.98	761.5	46	7.8	54	N	4	1.8	.....	5c	0	W	.....	0	0	Fair	W. H. McIntyre.
Saugeen, Ontario*	29.17	740.9	29.87	758.7	57	13.9	91	N	3	1.3	.....	8cs	0	.....	.....	0.01	0.3	Cloudy	K. Stewart.
St. Andrews, N. B	29.73	755.1	29.78	756.4	55	12.8	62	NE	3	1.3	.....	.....	10n	.....	.....	0	0	Cloudy	
St. John, N. B	29.63	752.6	29.79	756.7	55.0	12.8	74	NE	7	3.1	.....	.....	10ks	.....	.....	0	0	D. clouds	G. Murdock, C. E.
Stratford, Ontario	28.56	725.4	29.82	757.4	55.9	13.3	93	E	2	0.9	.....	.....	10s	.....	.....	0.496	12.6	D. clouds	C. J. Macgregor, M. A.
Sydney, C. B*	29.62	752.3	29.66	753.4	54	12.2	86	SW	6	2.7	.....	.....	10ks	.....	NW	0	0	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.48	748.8	29.86	758.4	58	14.4	91	N	12	5.4	.....	.....	10ks	.....	W	0.20	5.1	Cloudy	Magnetic Observatory
Windsor, N. S	29.64	752.8	29.73	755.1	56.0	13.3	81	N	8	3.6	.....	5cs	0	S	.....	0	0	Fair	
Woodstock, Ontario	28.80	731.5	29.84	757.9	56.8	13.8	94	N	7	3.1	.....	.....	10ks	.....	.....	0.82	20.8	Raining	Prof. Wolverton.
Yarmouth, N. S.*	29.68	753.9	29.75	755.6	48	8.9	97	W	2	0.9	.....	Fg	Fg	.....	.....	0	0	Foggy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.58	751.3	29.83	757.7	43	6.1	100	S	1	0.4	.....	Fg	Fg	.....	.....	0	0	Fair	John Delany.
St. Pierre, N. F.	.....	.....	29.60	751.8	55.0	12.8	.....	Calm	.....	.....	0	.....	.....	.....	.....	0.20	5.1	.....	N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Cape St. Francis Lt. House	30.26	768.6	.....	.....	56.2	13.4	68	WNW	.....	.....	0	3ks	.....	.....	0.635	16.1	.....	John Duthie.
Cape Town, C. G. H. Obs'y	30.32	770.1	30.36	771.1	49.2	9.6	.....	NW	2	0.9	5	4k	.....	.....	0	0	Vapory	The Staff, for D. Gill.
Worcester *†	29.27	743.4	.....	.....	55.2	12.9	59	E	.....	.....	1	0	1	.....	0	0	Fine	C. Stokes.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.85	758.2	29.87	758.7	67.5	19.7	88	SE	7.4	3.3	.....	0	0	.....	.....	0	0	Clear	M. Marc Dechevrens, S. J.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature.		Barometer. Reduced to sea-level.		Tempera-ture of the Air.		Rel. Hum.	Wind. Direc-tion.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.17	664.7	29.89	759.2	70.7	21.5	82	SE			2	7cs	0			0	0	Cloudy.	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.00	762.0	30.05	763.2	61.3	16.3	82	N	9	4			1						Oversergent Fischer.
Fanöe	30.00	762.0	30.02	762.5	68.5	20.3	58	NW			6		1						Overloerer Lauridsen.
Godthaab, Greenland	29.56	750.7	29.60	751.8	41.0	5.0	80	NE			4		1						S. Kleinschmidt.
Stykkisholm, Iceland	29.76	755.9	29.80	757.0	48.4	9.1		W			4		2						A. O. Thorlacius.
Thorshavn	30.07	763.8	30.11	764.7	52.9	11.6	95	SW	20	9			10						Overloerer Bergh.
Vestervig	29.97	761.2	30.06	763.6	67.6	19.8	57	N			2		1						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.45	748.1	30.09	764.3	63.0	17.2	67	SW			1	0	nkc			0	0		M. Labroue, Director.
Alençon Normal School	29.61	752.2	30.17	766.2	66.2	19	72	N			1		1		NE	0	0	Clear.	M. Nicot, Director.
Arras, Engineer School																			M. Klein, Commandant.
Avignon, Normal School	29.98	761.6	30.06	763.6	74.3	23.5	50	N			1		0			0.031	0.8	Clear	M. Giraud, Director.
Bar-sur-Seine	29.55	750.5	30.08	764.1	73.6	23.1	36	ENE			1	0	8cn			0	0	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.94	760.4	30.19	766.9	72.1	22.3	41	NE			2		2		NE	0	0	Slightly cl'dy	M. Frère Eugene Marie.
Besançon, Normal School	29.22	742.1	30.04	763.1	70.7	21.5	54	ENE			1	c	0		NE	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.81	757.2	30.06	763.6	72.0	22.2	59	SE			1		2			0.004	0.1	Slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	29.56	750.8	30.09	764.2	76.3	24.6	29	NE			1	0	k		NE	0	0		M. Postel, Director.
Brest, Naval Observatory	29.96	761.0	30.21	767.2	73.0	22.8	45	NE			2		0			0	0		M. de Rermaree, Dir.
Caen, Normal School	30.10	764.5	30.17	766.3	69.8	21	65	N			1		0			0	0	Clear	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.73	755.2	30.04	763.1	75.2	24.0	21	E			2		2			0	0	Slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.63	752.6	30.13	765.3	67.6	19.8	58	NW			1					0	0		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.72	729.5	30.04	763.0	67.6	19.8	57	NNE			1		8		N	0	0	¾ cover'd	M. Alluard, Director.
Cluny, Normal School	29.23	742.5	30.07	763.7	74.5	23.6	44	N			1		0			0	0	Clear	M. de Villemontée, Dir.
Commercy, Normal School	29.23	742.5	30.08	763.9	75.9	24.4	32	WNW			1	2ck	0	WNW	WNW	0	0	Slightly cl'dy	Dr. Coulet, Director.
Gap, Normal School	27.54	699.6	30.03	762.7	65.8	18.8	59	W			2	0	k		E	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.98	736.0	30.12	765.0	67.6	19.8	54	SE			2		8	SW	SE	0.618	15.7	¾ covered	M. Kina, Director.
Grenoble, Normal School	29.28	743.7	30.02	762.4	72.3	22.4	55	ENE			1	ok	0		E	0.047	1.2		M. Ablard, Director.
Guéret, Normal School	28.52	724.4	30.06	763.5	68.0	20	34	E			3	0	kn		E	0	0		M. Rivoire, Director.
Lamballe, Normal School	29.97	761.1	30.23	767.9	72.5	22.5	36	N			1				N	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.50	749.3	30.16	766.0	68.7	20.4	83	SW			1	0	kn		W	0.795	20.2		M. Chauvin, Director.
Lorient, Naval Observatory	30.15	765.7	30.25	768.3	77.0	25.0	40	NNE			2		1		N	0	0	Clear	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.62	737.2	30.06	763.4	68.7	20.4	50	NNE			1		8		N	0.197	5.0	Very cloudy	M. André, Director.
Mans, Normal School	29.85	758.2	30.14	765.6	71.1	21.7	44	NNE			3		2		ENE	0	0	Slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	29.77	756.2	30.04	762.9	70.2	21.2	63	SW			1		9		ENE	0.063	1.6		M. Stephan, Director.
Montlouis l'instituteur	24.87	631.8	30.11	764.8	47.3	8.5	93	E	9.4	4.2			10		NE	0.059	1.5	Raining	M. Cave, for Dr. Fines.
Montpellier, Normal School	29.97	761.2	30.08	763.9	70.2	21.2	75	W			1		8	E	SE	0.12	3.	Light rain	M. P. Galzin, Director.
Nancy, Normal School	29.34	745.1	30.08	763.9	74.8	23.8	28	NNE			1	0	2k			0	0	Slightly cl'dy	M. Hasse.
Nantes, Observatory	30.00	762.1	30.17	766.2	75.4	24.1	36	NW			1-2	1c	0		NE	0	0		M. Larocque, Director.
Nice	29.98	761.6	30.02	762.5	71.2	21.8	50	E			3		1	E	E	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.95	760.7	30.05	763.3	67.1	19.5	68	SE	11.2	5.0			7		NW	0.555	14.1	Raining	Dr. Fines.
Pic-du-Midi, Plantade	22.57	573.3			32.7	0.4							10		NE	0.622	15.8	Rain & snow	Gen'l de Nansouty, Dir.
Privas, Normal School	29.04	737.6	30.07	763.8	71.2	21.8	50	N			1		2					Raining	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.25	641.4			47.7	8.7	89	NE			3		8					Raining	M. Alluard, Director.
Rochefort, Naval Obs'y	30.08	764.1	30.11	764.9	79.2	26.2	33	NE			2		2		NE	0	0	¼ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.88	759.0	30.09	764.3	75.9	24.4	37	N			1		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.94	709.7	30.10	764.4	54.3	12.4	88						10			0.165	4.2	Raining	M. Richard, Director.
Rouen, Normal School	30.11	764.8	30.20	767.0	75.2	24	30	N			1		0			0	0	Clear	M. Platrier, Director.
Saint Lô, Normal School	30.11	764.9	30.27	768.9	70.2	21.2	45	NNE			1		0			0	0	Clear	M. Delaplanche, Dir.
Saint Maur, Observatory	29.98	761.6	30.15	765.8	71.6	22.0	44	NNE			1		1	NE	NE	0	0		M. Renou, Director.
Toulouse, Observatory	29.41	746.9	30.13	765.3	67.6	19.8	68	NW			1		10			0	0	Covered	M. Bailland, Director.
Tours	29.91	759.7	30.11	764.7	75.2	24.0	38	E			2		2		E	0	0	Almost clear	M. de Tastes.
Versailles, Observatory	29.67	753.7	30.17	766.2	72.0	22.2	34	NE			3					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.88	759.0	30.17	766.4	71.4	21.9	39	NE			2		3	ENE		0	0		M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.21	741.9	30.08	763.9	73.0	22.8	33	NNE			1	2cs	0	NNE		0	0		Prof. Dr. Hoh.
Berlin	29.83	757.7	30.00	761.9	77.9	25.5	27	N			1		5					Light rain	Prof. Dr. Arndt.
Breslau	29.49	749.0	30.02	762.5	72.7	22.6	28	NNW			2		4					Sprinkling	Royal University Obs'y.
Carlsruhe	29.64	752.8	30.05	763.3	73.4	23.0	50	NE			1		2	NE		0	0		Albert Senz.
Cassel	29.36	745.7	30.08	763.9	71.6	22.0	42	NNW			4		5	N		0	0		Dr. H. Möhl.
Frankfort on the Main	29.74	755.5	30.09	764.3	75.0	23.9	23	NE			1		2			0	0		Physical Society.
Friedrichshafen	28.63	727.2	30.02	762.0	68.7	20.4	51	W			3		6	W		0	0		Wilhelm, Chief Tel.
Hamburg	30.02	762.5	30.09	764.3	68.4	20.2	62	SW			3		3			0	0		Dr. R. Kleeman.
Kiel	30.04	762.9	30.05	763.3	64.4	18.0	69	W			4		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.65	753.2	30.06	763.5	73.4	23.0	39	NW			2		5	WNW		0	0		Prof. Dr. Bruhns.
Magdeburg	29.87	758.8	30.06	763.4	73.0	22.8	46	NW			3	0	3k		NW;N	0	0		Dr. Assmann.
Memel	29.97	761.1	30.01	762.3	56.8	13.8	48	NW			4								Reinbrecht & Issermann.
Munich	28.26	717.7	30.12	765.1	68.5	20.3	32	N			2		4	NE		0	0		Central Station.
Neufahrwasser	30.01	762.3	30.03	762.7	63.0	17.2	35	NNE			2		3			0	0		A. Lothes.
Neustadt, Palatinate	29.53	750.1	30.06	763.5	75.6	24.2	31	E			1		2			0	0		Dicknether.
Stuttgart	29.11	739.3	29.97	761.2	72.0	22.2	30	N			1		1	N		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.57	725.6	30.03	762.7	70.2	21.2	21	E			4		4	N		0	0		Prof. Kemlein.
Wustrow	30.06	763.4	30.08	764.0	54.9	12.7	89	NNW			2		10			0	0		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.63	752.7	30.02	762.4	69.6	20.9		SW			1.0		5					½ clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.56	750.8	29.61	752.0	89.3	31.8	75	SSW	28.0	12.5			2	WSW		0	0	D. clouds	
Deesa	29.07	738.3	29.52	749.8	99.3	37.4	36	WSW	18.3	8.2			5		WSW	0	0	D. clouds	
Bombay	29.66	753.4	29.70	754.4	88.1	31.2	73	W	14.0	6.3			4		WSW	0.15	3.8	D. clouds	
Poona, Yarrowda	27 85	707.3	29.68	754.0	81.5	27.5	56	WSW					1		W	0	0	D. clouds	
Belgaum	27.21	691.0	29.72	754.8	77.6	25.4	76	WSW	13.0	5.8			5	E	W	0.02	0.5	Showery	
Lahore	28.66	728.1	29.35	745.8	106.3	41.3	39	SW	3.9	1.7			0			0	0	Misty	
Roorkee	28.48	723.5	29.35	745.4	91.2	32.9	59	E	4.5	2.0			9			0.04	1.0		
Agra	28.85	732.7	29.38	746.2	101.1	38.4	33	N	6.7	3.0			0			0	0		
Nagpur	28.40	722.6	29.45	747.9	97.7	36.5	34	NNE	13.4	6.0			8		W	0	0	D. clouds	
Jubbulpore	28.21	716.5	29.55	750.7	79.0	26.1	74	NW	7.0	3.1			10			0.02	0.5	Overcast	
Lucknow	29.08	738.5	29.44	747.8	92.1	33.4	42	N	3.5	1.6			10			0	0	Overcast	
Allahabad	29.12	739.7	29.43	747.4	87.7	30.9	73	ENE	2.3	1.0			8			0.17	4.3	D. clouds	
Patna	29.28	743.8	29.46	748.3	82.3	27.9	75	E	6.7	3.0			10	E	E	0.58	14.7	Overcast	
Hazaribagh	27.53	699.4	29.54	750.2	74.8	23.8	72	NW	7.8	3.5			10			0	0	Th'd'r storm	
Cuttack	29.37	745.9	29.45	747.9	91.5	33.1	58	Calm	0.3	0.1			8			0	0	Threatening	
Calcutta, Alipore	29.43	747.4	29.45	748.0	81.0	27.2	94	WSW	3.0	1.3			9	SW		0.01	0.3	Gloomy	
Dhubri	29.33	744.9	29.44	747.9	87.1	30.6	73	Calm	1.4	0.6			1	W		0	0	D. clouds	
Chittagong	29.39	746.6	29.48	748.8	83.9	28.8	83	SSW	3.1	1.4			8			0	0	D. clouds	
Sibsagar	29.12	739.5	29.44	747.7	92.3	33.5	64	NE	1.4	0.6			0			0	0	Blue sky	
Zanzibar, Africa			29.95	761.0	81.0	27.2	76	SSW	5	2.2			9		S	0.09	2.3	Gloomy	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.62	752.4	30.02	762.5	73.9	23.3	36	SW	0.7	0.3			6			0	0		Prof. Giovanni Clodig.
Milan	29.52	749.9	30.03	762.7	73.2	22.9	27	WNW	3.1	1.4			6			0	0		Prof. Schiaparelli.
Padua	29.93	760.1	30.03	762.7	73.4	23.0	44	SSE	4.3	1.9			2	E		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.15	740.3	30.03	762.8	71.4	21.9	43	SSE	2.5	1.1			8	S		0	0		Prof. P. F. Denza.
Genoa	29.86	758.4	30.05	763.3	70.0	21.1	45	S	3.1	1.4			4	N		0.008	0.2		Prof. G. M. Garibaldi.
Mondovi	28.16	715.3	30.03	762.8	66.6	19.2	45	NW			4		6	N		0	0		Prof. D. C. Bruno.
Pesaro	29.98	761.5	30.03	762.7	68.4	20.2	66	N					0			0	0		Prof. Luigi Guidi.
Florence	29.73	755.1	29.98	761.4	76.1	24.5	28	NW			2		7	N		0	0		Prof. Costantino Pitter.
Leghorn	29.96	700.9	30.04	763.0	72.1	22.3	41	W	5.6	2.5			4			0	0		Prof. P. Monte.
Rome	29.82	757.4	29.99	761.7	64.8	18.2	76	SW	7.4	3.3			10			0.854	21.7		Prof. P. S. Ferrari.
Lecce	29.77	756.1	30.01	762.3	73.2	22.9	45	SSE	4.9	2.2			4			0	0		Prof. C. de Giorgi.
Cosenza	29.15	740.5	30.02	762.6	67.6	19.8	71	SSW	1.8	0.8			10	SW		0.205	5.2		Prof. D. Conti.
Cagliari	29.73	755.2	29.93	760.1	69.8	21.0	73	SE			4		9	S		0.008	0.2		Prof. A. Pacinotti.
Palermo	29.77	756.2	30.02	762.4	68.4	20.2	66	Calm	0	0			10			0	0		Prof. G. Cincciatore.
Syracuse	29.97	761.2	30.01	762.3	69.8	21.0	72	E	4.9	2.2			8	SW		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.45	748.1	29.97	761.1	73.0	22.8	51	W	1.8	0.8			10	WSW		0	0		Prof. F. Brioschi.
Stelvio	22.25	565.1			45.7	7.6	47	SE			1	0	4ks		N	0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.28	566.0			38.7	3.7	86	E			2		10n		S	0.004	0.1	Covered	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y †	29.95	760.7	29.96	761.0	65.6	18.7	80	Calm	0	0		8cs	0			0	0	Cloudy	K. Sasaki.
Kioto	29.83	757.7	30.00	762.0	62.1	16.7	73	SSE	3.2	1.4		ck	6s			0	0	Fair	M. Tojima.
Nagasaki, I. M. Obs'y	29.75	755.6	29.95	760.7	66.0	18.9	76	SW	0.9	0 4		0	0			0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	30.00	762.0	30.06	763.5	62.6	17.0	75	SSE	4.0	1.8		1cs	0			0	0	Clear	The Staff.
Wakayama	29.93	760.2	29.99	761.7	66.5	19.2	70	Calm	0	0		10s				0	0	Cloudy	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.91	759.7	30.10	764.6	76.4	24.7	73	E	16.0	7.2		0	3		E	0	0	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.65	753.1	29.91	759.6	76.0	24.4	86	NNE	0.9	0.4		2cs	0			0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.23	767.9	30.23	767.9	63.1	17.3		NNE			3					0	0		
Groningen	30.11	764.9	30.17	766.3	62.1	16.7		N			4					0	0		
Helder	30.21	767.3	30.21	767.3	59.0	15.0		N			3					0	0		
Hellevoetsluis	30.21	767.4	30.21	767.4	65.3	18.5	80	N			1					0	0		
Utrecht	30.16	766.0	30.21	767.2	66.0	18.9	67	ENE			2		5			0	0	Cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direc-tion.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.10	764.5	30.16	766.1	59.7	15.4	79	WNW	5.1	2.3	.....	.....	7	.....	.....	0	0	.....	
Christiania	29.87	758.7	30.01	762.3	71.6	22.0	44	SW	4	2	.....	.....	7	.....	.....	0	0	.....	.....
Gjæsvær	29.76	755.9	29.78	756.5	37.4	3.0	.....	SW	.....	.....	2	10	.....	.....	.....	.....	.....	.....	.....
Lodingen	29.76	756.0	29.81	757.2	43.7	6.5	82	WSW	.....	.....	4	.....	10	.....	.....	0.236	6.0	Raining	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.15	765.8	30.17	766.3	62.4	16.9	73	NNE	4.3	1.9	.....	.....	3	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.02	737.2	29.98	761.5	81.0	27.2	30	NNW	0.7	0.3	.....	.....	8	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.08	764.1	30.17	766.3	68.7	20.4	61	WSW	3.1	1.4	.....	.....	7	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.71	754.6	30.06	763.4	73.9	23.3	46	SSW	4.9	2.2	.....	.....	.....	W	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.21	767.3	30.28	769.1	64.8	18.2	77	NNE	22.4	10.0	.....	.....	3	.....	.....	0.504	12.8	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	[28.22	716.9	29.21	[741.9]	84.4	29.1	31	SW	18	8	.....	.....	5	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	29.82	757.5	29.84	758.0	36.1	2.3	70	NW	18	8	.....	0	9k	.....	.....	.....	.....	.....	Capt. Sselliwerstow.
Astrakhan	29.84	757.8	29.75	755.7	63.3	17.4	39	SW	13	6	.....	0	7k	.....	.....	Blank		.....	Capt. Wisganow.
Barnaul	‡ 29.13	739.8	29.61	752.1	60.6	15.9	64	NNE	4	2	.....	.....	10	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	29.64	752.8	29.88	758.9	62.1	16.7	43	N	7	3	.....	6ck	0	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	28.13	714.6	29.10	739.1	34.0	1.1	92	Calm	0	0	.....	.....	10	.....	.....	.....	.....	.....	Meteorological Obs'y.
Kasan	29.04	737.7	29.31	744.5	50.4	10.2	25	NW	16	7	.....	.....	9	.....	.....	.....	.....	.....	Observatory.
Kertch	29.80	757.0	29.82	757.5	67.1	19.5	59	WSW	9	4	.....	.....	5	.....	.....	.....	.....	.....	Lagorio & Sastyrez.
Kieff	29.15	740.5	29.78	756.3	57.2	14.0	36	N	9	4	.....	c;ck	2k	.....	.....	.....	.....	.....	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.36	745.8	29.56	750.9	57.2	14.0	44	WNW	34	15	.....	.....	8	.....	.....	Blank		.....	Meteorological Obs'y.
Moscow	29.16	740.6	29.71	754.7	42.1	5.6	80	N	7.8	3.5	.....	.....	9ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.25	692.2	29.56	750.8	34.9	1.6	87	N	4	2	.....	.....	10	.....	.....	0.343	8.7	.....	Meteorological Obs'y.
Nikolaiev	29.73	755.1	29.80	756.9	72.5	22.5	52	W	18	8	.....	0	3kn	.....	.....	.....	.....	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.79	756.6	29.87	758.8	38.5	3.6	85	Calm	.....	.....	0	0	0	.....	.....	0	0	.....	Lieut. Iwanow.
Pekin, China	29.50	749.2	29.64	752.8	76.3	24.6	56	SW	4	2	.....	5cs	0	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	29.88	758.9	29.89	759.3	50.2	10.1	40	ENE	9	4	.....	c;cs	9ks	.....	.....	.....	.....	Solar corona	Central Physical Obs'y.
Tashkend, Laboratory	28.00	711.2	29.44	747.8	89.6	32	56	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.43	722.2	29.82	757.5	62.8	17.1	41	NW	4	2	.....	.....	9k	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	29.52	749.9	29.93	760.3	68.5	20.3	37	N	7	3	.....	6c	0	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.51	749.6	29.92	760.0	63.3	17.4	43	WNW	4	2	.....	.....	6	.....	.....	.....	.....	.....	Berg, Assistant.
Yeniseisk	29.54	750.2	29.83	757.6	41.4	5.2	51	W	2	1	.....	.....	4	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	30.23	767.8	71.5	21.9	56	E	.....	.....	1	0	0	.....	.....	0	0	Hazy	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	30.20	767.1	57	13.9	94	S	.....	.....	4	5	5	SW	.....	0	0	D. clouds	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	30.10	764.5	.....	.....	.....	SW	.....	.....	3	.....	Fg	.....	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.95	760.7	30.05	763.3	71.2	21.8	53	SSE	2.7	1.2	.....	.....	8	.....	.....	0.008	0.2	Almost cov'd	Antonio Ravo, Director.
Bilbao, Met. Obs'y	30.07	763.7	30.12	765.1	72.7	22.6	67	NW	1.8	0.8	.....	2	6	NW	.....	0	0	Almost cov'd	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.15	689.7	.....	.....	65.3	18.5	45	NE	6.7	3.0	.....	.....	6	.....	.....	0	0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.82	706.7	29.97	761.3	73.8	23.2	46	E	7.8	3.5	.....	0	7	.....	.....	0	0	Cloudy	The Staff.
Murcia, Met. Obs'y	‡ 29.87	758.8	30.02	762.5	72.7	22.6	62	SSW	3.8	1.7	.....	4	4	SW	.....	0.165	4.2	Almost cov'd	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.14	740.1	30.00	761.9	77.0	25.0	45	NE	0	0	.....	.....	5	.....	.....	0	0	Cloudy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.90	759.5	29.97	761.2	81.7	27.6	82	E	4.9	2.2	.....	2c;ck	1k	WSW	SE	0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.78	756.4	29.83	757.7	86.0	30.0	76	E	3.3	1.5	.....	0	5k	.....	E	0	0	.....	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.96	761.0	30.05	763.4	76.8	24.9	41	W	6.8	3.0	.....	0	8	.....	SE	0	0	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.93	760.1	30.02	762.4	81.7	27.6	88	E	8.9	4.0	.....	2c	3k	E	E	0.118	3.0	.....	Enrique Gadea, Chief Engineer.
Tagnegarao, Philippine Ids	29.74	755.4	29.89	759.1	82.0	27.8	80	N	0	0	.....	.....	10km	.....	NNE	0.071	1.8	Very cloudy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.87	758.8	29.91	759.8	49.3	9.6	49	SW	.....	.....	2	.....	0	.....	.....	0.075	1.9	.....	
Umea	29.84	757.8	29.89	759.1	57.2	14.0	57	S	.....	.....	2	.....	2	.....	.....	0	0	.....	
Hernosand	29.85	758.3	29.91	759.6	64.2	17.9	40	N	.....	.....	2	.....	5	.....	.....	0	0	.....	
Stockholm	29.81	757.2	29.99	761.7	65.5	18.6	44	NW	.....	.....	2	.....	3	.....	.....	0	0	.....	
Wisby	29.94	760.5	30.00	762.0	49.3	9.6	75	N	.....	.....	2	.....	5	.....	.....	Blank		.....	
Sub-Series.																			
Upsala	29.78	756.5	29.87	758.7	66.4	19.1	43	NNW	8.3	3.7	.....	.....	8	N	N	Inap.	Inap.	.....	S. G. Fineman.
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.66	727.9	30.04	763.1	67.3	19.6	52	N	.....	.....	3	.....	3	.....	.....	0	0	.....	The Observatory.
Zurich	‡ 28.45	722.5	30.02	762.6	72.3	22.4	33	NE	.....	.....	4	.....	4	.....	.....	0	0	Fair	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.00	762.1	64.8	18.2	43	NE	7	3.0	.....	.....	0	.....	.....	0	0	.....	The Observatory.
Valona	.....	.....	30.10	764.6	69.4	20.8	.....	Calm	.....	.....	0	.....	10	.....	.....	0	0	Covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.84	757.9	79.0	26.1	58	WSW	.....	.....	3	0	1k	.....	WSW	0.11	2.8	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.75	755.6	29.83	757.7	70	21.1	57	NE	2	0.9		2cs;hz	Hz			0	0	Dense haze.	
Alpena, Michigan	29.29	744.0	29.94	760.5	55.5	13.1	62	E	11	4.9		1c	2s	SE		0.04	1.0	Fair.	
Atlanta, Georgia	28.72	729.5	29.87	758.7	75.2	24.0	67	SW	7	3.1		1c	0	Calm		0.32	8.1	Clear.	
Atlantic City, New Jersey	29.78	756.4	29.79	756.7	68	20.0	95	SW	5	2.2		2ck	5s	SW	Calm	0.02	0.5	Fair.	
Augusta, Georgia	29.71	754.6	29.89	759.2	71.0	21.7	90	S	5	2.2		0	Fg		Calm	0.25	6.3	Clear.	
Baltimore, Maryland	29.75	755.6	29.80	756.9	73	22.8	76	W	5	2.2		0	8s		W	0.02	0.5	Fair	
Barnegat, New Jersey	29.75	755.6	29.77	756.1	69	20.6	95	S	1	0.4		2k	5s	Calm	Calm	0.08	2.0	Fair.	
Bismarck, Dakota	28.10	713.7	29.84	757.9	62	16.7	88	Calm	0	0		8c	0	NW		0.16	4.1	Cloudy.	
Boise City, Idaho	27.22	691.4	29.98	761.5	54.2	12.3	61	NW	2	0.9		0	0			0	0	Clear	
Boston, Massachusetts	29.63	752.6	29.78	756.4	68.0	20.0	60	N	3	1.3		5ck	0	W		0	0	Fair	
Brackettville, Texas	28.73	729.7	29.75	755.6	70.0	21.1	75	Calm	0	0		0	0			0	0	Clear.	
Brownsville, Texas	29.78	756.4	29.82	757.4	76	24.4	73	N	4	1.8			10s		N	0	0	Cloudy	
Buffalo, New York	29.13	739.9	29.82	757.4	57.5	14.2	91	NE	8	3.6			10n		SW	0.22	5.6	Light rain	
Burlington, Vermont	29.56	750.8	29.84	757.9	55.5	13.1	56	N	12	5.4		2cs	Sk	W		0	0	Light smoke	
Cairo, Illinois	29.46	748.3	29.84	757.9	72	22.2	90	SW	2	0.9			10n		Calm	Inap.	Inap.	Light rain.	
Campo, California	27.38	695.4	29.95	760.7	39	3.9	55	S	4	1.8		0	0			0	0	Clear.	
Camp Thomas, Arizona	27.19	690.6			54	12.2	32	Calm			0	0	0			0	0	Clear.	
Cape Henry, Virginia	29.77	756.1	29.79	756.7	74	23.3	81	SW	12	5.4		0	0			0.02	0.5	Clear.	
Cape May, New Jersey	29.75	755.6	29.78	756.4	68	20.0	90	S	3	1.3			10s		S	1.45	36.8	Cloudy.	
Castroville, Texas	29.09	738.9	29.78	756.4	67	19.4	79	NW	3	1.3		0	0			0	0	Clear	
Cedar Keys, Florida	29.92	760.0	29.94	760.5	81	27.2	74	S	13	5.8		1k	0			0	0	Clear.	
Champaign, Illinois	29.02	737.1	29.78	756.4	61.2	16.2	94	N	9	4.0			Fg			1.60	40.6	Dense fog.	
Charleston, S. Carolina	29.85	758.2	29.91	759.7	78	25.6	78	SW	5	2.2		0	0			0	0	Clear.	
Charlotte, N. Carolina	29.01	736.8	29.87	758.7	73.8	23.2	72	SW	2	0.9		5cs	0	SW		0.58	14.7	Fair.	
Chattanooga, Tennessee	29.06	738.1	29.86	758.4	68.5	20.3	92	Calm	0	0		5cs	2ks;fg	Calm	S;Calm	0.03	0.8	Fair	
Cheyenne, Wyoming	24.11	612.4	29.92	760.0	57	13.9	36	NW	12	5.4		0	0			0	0	Clear	
Chicago, Illinois	29.15	740.4	29.83	757.7	52.5	11.4	93	N	9	4.0			10s			0.12	3.0	Cloudy.	
Chincoteague, Virginia	29.76	755.9	29.78	756.4	66	18.9	95	SW	17	7.6		5k	0	W		0.01	0.3	Fair.	
Cincinnati, Ohio	29.16	740.7	29.80	756.9	72	22.2	71	SE	5	2.2		2cs	0	SW		0.03	0.8	Clear.	
Cleveland, Ohio	29.07	738.4	29.79	756.7	59.5	15.3	88	NE	9	4.0		10k	Fg	SW		0	0	Cloudy.	
Coleman City, Texas																			
Columbus, Ohio	28.95	735.3	29.76	755.9	67	19.4	84	SW	6	2.7		2ck	5ks	SW	SW	0.05	1.3	Clearing	
Concho, Texas	28.05	712.5	29.93	760.2	64	17.8	83	Calm	0	0		0	0			0	0	Clear.	
Corsicana, Texas	29.39	746.5	29.85	758.2	67	19.4	89	N	4	1.8		0	0			0.16	4.1	Clear.	
Davenport, Iowa	29.24	742.7	29.88	758.9	65	18.3	84	NE	7	3.1			10s		NE	Inap.	Inap.	Cloudy.	
Dayton, Washington T'y	28.34	719.8	30.09	764.3	49	9.4	71	N	4	1.8		0	0			0	0	Clear.	
Deadwood, Dakota	25.41	645.4	29.96	761.0	55	12.8	81	NW	1	0.4		0	0			0	0	Clear	
Decatur, Texas	28.70	729.0	29.82	757.4	68	20.0	70	N	3	1.3		0	0			0	0	Clear.	
Delaware Breakwater, Del.	29.76	755.9	29.78	756.4	68	20.0	95	W	4	1.8			10ks		SW	0.24	6.1	Cloudy.	
Denison, Texas	29.04	737.6	29.82	757.4	67	19.4	95	NW	4	1.8		0	0			Inap.	Inap.	Clear.	
Denver, Colorado	24.83	630.7	29.87	758.7	54.5	12.5	71	S	5	2.2		0	0			0	0	Clear	
Des Moines, Iowa	29.01	736.8	29.89	759.2	64	17.8	89	NE	6	2.7			10s			0	0	Cloudy.	
Detroit, Michigan	29.15	740.4	29.82	757.4	58.7	14.8	88	N	8	3.6			10n		Calm	0.02	0.5	Light rain	
Dodge City, Kansas	27.42	696.5	29.91	759.7	58	14.4	88	NW	4	1.8		0	0			0	0	Clear.	
Dubuque, Iowa	29.22	742.2	29.90	759.4	62.3	16.8	83	Calm	0	0			10s		Calm	0.67	17.0	Cloudy.	
Duluth, Minnesota	29.30	744.2	29.98	761.5	52	11.1	93	NE	4	1.8			10s;fg			0.06	1.5	Cloudy.	
Eagle Pass, Texas	29.15	740.4	29.96	761.0	70.5	21.4	85	NW	2	0.9		0	0			0	0	Clear.	
Eagle Rock, Idaho	25.35	643.9	30.06	763.5	44	6.7	55	N	5	2.2		0	0			0	0	Clear.	
Eastport, Maine	29.71	754.6	29.78	756.4	52.5	11.4	76	NW	8	3.6		10cs	Fg	NW		0	0	Cloudy	
El Paso, Texas	26.23	666.2	29.88	758.9	69	20.6	52	NE	4	1.8		0	0			0	0	Clear.	
Erie, Pennsylvania	29.10	739.1	29.79	756.7	57	13.9	87	NE	13	5.8			10n			0.12	3.0	Light rain	
Escanaba, Michigan	29.31	744.5	29.95	760.7	53	11.7	93	N	12	5.4			10s		N	0.32	8.1	Cloudy.	
Florence, Arizona	28.36	720.3	29.96	761.0	65	18.3	40	W	2	0.9		0	0			0	0	Clear.	
Fort Apache, Arizona	25.07	636.8	29.85	758.2	43	6.1	43	E	4	1.8		0	Sk		Calm	0	0	Dense smoke	
Fort Assinnaboine, Montana	27.14	689.3	29.37	746.0	42	5.6	50	W	12	5.4		0	0			0	0	Clear.	
Fort Bennett, Dakota	28.35	720.1	29.82	757.4	63	17.2	94	E	3	1.3			10n		W	0.19	4.8	Light rain	
Fort Benton, Montana	27.14	689.3	29.88	758.9	63	17.2	42	Calm	0	0		0	0			0	0	Clear	
Fort Buford, Dakota	27.93	709.4	29.85	758.2	57	13.9	81	Calm	0	0		2cs	0	W		0.03	0.8	Clear.	
Fort Custer, Montana	26.89	683.0	29.98	761.5	54	12.2	87	W	4	1.8		0	0			0	0	Clear.	
Fort Davis, Texas	25.25	641.3	30.21	767.3	61	16.1	66	NW	4	1.8		5c	1s		NW	0	0	Fair	
Fort Elliott, Texas	27.25	692.1	30.32	770.1	55	12.8	74	NW	4	1.8		0	0			0	0	Clear.	
Fort Gibson, Indian T'y	29.28	743.7	29.81	757.2	65	18.3	94	Calm	0	0			10s		Calm	Inap.	Inap.	Cloudy.	
Fort Grant, Arizona	25.26	641.6	30.06	763.5	71	21.7	8	E	3	1.3		0	0			0	0	Clear.	
Fort Griffin, Texas	28.64	727.4	29.87	758.7	66.8	19.3	74	Calm	0	0		0	0			0	0	Clear.	
Fort Keogh, Montana	27.52	699.0	29.93	760.2	55	12.8	93	SW	3	1.3		2cs	0	SW		0.01	0.3	Fair	
Fort Macon, North Carolina	29.85	758.2	29.86	758.4	75	23.9	90	SW	8	3.6		2k	0	Calm		0	0	Clear.	
Fort McKavett, Texas	27.69	703.3	29.56	750.8	63.2	17.3	47	W	5	2.2		0	0			0	0	Clear	
Fort Missoula, Montana	26.85	682.0	30.23	767.8	54	12.2	61	N	2	0.9		0	0			0	0	Clear.	
Fort St. Michaels	29.71	754.6	29.74	755.4	30	— 1.1	100	N	13	5.8			Fg		N				
Fort Shaw, Montana	26.45	671.8	29.90	759.4	50	10.0	65	W	5	2.2		0	0			0	0	Clear.	
Fort Sill, Indian Territory	28.68	728.5	29.89	759.2	68	20.0	79	NW	6	2.7		0	0			0	0	Clear.	
Fort Stevenson, Dakota	28.06	712.7	29.84	757.9	60	15.6	94	Calm	0	0		8cs	0	Calm		0.45	11.4	Fair.	
Fort Verde, Arizona					52.5	11.4	25	N			1	0	0			0	0	Clear.	
Fredericksburg, Texas	28.18	715.8	29.69	754.1	65	18.3	84	NW	2	0.9		0	0			0	0	Clear.	
Galveston, Texas	29.78	756.4	29.82	757.4	75	23.9	81	NW	8	3.6		10k;Hz	0			0.03	0.8	Clear.	
Grand Haven, Michigan	29.22	742.2	29.87	758.7	60	15.6	82	NE	8	3.6			10s		Calm	0.09	2.3	Cloudy.	
Hatteras, North Carolina	29.83	757.7	29.85	758.2	74	23.3	90	S	10	4.5		0	Hz			0	0	Clear.	
Helena, Montana	25.92	658.4	30.12	765.0	60	15.6	44	Calm	0	0		0	0			0	0	Clear	
Henrietta, Texas	28.88	733.5	29.76	755.9	67	19.4	89	NW	8	3.6		0	0			0	0	Clear.	
Indianapolis, Indiana	29.01	736.8	29.78	756.4	68	20.0	84	Calm	0	0		8cs	Hz	Calm	Calm	1.94	49.3	Cloudy.	
Indianola, Texas	29.83	757.7	29.86	758.4	74.2	23.4	76	NW	8	3.6		Hz	Hz			0	0	Hazy.	
Jacksboro, Texas	28.73	729.7	29.82	757.4	66	18.9	89	NW	4	1.8		0	0			0	0	Clear.	
Jacksonville, Florida	29.90	759.4	29.92	760.0	81	27.2	74	SW	8	3.6		0	0			Inap.	Inap.	Clear.	
Keokuk, Iowa	29.19	741.4	29.81	757.2	66.5	19.2	86	NE	4	1.8			8s		NE	0	0	Cloudy.	
Key West, Florida	29.96	761.0	29.99	761.7	82.2	27.9	79	E	4	1.8		2k	0			0.30	7.6	Clear	
Kittyhawk, North Carolina	29.83	757.7	29.85	758.2	73	22.8	90	W	11	4.9		2c	0	W		0	0	Clear.	
Knoxville, Tennessee	28.87	733.3	29.87	758.7	66.8	19.3	85	NE	1	0.4		5c	2s	W	Calm	0.02	0.5	Fair.	
La Crosse, Wisconsin	29.16	740.7	29.88	758.9	62	16.7	83	NE	8	3.6			10s		Calm	0.12	3.0	Cloudy.	
La Mesilla, New Mexico	26.10	662.9	30.25	768.3	67	19.4	55	Calm	0	0		0	0			0	0	Clear.	
Laredo, Texas	29.44	747.8	29.77	756.1	72	22.2	90	Calm	0	0		0	0			0	0	Clear.	
Leavenworth, Kansas	29.02	737.1	29.89	759.2	65	18.3	78	N	8	3.6		1cs	0	W		Inap.	Inap.	Clear.	
Lewiston, Idaho	29.26	743.2	30.09	764.3	53	11.7	68	SW	1	0.4		0	0			0	0	Clear	
Little Rock, Arkansas	29.46	748.3	29.77	756.1	68	20.0	95	NE	6	2.7			10s		E	0.18	4.6	Cloudy.	
Los Angeles, California	29.56	750.8	29.93	760.2	52.0	11.1	93	Calm	0	0			Fg		Calm	0	0	Light fog.	
Louisville, Kentucky	29.23	742.4	29.78	756.4	72.5	22.5	80	SW	4	1.8		10cs	0			0.35	8.9	Cloudy.	
Lynchburg, Virginia	29.14	740.1	29.81	757.2	74	23.3	68	Calm	0	0		1k	0	SW		0.26	6.6	Clear.	
Madison, Wisconsin	28.90	734.0	29.88	758.9	60	15.6	88	NE	10	4.5		0	8s		NE	0	0	Cloudy	
Marquette, Michigan	29.28	743.7	29.99	761.7	47	8.3	92	NW	7	3.1			10s		NW	0	0	Cloudy.	
Mason, Texas	28.29	718.6	30.00	762.0	66	18.9	79	NW	4	1.8		0	0			0	0	Clear.	
Memphis, Tennessee	29.46	748.3	29.79	756.7	69	20.6	95	Calm	0	0			10ks		SE	0.55	14.0	Cloudy.	
Milwaukee, Wisconsin	29.18	741.2	29.91	759.7	50	10.0	100	N	14	6.3			Fg			0.01	0.3	Dense fog.	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.78	756.4	29.85	758.2	73	22.8	85	W	19	8.5			10n			0.68	17.3	Heavy rain.	
Montgomery, Alabama	29.65	753.1	29.87	758.7	71	21.7	90	S	6	2.7		8k	0	SW		0.04	1.0	Fair.	
Moorhead, Minnesota	28.91	734.3	29.87	758.7	60	15.6	88	Calm	0	0		0	5s			Inap.	Inap.	Fair	
Morgantown, W. Virginia	28.82	732.0	29.76	755.9	71	21.7	85	Calm	0	0		2cs	8s		SW	0.49	12.4	Cloudy.	
Mt. Washington, N. H.	23.69	601.7	29.72	754.9	40	4.4	48	NW.	24	10.7			10s;2k		NW	0	0	Cloudy.	
Nashville, Tennessee	29.29	744.0	29.81	757.2	71.9	22.2	86	N	1	0.4			10ks		SW	0.01	0.3	Cloudy.	
New Haven, Connecticut	29.66	753.4	29.77	756.1	67	19.4	60	N	4	1.8		10ck	0	SW		0.01	0.3	Cloudy	
New London, Connecticut	29.72	754.9	29.77	756.1	68	20.0	79	E	3	1.3			10s		E	0	0	Cloudy.	
New Orleans, Louisiana	29.74	755.4	29.79	756.7	74.0	23.3	81	S	6	2.7		2c	8s	SW	S	0.17	4.3	Cloudy.	
Newport, Rhode Island	29.71	754.6	29.76	755.9	66.4	19.1	88	W	1	0.4		4c	Sk	SW		0	0	Dense smoke	
New River, N. Carolina																			
New Shoreham, Rhode I'd	29.73	755.1	29.76	755.9	64.0	17.8	89	Calm	0	0		8ck	0	Calm		0	0	Fair.	
New York, New York	29.61	752.1	29.78	756.4	70	21.1	66	NE	10	4.5			10s		NW	0.10	2.5	Cloudy	
Norfolk, Virginia	29.78	756.4	29.81	757.2	78	25.6	77	SW	6	2.7		0	0			0.16	4.1	Clear.	
North Platte, Nebraska	27.09	688.1	29.91	759.7	61	16.1	85	S	3	1.3		0	0			0	0	Clear.	
Olympia, Washington T'y	29.99	761.7	30.03	762.7	47.5	8.6	88	N	1	0.4		2cs	0	SW		0.01	0.3	Fair.	
Omaha, Nebraska	28.79	731.3	29.93	760.2	61.6	16.4	98	N	5	2.2			Fg			0	0	Dense fog.	
Oswego, New York	29.50	749.3	29.82	757.4	55.0	12.8	78	NW	2	0.9			10s		NW	0	0	Cloudy.	
Pensacola, Florida	29.82	757.4	29.85	758.2	79	26.1	78	S	17	7.6		1k	0	W		0	0	Clear.	
Philadelphia, Pa	29.73	755.1	29.79	756.7	71	21.7	80	SE	3	1.3		8ck	Fg			0.04	1.0	Cloudy.	
Phœnix, Arizona	28.74	730.0	30.51	774.9	62	16.7	56	E	1	0.4		0	0			0	0	Clear.	
Pike's Peak, Colorado	18.02	457.7	30.23	767.8	33	0.6	70	NE	14	6.3		5c	0	N		0.16	4.1	Fair.	
Ploche, Nevada	24.09	611.9	29.94	760.5	54	12.2	15	Calm	0	0		0	0			0	0	Clear.	
Pittsburg, Pennsylvania	28.99	736.3	29.78	756.4	66	18.9	84	Calm	0	0			Fg		Calm	0.08	2.0	Dense fog.	
Port Eads, Louisiana	29.84	757.9	29.85	758.2	77.1	25.1	91	S	14	6.3		2k	2s	S	S	0	0	Fair.	
Port Huron, Michigan	29.19	741.4	29.85	758.2	52.1	11.2	100	N	8	3.6			10n		Calm	0.20	5.1	Light rain.	
Portland, Maine	29.73	755.1	29.78	756.4	64	17.8	63	NW	5	2.2			10s		NW	0	0	Cloudy.	
Portland, Oregon	29.94	760.5	30.01	762.2	55.8	13.2	90	NW	5	2.2		2cs	8s	S	S	0.21	5.3	Cloudy.	
Portsmouth, N. Carolina					76	24.4	73	SW	10	4.5		0	0			0	0	Clear.	
Prescott, Arizona	24.80	629.9	29.88	758.9	46	7.8	40	SW	3	1.3		0	0			0	0	Clear.	
Punta Rassa, Florida	29.94	760.5	29.95	760.7	80	26.7	82	S	9	4.0		5c	2ks	SW	SE	Inap.	Inap.	Fair.	
Red Bluff, California	29.58	751.3	29.91	759.7	60.0	15.6	77	NW	3	1.3		0	1s		Calm	0	0	Clear.	
Rio Grande City, Texas	29.70	754.4	29.91	759.7	75	23.9	90	Calm	0	0		0	0			0	0	Clear.	
Rochester, New York	29.22	742.2	29.84	757.9	57	13.9	87	NE	10	4.5			10n		NE	0.02	0.5	Light rain.	
Roseburg, Oregon	29.40	746.7	29.96	761.0	56	13.3	87	W	1	0.4		10ck	0	SW		0.02	0.5	Cloudy.	
Sacramento, California	29.90	759.4	29.96	761.0	60.3	15.7	82	S	5	2.2		0	0			0	0	Clear.	
St. Louis, Missouri	29.24	742.7	29.82	757.4	68.0	20.0	87	N	5	2.2		8c;hz	0			0	0	Fair.	
St. Paul, Minnesota	29.06	738.1	29.90	759.4	63	17.2	89	Calm	0	0		1c	0	NW		0	0	Clear.	
Salt Lake City, Utah	25.68	652.3	29.88	758.9	59	15.0	38	Calm	0	0		0	0			0	0	Clear.	
San Antonio, Texas	29.19	741.4	29.88	758.9	70.3	21.3	90	Calm	0	0		0	0			0	0	Clear.	
San Diego, California	29.85	758.2	29.92	760.0	55.5	13.1	93	NE	4	1.8		0	2s			0	0	Clear.	
Sandusky, Ohio	29.14	740.1	29.80	756.9	64	17.8	83	N	22	9.8			10s			0	0	Cloudy.	
Sandy Hook, New Jersey	29.76	755.9	29.79	756.7	69.0	20.6	99	W	5	2.2			10n			0.07	1.8	Light rain.	
San Francisco, California	29.97	761.2	30.03	762.7	57	13.9	94	W	2	0.9			Fg		SW	0.01	0.3	Dense fog.	
Santa Fé, New Mexico	23.37	593.6	29.88	758.9	56	13.3	35	E	2	0.9		5c	0	E		0	0	Fair	
Savannah, Georgia	29.83	757.7	29.92	760.0	81	27.2	68	SW	6	2.7		0	0			0	0	Clear.	
Shreveport, Louisiana	29.53	750.0	29.77	756.1	68	20.0	95	NW	6	2.7			10s			0.05	1.3	Cloudy.	
Silver City, New Mexico	24.33	618.0	29.79	756.7	55	12.8	56	SW	1	0.4		0	0			0	0	Clear.	
Sitka Alaska																0	0		
Smithville, North Carolina	29.85	758.2	29.88	758.9	77	25.0	86	SW	6	2.7		8k	Hz	SW		0	0	Cloudy.	
Spokane Falls, Wash. Ter.	28.09	713.5	30.05	763.3	44	6.7	75	N	1	0.4		0	0			Inap	Inap.	Clear.	
Springfield, Illinois	29.18	741.2	29.84	757.9	65	18.3	91	N	5	2.2		1c	7s	W	N	0.13	3.3	Fair.	
Springfield, Massachusetts	29.66	753.4	29.79	756.7	71	21.7	53	N	8	2.7		5c	0			0	0	Fair	
Stockton, Texas	26.95	684.5	29.94	760.5	61.2	16.2	100	Calm	0	0		0	0			0	0	Clear.	
St. Vincent, Minnesota	29.06	738.1	29.90	759.4	58	14.4	94	SE	2	0.9			10s		Calm	0	0	Cloudy.	
Thatcher's Island, Mass	29.74	755.4	29.80	756.9	61.8	16.6	77	N	9	4.0		0	2s		N	0	0	Fair.	
Toledo, Ohio	29.12	739.6	29.80	756.9	61	16.1	82	N	7	3.1			10s		SW	0.07	1.8	Threatening	
Tucson, Arizona	27.48	698.0	29.77	756.1	63	17.2	28	SE	4	1.8		0	0			0	0	Clear.	
Umatilla, Oregon	29.73	755.1	30.13	765.3	51.0	10.6	70	E	2	0.9		2cs	0	SW		0	0	Clear.	
Uvalde, Texas																			
Vicksburg, Mississippi	29.51	749.5	29.76	755.9	69	20.6	90	SE	4	1.8			10n			1.11	28.2	Light rain.	
Visalia, California	29.54	750.3	29.88	758.9	61.5	16.4	77	NW	2	0.9		0	0			0	0	Clear.	
Washington, D. C.	29.68	753.9	29.79	756.7	69	20.6	93	NW	3	1.3		5cs	5ks	NW	NW	0.06	1.5	Cloudy.	
Wickenburg, Arizona					57	13.9	36	Calm			0	0	0			0	0	Clear.	
Wilmington, N. Carolina	29.82	757.4	29.87	758.7	75	23.9	86	W	4	1.8		Hz	0	Calm		0	0	Dense haze.	
Winnemucca, Nevada	25.62	650.7	29.83	757.7	51	10.6	40	NE	12	5.4		0	0			0	0	Clear.	
Wood's Holl, Mass	29.71	754.6	29.75	755.0	64	17.8	89	SW	3	1.3		2ck	Hz	W		0	0	Fair	
Yankton, Dakota	28.73	729.7	29.99	761.7	67	19.4	64	Calm	0	0		0	0			0	0	Clear.	
Yuma, Arizona	29.63	752.6	29.77	756.1	68.7	20.4	75	E	1	0.4		0	0			0	0	Clear.	
Sub-Series.																			
Bogota, U. S. Columbia	22.07	560.6			55.5	13.1	72	Calm	0	0		2cs	5ks			0	0	Cloudy.	Thomas Herman
Buff Bay Town, Jamaica. ‡	29.70	755.9	30.07	763.8	75	23.9	76	E				0	0						
Havana, Cuba, W. I.	29.94	760.5	29.99	761.7	82	27.8	83	Calm	0	0		0	0			0	0	Clear.	A. Van Caneghem, Ass't.
Kingston, Jamaica, W. I.	29.99	761.7	30.00	762.0	81.0	27.2	71	Calm	0	0		0	0			0	0	Fine.	Robert Johnstone.
Navassa, W. I.	29.92	760.0	30.00	762.0	81	27.2	83	NE	12	5.4		0	2k		E	0	0	Hazy.	F. M. Everett.
Paramaribo, S. A.	30.01	762.2	30.01	762.2	80	26.7	82	E			2	5c	5k	E		0.700	17.8		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.34	745.2	29.89	759.2	82	27.8	68	Calm			0	2c	5s	N	S	0	0	Hazy.	Francesco J. Cisneros.
Rivas, Nicaragua																			Earl Flint.
Santiago de Cuba, W. I.	29.99	761.7	30.01	762.2	79	26.1	82	Calm	0	0		8ks	0			0	0	Cloudy.	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.60	751.8	29.64	752.8	41.0	5.0	96	W	10	4.5		3k	2s	SW	SW	0	0	Fair.	J. Fortescue & W Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross																			Comm A. J.Errington.
H. M. S. Alert, Bird Island, Oceanica	29.86	758.4	78	25.6	89	SE			3		10							Showery	Capt. J. P. Maclear.
H. M. S. Alexandra, Malta, Mediterranean	30.02	762.5	70	21.1	75	ESE			1		3							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab, Aden, Arabia, Asia	29.69	754.1	87	30.6	79	SSW			2		2					Sm'h		D. clouds	Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N 18° 14′, E. 59° 31′	29.01	736.8	78	25.6	90	SW			8–10	2	8	NE	SW			9	SW	Raining	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			64	17.8		NE			2–3		2	NE				1	NE	D. clouds	Capt. E. B. Pusey.
H. M. S. Blanche, N 13° 05′, W. 59° 36′	29.98	761.5	82	27.8	87	E			2–5		10					2	E	Showery	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 32° 00′, E. 15° 16′	30.28	769.1	57	13.9	57	SSW			3		4	S				4	S	D. clouds	Com. F. W. Richards.
H. M. S. Champion, S. 18° 40′, W. 80° 32′	30.08	764.0	77	25.0	90	NE			4		2					3	E	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Cheefoo Harbor, China	29.69	754.1	72	22.2	67	SSW			4–6		3	SW						D. clouds	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruiser																			Capt. F. A. Wetherall.
H. M. S. Curacoo																			Capt. S. Long.
H. M. S. Danae, N. 11° 37′, W. 26° 10	30.10	764.5	78	25.6	86	NE			3		3					2	NNE	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Eliott.
H. M. S. Dido, Simen's Bay, Cape Colony	30.35	770.9	57	13.9		Calm			0		5	SSW						D. clouds	Capt C. Domville.
H. H. S. Dock-Yard, Bermuda, W.I.	29.93	760.2	78	25.6	86	SSW			1		4	SSW						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 34′, W. 52° 41′	29.73	755.1	45	7.2	92	SE			1		10							Rain & fog	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 1° 14′, E. 88° 16′	29.74	755.4	82	27.8		WSW			2–3		3					3	SSE	D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald, N. 1° 47′, E. 172° 56′	29.86	758.4	83	28.3	87	ENE			3		5	NE						D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, S. 17° 32′, E. 61° 56′	30.02	762.5	78	25.6	77	ENE			5		2	ENE				4	ENE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn N. 13° 42′, E. 42° 42′	29.59	751.6	87	30.6	74	NW			1		4					1	NW	D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo, N. 17° 40′, W. 87° 55′	29.89	759.2	87	30.6	79	ESE			2		2	E						D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish, Yokohoma, Japan	30.00	762.0	65	18.3	78	S			1		6					1	NE	Misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	30.08	764.0	50	10.0	86	Calm			0		3							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 53° 10′, W. 70° 54′	29.78	756.4	35	1.7	80	WSW			4		5					3	SSE	D. clouds	Capt. L. F. Jones.
H. M. S. Griffin, Nassau, Bahamas	30.00	762.0	83	28.3	70	SE			1		4	ESE						D. clouds	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 37° 10′, W. 37° 30′	30.33	770.4	64	17.8		ESE			1–2		3	E				2	ESE	D. clouds	Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C.P. Fitzgerald.
H. M. S. Iris, N. 35° 51′, E. 14° 55′	30.03	762.7	68	20.0	90	WNW			1		8					1	WNW	Misty	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.02	762.5	62	16.7		Calm			0		7	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Kobe, Japan	29.89	759.2	68	20.0		Calm			0		2							D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	29.80	756.9	79.2	26.2	90	SE			2–3		10					1	E	Misty	Capt. A. Carpenter.
H. M. S. Midge, N. 25° 55′, E. 119° 49.′	29.82	757.4				NNE			3		4	NNE				2	NE	D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. N. S. Modeste, S. 13° 30′, E. 90° 40′	29.92	760.0	75	23.9	?	SSE			4–5		4					5	SE	D. clouds	Capt. J. G. Mead.
H. M. S Monarch, Tunis, Tunis, Africa	29.97	761.2	67	19.4	94	SSE			2–3		7	SSE						D. clouds	Capt. G. C. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.72	754.9	57	13.9	90	Calm			0		10							D. clouds	Capt. E. B Drummond.
H. M. S. Orontes																			Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.83	757.7	81	27.2	100	NNW			1		10					1	SE	Overcast	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, La Guayra, Venezuela, S.A.	29.93	760.2	79	26.1	82	Calm			0		8					1	NNE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.58	751.3	79	26.1		SE			2		8	SE						D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	30.03	762.7	47	8.3		Calm			0		2							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 58′, E. 50° 35′	29.89	759.2	81.3	27.4	78	S			3-4		3	ENE				2		D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, S. 1° 05′, E. 74° 15′	29.42	747.3	84	28.9	79	SSE			4		2	SE				5	SE	D. clouds	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 22° 56′, W. 21° 40′	30.16	766.1	73	22.8	74	NNE			2		1					2	NNE	Blue sky	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A.	30.06	763.5	57	13.9	81	Calm			0		4	Calm						D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise, S. 42° 44′, W. 75° 50′	30.15	765.8	47	8.3	92	SSW			5		8	SSW				5	SSW	D. clouds	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 36° 40′, W. 8° 20′	30.04	763.0	68	20.0	90	SSE			1		5	Calm						Misty	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.			79	26.1		NW			1		2							D. clouds	Com. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	29.79	756.7	61	16.1	77	S			1		1							Blue sky	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, Shat el Arab River, Turkey	29.59	751.6	91.5	33.1	70	NW			1-3		0							Misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, Lobito, Benguela	30.00	762.0	74.5	23.6	77	NW			2		10							Overcast	Carlos Candid dos Reis, Comd't.
Quanza, Bulama, Senegambia	29.95	760.7	84.2	29.2	96	E			1		2		E	2 hours		1	E	D. clouds	Carlos M. de Silva Costa, Comd't
Rio Lima, Sado																			S. C da Silva Costa, Comd't.
St. Thomas, Gulf of Guinea	29.91	759.8	81.3	27.4	81	SSE			4		4		SE	25 minutes		3	SSE	D. clouds.	G. A de Brito Capello, Comd't.
Tamega, Macao, China	29.84	757.8	76.5	24.7	78	E			2		9		E	4 hours				Drizzling	P. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga N. 54° 30′, E. 4° 14′	30.20	767.0	54.5	12.5	94	NNW			4		10							Foggy	Capt. M. von Krusenstierna.
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	o—10	o—10	o—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	29.96	761.0	80	26.7	78	S	9	4.0			2		SE	0	0			Fair	
N. Yard, Portsmouth, N. H.	29.78	756.4	66	18.9	79	Calm	0	0			5			0	0			Cloudy	
Naval Hospital, Yokahama, Japan	29.85	758.2	64	17.8	75	Calm			0		0			0	0			Hazy	
Adams, S. 0° 58′, W. 81° 12	29.72	754.9	74	23.3	90	ESE			2		8		ESE			Long	SW	Cloudy	
Alaska, Callao, Peru	29.94	760.5	65	18.3	89	Calm			0		10			0	0	Sm'h		Overcast	
Alert, N. 16° 38′, E. 143° 10′ *	29.83	757.7	84	28.9	79	E			3		2		E			Long	E	Clear	
Alliance, Norfolk, Va	29.83	757.7	74	23.3	86	SW			1		0			0	0			Clear	
Ashuelot, Kobe, Japan	29.99	761.7	57	13.9	?	Calm			0		2		Calm					Fair	
Colorado, New York, N. Y	29.76	755.9	69	20.6	75	N	8	3.6			10		Calm	0.01	0.3			Overcast	
Constitution, Norfolk, Va	29.75	755.6	72	22.2	85	SW			2		8?							Clear?	
Franklin, Off Norfolk, Va	29.78	756.4	73	22.8	85	SW	6	2.7			2		SW	0	0			Fair	
Galena, N. 36° 35′, W. 1° 48′	30.06	763.5	74	23.3	81	E			1		2		NE			Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	30.05	763.3	74	23.3	76	SW	1.2	0.5			2		SW	0	0			Fair	
Jamestown, Sitka, Alaska *	29.96	761.0	50	10.0	86	NNW			1		10			0.04	1.0			Overcast	
Kearsarge, Norfolk, Va	29.85	758.2	73	22.8	85	Calm			0		5		S			Sm'h		Fair	
Lackawanna, S. 11° 21′, W. 135° 59′ †	30.10	764.5	81	27.2	87	E			3-4		2		E			Sm'h	E	Fair	
Marion, Montevideo, Uruguay *†	29.91	759.7	55	12.8	87	S			3		10		Calm	Mod	erate	Sm'h		Raining	
Michigan, Erie, Pennsylvania	29.74	755.4	56	13.3	94	NE			4		10		NE					Raining	
Minnesota, Newport, R. I	29.76	755.9	69	20.6	90	N			1		9					Sm'h		Foggy	
Monocacy, Yokohama, Japan	30.03	762.7	65	18.3	89	SSE			1		2		SE					Fair	
New Hampshire, Norfolk, Va	29.81	757.2	73	22.8	85	W	8	3.6			0			0	0			Clear	
Nipsic, N. 36° 31′, W. 2° 28′	30.03	762.7	74	23.3	68	ESE			2		2					Sm h		D. clouds	
Onward, Callao, Peru †	29.97	761.2	64	17.8	94	Calm			0		10					Long	W	Misty	
Palos, Nagasaki, Japan	29.98	761.5	66	18.9	94	E			1		0							Clear	
Passaic, Washington, D. C	29.82	757.4	71	21.7	90	SW			1		8							Cloudy	
Pensacola, N. 38° 20′, W. 123° 30′	30.02	762.5	52	11.1	100	Calm			0		8			0	0	Sm'h		Foggy	
Portsmouth, Hampton Roads, Va	29.81	757.2	71	21.7	100	SW			2		2							Fair	
Powhatan, Norfolk, Va	29.83	757.7	78	25.6	82	WSW			1		2							Clear	
Quinnebaug, N. 21° 38′, W. 56° 10′	30.08	764.0	82	27.8	79	E			1		2					Sm'h		Clear	
Ranger, N. 17° 28′, W. 101° 53′ *	29.84	757.9	80	26.7	78	W			1		5		W	0	0	Sm'h		Fair	
Richmond, N. 34° 58′, E. 130° 30′	29.97	761.2	70	21.1	80	SSW			1		10					Sm'h	wsw	Hazy	
Saratoga, Hampton Roads, Va	29.80	756.9	74	23.3	86	SW			2		2		S	Slig	ht			Fair	
Shenandoah, Montevideo, Uruguay *	29.90	759.4	54	12.2	87	S			2		10					Sm'h		Rainy	
St. Louis, League Island, Pa	29.37	746.0	71	21.7	85	W	1	0.4			2		NW	0.05	1.3			Clear	
Swatara, Shanghai, China *†	29.84	757.9	73	22.8	76	SSE			2		0							Blue sky	
Tennessee, New York, N. Y	29.79	756.7	71	21.7	85	NE	8	3.6			10		SW			Sm'h		Hazy	
Ticonderoga, S. 52° 28′, W. 83° 15′	30.29	769.4	40	4.4	100	SSE			5		10		SSE	Inap.	Inap.	Mod.	SSE	Cloudy	
Trenton, Barcelona, Spain *	29.99	761.7	70	21.1	66	NE			2		5			0	0	Sm'h		Fair	
Vandalia, Navy Yard, N. Y	29.76	755.9	68	20.0	84	NNE			2		10		Calm					Cloudy	
Wabash, Boston, Massachusetts	29.79	756.7	68	20.0	70	N	10	4.5			5		NW	0	0			Hazy	
Wachusetts, N. Yard, Mare I'd, Cal	30.00	762.0	62	16.7	88	SW			2		10			0	0	Sm'h		Cloudy	
Yantic, N. 28° 08′, W. 80° 04′ *	29.91	759.7	78	25.6	91	SSW			4		2					Mod.	SW	Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belloisie, N. 23° 32′, W. 84° 00′	29.96	761.0	80.5	26.9	96	SE			3		3							D. clouds	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 52° 14′, W. 14° 44′	30.07	763.8	56.8	13.8	98	SE			4		8							D. clouds	W. N. Lalley.
City of Agra, N. 43° 17′, W. 13° 41′	30.29	769.4	62.5	16.9	83	NNE			3		8					3	SSE	D. clouds	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbighshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 27° 10′, W. 34° 25′	30.16	765.1	71.0	21.7	85	NNE			3		4							D. clouds	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laemene																			Capt W. P. Hughes.
Ship Lochee, ‡ N. 48° 52′, W. 14° 15′	30.19	766.8	59.5	15.3	94	S			4		4							Misty	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria																			Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 13° 03′, E. 43° 19′	29.56	750.8	86.5	30.3	96	NNW			4		8							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 51° 57′, W. 38° 50′	29.77	756.1				W			6		8		W			Cross	sw; nw	Cloudy	
S. S. Circassian, ‡ N. 51° 07′, W. 43° 18′	29.72	754.9	46	7.8	77	WSW			6		10k		WNW	6 hours		4	WNW	D. clouds	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			
S. S. Baltic, ‡ N. 48° 08′, W. 32° 58′	29.94	760.5	58	14.4	76	WSW			4		5		N	0	0	Con.	WSW; W	D. clouds	Capt. J. W. Jennings.
S. S. Britannic																			Capt. H. Parsell.
S. S. Celtic																			Capt. H. Perry.
S. S. Germanic																			Capt. Benj. Gleadell.
S. S. Republic																			Capt. Ch. W. Kennedy
																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Thol.
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern																			Capt. Th. Jüngst.
S. S. Köln, N. 42° 17′, W. 51° 38′	29.94	760.5	52.5	11.4	100	SSW			3		5?		SSW	14h'rs	fog	Mod.	SW	Cloudy?	Capt. F. Pfeiffer.
S. S. Leipzig, N. 49° 00′, W. 23° 30′	30.12	765.0	67.0	19.4		WSW			4		2		WSW	3 hours		Mod.	W;N	Fair	Capt. G. Meyer.
S. S. Ohio																			Capt. C. Helmbourh.
S. S. Strassburg																			
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Skoldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mil.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mil.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. N. 40° 11′, W. 51° 24′...*†	30.02	762.5	72	22.2	95	WSW	.....	.....	5	.....	5	.....	WSW	.....	.....	Sm'h	SW	Fair.....	Capt. J. W. Shackford.
S. S. Indiana, N. 48° 11′, W. 27° 22′.....†	29.95	760.7	57	13.9	74	WSW	.....	.....	5	.....	8	.....	SW	Light		Mod.	SW	Cloudy.....	Capt. R. W. Sargent.
S. S. Ohio, Liverpool, England....*†	30.36	771.1	68	20.0	95	W	.....	.....	1	.....	0	.....	.....	0	0	.....	.....	Fair.....	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, N. 41° 51′, W. 44° 36′.....†	30.09	764.3	65	18.3	94	WSW	.....	.....	3	.....	10	.....	W	.....	.....	Sm'h	W	Fair.....	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern.....																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic. N. 42° 58′, W. 142° 02′...†	30.10	764.5	53	11.7	80	NNE	.....	.....	6	.....	8	.....	NE	0	0	High	NE	Cloudy.....	Capt. H. Davison.
S. S. Gaelic, N. 26° 20′, E. 122° 32′....*†	30.00	762.0	73	22.8	85	NE	.....	.....	5	.....	2	.....	NE	.....	.....	Light	NE	Fair.....	Capt. W. H. Kidley.
S. S. Oceanic, Hong Kong, China.....	30.08	764.0	77	25.0	75	N	.....	.....	3	.....	2	.....	N	0.06	1.5	.....	.....	Fine.....	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia.....																			Capt. Fred. Bolles.
S. S. Oregon, N. 38° 10′, W. 123° 15′....†	30.07	763.8	55.5	13.1	?	S	.....	.....	.....	.....	10	.....	.....	.....	.....	Sm'h	SW	Foggy.....	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Francisco, Cal.... ...†	30.03	762.7	59	15.0	94	W	.....	.....	1	.....	Fog	.....	SW	0	0	.....	.....	Foggy.....	Capt. J. N. Ingalls.
S. S. Dakota.																			Capt. H. G. Morse.
S. S. Idaho, N. 42° 55′, W. 124° 44′...†	29.92	760.0	52	11.1	93	NW	.....	.....	2	.....	Fog	.....	.....	.....	.....	Sm'h	.....	Foggy	C. E. Lyons, 1st Officer.
S. S. Orizaba,.....																			Geo. H. Harrison.
S. S. Senator, San Pedro, Cal.....†	29.88	758.9	60	15.6	94	NW	.....	.....	2	.....	10	.....	NW	.....	.....	Mod.	NW	Cloudy.....	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal.....†	30.02	762.5	56	13.3	94	W	.....	.....	2	.....	5	.....	SW	.....	.....	.....	.....	Fair	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal.... ...†	30.02	762.5	51	10.6	86	Calm	.....	.....	0	.....	2	.....	.....	.....	.....	.....	.....	Fair.....	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, S. 0° 14′ W. 166° 38′.....	29.87	758.7	80	26.7	82	E	.....	.....	2	.....	2	.....	E	.....	.....	Sm'h	E	Clear.....	A. Bannerman, 2d Officer.
S. S. City of New York, Sydney, N. S. W.....†	29.75	755.6	64	17.8	100	W	.....	.....	1	.....	0	.....	.....	.....	.....	.....	.....	Clear.....	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 14° 16′, W. 92° 29′.....†	29.95	760.7	84	28.9	79	E	.....	.....	1	0	8kn	.....	E	0	0	Mod.	S	Cloudy.....	Capt. D. S. Austin.
S. S. City of Peking, N. 45° 02′, E. 165° 32′.....†	29.58	751.3	44	6.7	100	SE	.....	.....	4	.....	10	.....	SE	0	0	Sm'll	SE	Foggy.....	Capt. G. G. Berry.
S. S. City of Sidney.....																			Capt. H. C. Dearborn.
S. S. City of Tokio, N. 38° 35′, W. 171° 49′....†	29.94	760.5	55	12.8	50	NW	.....	.....	2	.....	Fog	.....	.....	.....	.....	Sm'h	.....	Foggy.....	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 7° 02′, W. 80° 34′.....†	29.85	758.2	82	27.8	83	W	.....	.....	4	.....	5	.....	W	0.05	1.3	Mod.	WSW	Fair,.....	Capt. R. R. Searle.
S. S. Zealandia.....																			Capt. M. Connolly.
RED STAR LINE. *Jas. A. Wright President.*																			
S. S. Belgenland.....																			Capt. Sam'l Jackson.
S. S. Nederland.....																			A. Feddersen, 2d Officer.
S. S. Rhynland, N. 40° 31′, W. 70° 29′.....†	29.81	757.2	56	13.3	93	SW	.....	.....	1	.....	0	.....	.....	0.1	3.	Sm'h	.....	Foggy	Capt. Wm. Geo. Randle.
S. S. Vaderland.....																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley.....																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, Fall River, Mass.....	29.76	755.9	74	23.3	63	Calm	0	0	.....	8ck	0	SW	.....	0	0	.....	.....	Cloudy	Capt J. Jorgensen.
Sch'r Annie R. Lewis.....																			Capt. L. L. Lewis.
Bark Carrie Heckle.....‡																			Capt. B. F. Woodbury.
Brigantine George, N. 25° 17′, W. 64° 13′.....†	30.13	765.3	82	27.8	.....	S	.....	.....	1	.....	2	.....	.....	0	0	Sm'h	.....	....	Capt. W H. Champlin.
U. S. F. C. S. Fish Hawk, Susquehanna River, Md†	29.85	758.2	74	23.3	81	NNE	1	0.4	.....	2c	2s	.....	.....	2.01	51.1	.....	.....	Fine.....	
Bark Sunbeam, Lisbon, Portugal.....†	30.07	763.8	78	25.6	65	Calm	.....	.....	0	.....	2	.....	SW	0	0	.....	.....	Clear.....	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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W. B. Hazen

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

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 2, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direc-tion.	Wind. Velocity.		Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours‡			29.98	761.5	72.1	22.3	79	N			4		1			0	0	Very fair	Raynard.
Algiers‡			30.03	762.8	72.3	22.4	76	NNW			3		0			0	0	Clear	Nicolas.
La Calle‡			30.02	762.6	73.4	23.0	76	NNW			2		4			0.079	2.0	Cloudy	Fonfrède.
Tunis‡			29.99	761.8															Jacques.
Sfax‡			30.14	765.5															Gau.
Saida‡			30.02	762.5	73.4	23.0	38	NNE			1		5			0	0	Cloudy	Dumas.
Tebessa‡			30.02	762.6	64.4	18.0	60	Calm			0		9			0.051	1.3	Covered	Watrin.
Geriville‡					68.7	20.4	44	N			1		5			0	0	Cloudy	Lonchamp.
Laghouat‡			29.99	761.8	77.7	25.4	30	W			1		2			0	0	Fair	Herbin.
Biskra‡			30.01	762.2	83.1	28.4	61	NW			1		0			0	0	Clear	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.39	746.5	29.48	748.8	52.7	11.5	81	N	4	1.8			10			0	0	Threatening	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.42	747.2	29.95	760.6	73.6	23.1	41	N			2		4			0	0		Prof. Ivan Stožir.
Cracow, I. R. Obs'y	29.19	741.4	29.94	760.4	66.9	19.4	56	SW	4.3	1.9			5			0.091	2.3		Dr. Wierzbicki.
Eperies	29.05	737.8	29.91	759.6	55.4	13.0	76	Calm			0	3C;CS	0	S		0.012	0.3		Julius Mikolik.
Gratz‡	28.78	730.9	30.01	762.2	60.6	15.9	79	NE			3		8					Thnd'r str'm	Andreas Rospini.
Hermannstadt	28.49	723.7	29.86	758.4	73.6	23.1	39	NW			5		5			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.66	728.0	29.95	760.8	71.6	22.0	59	NE			1		2			0	0		The Staff.
Lemberg	28.89	733.7	29.84	757.9	67.8	19.9	46	NW			1		8			0	0		Dr. T. Stanecki.
Pola	29.86	758.4	29.97	761.1	78.8	26.0	41	S			2		0			0	0		I. R. HydrographicOffice.
Szathmar	29.45	748.0	29.86	759.4	70.9	21.6	44	NW			3		5			0	0		Beicht Peter, S. J.
Szegedin																			Karl Stancel.
Trieste	29.90	759.4	30.00	762.0	71.6	22.0	46	S			1		10			0	0		Secco.
Vienna	29.29	743.9	29.98	761.5	71.2	21.8	45	NW			2		2			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter Printed June 3 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force o—10	Clouds. Amount and kind. Up'er o—10	Lo'r o—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.97	761.2	30.06	763.5	72.3	22.4	40	SSE	15	6.7			2			0	0	Blue sky	W. Boswell.
Armagh, Observatory	29.95	760.7	30.17	766.3	69.8	21.0	54	SW	6	2.7			1					D. clouds	S. Call.
Bidston, Liverpool Obs'y			30.18	766.6	66.7	19.3	56	WNW	10	4.5			2					Blue sky	John Hartnup.
Bolton, Sharples	29.62	752.3	30.14	765.5	72.6	22.6	41	NW	6	2.7			5					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.74	755.4	30.14	765.5	71.2	21.8	35	NE			1		1			0	0	Blue sky	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.95	760.7	29.98	761.5	87	30.6	65	NE			1		3					D. clouds	Corpl.J.Surgener,A.H.C.
Cardington			30.12	765.0	78.0	25.6	46	NE			0.4		7					D. clouds	John McLaren.
Chatham, School M. E.	30.04	763.0	30.17	766.3	65.0	18.3	68	E			2		3					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.96	761.0	30.19	766.8	70.4	21.3	41	NNW			4		2					D. clouds	The Staff.
Fort Napier, Natal	27.66	702.6	29.88	758.9	67.2	19.6	95	Calm			0		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	88	31.1	84	Calm			0							Raining	Sgt. C. E. Keane.
Galway, Queen's College			30.13	765.3	60	15.6	88	E			2		10					Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	29.98	761.5	30.04	763.0	69.2	20.7	95	E			3		6					Gloomy	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.91	759.7	30.12	765.0	71.3	21.8	59	SW			6		1					Blue sky	Harry Urquhart.
Greenwich, Royal Obs'y	29.98	761.5	30.15	765.8	74.3	23.5	56	E			1		3					Blue sky	The Staff.
Guernsey	29.91	759.7	30.13	765.3	65	18.3	65	NE			1		3					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.11	764.8	30.14	765.5	73.8	23.2	53	ENE	12	5.4			5					Misty	The Staff.
Leicester, Museum	29.89	759.2	30.13	765.3	74.0	23.3	99	SW			1		9					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.82	757.4	29.90	759.4	74.6	23.7	70	SE			2		3					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.94	760.5	29.99	761.7	85.0	29.4	79	S			1		7					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.64	752.8	30.15	765.8	68.4	20.2	71	N			1		10					Overcast	John Mac Emall.
Oxford, Radcliffe Obs'y	29.93	760.2	30.16	766.1	72.9	22.7	46	NNE			1		8					Threatening	The Staff.
Plymouth	30.09	764.3	30.17	766.3	68.8	20.4	58	SW			2		9					Misty	John Merrifield.
Sandwick Manse, Orkneys			30.08	764.0	55	12.8	82	W	26	11.6			1					Blue sky	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.86	758.4	29.92	760.0	69.4	20.8	70	SW			1		2					D. clouds	Serg't W. H. Lyne.
Sheffield	29.89	759.2	30.16	766.1	73.5	23.1	54	ESE			1		6			0	0	D. clouds	W. F. Cooper.
Silloth Rectory	30.12	765.0	30.15	765.8	69.2	20.7	64	W			4		0			0	0	Blue sky	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.37	771.4	71.8	22.1	52	W	14	6.3			0					Blue sky	Rev. S. J. Perry.
Stratfield Turgiss	29.94	760.5	30.15	765.8	76.4	24.7	50	NE			2		8					D. clouds	Rev.C.H.Griffiths,F.M.S
Truro, Royal Institution	30.20?	767.1?	30.20?	767.1?	72	22.2	46	N	1	0.4			4					D. clouds	W. Newcombe.
Valencia, Observatory	30.22	767.6	30.25	768.3	59.9	15.5	78	NW	10	4.5			8					D. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B					51.0	10.6		Calm	0	0		0	0			0	0	Blue sky	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.88	758.9	29.92	760.0	51	10.6	56	SE	5	2.2		0	0			0	0	Clear	H. J. Cundall, C. E.
Chatham, N. B.*	29.86	758.4	29.92	760.0	47	8.3	71	NE	4	1.8		0	0			0	0	Clear	G. A. Blair.
Chicontimi, Quebec					41.6	5.3		NW			1	1ck	0			0	0	Blue sky	Rev. V. A. Huart.
Cornwall, Ontario	29.66	753.4	29.86	758.4	48.9	9.4	86	NE			1	0	0			0	0	Blue sky	James Smith, M. A
Dalhousie, N. B	29.85	758.2	29.89	759.2	53.0	11.7		E			2	0	0			0	0	Blue sky	H. A. Johnson.
Father Point, Quebec*	29.89	759.2	29.91	759.7	45	7.2	74	NE	10	4.5		0	0			0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.06	738.1	29.87	758.7	55	12.8	90	N	5	2.2		0	0			0.360	9.1	Clear	James Stewart.
Fredericton, N. B	29.86	758.4	29.92	760.0	48.8	9.3	73	NE	4	1.8		0	0			0	0		Prof. Harrison.
Granton, Ontario	28.75	730.2	29.84	757.9	53.0	11.7	80	N			1	4c	0			0.02	0.5	Fair	James Grant.
Halifax, N. S.*	29.78	756.4	29.91	759.7	48	8.9	84	E	8	3.6			10ks			0	0	Cloudy	A. Allison.
Hamilton, Ontario	29.48	748.8	29.86	758.4	53.5	11.9	80	NE			1	0	0			0.03	0.8	Clear	Geo. Dickson, B. A.
Kingston, Ontario*	29.51	749.5	29.85	758.2	54	12.2	59	N	7	3.1		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S	29.91	759.7	29.95	760.7	38.2	3.4	84	N			3	7k	0	N		0	0	Cloudy	C. H. Rigby.
Montreal, Quebec*	29.68	753.9	29.88	758.9	53	11.7	67	NE	8	3.6		0	Hz			0	0	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario	29.85	758.2	29.89	759.2	46.1	7.8	62	S			1	0	7ks			Inap.	Inap.	D. clouds	J. R. Nason.
Parry Sound, Ontario*	29.19	741.4	29.88	758.9	54	12.2	52	E	4	1.8		5cs	0	W		0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario	29.14	740.1	29.87	758.7	62.7	17.1	66	Calm			0	0	0			0	0	Clear	J. F. Jeffers, M. A.
Port Dover, Ontario	29.15	740.4	29.84	757.9	55	12.8	81	NE	4	1.8		8c	0	SW		0.02	0.5	Fair	H. Morgan.
Port Stanley, Ontario	29.10	741.7	29.83	757.7	57	13.9	72	E	8	3.6		2ck	0	NW		0.23	5.8	Clear	M. Payne.
Quebec, Quebec*	29.60	751.8	29.92	760.0	48	8.9	56	NE			1	0	Hz			0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.45	748.0	29.91	759.7	45	7.2	76	Calm	0	0		5c	0	SW		0	0	Fair	W. H. McIntyre.
Saugeen, Ontario*	29.14	740.1	29.84	757.9	51	10.6	71	E	9	4.0		5cs	0			0	0	Fair	K. Stewart.
St. Andrews, N .B	29.79	756.7	29.84	757.9	51	10.6	75	NE	2	0.9		0	0			0	0	Clear	
St. John, N. B	29.72	754.9	29.89	759.2	55.0	12.8	56	E	6	2.7		5c	0			0	0	Blue sky	G. Murdock, C. E.
Stratford, Ontario	29.55	750.6	29.82	757.4	50.0	10.0	85	E	5	2.2		3cs	0			0	0	Blue sky	C. J. Macgregor, M. A.
Sydney, C. B*	29.91	759.7	29.95	760.7	45	7.2	73	NE	5	2.2		8cs	0	W		0	0	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.50	749.3	29.88	758.9	55	12.8	71	Calm	0	0		8ck	0	W		0	0	Cloudy	Magnetic Observatory
Windsor, N. S	29.78	756.4	29.88	758.9	47.5	8.6	74	E	4	1.8			9n			0	0	Fair	
Woodstock, Ontario	28.79	731.3	29.84	757.9	56.1	13.4	84	NE	2	0.9		6cs	0	SW		0.02	0.5	D. clouds	Prof. Wolverton.
Yarmouth, N. S.*	29.75	755.6	29.82	757.4	51	10.6	86	E	10	4.5			10s		SE	0	0	Cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.73	754.9	29.97	761.2	50	10.0	86	NE	1	0.4		2k	2s			0	0	Fair	John Delany.
St. Pierre, N. F			29.84	757.9	46.4	8.0		NW			2					0	0		N. F. Land, Comd't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	30.07	763.8			59.0	15.0	71	W	44.5	19.9		0	2ks			0	0		John Duthie.
Cape Town, C. G. H. Obs'y.	30.25	768.3	30.29	769.4	45.7	7.6		W	3.4	1.5		4cs	4k			0.072	1.8		The Staff, for D. Gill.
Worcester	29.19	741.4			56.1	13.4	59	WNW			1	2	4			0	0	Lightly cl'dy	C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.85	758.1	29.87	758.7	68.0	20.0	83	SE	7.4	3.3		9ck	0			0	0	Covered	M. Marc Dechevrens, S. J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.19	665.2	29.91	759.7	65.3	18.5	87					10s	0			0	0	Cloudy	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.98	761.4	30.02	762.6	68.5	20.3	57	NNE	9	4		0							Oversergent Fischer.
Farõe	30.03	762.7	30.05	763.2	59.7	15.4	82	WNW			4	1							Overloerer Lauridsen.
Godthaab, Greenland	29.36	745.7	29.40	746.8	43.5	6.4	72	NNE			4	3							S. Kleinschmidt.
Stykkisholm, Iceland	29.50	749.4	29.55	750.5	46.8	8.2		NE			6	8							A. O. Thorlacius.
Thorshavn	29.80	757.0	29.84	757.9	53.2	11.8	78	SW	22	10		4							Overloerer Bergh.
Vestervig	29.94	760.4	30.03	762.8	57.6	14.2	85	W			2	5							Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.39	746.6	30.03	762.7	68.0	20	40	W			1	0	8nkc	NE	S	0.39	10.	Very cloudy	M. Labroue, Director.
Alençon Normal School	29.58	751.3	30.13	765.3	68.7	20.4	67	NE			2	0	2k		SW	0	0	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	29.85	758.2	30.10	764.6	61.7	16.5	73	ENE			2		10		E			Covered	M. Klein, Commandant.
Avignon, Normal School	29.90	759.5	29.98	761.5	75.7	24.3	48	SSE			1				SSW	0.020	0.5	Clouds	M. Giraud, Director.
Bar-sur-Aube	29.47	748.5	30.00	762.1	73.0	22.8	40	ESE			1	0	8kn		ESE	0	0	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.85	758.1	30.11	764.7	67.1	19.5	54	NE			2		5		E	0	0	Cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.14	740.1	29.95	760.7	73.4	23	37	ENE			2					0	0		M. Gobin, Director.
Bordeaux, Observatory	29.77	756.1	30.02	762.5	80.4	26.9	27	N			1		10			0.028	0.7	Covered	M. Rayet, Director.
Bourges, Normal School	29.46	748.3	30.00	762.0	75.2	24	46	N			1	0	n		N	0	0		M. Postel, Director.
Brest, Naval Observatory	29.92	760.0	30.17	766.2	69.8	21.0	58	NNE			2		6		NNE	0	0	Stormy	M. de Rermaree, Dir.
Caen, Normal School	30.02	762.5	30.09	764.3	66.6	19.2	83	NE			4		2		NE	0	0	Slightly cl'dy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.63	752.7	29.95	760.6	80.2	26.8	40	SSE			1		8			0	0	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.55	750.6	30.05	763.3	75.2	24	53	N			1					0	0		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.65	727.7	29.95	760.6	74.5	23.6	40	NE			2		5		NE	0	0	¼ covered	M. Allnard, Director.
Cluny, Normal School	29.16	740.6	29.99	761.8	76.3	24.6	36	N			1		0			0	0	Clear	M. de Villemontée, Dir.
Commercy, Normal School	29.18	741.1	30.02	762.4	74.7	23.7	27	NE			1	0	5k		NE	0	0	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.53	699.3	30.05	763.3	59.0	15	76	NW			6	0	k		E	0.185	4.7		M. Jeangirard, Director.
Greasque, du. Rhone	28.94	735.0	30.08	764.0	68.0	20	45	SE			2		10		SE	0.370	9.4	Covered	M. Kina, Director.
Grenoble, Normal School	29.21	742.0	29.96	760.9	68.7	20.4	54	E			1	0	csk		SE	0	0		M. Ablard, Director.
Guéret, Normal School	28.45	722.7	29.99	761.8	69.8	21	53	NE			1	0	k		SW	0	0		M. Rivoire, Director.
Lamballe, Normal School	29.87	758.6	30.13	765.4	72.3	22.4	48	NNW			1		Fg		NNW	0	0	Foggy	M. Ollitrault, Director.
Lescar, Normal School	29.45	747.9	30.10	764.6	68.7	20.4	68	WNW			1	clk	0	W		0.28	7.		M. Chauvin, Director.
Lorient, Naval Observatory	30.05	763.3	30.15	765.9	78.1	25.6	57	S			1		8		S	0	0	¾ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.95	735.2	29.97	761.1	73.9	23.3	40	E			1		5		ENE	0	0	Cloudy	M. André, Director.
Mans, Normal School	29.78	756.3	30.08	763.9	70.7	21.5	73	NNE			4		2		NNE	0	0	Slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	29.72	755.0	29.99	761.8	70.9	21.6	61	SW			1		6		E	Inap.	Inap.		M. Stephan, Director.
Montlouis l'Instituteur	24.86	631.5	30.10	764.5	49.6	9.8	76	SE	5.6	2.5			8		N	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.87	758.6	29.97	761.2	72.0	22.2	80	SE			2		2		S	0	0	Slightly cl'dy	M. P. Galzin, Director.
Nancy, Normal School	29.28	743.6	30.01	762.3	75.2	24	30	NNW			1	0	5k			0	0	Cloudy	M. Hasse.
Nantes, Observatory	29.94	760.5	30.10	764.6	75.7	24.3	50	N			1-2	8ck	0	NE	NNE	0	0		M. Larocque, Director.
Nice	29.95	760.6	29.98	761.5	74.8	23.8	53	E			1		1	E	E	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.91	759.8	30.02	762.4	62.2	16.8	73	NW	5.6	2.5			10		NW	0.059	1.5	Stormy	Dr. Fines.
Pic-du-Midi, Plantade	22.59	573.7			35.1	1.7							10	SW	NE	0.346	8.8	Stormy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.98	736.2	30.00	762.0	77.0	25	28	Calm			0		0			0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.20	640.0			49.3	9.6	74	NE			3		5			0.063	1.6	¼ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.04	763.1	30.08	763.9	73.4	23.0	56	NE			1		8		NE	0	0	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.85	758.3	30.07	763.7	70.9	21.6	43	NNE			1		8		SW	0	0	Very cloudy	M. Mouillot, Director.
Rodez, Normal School	27.88	708.1	29.99	761.8	62.2	16.8	83	W			2		10					Thun'r storm	M. Richard, Director.
Rouen, Normal School	30.00	762.1	30.09	764.3	69.4	20.8	54	N			2		2		N	0	0	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	29.98	761.5	30.14	765.5	67.3	19.6	61	NNW			1		2		N	0	0	Slightly cl'dy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.90	759.5	30.07	763.7	69.8	21.0	63	N			2		1	NE	NE	0	0		M. Renou, Director.
Toulouse, Observatory	29.46	748.3	30.19	766.8	69.8	21.0	63	NW			2		10			0.181	4.6	Covered	M. Baillard, Director.
Tours	29.84	758.0	30.04	763.0	73.4	23.0	53	ENE			1		2		ENE	0	0	¼ covered	M. de Tastes.
Versailles, Observatory	29.59	751.5	30.08	764.0	70.2	21.2	53	NE			3					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.80	756.8	30.09	764.2	69.6	20.9	54	N			2		1		NE	c	0		M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.18	741.1	30.04	763.0	73.6	23.1	40	Calm			0	0	4k			0	0		Prof. Dr. Hoh.
Berlin	29.85	758.1	30.02	762.4	70.7	21.5	55	N			1		5			0.008	0.2		Prof. Dr. Arndt.
Breslau	29.48	748.8	30.01	762.3	72.7	22.6	32	NNW			2		4			0	0		Royal University Obs'y.
Carlsruhe	29.58	751.4	29.99	761.8	75.9	24.4	51	SE			1		1	NE		0	0		Albert Senx.
Cassel	29.34	745.2	30.06	763.5	66.6	19.2	64	NNW			3		2	N		0	0		Dr. H. Möhl.
Frankfort on the Main	29.70	754.4	30.06	763.6	77.0	25.0	28	N			1		3			0	0		Physical Society.
Friedrichshafen	28.56	725.5	29.95	760.6	71.2	21.8	30	ENE			4		1	E		0	0		Wilhelm, Chief Tel.
Hamburg	29.97	761.2	30.04	763.0	71.6	22.0	56	W			3		8			0	0		Dr. R. Kleeman.
Kiel	30.00	762.0	30.02	762.4	68.7	20.4	51	NE			2		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.63	752.6	30.04	763.0	70.5	21.4	56	NW			1		7	WNW		0.087	2.2		Prof. Dr. Bruhns.
Magdeburg	29.86	758.4	30.04	763.1	64.9	18.3	68	NW			1	0	3k		NW	0	0	D. smoke	Dr. Assmann.
Memel	29.91	759.8	29.96	761.0	59.0	15.0	62	NW			3		10k						Reinbrecht & Issermann.
Munich	28.26	717.8	30.13	765.3	69.8	21.0	26	NE			2		3	W		0	0		Central Station.
Neufahrwasser	29.97	761.2	29.98	761.6	65.1	18.4	41	NE			2		10			0	0		A. Lothes.
Neustadt, Palatinate	29.48	748.8	30.01	762.2	77.5	25.3	34	Calm			0		7			0	0		Dicknether.
Stuttgart	29.06	738.1	29.92	759.9	73.4	23.0	42	W			1		5	N		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.53	724.7	29.99	761.8	72.5	22.5	33	N			2		6	E		0	0		Prof. Kemlein.
Wustrow	30.00	761.9	30.02	762.5	58.3	14.6	82	WSW			3	0	58			0	0		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.61	752.1	30.00	761.9	69.6	20.9	.....	SW	.....	.....	2.0	.....	0	.....	.....	.....	.....	Smoky.....	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.56	750.9	29.61	752.1	89.0	31.7	75	SW	21.0	9.4	.....	.....	2	SW	.....	0	0	D. clouds.....	
Deesa	29.09	738.9	29.54	750.4	100.5	38.1	34	W	17.3	7.7	.....	.....	5	.....	SW	0	0	D. clouds.....	
Bombay	29.68	753.9	29.72	754.8	88.2	31.2	72	WNW	18.0	8.0	.....	.....	5	.....	W	0.12	3.0	D. clouds.....	
Poona, Yarrowda	27.89	708.3	29.72	755.0	82.3	27.9	54	WSW	.....	.....	.....	.....	4	.....	W	0	0	D. clouds.....	
Belgaum	27.22	691.5	29.74	755.3	78.8	26.0	65	SW	11.0	4.9	.....	.....	4	E	SW	0.02	0.5	Showery.....	
Lahore	28.64	727.4	29.33	744.9	110.3	43.5	18	SW	4.4	2.0	.....	.....	0	.....	.....	0	0	Misty.....	
Roorkee	28.56	725.5	29.43	747.5	91.4	33.0	56	NE	8.2	3.7	.....	.....	3	.....	.....	0.13	3.3	.....	
Agra	28.88	733.6	29.42	747.2	99.1	37.3	37	E	7.1	3.2	.....	.....	0	.....	.....	0	0	.....	
Nagpur	28.48	723.2	29.48	748.9	91.7	33.2	47	NW	6.3	2.8	.....	.....	9	.....	NW	0.42	10.7	Gloomy.....	
Jubbulpore	28.19	715.9	29.50	749.2	93.1	33.9	36	NE	6.1	2.7	.....	.....	8	.....	.....	0.03	0.8	Overcast	
Lucknow	29.13	739.8	29.49	749.1	90.1	32.3	52	NNW	3.7	1.6	.....	.....	3	NNW	.....	0.12	3.0	D. clouds.....	
Allahabad	29.16	740.8	29.47	748.4	92.7	33.7	50	WSW	3.0	1.3	.....	.....	6	W	.....	0	0	D. clouds.....	
Patna	29.29	744.0	29.46	748.4	95.1	35.1	50	E	4.2	1.9	.....	.....	4	E	E	0	0	D. clouds.....	
Hazaribagh	27.52	699.0	29.50	749.2	80.8	27.1	76	E	7.3	3.3	.....	.....	10	.....	N	0.57	14.5	Thund'rst'm	
Cuttack	29.38	746.2	29.46	748.2	83.0	28.3	82	N	0.4	0.2	.....	.....	10	.....	.....	0.73	18.5	Overcast.....	
Calcutta, Alipore	29.43	747.5	29.45	748.0	82.3	27.9	85	ESE	7.0	3.1	.....	.....	9	NW	E	1.92	48.8	D. clouds.....	
Dhubri	29.39	746.4	29.51	749.4	80.6	27.0	78	Calm	0.9	0.4	.....	.....	10	.....	.....	0	0	Overcast.....	
Chittagong	29.44	747.7	29.53	750.0	78.9	26.1	93	ENE	3.4	1.5	.....	.....	10	.....	.....	0.11	2.8	Drizzling.....	
Sibsagar	29.16	740.8	29.49	749.0	90.1	32.3	68	N	1.7	0.8	.....	.....	10	SW	SW	0	0	D. clouds.....	
Zanzibar, Africa	.....	.....	30.00	762.0	82.5	28.1	63	SSE	5	2.2	.....	.....	9	.....	SE	0.08	2.0	Gloomy.....	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.59	751.5	29.98	761.6	71.4	21.9	38	S	1.3	0.6	.....	.....	7	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.48	748.8	29.98	761.6	72.5	22.5	43	WNW	4.9	2.2	.....	.....	3	.....	.....	0	0	.....	Prof. Schiaparelli.
Padua	29.84	757.9	29.94	760.5	74.1	23.4	35	ESE	6.9	3.1	.....	.....	1	SE	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.13	739.8	30.01	762.3	71.6	22.0	42	WSW	2.5	1.1	.....	.....	3	E	.....	0	0	.....	Prof. P. F. Denza.
Genoa	29.80	756.9	29.99	761.7	73.4	23.0	42	N	4.9	2.2	.....	.....	2	NE	.....	0.024	0.6	.....	Prof. G. M. Garibaldi.
Mondovi	28.14	714.7	30.01	762.2	64.8	18.2	49	W	.....	.....	4	.....	1	E	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.93	760.2	29.98	761.4	66.9	19.4	69	N	.....	.....	.....	.....	1	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.76	755.8	29.93	760.1	75.9	24.3	28	NE	.....	.....	2	.....	6	SE	.....	0	0	.....	Prof. Costantino Pitter.
Leghorn	29.88	758.9	29.96	761.0	76.6	24.8	28	NE	3.8	1.7	.....	.....	4	.....	.....	0.008	0.2	.....	Prof. P. Monte.
Rome	29.76	755.9	29.93	760.2	72.7	22.6	56	SW	6.9	3.1	.....	.....	8	.....	.....	0.016	0.4	.....	Prof. P. S. Ferrari.
Lecce	29.70	754.3	29.94	760.5	71.1	21.7	70	W	4.3	1.9	.....	.....	8	SE	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.98	738.6	29.95	760.7	63.7	17.6	70	NW	1.3	0.6	.....	.....	10	WNW	.....	0.496	12.6	.....	Prof. D. Conti.
Cagliari	29.72	754.8	29.91	759.7	65.3	18.5	76	SE	.....	.....	2	.....	10	NW	.....	0.252	6.4	.....	Prof. A. Pacinotti.
Palermo	29.68	753.9	29.93	760.1	69.4	20.8	59	E	8.7	3.9	.....	.....	10	ENE	.....	0.106	2.7	.....	Prof. G. Ciaccatore.
Syracuse	29.88	758.9	29.92	760.0	69.1	20.6	74	E	3.8	1.7	.....	.....	9	WSW	.....	0.268	6.8	.....	Prof. Vincenzo Gulliano.
Sub-Series.																			
Naples, S. R	29.41	746.9	29.92	759.9	68.2	20.1	67	E	2.5	1.1	.....	.....	10	SE	.....	0.012	0.3	.....	Prof. F. Brioschi.
Stelvio	22.25	565.2	.....	.....	45.1	7.3	49	SE	.....	.....	2	0	8ks	.....	NE	0.185	4.7	Misty.....	Prof. P. F. Denza.
Valdobbia	22.27	565.7	.....	.....	42.3	5.7	81	E	.....	.....	2	.....	10n	NW	.....	0	0	Covered.....	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y....†	29.99	761.7	30.00	762.0	67.2	19.6	85	SW	2.2	1.0	.....	3cs	0	.....	.....	0	0	Clear.....	K. Sasaki.
Kioto	29.86	758.4	30.04	763.0	66.7	19.3	77	N	2.3	1.0	.....	0	0	.....	.....	0	0	Clear.....	M. Tojima.
Nagasaki, I. M. Obs'y	29.79	756.6	29.99	761.7	68.9	20.5	84	SW	2.2	1.0	.....	0	0	.....	.....	0	0	Clear.....	S. Takehayashi.
Tokei Obs'y, Yeddo	30.04	763.0	30.11	764.8	65.5	18.6	82	SSW	5.8	2.6	.....	.....	10s	.....	.....	0	0	Cloudy.....	The Staff.
Wakayama	29.98	761.5	30.03	762.7	66.6	19.2	88	NW	0.4	0.2	.....	2ck	0	.....	.....	0	0	Fair.....	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.97	761.2	30.16	766.1	76.6	24.8	73	ENE	10.5	4.7	.....	0	4	.....	ENE	0.86	21.8	Cloudy.....	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanajuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez.
Leon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Leal.
Mazatlan	29.62	752.4	29.88	758.9	77.0	25.0	84	NNW	5.3	2.3	.....	2cs	3n	.....	WNW	0	0	½ cloudy..	F. Quijano, U. E.
Mexico, Central Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff.
Pabellon, Aguascalientes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. P. Spina.
San Luis Potosi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Barroeta, M. D.
Tlacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.15	765.9	30.15	765.9	64.4	18.0	.....	NNE	.....	.....	3	.....	.....	.....	.....	0	0	.....	
Groningen	30.06	763.5	30.11	764.9	59.9	15.5	.....	N	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Helder	30.13	765.4	30.13	765.4	57.7	14.3	.....	NNW	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	30.13	765.4	30.13	765.4	66.9	19.4	79	N	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Utrecht	30.09	764.3	30.14	765.5	65.3	18.5	71	NNE	.....	.....	2	.....	5	.....	.....	0	0	Cloudy.....	H. van der Brink

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction,		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES.																			
Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.95	769.6	30.01	762.2	64.0	17.8	68	NW	3.4	1.5	.....	.....	0	.....	.....	0	0	.....	.....
Christiania	29.78	756.3	29.91	759.8	77.5	25.3	35	SW	9	4	.....	.....	3	.....	.....	0	0	.....	.....
Gjesvær	29.44	747.8	29.47	748.4	38.7	3.7	.....	WSW	.....	.....	8	.....	10	.....	.....	.....	.....	.....	.....
Lodingen	29.74	755.5	29.79	756.7	40.8	4.9	87	W	.....	.....	4	.....	10	.....	.....	1.059	26.9	.....	.....
PORTUGUESE SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.26	768.5	30.28	769.0	62.2	16.8	81	SE	10.5	4.7	.....	.....	3	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.06	738.1	30.02	762.4	81.0	27.2	21	ENE	3.8	1.7	.....	.....	7	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.08	763.9	30.17	766.2	68.2	20.1	64	WSW	5.6	2.5	.....	.....	8	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.70	754.3	30.04	763.1	77.2	25.1	46	ESE	2.5	1.1	.....	.....	3	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.32	770.2	30.39	772.0	65.1	18.4	69	NNE	15.0	6.7	.....	.....	3	.....	.....	0	0	.....	
RUSSIAN SERIES.																			
Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.52	724.3	29.55	750.6	63.9	17.7	40	SW	7	3	.....	.....	4	.....	.....	.....	.....	Light clouds	Capt. Lasarew.
Archangel	29.59	751.6	29.61	752.1	39.4	4.1	82	WNW	4	2	.....	.....	10	.....	.....	.....	.....	Light clouds	Capt. Sseliwerstow.
Astrakhan	29.87	758.6	29.78	756.5	62.2	16.8	32	WNW	9	4	.....	.....	10k	.....	.....	.....	.....	.....	Capt. Wisganow.
Barnaul ‡	29.03	737.3	29.50	749.3	69.3	20.7	53	W	22	10	.....	.....	10	.....	.....	.....	.....	Raining	Meteorological Obs'y.
Dorpat	29.49	749.0	29.73	755.1	58.8	14.9	70	WNW	7	3	.....	.....	10ks	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	28.27	718.1	29.22	742.1	46.2	7.9	44	WSW	9	4	.....	.....	10n	.....	.....	.....	.....	.....	Meteorological Obs'y.
Kasan	29.15	740.4	29.42	747.3	44.6	7.0	55	W	7	3	.....	.....	10	.....	.....	.....	.....	.....	Observatory.
Kertch	29.87	758.7	29.89	759.2	62.4	16.9	63	NW	7	3	.....	.....	5	.....	.....	.....	.....	.....	Lagorio & Sastyrez.
Kieff	29.13	740.0	29.75	755.6	65.5	18.6	35	WNW	9	4	.....	0	5k;ks	.....	.....	.....	.....	.....	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.59	751.6	29.79	756.7	57.9	14.4	54	WNW	18	8	.....	.....	6	.....	.....	Blank		.....	Meteorological Obs'y.
Moscow	29.17	741.0	29.72	754.9	50.0	10.0	40	NNW	7.8	3.5	.....	0	5ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.20	690.8	29.42	747.2	51.4	10.8	48	Calm	0	0	.....	.....	10	.....	.....	0.520	13.2	.....	Meteorological Obs'y.
Nikolaiev	29.88	758.9	29.95	760.7	65.7	18.7	50	Calm	0	0	.....	0	1s	.....	.....	.....	.....	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.65	753.0	29.73	755.2	50.2	10.1	84	SE	.....	.....	7	.....	10n	.....	.....	0.047	1.2	.....	Lieut. Iwanow.
Pekin, China	29.65	753.1	29.79	756.7	79.5	26.4	23	SW	4	2	.....	.....	0	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	29.61	752.1	29.63	752.5	54.7	12.6	60	NNW	11	5	.....	.....	10ks;kn	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tashkend, Laboratory	27.98	710.6	29.42	747.3	87.8	31	47	Calm	0	0	.....	.....	10	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.48	723.3	29.86	758.4	65.7	18.7	36	NW	22	10	.....	10s	0	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	29.52	749.8	29.93	760.2	70.3	21.3	33	NNW	9	4	.....	0	4k	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.45	747.9	29.85	758.3	62.6	17.0	46	NNW	9	4	.....	.....	10	.....	.....	.....	.....	.....	Berg, Assistant.
Yeniseisk	29.53	750.0	29.81	757.2	52.7	11.5	51	E	7	3	.....	.....	2	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH SERIES.																			
Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	30.12	765.0	75.8	24.3	37	W	.....	.....	3	0	0	.....	.....	0	0	Fine	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	30.10	764.5	56	13.3	94	SW	.....	.....	3	5	5	SW	.....	0	0	.....	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	30.00	762.0	.....	.....	.....	SW	.....	.....	4	.....	Hz	.....	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES.																			
Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.94	760.4	30.04	763.0	73.8	23.2	41	S	3.1	1.4	.....	.....	4	.....	.....	0	0	.....	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.06	763.4	30.11	764.8	73.0	22.8	72	NW	2.0	0.9	.....	1	2	N	.....	0.016	0.4	Almost clear	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.17	690.1	.....	.....	63.7	17.6	55	N	5.8	2.6	.....	.....	7	.....	.....	0	0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.84	707.2	29.99	761.7	74.7	23.7	39	N	6.5	2.9	.....	0	6	.....	.....	0.075	1.9	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.87	758.6	30.01	762.3	75.6	24.2	63	SE	2.2	1.0	.....	3	5	NW	.....	0.386	9.8	Almost cov'd	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.16	740.6	30.02	762.4	74.8	23.8	42	NE	12.5	5.6	.....	.....	1	.....	.....	0	0	Almost clear	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	29.90	759.4	29.97	761.1	81.7	27.6	83	SE	5.1	2.3	.....	6c;ck	1s	WSW	.....	Inap.	Inap.	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.82	757.3	29.87	758.6	82.4	28.0	83	NE	3.3	1.5	.....	.....	9n	.....	E	0.28	7.0	.....	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.93	760.1	30.02	762.5	76.6	24.8	49	E	6.8	3.0	.....	0	9	.....	E	0	0	.....	Capt. C. Pulason, R. N., Dir.
San Juan de Porto Rico, W. I	29.91	759.7	30.00	762.0	82.4	28.0	85	SE	6.5	2.9	.....	2c	2k	SE	SE	0	0	.....	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.83	757.7	29.98	761.4	82.2	27.9	81	NNW	0.8	0.4	.....	.....	10kn	.....	NNW	0	0	Very cloudy	José L. Fastovra.
SWEDISH SERIES.																			
Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.64	752.8	29.68	753.8	56.1	13.4	32	NW	.....	.....	4	.....	8	.....	.....	0	0	.....	
Umea	29.71	754.6	29.76	755.9	63.7	17.6	29	NE	.....	.....	4	.....	5	.....	.....	0	0	.....	
Hernosand	29.83	757.6	29.88	758.9	65.7	18.7	23	NNW	.....	.....	6	.....	2	.....	.....	0	0	.....	
Stockholm	29.71	754.5	29.88	759.0	68.0	20.0	35	NNW	.....	.....	4	.....	8	.....	.....	0.024	0.6	.....	
Wisby	29.87	758.6	29.93	760.1	54.7	12.6	75	N	.....	.....	2	.....	3	.....	.....	0.075	1.9	.....	
SUB-SERIES.																			
Upsala	29.68	753.9	29.77	756.1	69.8	21.0	35	NNW	12.1	5.4	.....	.....	3	.....	.....	0	0	.....	S. G. Fineman.
SWISS SERIES.																			
Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.60	726.4	29.99	761.7	66.9	19.4	46	NNE	.....	.....	2	.....	3	.....	.....	0	0	.....	The Observatory.
Zurich ‡	28.38	720.8	29.95	760.6	74.5	23.6	31	E	.....	.....	4	.....	2	.....	.....	0	0	Clear	The Observatory.
TURKISH SERIES.																			
Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.97	761.2	71.8	22.1	37	SSW	8	3.5	.....	.....	3	.....	NE	0	0	.....	The Observatory.
Valona	.....	.....	30.06	763.4	70.7	21.5	.....	SW	.....	.....	1	.....	2	.....	.....	0	0	Slightly cld'y	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.92	760.0	79.5	26.4	59	WSW	.....	.....	3	.....	0	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Albany, New York	29.76	755.9	29.84	757.9	02	16.7	51	N	6	2.7	.....	Hz	2 s;hz	.....	.....	0.22	5.6	Dense haze.	
Alpena, Michigan	29.22	742.2	29.87	758.7	49.3	9.6	78	Calm	0	0	.....	5c	0	SW	.....	0	0	Fair.	
Atlanta, Georgia	28.60	726.4	29.75	755.6	68.2	20.1	88	SE	7	3.1	.....	.....	10s	.....	Calm	0.63	16.0	Cloudy.	
Atlantic City, New Jersey	29.76	755.9	29.77	756.1	61	16.1	82	NE	21	9.4	.....	.....	10s	.....	Calm	0.26	6.6	Cloudy	
Augusta, Georgia	29.61	752.1	29.79	756.7	71.0	21.7	85	SW	1	0.4	.....	5cs	1s	SW	Calm	0.30	7.6	Fair.	
Baltimore, Maryland	29.74	755.4	29.79	756.7	66	18.9	79	N	6	2.7	.....	.....	10s	.....	N	0	0	Threatening	
Barnegat, New Jersey	29.75	755.6	29.77	756.1	60	15.6	88	NE	11	4.9	.....	.....	10s	.....	N	1.02	25.9	Cloudy	
Bismarck, Dakota	28.19	716.0	29.93	760.2	56	13.3	87	NW	12	5.4	.....	0	0	.....	.....	0	0	Clear.	
Boise City, Idaho	27.06	687.3	29.82	757.4	58.3	14.6	88	W	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Boston, Massachusetts	29.66	753.4	29.81	757.2	56.1	13.4	85	NE	1	0.4	.....	.....	10s;fg	.....	N	0.06	1.5	Cloudy.	
Brackettville, Texas	28.72	729.5	29.74	755.4	68.0	20.0	79	Calm	0	0	.....	5cs	0	.....	.....	0	0	Fair.	
Brownsville, Texas	29.82	757.4	29.86	758.4	80	26.7	82	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Buffalo, New York	29.14	740.1	29.83	757.7	53.2	11.8	70	NE	8	3.6	.....	1c	Sk	.....	.....	0.06	1.5	Clear.	
Burlington, Vermont	29.58	751.3	29.86	758.4	51.2	10.7	71	N	3	1.3	.....	0	0	.....	.....	0	0	Clear.	
Cairo, Illinois	29.42	747.3	29.81	757.2	70	21.1	85	N	4	1.8	.....	0	0	.....	.....	0.03	0.8	Clear.	
Campo, California	27.37	695.2	29.94	760.5	40.2	4.6	65	S	3	1.3	.....	0	0	.....	.....	0	0	Clear.	
Camp Thomas, Arizona	27.17	690.1	.....	.....	57	13.9	47	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear.	
Cape Henry, Virginia	29.71	754.6	29.73	755.1	71	21.7	90	W	8	3.6	.....	.....	10s	.....	.....	0.14	3.6	Cloudy	
Cape May, New Jersey	29.73	755.1	29.76	755.9	62	16.7	77	NE	21	9.4	.....	.....	10s	.....	NW	0.24	6.1	Cloudy.	
Castroville, Texas	29.09	738.9	29.77	756.1	65	18.3	84	NW	3	1.3	.....	8c	0	.....	.....	0	0	Cloudy.	
Cedar Keys, Florida	29.86	758.4	29.88	758.9	79	26.1	78	S	22	9.8	.....	1c	5ks	.....	S	0	0	Fair.	
Champaign, Illinois	28.97	735.8	29.74	755.4	61.4	16.3	94	SE	5	2.2	.....	.....	10s	.....	SE	0	0	Cloudy.	
Charleston, S. Carolina	29.78	756.4	29.84	757.9	78	25.6	82	SW	12	5.4	.....	0	0	.....	.....	0.15	3.8	Clear.	
Charlotte, N. Carolina	29.02	737.1	29.88	758.9	70.2	21.2	80	SW	3	1.3	.....	.....	10s	.....	.....	0.11	2.8	Cloudy.	
Chattanooga, Tennessee	28.93	734.8	29.73	755.1	67	19.4	95	SE	3	1.3	.....	.....	10n	.....	S	0.45	11.4	Light rain.	
Cheyenne, Wyoming	24.17	613.9	29.98	761.5	50.2	10.1	72	W	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
Chicago, Illinois	29.09	738.9	29.77	756.1	59.0	15.0	85	S	6	2.7	.....	.....	10s	.....	.....	0	0	Cloudy.	
Chincoteague, Virginia	29.71	754.6	29.73	755.1	71	21.7	90	NW	12	5.4	.....	.....	10s	.....	N	0.01	0.3	Threatening	
Cincinnati, Ohio	29.14	740.1	29.79	756.7	72	22.2	83	E	4	1.8	.....	.....	10s	.....	.....	0.21	5.3	Cloudy.	
Cleveland, Ohio	29.08	738.6	29.80	756.9	56.5	13.6	87	E	4	1.8	.....	0	0	.....	.....	0.19	4.8	Clear.	
Coleman City, Texas	28.14	714.7	29.76	755.9	62	16.7	77	NW	3	1.3	.....	1c	0	.....	.....	0	0	Clear.	
Columbus, Ohio	28.94	735.1	29.76	755.9	61	16.1	77	NE	2	0.9	.....	.....	10s	.....	.....	0.02	0.5	Cloudy.	
Concho, Texas	28.04	712.2	29.92	760.0	63	17.2	83	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Corsicana, Texas	29.46	748.3	29.92	760.0	69	20.6	75	N	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Davenport, Iowa	29.15	740.4	29.79	756.7	62	16.7	67	SW	6	2.7	.....	.....	10s	.....	.....	Inap.	Inap.	Cloudy.	
Dayton, Washington T'y	28.20	716.3	29.95	760.7	54.5	12.5	86	S	3	1.3	.....	8c	0	S	.....	0.01	0.3	Fair.	
Deadwood, Dakota	25.50	647.7	30.05	763.3	47	8.3	77	SW	1	0.4	.....	0	0	.....	.....	0	0	Clear.	
Decatur, Texas	28.74	730.0	29.86	758.4	69	20.6	75	N	5	2.2	.....	2c	0	.....	.....	0	0	Fair.	
Delaware Breakwater, Del.	29.73	755.1	29.75	755.6	64	17.8	100	NE	15	6.7	.....	.....	10n;fog	.....	NE	0.11	2.8	Light rain.	
Denison, Texas	29.10	739.1	29.88	758.9	68	20.0	95	N	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Denver, Colorado	24.89	632.2	29.93	760.2	55.0	12.8	62	SE	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Des Moines, Iowa	28.92	734.6	29.80	756.9	65	18.3	89	W	5	2.2	.....	0	0	.....	.....	0.22	5.6	Clear.	
Detroit, Michigan	29.14	740.1	29.81	757.2	54.2	12.3	74	N	4	1.8	.....	2cs	0	W	.....	0.39	9.9	Clear.	
Dodge City, Kansas	27.38	695.4	29.87	758.7	64.6	18.1	80	SW	3	1.3	.....	5cs	0	.....	.....	Inap.	Inap.	Fair.	
Dubuque, Iowa	29.03	737.3	29.71	754.6	61.3	16.3	66	SW	7	3.1	.....	1ck	1s	S	.....	0	0	Fair.	
Duluth, Minnesota	28.90	735.6	29.64	752.8	49	9.4	93	NE	1	0.4	.....	.....	10s	.....	.....	0.10	2.5	Cloudy.	
Eagle Pass, Texas	29.12	739.6	29.93	760.2	72.4	22.4	80	Calm	0	0	.....	5cs	0	Calm	.....	0	0	Fair.	
Eagle Rock, Idaho	25.29	642.4	30.00	762.0	50	10.0	86	N	8	3.6	.....	0	0	.....	.....	0	0	Clear.	
Eastport, Maine	29.79	756.7	29.86	758.4	49.5	9.7	75	NE	8	3.6	.....	5c	Hz	NW	.....	0	0	Fair.	
El Paso, Texas	26.23	666.2	29.88	758.9	64	17.8	53	E	1	0.4	.....	c	0	.....	.....	0	0	Clear.	
Erie, Pennsylvania	29.09	738.9	29.79	756.7	55	12.8	87	E	4	1.8	.....	0	0	.....	.....	0.37	9.4	Clear	
Escanaba, Michigan	29.07	738.4	29.71	754.6	55	12.8	93	SE	8	3.6	.....	.....	10n	.....	SE	0.24	6.1	Light rain.	
Florence, Arizona	28.34	719.8	29.94	760.5	63	17.2	38	NE	3	1.3	.....	0	0	.....	.....	0	0	Clear.	
Fort Apache, Arizona	25.07	636.8	29.85	758.2	48	8.9	16	NE	3	1.3	.....	0	Sk	.....	Calm	6	0	Dense smoke	
Fort Assinnaboine, Montana	27.20	690.9	29.75	755.6	69	20.6	80	W	12	5.4	.....	0	0	.....	.....	0	0	Clear.	
Fort Bennett, Dakota	28.39	721.1	29.86	758.4	62	16.7	72	Calm	0	0	.....	0	0	.....	.....	0.01	0.3	Clear.	
Fort Benton, Montana	27.14	689.3	29.86	758.4	61	16.1	41	W	3	1.3	.....	0	0	.....	.....	0	0	Clear.	
Fort Buford, Dakota	28.07	713.0	29.99	761.7	54	12.2	74	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Fort Custer, Montana	26.91	683.5	30.00	762.0	54	12.2	74	E	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Fort Davis, Texas	25.20	640.1	30.16	766.1	66	18.9	59	E	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Fort Elliott, Texas	27.22	691.4	30.29	769.4	60	15.6	65	SW	4	1.8	.....	5c	0	SW	.....	0	0	Fair.	
Fort Gibson, Indian T'y	29.31	744.5	29.84	757.9	67	19.4	89	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Fort Grant, Arizona	28.17	639.3	29.97	761.2	68	20.0	18	E	3	1.3	.....	0	0	.....	.....	0	0	Clear.	
Fort Griffin, Texas	28.65	727.7	29.89	759.2	64.3	17.9	73	Calm	0	0	.....	5cs	0	.....	.....	0	0	Fair.	
Fort Keogh, Montana	27.57	700.3	29.98	761.5	52	11.1	86	SW	3	1.3	.....	0	0	.....	.....	0	0	Clear.	
Fort Macon, North Carolina	29.75	755.6	29.76	755.9	75	23.9	90	SW	8	3.6	.....	8cs	Hz	Calm	Calm	0	0	Cloudy.	
Fort McKavett, Texas	27.71	703.8	29.59	751.6	61	16.1	45	SW	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
Fort Missoula, Montana	26.69	677.9	30.07	763.8	61	16.1	61	SW	5	2.2	.....	0	0	.....	.....	0	0	Clear.	
Fort St. Michaels	29.67	753.6	29.70	754.4	29	1.7	100	N	4	1.8	.....	0	0	.....	.....	.....	.....	.....	
Fort Shaw, Montana	26.40	670.6	29.85	758.2	50	10.0	72	SW	7	3.1	.....	0	5s	.....	W	0	0	Fair.	
Fort Sill, Indian Territory	28.70	729.0	29.91	759.7	66	18.9	79	NW	6	2.7	.....	5c	0	.....	.....	0	0	Fair.	
Fort Stevenson, Dakota	28.18	715.8	29.96	761.0	55	12.8	93	W	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy.	
Fort Verde, Arizona	.....	.....	.....	.....	56	13.3	19	S	.....	.....	1	0	0	.....	.....	0	0	Clear.	
Fredericksburg, Texas	28.09	713.5	29.60	751.8	66	18.9	74	Calm	0	0	.....	7c	0	.....	.....	0	0	Fair.	
Galveston, Texas	29.83	757.7	29.87	758.7	80	26.7	74	N	7	3.1	.....	0	Hz	.....	.....	0	0	Dense haze.	
Grand Haven, Michigan	29.16	740.7	29.81	757.2	61	16.1	61	E	2	0.9	.....	2c	5s	Calm	Calm	0	0	Fair.	
Hatteras, North Carolina	29.76	755.9	29.78	756.4	73	22.8	90	SW	10	4.5	.....	8cs	0	.....	.....	0	0	Fair.	
Helena, Montana	25.88	657.3	30.08	764.0	59	15.0	70	S	2	0.9	.....	5k	0	Calm	.....	0	0	Fair.	
Henrietta, Texas	28.90	734.0	29.79	756.7	68	20.0	84	Calm	0	0	.....	8cs	0	.....	.....	0	0	Fair.	
Indianapolis, Indiana	28.98	736.1	29.76	755.9	66	18.9	69	E	3	1.3	.....	0	0	.....	.....	Inap.	Inap.	Clear.	
Indianola, Texas	29.86	758.4	29.88	758.9	76.3	24.6	82	NW	9	4.0	.....	Hz	1ks;hz	.....	Calm	0	0	Light haze.	
Jacksboro, Texas	28.78	731.0	29.87	758.7	66	18.9	89	Calm	0	0	.....	5cs	0	Calm	.....	0	0	Fair.	
Jacksonville, Florida	29.82	757.4	29.84	757.9	82	27.8	67	S	20	8.9	.....	2cs	0	.....	.....	0	0	Clear.	
Keokuk, Iowa	29.15	740.4	29.77	756.1	65.5	18.6	81	S	4	1.8	.....	.....	10s	.....	S	0	0	Cloudy.	
Key West, Florida	29.95	760.7	29.98	761.5	80.5	26.9	82	S	8	3.6	.....	10k	0	S	.....	0	0	Cloudy.	
Kittyhawk, North Carolina	29.75	755.6	29.77	756.1	74	23.3	76	W	14	6.3	.....	8cs	0	W	.....	0	0	Cloudy.	
Knoxville, Tennessee	28.77	730.7	29.77	756.1	65.2	18.4	93	E	2	0.9	.....	.....	10s	.....	Calm	1.28	32.5	Cloudy.	
La Crosse, Wisconsin	28.92	734.6	29.62	752.3	68	20.0	74	W	12	5.4	.....	.....	10s	.....	W	0.02	0.5	Cloudy	
La Mesilla, New Mexico	26.08	662.4	30.23	767.8	67	19.4	46	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Laredo, Texas	29.44	747.8	29.77	756.1	75	23.9	77	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Leavenworth, Kansas	28.99	736.3	29.86	758.4	67	19.4	69	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Lewiston, Idaho	29.08	738.6	29.91	759.7	61	16.1	66	NE	1	0.4	.....	0	2s	.....	Calm	0	0	Clear.	
Little Rock, Arkansas	29.50	749.3	29.81	757.2	69	20.6	90	NW	2	0.9	.....	0	0	.....	.....	0.16	4.1	Clear.	
Los Angeles, California	29.58	751.3	29.95	760.7	59.1	15.1	88	SE	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy.	
Louisville, Kentucky	29.17	740.9	29.72	754.9	66.5	19.2	89	NE	4	1.8	.....	.....	10s	.....	NE	0.18	4.6	Cloudy	
Lynchburg, Virginia	29.08	738.6	29.75	755.6	71	21.7	75	Calm	0	0	.....	.....	10n	.....	SW	0.28	7.1	Light rain.	
Madison, Wisconsin	28.76	730.5	29.74	755.4	61	16.1	77	S	8	3.6	.....	.....	10s	.....	W	0	0	Cloudy.	
Marquette, Michigan	29.01	736.8	29.72	754.9	49	9.4	93	S	2	0.9	.....	.....	10n	.....	Calm	0.07	1.8	Light rain.	
Mason, Texas	28.30	718.8	30.02	762.5	65.3	18.5	89	NW	2	0.9	.....	1cs	0	Calm	.....	0	0	Clear.	
Memphis, Tennessee	29.46	748.3	29.79	756.7	68	20.0	100	Calm	0	0	.....	.....	10s	.....	NW	0.13	3.3	Cloudy.	
Milwaukee, Wisconsin	29.05	737.9	29.78	756.4	58	14.4	82	S	3	1.3	.....	2cs	8s	.....	.....	0	0	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper.	Clouds. Direction. Lower.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.72	754.9	29.79	756.7	73	22.8	85	NW	4	1.8	.....	5k	1ks	.....	W	1.03	26.2	Fair	
Montgomery, Alabama	29.54	750.3	29.76	755.9	68	20.0	90	N	4	1.8	.....	2k	8ks	SW	SW	0.32	8.1	Threatening	
Moorhead, Minnesota	28.84	732.5	29.80	756.9	58.2	14.6	88	NW	8	3.6	.....	0	0	.....	.....	0.64	16.3	Clear	
Morgantown, W. Virginia	28.78	731.0	29.72	754.9	65	18.3	84	N	2	0.9	.....	.....	10s	.....	.....	0.96	24.4	Cloudy	
Mt. Washington, N. H.	23.68	601.5	29.71	754.6	40	4.4	40	Calm	0	0	.....	2k	Sk	W	.....	0	0	Clear	
Nashville, Tennessee	29.22	742.2	29.74	755.4	67.7	19.8	85	NW	5	2.2	.....	.....	10ks	.....	NW	0.56	14.2	Cloudy	
New Haven, Connecticut	29.66	753.4	29.78	756.4	59	15.0	88	N	11	4.9	.....	.....	10s	.....	NW	0.05	1.3	Cloudy	
New London, Connecticut	29.74	755.4	29.78	756.4	60	15.6	88	E	6	2.7	.....	.....	10n	.....	E	0.03	0.8	Light rain	
New Orleans, Louisiana	29.75	755.6	29.80	756.9	73.0	22.8	85	W	6	2.7	.....	1c	2ks	W	W	0.04	1.0	Fair	
Newport, Rhode Island	29.74	755.4	29.79	756.7	57.8	14.3	86	N	6	2.7	.....	.....	10n	.....	Calm	0.09	2.3	Light rain	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	29.79	756.7	29.82	757.4	55.0	12.8	87	NE	14	6.3	.....	.....	10s	.....	Calm	0	0	Cloudy	
New York, New York	29.61	752.1	29.78	756.4	60	15.6	82	NE	11	4.9	.....	.....	10s;fg	.....	N	0.16	4.1	Cloudy	
Norfolk, Virginia	29.72	754.9	29.75	755.6	73	22.8	81	SW	6	2.7	.....	.....	10s	.....	.....	0.06	1.5	Cloudy	
North Platte, Nebraska	27.12	688.8	29.94	760.5	57.6	14.2	94	NW	8	3.6	.....	0	0	.....	.....	0.44	11.2	Clear	
Olympia, Washington T'y	29.90	759.4	29.94	760.5	51.5	10.8	90	N	1	0.4	.....	5cs	0	S	.....	0	0	Fair	
Omaha, Nebraska	28.72	729.5	29.86	758.4	71.5	21.9	78	W	3	1.3	.....	0	0	.....	.....	0.19	4.8	Clear	
Oswego, New York	29.52	749.8	29.84	757.9	55.5	13.1	72	E	5	2.2	.....	0	0	.....	.....	0.04	1.0	Clear	
Pensacola, Florida	29.75	755.6	29.78	756.4	76	24.4	86	W	10	4.5	.....	.....	10ks	.....	W	0.11	2.8	Threatening	
Philadelphia, Pa	29.73	755.1	29.79	756.7	61	16.1	77	NE	18	8.0	.....	.....	10s	.....	.....	1.58	40.1	Cloudy	
Phœnix, Arizona	28.74	730.0	30.51	774.9	62	16.7	56	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	18.05	458.5	30.26	768.6	37	2.8	31	NW	10	4.5	.....	0	0	.....	.....	0.06	1.5	Clear	
Pioche, Nevada	24.05	610.9	29.90	759.4	58	14.4	12	S	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Pittsburg, Pennsylvania	28.97	735.8	29.76	755.9	64.8	18.2	75	NE	6	2.7	.....	2k	4s;fg	NE	NE;C	0.16	4.1	Fair	
Port Eads, Louisiana	29.81	757.2	29.82	757.4	74.0	23.3	95	W	12	5.4	.....	0	8s	.....	W	0.25	6.3	Fair	
Port Huron, Michigan	29.18	741.2	29.84	757.9	51.4	10.8	79	NE	4	1.8	.....	8c	0	W	.....	0.02	0.5	Fair	
Portland, Maine	29.78	756.4	29.83	757.7	57	13.9	58	NE	10	4.5	.....	2cs	5s	NW	Calm	0	0	Fair	
Portland, Oregon	29.85	758.2	29.92	760.0	59.1	15.1	84	NW	5	2.2	.....	10k;cs	0	S;SW	.....	Inap.	Inap.	Cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	73	22.8	76	S	16	7.2	.....	2c	0	Calm	.....	0	0	Clear	
Prescott, Arizona	24.79	629.6	29.86	758.4	48	8.9	36	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	29.92	760.0	29.93	760.2	81	27.2	80	S	20	8.9	.....	10cs	0	SW	.....	0	0	Cloudy	
Red Bluff, California	29.52	749.8	29.85	758.2	65.0	18.3	73	S	5	2.2	.....	0	2s	.....	Calm	0	0	Clear	
Rio Grande City, Texas	29.71	754.6	29.92	760.0	75	23.9	81	Calm	0	0	.....	1cs	0	W	.....	0	0	Clear	
Rochester, New York	29.23	742.4	29.85	758.2	55	12.8	68	E	4	1.8	.....	2c	0	Calm	.....	0.03	0.8	Clear	
Roseburg, Oregon	29.34	745.2	29.90	759.4	57.5	14.2	87	E	4	1.8	.....	5k	0	SW	.....	0.08	2.0	Fair	
Sacramento, California	29.86	758.4	29.93	760.2	61.8	16.6	83	S	6	2.7	.....	0	0	.....	.....	0	0	Clear	
St. Louis, Missouri	29.23	742.4	29.81	757.2	65.5	18.6	89	N	6	2.7	.....	8c;hz	0	NW	.....	0	0	Fair	
St. Paul, Minnesota	28.83	732.3	29.67	753.6	63	17.2	83	W	5	2.2	.....	2ck	0	W	.....	0.12	3.0	Clear	
Salt Lake City, Utah	25.58	649.7	29.78	756.4	61	16.1	40	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
San Antonio, Texas	29.20	741.7	29.89	759.2	72.3	22.4	71	N	1	0.4	.....	4c	0	NW	.....	0	0	Fair	
San Diego, California	29.83	757.7	29.90	759.4	59.0	15.0	82	Calm	0	0	.....	.....	10s	.....	.....	0	0	Cloudy	
Sandusky, Ohio	29.15	740.4	29.81	757.2	61	16.1	77	NE	13	5.8	.....	0	0	.....	.....	0.26	6.6	Clear	
Sandy Hook, New Jersey	29.75	755.6	29.78	756.4	61.5	16.4	86	E	20	8.9	.....	.....	10s	.....	.....	0.24	6.1	Cloudy	
San Francisco, California	29.90	759.4	29.96	761.0	60	15.6	91	SW	3	1.3	.....	.....	Fg	.....	SW	0	0	Dense fog	
Santa Fé, New Mexico	23.38	593.8	29.88	758.9	58	14.4	32	E	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Savannah, Georgia	29.74	755.4	29.84	757.9	82	27.8	71	SW	9	4.0	.....	0	0	.....	.....	0.10	2.5	Clear	
Shreveport, Louisiana	29.62	752.3	29.86	758.4	70	21.1	95	Calm	0	0	.....	0	0	.....	.....	0.18	4.6	Clear	
Silver City, New Mexico	24.32	617.7	29.78	756.4	56	13.3	51	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Sitka, Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.07	1.8	.....	
Smithville, North Carolina	29.98	761.5	29.81	757.2	77	25.0	82	SW	7	3.1	.....	1ck	1ks	SW	.....	0	0	Fair	
Spokane Falls, Wash. Ter.	27.95	709.9	29.91	759.7	52	11.1	72	W	1	0.4	.....	5cs	0	.....	.....	0	0	Fair	
Springfield, Illinois	29.14	740.1	29.80	756.9	61	16.1	77	N	1	0.4	.....	3c	0	W	.....	0	0	Fair	
Springfield, Massachusetts	29.67	753.6	29.80	756.9	60.5	15.8	82	N	2	0.9	.....	8cs	0	N	.....	0.54	13.7	Fair	
Stockton, Texas	26.92	683.8	29.92	760.0	63.7	17.6	68	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	29.01	736.8	29.85	758.2	56	13.3	87	NW	14	6.3	.....	0	0	.....	.....	0.12	3.0	Clear	
Thatcher's Island, Mass	29.77	756.1	29.82	757.4	53.4	11.9	100	NE	9	4.0	.....	.....	10n	.....	NE	0.27	6.9	Light rain	
Toledo, Ohio	29.14	740.1	29.82	757.4	57	13.9	69	NW	4	1.8	.....	0	0	.....	.....	0.63	16.0	Clear	
Tucson, Arizona	27.48	698.0	29.77	756.1	67	19.4	21	E	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.58	751.3	29.98	761.5	57.0	13.9	75	NE	2	0.9	.....	2cs	0	SW	.....	Inap.	Inap.	Clear	
Uvalde, Texas	28.92	734.6	29.72	754.9	66	18.9	79	NE	1	0.4	.....	5cs	0	Calm	.....	0	0	Fair	
Vicksburg, Mississippi	29.56	750.8	29.81	757.2	71	21.7	90	N	6	2.7	.....	.....	10s	.....	N	0.57	14.5	Cloudy	
Visalia, California	29.50	749.3	29.86	758.4	65.5	18.6	66	NW	4	1.8	.....	8c	0	.....	.....	0	0	Fair	
Washington, D. C.	29.67	753.6	29.78	756.4	64	17.8	94	N	7	3.1	.....	.....	10s	.....	NE	0.06	1.5	Threatening	
Wickenburg, Arizona	.....	.....	.....	.....	58	14.4	32	NW	.....	.....	1	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	29.74	755.4	29.80	756.9	76	24.4	77	W	4	1.8	.....	5ck	0	W	.....	0.20	5.1	Fair	
Winnemucca, Nevada	25.54	648.7	29.75	755.6	57	13.9	47	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Wood's Holl, Mass	29.75	755.6	29.79	756.7	56	13.3	87	NE	6	2.7	.....	.....	10n	.....	NE	0.03	0.8	Light rain	
Yankton, Dakota	28.64	727.4	29.90	759.4	64	17.8	78	NW	10	4.5	.....	0	0	.....	.....	0.10	2.5	Clear	
Yuma, Arizona	29.62	752.3	29.76	755.9	69.5	20.8	75	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.08	560.8	.....	.....	53.0	11.7	73	Calm	0	0	.....	5cs;k	0	.....	.....	0	0	Fair	Thomas Herman
Buff Bay Town, Jamaica.‡	29.76	755.9	30.07	763.8	75	23.9	81	E	.....	.....	.....	0	0	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.75	755.6	30.00	762.0	81	27.2	82	Calm	0	0	.....	4cs	8ks	Calm	Calm	Inap.	Inap.	Cloudy	A. Van Cuneghem, Ass't.
Kingston, Jamaica, W. I.	29.96	761.0	29.97	761.2	80.2	26.8	71	Calm	0	0	.....	0	0	.....	.....	0	0	Fine	Robert Johnstone.
Navassa, W. I.	29.89	759.2	29.97	761.2	82	27.8	83	E	8	3.6	.....	0	5n;k	.....	E	0	0	Hazy	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.03	762.7	79	26.1	91	E	.....	.....	2	5k	4s	E	.....	0.130	3.3	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.36	745.7	29.92	760.0	75	23.9	100	Calm	.....	.....	0	.....	10n	.....	S	1.16	29.5	Raining	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Earl Flint.
Santiago de Cuba, W. I.	29.96	761.0	29.99	761.7	80	26.7	82	Calm	0	0	.....	4ks	0	.....	.....	0	0	Fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.63	752.6	29.68	753.9	42.0	5.6	96	SW	10	4 5	.....	2c	0	W	.....	0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H M. S. Alert, Bird Island, Oceanica	29.87	758.7	78.5	25.8	90	SE			1		2							D. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, N. 35° 57′, E. 14° 36′	30.05	763.3	71	21.7	83	ESE			2		4					1	ESE	D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab, Aden, Arabia, Asia	29.64	752.8	88	31.1	75	SSW			2		2					Sm'h		D. clouds	Comm: R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 18° 20′, E. 60° 13′	29.39	746.5	83	28.3	91	SSW			5-6		4	SW				8	SW	Squally	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			70	21.1		S			2		0							Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N. 12° 19′, W. 60° 56′	29.98	761.5	83	28.3	83	E			4		1					3	E	Blue sky	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 29° 45′, E 11° 49′	30.23	767.8	61	16.1	70	SE			5		4	S				4	S	D. clouds	Com. F. W. Richards.
H. M. S. Champion, S. 19° 48′, W. 32° 12′	30.14	765.5	77	25.0	72	NE			4		1	Calm				4	E	Blue sky	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Chefoo Harbor, China	29.86	758.4	67	19.4	90	E			1									Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 35° 54′, E. 14° 35′	29.94	760.5	71	21.7		ESE			2		2	ESE				2	ENE	D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.32	770.1	58	14.4		SE			2-4		7	SE						Showery	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I	29.97	761.2	78	25.6	88	WSW			2-3		1	WSW						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 34′, W. 52° 41′	29.87	758.7	48.5	9.2	63	ENE			1		3	ENE						D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 3° 01′, E. 86° 22′	29.76	755.9	80	26.7		SSW			4		4					3	SSE	D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald, N. 1° 7′, E. 172° 56′	29.84	757.9	84	28.9		ENE			2		2	ENE						D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, S. 18° 03′, E. 58° 49′	30.05	763.3	79	26.1	78	E			5-6		3	ENE				3	ENE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn N. 13° 37′, E. 42° 50′	29.62	752.3	87	30.6	77	NW			2		3					2	NW	D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo Balize, Central America	29.90	759.4	88	31.1	80	E			2		6	E						D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish, Yokohama, Japan	30.08	764.0	68	20.0	79	S			1		6					1	N	Misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, VancouverI'd	29.95	760.7	49.5	9.7	89	Calm			0		2							Misty	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.89	759.2	38	3.3	80	SW			1		5							D. clouds	Capt. L. F. Jones.
H. M. S. Griffon, Nassau, W. I	30.00	762.0	83	28.3	74	ESE			2		6	ESE						D. clouds	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 37° 52′, W. 33° 05′	30.41	772.4	63	17.2		ESE			2		2	E				2	NNW; ESE	D. clouds	Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.95	760.7	61	16.1		Calm			0		8	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, N. 33° 50′, E. 135° 20′	29.98	761.5	70	21.1		Calm			0		7					2	S	D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	29.84	757.9	78.9	25.1	86	E			3		10					1	NE	Raining	Capt. A. Carpenter.
H. M. S. Midge, Foochow, China	29.93	760.2				NE			1		4	NE						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. M. S. Modeste, S. 14° 20′ E. 87° 50′	29.83	757.7	75	23.9	100	SSE			4-5		4					5	SE	D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Tunis, Tunis, N. Africa	29.94	760.5	68	20.0	79	N			3		5	NNW						D. clouds	Capt. G. Tryon. C. B

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.83	757.7	48	8.9	71	ESE			1									D. clouds	Capt. E. B. Drummond.
H. M. S. Orontes																			Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S Pelican, N. 8° 55′, W. 79° 30′	29.83	757.7	80	26.7	100	N			1		10							Overcast	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, La Guayra, Venezuela, S.A	29.86	758.4	79	26.1	86	W			1		8					1	N	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A.C.Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.66	753.4	77	25.0		SE			2–6		6							Raining	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	29.97	761.2	47	8.3		Calm			0		3							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 5° 15′, E. 48° 02′	29.91	759.7	80.3	26.8	95	S			4–5		2					2	S	D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, S. 2° 30′, E. 72° 30′	29.41	747.0	80	26.7	78	SE			4–6		7					6	SE	Showery	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 24° 47′, W. 20° 43′	30.21	767.3	71.5	21.9	71	N			2		8	N				2	NNE	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A	29.92	760.0	55	12.8	93	Calm			0		10	Calm						Misty	Capt. A. H. Markham.
H. M. S. Turquoise, S. 42° 25′, W. 75° 45′	30.10	764.5	46	7.8	85	S			4		5	SSW				4	SSW	D. clouds	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne, N. 39° 16′, W. 9° 40′	30.04	763.0	65	18.3	94	NNW			2		0					1	NW	Misty	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I			79	26.1		N			1		3							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W	29.58	751.3	61	16.1	61	NW			1		1							Blue sky	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Shat el Arab River, Turkey	29.70	754.4	91.5	33.1	74	NW			2–3									Misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, Novo Redondo Benguela	30.02	762.4	75.6	24.2	85	WNW			2		9					2	W	Overcast	Carlos Candido dos Reis, Comd't.
Quanza, Bulama	29.96	760.9	83.3	28.5	76	SSE			1		1		E			1	E	Blue sky	Carlos M. da Silva Costa, Comd't
Rio Lima																			S. C. da Silva Costa, Comd't.
Sado, St. Thomas, W. I	29.90	759.4	80.2	26.8	86	SSE			4		3		SSE			3	SSE	D. clouds	G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.87	758.6	77.4	25.2	78	S			2		0							Blue sky	P. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga, N. 52° 59′, E. 3° 11′	30.15	765.9	55.9	13.3	90	Calm			0		0							Foggy	Capt. M. von Krusenstierna
H. M. Frigate Vanadis																			Com. Th. Ulner.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper.	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	29.83	757.7	76	24.4	86	SW	14	6.3			8		SW	0.86	21.8			Fair	
N. Yard, Portsmouth, N. H	29.82	757.4	58	14.4	88	NE	6	2.7			5		N	0.1	0.3			Cloudy	
Naval Hospital, Yokahama, Japan	29.96	761.0	66.5	19.2	84	SW			2		10		W	0	0			Gloomy	
Adams, N. 1° 57′, W. 80° 02	29.75	755.6	78	25.6	91	S			2		8		SE			Long	SW	Cloudy	
Alaska, Callao, Peru	29.84	757.9	64	17.8	94	E			1		10			0	0	Sm'h		Hazy	
Alert, N. 18° 56′, E. 142° 08′ *	29.85	758.2	83	28.3	79	ENE			3		2		E			Mod.	E	Clear.	
Alliance, Norfolk, Va *†	29.74	755.4	72	22.2	90	W			1		10			Mod	erate			Cloudy	
Ashuelot, Kobe, Japan	30.04	763.0	68	20.0	84	WNW			1		0							Clear	
Colorado, New York, N. Y	29.88	758.9	58	14.4	82	N	10	4.5			10		N	0.028	0.7			Rainy	
Constitution, Norfolk, Va	29.69	754.1	70	21.1	90	WNW			1		10							Cloudy	
Franklin, Off Norfolk, Va	29.69	754.1	71	21.7	95	WSW	8	3.6			2			0.01	0.3			Fair	
Galena, N. 36° 13′, W. 4° 55′	30.03	762.7	69	20.6	90	Calm			0		8					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	30.01	762.2	75	23.9	72	SW	2.4	1.1			5		SW	0	0			Fair	
Jamestown, Sitka, Alaska *	30.00	762.0	50	10.0	86	NW			1		10			0.04	1.0			Drizzling	
Kearsarge, Norfolk, Va	29.87	758.7	71	21.7	90	Calm			0		10		Calm			Sm'h		Cloudy	
Lackawanna, S. 10° 41′, W. 137° 59′ †	30.11	764.8	82	27.8	87	E			3		2		E			Sm'h	E	Fair	
Marion, Montevideo, Uruguay *†	30.16	766.1	48	8.9	56	SW			4		2		SW			Mod.	SW	Fair	
Michigan, Erie, Pennsylvania	29.76	755.9	56	13.3	81	NE			4		2		NE					Fair	
Minnesota, Newport, R. I	29.79	756.7	62	16.7	94	NE			3		10					Sm'h		Light rain	
Monocacy, Yokohama, Japan	30.12	765.0	68	20.0	84	S			1		10		Calm					Cloudy	
New Hampshire, Norfolk, Va	29.71	754.6	72	22.2	90	SW	4	1.8			10		Calm	0.05	1.3			Cloudy	
Nipsic, Gibraltar, Mediterranean	30.03	762.7	70	21.1	80	N			1		8					Sm'h		Hazy	
Onward, Callao, Peru †	29.93	760.2	64	17.8	94	Calm			0		10					Long	W	Misty	
Palos, Nagasaki, Japan	30.01	762.2	70	21.1	90	S			1		5							Fair	
Passaic, Washington, D. C	29.78	756.4	66	18.9	89	NE			3		10		NE					Cloudy	
Pensacola. San Francisco, Cal	30.00	762.0	59	15.0	94	SW			1		10			0	0	Sm'h		Cloudy	
Portsmouth. Hampton Roads, Va	29.75	755.6	70	21.1	100	NNW			2		9							Cloudy	
Powhatan, Norfolk, Va	29.75	755.6	72	22.2	95	SW			1		10		SW					Cloudy	
Quinnebaug, N. 23° 05′, W. 57° 49′	30.06	763.5	84	28.9	75	NE			1		5		NE			Sm'h		Fair	
Ranger, N. 18° 40′, W. 103° 55′ *	29.85	758.2	77	25.0	86	WNW			3		5		Calm	0	0	Sm'h		Fair	
Richmond, Nagasaki, Japan	29.99	761.7	74	23.3	76	Calm			0		0			0	0			Clear	
Saratoga, Hampton Roads, Va	29.70	754.4	76	24.4	77	NNW			1		2		NNW	Rai	n			Cloudy	
Shenandoah, Montevideo, Uruguay *	30.18	766.6	48	8.9	56	SSW			3		8					Mod.	S	Fair	
St. Louis, League Island, Pa	29.46	748.3	63	17.2	78	NE	11	4.9			10		NE	1.45	36.8			Cloudy	
Swatara, Shanghai, China *†	29.84	757.9	71	21.7	80	SW			3		8		Calm					D. clouds	
Tennessee, New York, N. Y	29.78	756.4	63	17.2	81	NE	6	2.7			8			0.09	2.3	Sm'h		Cloudy	
Ticonderoga, S. 53° 12′, W. 80° 25′	30.26	768.6	38	3.3	90	SSE			3		10		Calm	0.025	0.6	Sm'h	S	Cloudy	
Trenton, Barcelona, Spain *	29.99	761.7	75	23.9	60	WSW			3		5			0	0	Sm'h		Fair	
Vandalia. Navy Yard, N. Y *†	30.08	764.0	62	16.7	88	ENE			2		10		ENE					Cloudy	
Wabash, Boston, Massachusetts	29.83	757.7	60	15.6	82	N	5	2.2			10		N	0.50	12.7			Hazy	
Wachusetts, N. Yard, Mare I'd, Cal	29.97	761.2	63	17.2	89	SW			3		8		W	0	0	Sm'h		Cloudy	
Yantic, N. 25° 45′, W. 80° 01′ *	29.90	759.4	80	26.7	96	S			3		8		S			Sm'h	S	Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 23° 32′, W. 82° 30′	29.97	761.2	80.0	26.7	91	SE			4		9							D. clouds	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. N. Youlden.
S. S. Cipero, N. 54° 15′, W. 10° 24′	30.19	766.8	56	13.3	94	W			2		2					2	W	Blue sky	Capt. W. N. Lalley.
City of Agra, N. 40° 24′, W. 15° 40′	30.26	768.6	63.0	17.2	89	NNE			5		0							Blue sky	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename																			Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 27° 05′, W. 33° 15′	30.20	767.1	73.7	23.2	81	NNW			3-4		2							D. clouds	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randell.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ N. 48° 46′, W. 10° 54′	30.20	767.1	57.7	14.3	94	NNW			4		9							Showery	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Nivell.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria, ‡ N. 10° 42′, W. 30° 27′	30.03	762.7	82.5	28.1	82	ENE			4		5							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 16° 09′, E. 41° 21′	29.62	752.3	85.5	29.7	80	NNW			4		8							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 49° 59′, W. 44° 24′	30.10	764.5				W			3		8		W			Mod.	W	Fair	
S. S. Circassian, ‡ N. 48° 45′, W. 49° 30′	30.07	763.8	40	4.4	91	Calm			0	ck	k		W	1 hour		1	W	Hailing	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 40° 44′, W. 66° 44′ †	29.58	751.3	48	8.9	92	Calm			0		Fog							Foggy	Capt. J. W. Jennings.
S. S. Baltic, ‡ N. 49° 52′, W. 23° 53′	30.23	767.8	57	13.9	75	SW			3		9		NE	0	0	Light	W	D. clouds	Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic																			Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—OF BREMEN. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, ‡ N. 53° 45′, E. 5° 10′	30.13	765.3	59.0	15.0		NW			2		2		NNE	0	0	Sm'h	N	Fair	
S. S. Köln, N. 42° 53′, W. 46° 23′	30.00	762.0	63.0	17.2	100	S			3-4		8		S	20h'rs	fog	Mod.	SSW	Drizzling	Capt. Th. Jüngst.
S. S. Leipzig, N. 48° 14′, W. 29° 20′	30.17	766.3	58.0	14.4		SW			4		10		SW	½ hour		Mod.	wsw	Cloudy	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, N. 42° 00′, W. 44° 11′	29.94	760.5	64	17.8	94	SSE			6		5?		SSE			Mod.	S	Overcast?	Capt. J. W. Shackford.
S. S. Indiana, N. 47° 41′, W. 32° 48′ †	30.10	764.5	61	16.1	88	SSW			5		5		SW	0	0	Mod.	SW	Cloudy	Capt. R. W. Sargent.
S. S. Ohio, N. 51° 31′, W. 8° 57′ *†	30.32	770.1	62	16.7	89	W			2		0			0	0	Sm'll	W	Fair	W. Shackford, Chief Off'r
S. S. Pennsylvania, N. 40° 17′, W. 50° 20′ †	29.95	760.7	66	18.9	94	W			2		8		W			Sm'h	W	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 42° 13′, W. 137° 40′ †	30.06	763.5	57	13.9	81	N			5		8		NE	0	0	High	NE	Cloudy	Capt. H. Davison.
S. S. Gaelic, N. 28° 12′, E. 126° 36′ *†	30.03	762.7	76	24.4	82	ESE			3		2		E			Light	NE	Fair	Capt. W. H. Kidley.
S. S. Oceanic, Hong Kong, China	30.16	766.1	79	26.1	65	E			2		2		SE					Fine	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon																			Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, San Francisco, Cal. †	29.96	761.0	59	15.0	94	SW			1		Fg			0	0			Foggy	Capt. J. N. Ingalls,
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, N. 46° 24′, W. 124° 59′ †	29.96	761.0	54	12.2	93	N			3		0					Sm'h		Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, N. 34° 27′, W. 120° 35′ †	29.94	760.5	56	13.3	94	WNW			3		0					Mod.	NW	Clear	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal. †	29.96	761.0	58	14.4	94	SW			2		5		S					Fair	Capt. G. Debney.
S. S. Victoria, N. 38° 50′, W. 122° 47′ †	29.92	760.0	54	12.2	86	ESE			2		2					Sm'h		Hazy	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 4° 35′, W. 165° 15′	29.85	758.2	80	26.7	82	NNE			2		2		NE			Sm'h	NE	Hazy	A. Bannerman, 2d Officer
S. S. City of New York, Sydney, N. S. W. †	29.57	751.1	59	15.0	100	Calm			0		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 13° 30′, W. 89° 16′ †	29.89	759.2	82	27.8	75	E			2	0	8ks		E	0	0	Sm'll	SW	Fair	Capt. D. S. Austin.
S. S. City of Peking, N. 46° 40′, E. 171° 49′ †	29.42	747.3	44	6.7	100	SE			2		10		SE	Li	ght	Sm'll	SE	Rainy	Capt. G. G. Berry.
S. S. City of Sidney																			Capt. H. C. Dearborn.
S. S. City of Tokio, N. 38° 41′, W. 176° 55′ †	29.98	761.5	56	13.3	80	S			3		10		S			Sm'h		Cloudy	A. L. Ritchie, 2d Officer
S. S. Colima, N. 8° 40′, W. 84° 12′ †	29.84	757.9	79	26.1	86	WNW			3		8		NW	1.60	40.6	Mod.	WNW	Raining	Capt. R. R. Searle.
S. S. Granada																			Capt. M. Connolly.
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland, Staten Island, N. Y. †	29.83	757.7	67	19.4	94	E			4		8		ESE	0.1	3.			Cloudy	Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Fall River, Mass.	29.76	755.9	59	15.0	76	NE					10s		NE	0	0			Overcast	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.																			Capt. L. L. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, N. 25° 13′, W. 64° 10′ †	30.12	765.0	83	28.3		S			1		2			0	0	Mod.	SE	Fine	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Susquehanna River, Md. †	29.78	756.4	65	18.3	89	NE	4	1.8			10n			0.44	11.2			Cloudy	
Bark Sunbeam, Lisbon, Portugal †	30.07	763.8	77	25.0	69	Calm			0		0			0	0			Clear	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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W. B. Hazen

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

THE HELIOTYPE PRINTING Co. 211 TREMONT ST BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 3, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours‡			29.96	761.0	68.5	20.3	91	NNW			1		4			0.039	1.0	Cloudy	Raynard.
Algiers‡			30.04	763.0	69.8	21.0	75	NE			3		5			0	0	Cloudy	Nicolas.
La Calle‡			30.11	764.7	75.2	24.0	63	ENE			4		4			0	0	Cloudy	Fonfréde.
Tunis‡			30.09	764.2															Jacques.
Sfax‡			30.17	766.4															Gau.
Saida‡			30.00	762.0	61.5	16.4	96	SW			1		10			0.051	1.3	Covered	Dumas.
Tebessa‡			30.08	764.0	68.4	20.2	45	NW			2		6			0.020	0.5	Cloudy	Watrin.
Geriville‡					77.0	25.0	54	SW			1		0			0.087	2.2	Clear	Lonchamp.
Laghouat‡			30.02	762.6	73.8	23.2	39	E			2		4			0	0	Cloudy	Herbin.
Biskra‡			30.07	763.8	82.4	28.0	67	NW			1		0			0	0	Clear	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.33	745.0	29.42	747.2	47.4	8.6	86	N	4	1.8			4			0.08	2.0	Fine	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.47	748.4	29.99	761.8	74.1	23.4	47	NE			2		5			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.20	741.6	29.94	760.5	70.5	21.4	57	W	8.7	3.9			7			0.004	0.1		Dr. Wierzbicki.
Eperies	29.07	738.4	29.92	759.9	72.0	22.2	42	Calm			0	10cs	0			0	0		Julius Mikolik.
Gratz‡	28.79	731.2	30.00	761.9	70.0	21.1	59	E			3		4			0.118	3.0		Andreas Rospini.
Hermannstadt	28.55	725.1	29.92	759.9	73.4	23.0	37	NW			2		3			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.68	728.4	29.96	761.0	73.0	22.8	49	NNW			1		2			0	0		The Staff.
Lemberg	28.92	734.5	29.87	758.6	72.1	22.3	45	NW			3		7			0	0		Dr. T. Stanecki.
Pola	29.93	760.2	30.04	763.0	77.4	25.2	43	NNW			1		1			0	0		I. R. HydrographicOffice.
Szathmar	29.50	749.3	29.95	760.6	75.6	24.2	45	W			3		5			0	0		Beicht Peter, S. J.
Szegedin	29.70	754.3	29.97	761.2	72.1	22.3	51	Calm			0		0			0	0		Karl Stancel.
Trieste	29.95	760.7	30.05	763.3	75.7	24.3	51	S			1		1			0	0		Secco.
Vienna	29.30	744.3	29.99	761.8	75.9	24.4	38	SW			1		2			0	0		I. R. Central Met. Obv'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter Printed June 5, 1882.

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

BRITISH SERIES.

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

Aberdeen	29.88	758.9	29.98	761.5	63.4	17.4	55	SSE	9	4.0			6			0	0	D. clouds	W. Boswell.
Armagh, Observatory	29.94	760.5	30.16	766.1	61.3	16.3	67	WSW	12	5.4			10					Overcast	S. Call.
Bidston, Liverpool Obs'y			30.20	767.1	60.8	16.0	63	WNW	12	5.4			5					D. clouds	John Hartnup.
Bolton, Sharples	29.64	752.8	30.16	766.1	63.3	17.4	56	WSW	15	6.7			4					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.73	755.1	30.13	765.3	69.2	20.7	39	W			1		4			0	0	D. clouds	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.95	760.7	29.98	761.5	87	30.6	63	NE			2		3					D. clouds	Corpl. J. Surgener, A.H.C.
Cardington			30.15	765.8	76.0	24.4	56	E			0.4		3					D. clouds	John McLaren.
Chatham, School M. E.	30.02	762.5	30.14	765.5	72.4	22.4	55	N			1		10					Overcast	Corpl. W. Beck, R. E.
Falmouth, Observatory	30.02	762.5	30.25	768.3	67.5	19.7	60	NNW			4		1					D. clouds	The Staff.
Fort Napier, Natal	27.90	708.6	30.11	764.8	55.1	12.8	75	SW			3		4?					Overcast?	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.88	758.9	87	30.6	88	S			1							Raining	Sgt. C. E. Keane.
Galway, Queen's College			30.17	766.3	61	16.1	82	SW			4		10					Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	29.97	761.2	30.02	762.5	67.2	19.6	93	E			2		8					Gloomy	2nd Opl. O. Baldwin.
Glasgow, Observatory	29.87	758.7	30.08	764.0	60.5	15.8	67	SW			9		8					Overcast	Harry Urquhart.
Greenwich, Royal Obs'y	29.98	761.5	30.14	765.5	76.0	24.4	42	N			1		0					Blue sky	The Staff.
Guernsey	29.95	760.7	30.17	766.3	69	20.6	70	NW			1		0					Blue sky	Dr. S. E. Hoskins, F.R.S.
Kew, Observatory	30.12	765.0	30.15	765.8	72.3	22.4	40	NNW	8	3.6			0					Misty	The Staff.
Leicester, Museum	29.81	757.2	30.05	763.3	74.2	23.4	81	NE			1		0					Blue sky	J. E. Carryer.
Malta, Mediterranean	29.93	760.2	30.00	762.0	71	21.7	71	NE			1		6					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas	29.95	760.7	30.00	762.0	86.5	30.3	85	S			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.64	752.8	30.15	765.8	73.8	23.2	51	WNW			3		4					D. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	29.93	760.2	30.16	766.1	74.2	23.4	39	NW			2		5					Misty	The Staff.
Plymouth	30.12	765.0	30.19	766.8	76.5	24.7	46	N			2		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			29.94	760.5	53.5	11.9	72	WSW	17	7.6			10			Bla	nk	Misty	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.88	758.9	29.94	760.5	77.4	25.2	47	N			2		3					D. clouds	Serg't W. H. Lyne.
Sheffield	30.00	762.0	30.28	769.1	71.9	22.7	51	NW			3		3			0	0	D. clouds	W. F. Cooper.
Siloth Rectory	30.11	764.8	30.14	765.5	62.4	16.9	66	W			3		2			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.18	766.6	62.3	16.8	53	WSW	16	7.2			7					D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	29.96	761.0	30.17	766.3	78.4	25.8	34	NE			1		0					Blue sky	Rev. C. H. Griffiths, F.M.S
Truro, Royal Institution	30.25	768.3	30.26	768.6	71	21.7	66	N			6		5					D. clouds	W. Newcombe.
Valencia, Observatory	30.25	768.3	30.28	769.1	59.7	15.4	83	SW	20	8.9			10					D. clouds	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B.					53.0	11.7		Calm	0	0		0	0			0	0	Blue sky	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.00	762.0	30.04	763.0	50	10.0	58	S	8	3.6		2c	0			0	0	Fair	H. J. Cundall, C. E.
Chatham, N. B.*	29.94	760.5	30.01	762.2	46	7.8	86	NE	3	1.3		0	0			0	0	Clear	G. A. Blair.
Chicontimi, Quebec					54.3	12.4		SE			3		10s					Raining	Rev. V. A. Huart.
Cornwall, Ontario	29.56	750.8	29.75	755.6	53.1	11.7	85	SE			1		10ks			0	0	D. clouds	James Smith, M. A
Dalhousie, N. B.	29.93	760.2	29.97	761.2	52.0	11.1		E			1	0	0			0	0		H. A. Johnson.
Father Point, Quebec*	29.89	759.2	29.91	759.7	47	8.3	84	Calm	0	0		0	Hz			0	0	Hazy	J. McWilliams.
Fort Garry, Manitoba*	29.23	742.4	30.06	763.5	48	8.9	85	Calm	0	0		0	0			0	0	Clear	James Stewart.
Fredericton, N. B.	29.98	761.5	30.04	763.0	55.0	12.8	68	SE	4	1.8		0	0			0	0		Prof. Harrison.
Granton, Ontario	28.57	725.7	29.65	753.1	53.0	11.7	100	Calm			0		10n			Inap.	Inap.	Raining	James Grant.
Halifax, N. S.*	29.92	760.0	30.05	763.3	51	10.6	68	E	9	4.0		0	0			0	0	Clear	A. Allison.
Hamilton, Ontario	29.28	743.7	29.67	753.6	54.5	12.5	80	NE			1	10cs	0	NE		0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.39	746.5	29.72	754.9	59	15.0	93	E	3	1.3			10s			0.10	2.5	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S.	30.02	762.5	30.06	763.5	44.2	6.8	74	N			2	3ck	0	W		0	0	Fair	C. H. Rigby.
Montreal, Quebec*	29.59	751.6	29.78	756.4	58	14.4	69	SE	7	3.1		Hz	Hz			0	0	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario	29.87	758.7	29.90	759.4	52.0	11.1	60	W			1	0	0			0	0	Blue sky	J. R. Nason.
Parry Sound, Ontario*	29.01	736.8	29.69	754.1	57	13.9	67	NE	6	2.7		5k	2ks	NE	NE	0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario	28.95	735.3	29.78	756.4	59.7	15.4	70	W			1		10ks			0	0	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	28.96	735.6	29.64	752.8	58	14.4	94	NE	4	1.8			10n			0	0	Cloudy	H. Morgan.
Port Stanley, Ontario	29.00	736.6	29.62	752.3	58	14.4	80	E	7	3.1			10n		SE	0	0	Cloudy	M. Payne.
Quebec, Quebec*	29.56	750.8	29.88	758.9	53	11.7	73	NE			5	0	Hz			0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.29	744.0	29.74	755.4	50	10.0	83	Calm	0	0		8cs	0	SW		0	0	Cloudy	W. H. McIntyre.
Saugeen, Ontario*	28.96	735.6	29.66	753.4	57	13.9	92	Calm	0	0		8k	0			0	0	Cloudy	K. Stewart.
St. Andrews, N. B.	29.95	760.7	30.00	762.0	49	9.4	85	SE	1	0.4		0	0			0	0	Clear	
St. John, N. B.	29.86	758.4	30.03	762.7	54.0	12.2	49	SE	3	1.3		0	0			0	0	Blue sky	G. Murdock, C. E.
Stratford, Ontario	28.36	720.3	29.60	751.8	53.9	12.2	93	E	2	0.9			10s			0.127	3.2	D. clouds	C. J. Macgregor, M. A.
Sydney, C. B*	30.03	762.7	30.05	763.3	55	12.8	49	NE	6	2.7		0	0			0	0	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.31	744.5	29.69	754.1	55	12.8	86	NE	12	5.4			10ks		SE	0.23	5.8	Cloudy	Magnetic Observatory
Windsor, N. S.	29.92	760.0	30.02	762.5	45.0	7.2	68	SE	1	0.4		0	0			0	0	Clear	
Woodstock, Ontario	28.60	726.4	29.64	752.8	54.4	12.4	89	NE	5	2.2			10s					Drizzling	Prof. Wolverton.
Yarmouth, N. S.*	29.90	759.4	29.97	761.2	52	11.1	54	SE	5	2.2		2c	0	W		0	0	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.94	760.5	30.19	766.8	47	8.3	85	NE	1	0.4		0	0			0	0	Fair	John Delany.
St. Pierre, N. F.			29.99	761.7	48.2	9.0		N			2					0	0		N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Cape St. Francis Lt. House	30.50	774.7			56.0	13.3	65	Var.	23.9	10.7			10n			0.525	13.3	Showery	John Duthie.
Cape Town, C. G. H. Obs'y.	30.47	773.9	30.51	774.9	49.8	9.9		SE	22	9.8		0	1ks			0	0		The Staff, for D. Gill.
Worcester *†	29.39	746.5			56	13.3	55	S			1	0	5			0.02	0.5	Fine	C. Stokes.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.82	757.3	29.85	757.9	68.5	20.3	96	SE	2.5	1.1			10			0	0	Covered	M. Marc Dechevrens, S. J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

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

San José	25.18	665.0	29.90	759.4	68.9	20.5	95	NE			2	7cs	0			0	0	Cloudy	Amand Maison.

DANISH SERIES.

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

Copenhagen	29.88	758.9	29.93	760.1	69.3	20.7	57	NW	16	7			1						Oversergent Fischer.
Faade	29.95	760.7	29.97	761.2	61.3	16.3	78	W			4		0						Overloerer Lauridsen.
Godthaab, Greenland	29.65	753.0	29.69	754.1	36.7	2.6	82	NW			2		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.48	748.9	29.53	750.0	42.8	6.0		E			6		8						A. O. Thorlacius.
Thorshavn	29.66	753.3	29.69	754.2	51.6	10.9	79	S	27	12			10						Overloerer Bergh.
Vestervig	29.85	758.1	29.94	760.5	57.6	14.2	79	WNW			4		0						Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.48	748.8	30.12	765.0	68.0	20	58	SW			1	0	2nk			0.295	7.5	Slightly cl'dy	M. Labroue, Director.
Alençon Normal School	29.65	753.2	30.21	767.2	68.7	20.4	81	NE			2		10k		NE	0	0	Covered	M. Nicot, Director.
Arras, Engineer School	29.89	759.2	30.14	765.6	68.2	20.1	81	E			2	0	1k		NE			Clear	M. Klein, Commandaut.
Avignon, Normal School	30.00	762.0	30.08	764.0	78.3	25.7	40	N			1		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.52	749.9	30.06	763.4	76.3	24.6	43	NNE			1	0	3kn			0	0	Cloudy	M. Saillard, Director.
Beauvais, Normal School	29.90	759.5	30.16	766.1	68.9	20.5	66	NE			1		8		NE	0	0	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.19	741.4	30.01	762.2	73.4	23	44	ENE			2	c	0	E		0	0		M. Gobin, Director.
Bordeaux, Observatory	29.85	758.2	30.10	764.6	72.3	22.4	49	ESE			1		0			0.016	0.4	Clear	M. Rayet, Director.
Bourges, Normal School	29.55	750.6	30.09	764.2	76.1	24.5	49	NNE			1	0	n		NNE	0.098	2.5		M. Postel, Director.
Brest, Naval Observatory	29.99	761.8	30.24	768.0	68.0	20.0	61	N			2		0			0	0		M. de Rermaree, Dir.
Caen, Normal School	30.06	763.6	30.13	765.4	69.4	20.8	75	NNE			2		2		NNE	0	0	Slightlycl'dy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.72	754.8	30.03	762.7	79.7	26.5	34	W			1		3			0	0	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.59	751.5	30.09	764.2	76.6	24.8	55	E			1					0	0		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.73	729.8	30.04	763.0	73.0	22.8	48	S			1	c	2k			0.437	11.1	¼ covered	M. Alluard, Director.
Cluny, Normal School	29.23	742.5	30.05	763.3	78.1	25.6	40	NNW			1		0			0	0	Clear	M. de Villemontée, Dir.
Commercy, Normal School	29.22	742.2	30.06	763.6	77.9	25.5	34	NW			1	50k	0	NW	NW	0	0	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.55	699.8	30.01	762.3	69.4	20.8	42	NE			3		1k		E	0.12	3.		M. Jeangirard, Director.
Grenasque, du. Rhone	29.05	737.9	30.15	765.9	74.8	23.8	45	SW			2		5		S	0.04	1.	½ covered	M. Kina, Director.
Grenoble, Normal School	29.30	744.1	30.03	762.8	74.8	23.8	44	NW			1	0	csk			0.102	2.6		M. Ablard, Director.
Guéret, Normal School	28.53	724.7	30.07	763.8	71.2	21.8	59	NE			1	ck	0	-NE		0	0		M. Rivoire, Director.
Lamballe, Normal School	29.92	760.0	30.19	766.8	72.3	22.4	56	N			1		Hz		N	0	0	Hazy	M. Ollitrault, Director.
Lescar, Normal School	29.52	749.8	30.18	766.5	65.8	18.8	73	W			1	0	n		W	0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.11	764.8	30.21	767.4	80.6	27.0	43	N			1		2		Calm	0	0	¼ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.03	737.3	30.05	763.3	75.0	23.9	38	N			1		5	SE	E	0	0	Cloudy	M. André, Director.
Mans, Normal School	29.84	757.8	30.13	765.4	71.4	21.9	75	NNE			3		5		NNE	0	0	Cloudy	M. Piboen, Director.
Marseille, Observatory	29.80	756.9	30.06	763.6	74.1	23.4	40	WSW			1		8		E	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.93	633.3	30.17	766.3	47.3	8.5	82	E	11.2	5.0			10		SE	0.028	0.7	Raining	M. Cave, for Dr. Fines.
Montpellier, Normal School	29.96	761.0	30.07	763.7	75.9	24.4	57	S			2		2			0	0	Slightlycl'dy	M. P. Galzin, Director.
Nancy, Normal School	29.32	744.7	30.06	763.4	76.3	24.6	40	NW			1	0	5k			0	0	Cloudy	M. Hasse.
Nantes, Observatory	30.00	762.0	30.16	766.1	74.5	23.6	56	N			1-2	0	8nk	NW	WNW	0	0		M. Larocque, Director.
Nice	30.02	762.6	30.06	763.4	74.8	23.8	65	E			2		1	E	E	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.97	761.2	30.07	763.8	71.2	21.8	49	SE	1.8	0.8			5	NW		0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.62	574.4			41.5	5.3							10		SW	0.469	11.9	Stormy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.06	738.2	30.09	764.2	76.6	24.8	28	Calm			0	0	2k			0	0	Slightly cl'dy	M. Thillieu.
Puy de Dôme Obs'y, Summit	25.28	642.2			54.9	12.7	71	E			2	0	2k			0.394	10.0	¼ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.10	764.5	30.13	765.3	79.5	26.4	53	W			1		5		NE	1.551	39.4	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.91	759.8	30.12	765.1	77.4	25.2	53	NNE			1		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	28.01	711.4	30.10	764.5	66.9	19.4	67	W			1		1c			0.98	25.	Covered	M. Richard, Director.
Rouen, Normal School	30.07	763.7	30.15	765.9	69.4	20.8	64	NNE			1		2		NNE	0	0	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	30.04	762.9	30.19	766.9	69.4	20.8	61	NNW			1		0			0	0	Clear	M. Delaplanche, Dir.
Saint Maur, Observatory	29.97	761.3	30.14	765.5	68.0	20.0	73	N			2		9	NE	NNE	0	0		M. Renou, Director.
Toulouse, Observatory	29.44	747.8	30.17	766.2	72.0	22.2	59	NW			1		5			0.276	7.0	Cloudy	M. Bailland, Director.
Tours	29.87	758.8	30.07	763.8	77.4	25.2	54	N			1		8		N	0	0	¼ covered	M. de Tastes.
Versailles, Observatory	29.67	753.7	30.17	766.2	68.4	20.2	68	N			3					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.86	758.5	30.15	765.9	67.6	19.8	71	N			1		9		NNE	0	0		M. Marié Davy, Director

GERMAN SERIES.

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

Bamberg	29.18	741.1	30.04	763.0	75.2	24.0	40	Calm			0	2cs	0			0	0		Prof. Dr. Hoh.
Berlin	29.76	755.9	29.93	760.1	77.0	25.0	35	W			1		3			0	0		Prof. Dr. Arndt.
Breslau	29.45	748.0	29.98	761.5	74.8	23.8	39	W			2		2			0	0		Royal University Obs'y.
Carlsruhe	29.62	752.3	30.03	762.8	77.4	25.2	57	NW			1		2	NW		0	0		Albert Senz.
Cassel	29.32	744.8	30.04	763.0	69.1	20.6	53	NNW			4		0			0	0		Dr. H. Möhl.
Frankfort on the Main	29.72	754.8	30.06	763.6	75.6	24.2	49	NW			1		4			0	0		Physical Society.
Friedrichshafen	28.63	727.2	30.02	762.6	68.7	20.4	64	SW			3		2	E		0.051	1.3		Wilhelm, Chief Tel.
Hamburg	29.93	760.3	30.00	762.1	70.5	21.4	52	WNW			4		2			0	0		Dr. R. Kleeman.
Kiel	29.94	760.5	29.96	760.9	68.7	20.4	63	W			3		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.59	751.5	29.99	761.8	74.8	23.8	48	NW			1		6	WNW		0	0		Prof. Dr. Bruhns.
Magdeburg	29.81	757.1	29.99	761.7	72.7	22.6	56	WSW			2	0	1k		W	0	0		Dr. Assmann.
Memel	29.75	755.7	29.80	756.9	61.9	16.6	68	SW			3								Reinbrecht & Issermann.
Munich	28.24	717.4	30.10	764.6	72.1	22.3	38	NE			1		4	E		0	0		Central Station.
Neufahrwasser	29.85	758.1	29.86	758.5	70.5	21.4	56	NE			2		2			0	0		A. Lothes.
Neustadt, Palatinate	29.51	749.5	30.04	762.9	73.6	23.1	57	Calm			0		7			0.008	0.2		Dicknether.
Stuttgart	29.09	738.8	29.94	760.4	77.0	25.0	37	N			1		6	SW		0.091	2.3		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.57	725.6	30.04	762.9	70.9	21.6	48	E			2		9	SW		0.197	5.0		Prof. Kemlein.
Wustrow	29.95	760.8	29.98	761.4	59.4	15.2	82	SW			3	0	3s			0	0		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.61	752.2	30.00	761.9	72.3	22.4		SW			0.5		5					½ clear.	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.51	749.6	29.56	750.9	88.5	31.4	78	WSW	30.0	13.4			1	WSW		0	0	Misty	
Deesa	29.04	737.5	29.49	749.0	101.1	38.4	28	W	18.1	8.1			4		W	0	0	D. clouds	
Bombay	29.66	753.2	29.69	754.2	88.9	31.6	69	W	15.0	6.7			6		W	0	0	D. clouds	
Poona, Yarrowda	27.84	707.2	29.68	753.8	81.8	27.7	57	WSW					1		W	0.01	0.3	D. clouds	
Belgaum	27.20	690.8	29.71	754.6	79.4	26.3	63	WSW	20.0	8.9			7	E	SW	0.02	0.5	Showery	
Lahore	28.60	726.5	29.29	743.9	112.1	44.5	25	W	2.8	1.3			0			0	0	Misty	
Roorkee	28.51	724.2	29.37	745.9	98.6	37.0	39	E	3.2	1.4			2			0	0		
Agra	28.82	732.0	29.35	745.4	105.1	40.6	27	NE	7.7	3.4			0			0	0		
Nagpur	28.47	723.1	29.50	749.3	81.7	27.6	76	NE	12.0	5.4			10	W	NE			Drizzling	
Jubbulpore	28.16	715.2	29.50	749.3	79.8	26.6	85	W	6.1	2.7			10			0.29	7.4	Overcast	
Lucknow	29.06	738.0	29.42	747.2	97.0	36.1	39	NE	1.2	0.5			0			0	0	Blue sky	
Allahabad	29.09	738.8	29.38	746.3	99.6	37.6	34	Calm	2.1	0.9			0			0	0	Blue sky	
Patna	29.29	743.9	29.46	748.4	89.2	31.8	65	E	4.4	2.0			4	E	E	0	0	D. clouds	
Hazaribagh	27.48	698.0	29.46	748.3	79.6	26.4	82	NE	5.7	2.6			8	SW	NE	1.11	28.2	Thunder s'm	
Cuttack	29.34	745.3	29.42	747.3	84.0	28.9	81	NE	0.1	0.04			9			0.29	7.4	D. clouds	
Calcutta, Alipore	29.38	746.4	29.41	746.9	81.5	27.5	90	NE	3.0	1.3			9			0.46	11.7	Gloomy	
Dhubri	29.40	746.7	29.52	749.7	79.8	26.6	85	ESE	6.9	3.1			10			0	0	Overcast	
Chittagong	29.42	747.2	29.50	749.4	79.5	26.4	89	E	5.9	2.6			9			0.15	3.8	D. clouds	
Sibsagar	29.21	741.9	29.54	750.3	80.1	26.7	91	NE	1.8	0.8			10	W	W	0.08	2.0	D. clouds	
Zanzibar, Africa			30.02	762.5	82.8	28.2	68	SSW	7	3.1			5			0	0	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.63	752.7	30.03	762.8	77.5	25.3	38	SW	1.3	0.6			5			0	0		Prof. Giovanni Cliodig.
Milan	29.53	750.0	30.03	762.8	76.5	24.7	36	SW	4.3	1.9			2			0	0		Prof. Schiaparelli.
Padua	29.94	760.5	30.04	763.1	75.7	24.3	38	WSW	4.9	2.2			1	SSE		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.16	740.7	30.05	763.2	72.9	22.7	28	ESE	3.1	1.4			2	NE		0	0		Prof. P. F. Denza.
Genoa	29.84	757.9	30.03	762.7	73.4	23.0	40	SW	3.1	1.4			4	N		0.020	0.5		Prof. G. M. Garibaldi.
Mondovi	28.18	715.8	30.05	763.3	69.1	20.6	41	NNW			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.00	762.1	30.05	763.3	70.9	21.6	64	NW					0			0	0		Prof. Luigi Guidi.
Florence	29.76	756.0	30.01	762.3	77.7	25.4	21	SE			2		0			0	0		Prof. Costantino Pitter.
Leghorn	29.96	761.0	30.04	763.1	73.2	22.9	60	WNW	4.9	2.2			2			0	0		Prof. P. Monte.
Rome	29.85	758.2	30.02	762.5	76.6	24.8	36	WSW	3.1	1.4			4			0	0		Prof. P. S. Ferrari.
Lecce	29.79	756.6	30.04	762.8	72.1	22.3	68	ENE	5.6	2.5			6			0.217	5.5		Prof. C. de Giorgi.
Cosenza	29.14	740.2	30.01	762.3	70.9	21.6	69	ESE	1.8	0.8			10	SE		0.236	6.0		Prof. D. Conti.
Cagliari	29.84	757.8	30.03	762.7	68.5	20.3	72	SE			2		10	E		0.031	0.8		Prof. A. Pacinotti.
Palermo	29.78	756.3	30.02	762.5	68.4	20.2	67	NE	4.9	2.2			7	NE		1.504	38.2		Prof. G. Cincciatore.
Syracuse	29.95	760.6	29.99	761.7	70.0	21.1	69	E	5.6	2.5			10	S		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.50	749.2	30.01	762.2	71.1	21.7	64	W	1.8	0.8			9	SW		0.035	0.9		Prof. F. Brioschi.
Stelvio	22.30	566.3			45.3	7.4	46	SE			2		7ks		NE	0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.31	566.7			39.6	4.2	86	SE			2		10kn		E	0	0	Covered	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.92	759.9	29.94	760.5	68.8	20.4	81	Calm	0	0		8ck	0			0	0	Very cloudy	K. Sasaki.
Kioto	29.81	757.2	29.98	761.5	68.8	20.4	70	ENE	1.5	0.7		3ck;cs	0			0	0	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.76	755.9	29.96	761.0	68.6	20.3	81	SW	1.1	0.5		1ck	0			0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	29.98	761.5	30.05	763.3	65.8	18.8	79	S	5.8	2.6		9c;ck	0	S		0	0	Cloudy	The Staff.
Wakayama	29.92	759.9	29.97	761.2	67.6	19.8	85	SW	2.1	0.9		1cs	0			0	0	Fair	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.96	761.0	30.15	765.7	75.5	24.2	76	ENE	7.5	3.4		2	4	S	E	0.04	1.0	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.63	752.7	29.89	759.2	75.5	24.2	86	WNW	0.9	0.4		7ck	0	E		Inap.	Inap.	Cloudy	F. Quijano, U. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.15	765.9	30.15	765.9	66.4	19.1		W			2					0	0		
Groningen	30.00	762.1	30.06	763.5	67.6	19.8		NW			3					0	0		
Helder	30.09	764.3	30.09	764.3	59.7	15.4		WSW			2					0	0		
Hellevoetsluis	30.13	765.2	30.13	765.2	66.2	19.0	75	WNW			3					0	0		
Utrecht	30.08	763.9	30.12	765.1	71.4	21.9	61	WNW			2		2			0	0	Lightly cl'dy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.81	757.2	29.87	758.8	52.5	11.4	76	W	18.6	8.3			10			0.433	11.0	Raining	
Christiania	29.53	750.0	29.67	753.6	69.4	20.8	26	WSW	18	8			2			0	0		
Gjesvær	29.39	746.4	29.41	747.0	34.2	1.2		E			4		10						
Lodingen	29.19	741.5	29.24	742.7	42.6	5.9	94	SW			7		10			1.402	35.6	Heavy rain.	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.28	769.0	30.29	769.4	64.0	17.8	82	ENE	11.2	5.0			2			0	0		Dr. J. A. Sampaio.
Campo Major	29.03	737.4	29.99	761.7	79.2	25.2	23	NNE	8.7	3.9			N			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.07	763.8	30.16	766.0	69.3	20.7	66	SW	5.6	2.5			4			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.69	754.2	30.04	763.0	79.9	25.6	28	NE	14.3	6.4			1			0	0		The Staff.
Ponta Delgada, Azores	30.40	772.1	30.47	773.9	66.2	19.0	57	NE	9.8	4.4			4			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.45	722.5	29.49	749.0	59.4	15.2	42	Var.	18	8		4ck	0						Capt. Lasarew.
Archangel	29.35	745.6	29.37	746.1	39.0	3.9	69	WNW	13	6		0	8ks						Capt. Saeliwerstow.
Astrakhan	29.92	759.9	29.84	757.8	64.4	18.0	42	SW	16	7			10s;n			Blank			Capt. Wisganow.
Barnaul ‡	28.80	731.6	29.27	743.5	67.6	19.8	79	S	4	2			10					Raining	Meteorological Obs'y.
Dorpat	29.44	747.8	29.68	753.8	64.2	17.9	47	W	9	4			10n;ks						Observatory.
Ekaterinburg	28.38	720.9	29.34	745.1	42.4	5.8	46	SW	31	14			9ks;n						Meteorological Obs'y.
Kasan	29.09	738.9	29.36	745.7	46.0	7.8	69	SW	7	3			10						Observatory.
Kertch	29.92	759.9	29.94	760.4	66.2	19.0	72	SSW	7	3			3						Lagorio & Sastyrex.
Kieff	29.13	739.8	29.74	755.4	64.2	17.9	54	NNW	4	2		c;cs	10ks						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.50	749.2	29.70	754.3	66.7	19.3	42	WNW	13	6			7			Blank			Meteorological Obs'y.
Moscow	28.97	735.8	29.51	749.5	56.5	13.6	58	NW	10.1	4.5			10s						Meteorological Obs'y.
Nertchinsk	27.19	690.6	29.47	748.6	39.0	3.9	64	NW	22	10			10			0.220	5.6		Meteorological Obs'y.
Nikolaiev	29.83	757.7	29.90	759.5	72.1	22.3	63	SSW	18	8		0	5ks;n						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.38	751.2	29.66	753.4	52.0	11.1	95	Calm			0	0	3k			0.500	12.7		Lieut. Iwanow.
Pekin, China	29.45	747.9	29.59	751.5	82.6	28.1	33	SW	13	6		5cs	0					Th'der storm	Physical Observatory.
St. Petersburg	29.50	749.3	29.52	749.7	55.6	13.1	67	NW	22	10			10kn					Raining	Central Physical Obs'y.
Tashkend, Laboratory	28.38	720.6	29.88	759.0	73.6	23.1	62	Calm	0	0			0			Blank			Teich, A. M.
Tiflis	28.50	724.0	29.87	758.7	71.1	21.7	37	Calm	0	0		0	8k						Physical Observatory.
Warsaw	29.48	748.9	29.89	759.1	76.3	24.6	38	W	9	4		0	4k						Astronomical Obs'y.
Wilna	29.42	747.3	29.83	757.6	66.9	19.4	39	NW	4	2			0						Berg, Assistant.
Yeniseisk	29.33	744.9	29.60	751.9	61.7	16.5	37	E	11	5			5						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.08	764.0	61.0	16.1	61	W			4	10k				0	0	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			29.93	760.2	54	12.2	93	SW			4	10						Raining	J. Youngclause.
North Unst, Shetland Isl'ds			29.83	757.7				WNW			7					Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.01	762.2	30.11	764.8	70.3	21.3	65	SE	4.0	1.8		0	2k			0	0	Hazy	Antonio Rave, Director
Bilbao, Met. Obs'y	30.09	764.3	30.15	765.7	77.0	25.0	63	E	2.2	1.0		3	4	N		0.024	0.6	Cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.21	691.0			64.4	18.0	57	NE	6.5	2.9			6			0	0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.87	708.0	30.02	762.6	75.2	24.0	39	NE	8.3	3.7		0	9			0	0	Almost cov'd	The Staff.
Murcia, Met. Obs'y ‡	29.93	760.1	30.07	763.8	74.5	23.6	62	E	2.9	1.3		2	4	WNW		0.157	4.0	Raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.25	742.9	30.12	765.1	66.6	19.2	72	N	10.5	4.7			10			0	0	Covered	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.94	760.3	30.00	762.0	82.7	28.2	79	SE	2.2	1.0		3c;ck	1k	WSW	S	0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.82	757.3	29.87	758.6	84.4	29.1	84	NW	5.5	2.5			9n		E	0	0		Federico Faura, S. J.
San Fernando, Naval Obs'y	29.91	759.6	30.00	762.0	76.8	24.9	44	E	17.1	7.6			10		SE	Inap.	Inap.		Capt. C. Pajason, R. N., Dir.
San Juan de Porto Rico, W. I	29.95	760.6	30.04	762.9	83.5	28.6	85	E	9.4	4.2		2cs	3k	E	E	0	0		Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.79	756.5	29.93	760.2	77.8	25.4	88	WNW	1.0	0.6			10n		WNW	0.605	15.4	Very cloudy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.33	744.9	29.37	745.9	46.4	8.0	89	Calm			0		10			0	0		
Umea	29.41	747.0	29.46	748.3	61.2	16.2	40	NW			4		10			0	0		
Hernosand	29.50	749.2	29.55	750.5	64.2	17.9	34	NW			6		5			0	0		
Stockholm	29.39	746.5	29.57	751.0	72.3	22.4	28	W			6		2			0	0		
Wisby	29.63	752.5	29.69	754.0	73.4	23.0	46	WSW			4		3			0	0		
Sub-Series.																			
Upsala	29.34	745.3	29.43	747.5	76.5	24.7	31	W	11.4	5.1			3		WNW	0	0		S. G. Fineman.
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.66	727.9	30.04	763.0	70.2	21.2	39	N			2		3			0	0		The Observatory.
Zurich	28.44	722.4	30.01	762.2	75.7	24.3	39	E			4		3			0	0	Clear	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.98	761.5	72.7	22.6	43	NE	13	6.0			2		NE	0	0		The Observatory.
Valona			30.13	765.2	73.6	23.1		Calm			0		2			0.20	5.	Slightly cl'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.96	760.9	79.7	26.5	56	SW			3	0	4k		SW	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.76	755.9	29.84	757.9	63.5	17.5	62	SE	8	3.6		2ck;hz	2ks;hz	SW	SW	0	0	Fair	
Alpena, Michigan	29.08	738.6	29.73	755.1	51.3	10.7	79	NW	6	2.7		10cs	0			0	0	Cloudy	
Atlanta, Georgia	28.64	727.4	29.79	756.7	71.5	21.9	78	W	9	4.0		0	0			0.34	8.6	Clear	
Atlantic City, New Jersey	29.64	752.5	29.65	753.1	56	13.3	94	NE	30	13.4			10s		Calm	0.49	12.4	Cloudy	
Augusta, Georgia	29.59	751.6	29.77	756.1	73.1	22.8	81	W	2	0.9		0	0			0.30	7.6	Clear	
Baltimore, Maryland	29.64	752.8	29.69	754.1	59	15.0	94	N	7	3.1			10s			0.46	11.7	Threatening	
Barnegat, New Jersey	29.64	752.8	29.66	753.4	54	12.2	100	E	30	13.4			10n		N	0.39	9.9	Light rain	
Bismarck, Dakota	28.27	718.0	30.01	762.2	55	12.8	74	NE	4	1.8		5c	0	Calm		0	0	Fair	
Boise City, Idaho	26.91	683.5	29.67	753.6	59.4	15.2	59	SW	1	0.4		0	0			0	0	Clear	
Boston, Massachusetts	29.75	755.6	29.90	759.4	48.4	9.1	98	E	15	6.7			10n		E	0.03	0.8	Light rain	
Brackettville, Texas	28.79	731.3	29.81	757.2	72	22.2	58	E	3	1.3		0	0			0	0	Clear	
Brownsville, Texas	29.87	758.7	29.91	759.7	76	24.4	64	Calm	0	0		0	0			0	0	Clear	
Buffalo, New York	28.95	735.3	29.64	752.8	61.9	16.6	75	NE	5	2.2			10s		NE	0	0	Cloudy	
Burlington, Vermont	29.52	749.8	29.80	756.9	61.0	16.1	77	S	1	0.4		2c	Sk	SW		Inap.	Inap.	Light smoke	
Cairo, Illinois	29.46	748.3	29.85	758.2	72	22.2	67	NW	9	4.0		c	0			0.03	0.8	Clear	
Campo, California	27.40	695.9	29.97	761.2	40	4.4	65	S	3	1.3		0	0			0	0	Clear	
Camp Thomas, Arizona	27.17	690.1			68	20.0	30	Calm			0	5ck	0			0	0	Fair	
Cape Henry, Virginia	29.56	750.8	29.58	751.3	69	20.6	85	NW	11	4.9			10s			0.40	10.2	Cloudy	
Cape May, New Jersey	29.58	751.3	29.61	752.1	58	14.4	94	NE	28	12.5			10n		NE	1.09	27.7	Light rain	
Castroville, Texas	29.17	740.9	29.86	758.4	67	19.4	74	W	4	1.8		0	0			0	0	Clear	
Cedar Keys, Florida	29.88	758.9	29.90	759.4	79	26.1	78	W	15	6.7		0	1ks		W	0	0	Clear	
Champaign, Illinois	28.92	734.6	29.69	754.1	59.5	15.3	94	NW	24	10.7			10s		NW	0.27	6.9	Cloudy	
Charleston, S. Carolina	29.71	754.6	29.77	756.1	76	24.4	82	SW	14	6.3		0	0			0.13	3.3	Clear	
Charlotte, N. Carolina	28.87	733.3	29.73	755.1	75.6	24.2	69	W	3	1.3		0	Hz			0.04	1.0	Clear	
Chattanooga, Tennessee	28.97	735.8	29.77	756.1	71	21.7	82	SW	10	4.5		1k	Fg	Calm	Calm	0.67	17.0	Clear	
Cheyenne, Wyoming	24.11	612.4	29.92	760.0	53	11.7	73	W	1	0.4		2ck	0			0.80	20.3	Clear	
Chicago, Illinois	29.02	737.1	29.70	754.4	51.0	10.6	88	N	16	7.2			10s		N	0.16	4.1	Cloudy	
Chincoteague, Virginia	29.56	750.8	29.58	751.3	63	17.2	100	W	4	1.8			10n		Calm	1.39	35.3	Light rain	
Cincinnati, Ohio	29.01	736.8	29.65	753.1	66	18.9	79	SW	6	2.7		0	1ks		W	0.54	13.7	Clear	
Cleveland, Ohio	28.89	733.8	29.61	752.1	60.5	15.8	91	SE	6	2.7			10n		S	0.49	12.4	Thund'rst'm	
Coleman City, Texas	28.20	716.3	29.83	757.7	64	17.8	73	Calm	0	0		0	0			0	0	Clear	
Columbus, Ohio	28.78	731.0	29.60	751.8	60	15.6	82	SW	6	2.7		2ck	8ks	W	W	0.21	5.3	Cloudy	
Concho, Texas	28.09	713.5	29.97	761.2	63	17.2	83	Calm	0	0		5c	0			0	0	Fair	
Corsicana, Texas	29.53	750.0	29.99	761.7	71	21.7	85	Calm	0	0		0	0			0	0	Clear	
Davenport, Iowa	27.20	690.9	29.84	757.9	57	13.9	69	NW	12	5.4		8k	0	NW		0	0	Cloudy	
Dayton, Washington T'y	27.99	710.9	29.74	755.4	64.5	18.1	67	S	9	4.0		2c	0	S		0	0	Clear	
Deadwood, Dakota	25.40	645.1	29.95	760.7	50	10.0	79	Calm	0	0		0	0			0	0	Clear	
Decatur, Texas	28.85	732.8	29.97	761.2	75	23.9	77	N	5	2.2		0	0			0	0	Clear	
Delaware Breakwater, Del.	29.57	751.1	29.59	751.6	60	15.6	100	NE	36	16.1			10n		NE	0.53	13.5	Light rain	
Denison, Texas	29.17	740.9	29.95	760.7	73	22.8	81	N	3	1.3		0	0			0	0	Clear	
Denver, Colorado	24.83	630.7	29.87	758.7	60.0	15.6	60	NW	6	2.7		0	0			0.09	2.3	Clear	
Des Moines, Iowa	29.08	738.6	29.96	761.0	59	15.0	82	N	6	2.7		0	0			0	0	Clear	
Detroit, Michigan	28.91	734.3	29.58	751.3	55.2	12.9	68	N	6	2.7			10s		Calm	0	0	Threatening	
Dodge City, Kansas	27.44	697.0	29.93	760.2	63	17.2	78	SE	6	2.7		5k	0	S		0	0	Fair	
Dubuque, Iowa	29.16	740.7	29.84	757.9	55.6	13.1	74	NW	7	3.1			10ks		NW	0.11	2.8	Cloudy	
Duluth, Minnesota	29.32	744.7	30.00	762.0	52	11.1	86	NE	1	0.4		0	0			0.17	4.3	Clear	
Eagle Pass, Texas	29.18	741.2	29.99	761.7	70.5	21.4	80	Calm	0	0		0	0			0	0	Clear	
Eagle Rock, Idaho	25.19	639.8	29.90	759.4	52	11.1	47	N	6	2.7		0	0			0	0	Clear	
Eastport, Maine	29.94	760.5	30.01	762.2	51	10.6	69	NE	3	1.3		2c	Hz			0	0	Fair	
El Paso, Texas	26.26	667.0	29.90	759.4	62	16.7	56	NW	1	0.4		0	1s			0	0	Clear	
Erie, Pennsylvania	28.90	734.0	29.58	751.3	60	15.6	77	SE	12	5.4			10s		S	0	0	Threatening	
Escanaba, Michigan	29.20	741.7	29.84	757.9	48	8.9	93	N	14	6.3			10s		N	1.46	37.1	Cloudy	
Florence, Arizona	28.39	721.1	29.99	761.7	68	20.0	18	Calm	0	0		1c	0	Calm		0	0	Clear	
Fort Apache, Arizona	25.08	637.0	29.86	758.4	58	14.4	32	E	3	1.3			10s		W	0	0	Cloudy	
Fort Assinnaboine, Montana	27.99	710.9	30.26	768.6	60	15.6	71	W	12	5.4			10k		Calm	0	0	Cloudy	
Fort Bennett, Dakota	28.46	722.9	29.93	760.2	59	15.0	59	SE	2	0.9		2c	0	NW		0	0	Fair	
Fort Benton, Montana	27.04	686.8	29.78	756.4	64	17.8	43	E	8	3.6		0	0			0	0	Clear	
Fort Buford, Dakota	27.99	710.9	29.91	759.7	57	13.9	81	E	4	1.8		5cs	0	SW		0	0	Fair	
Fort Custer, Montana	26.70	678.2	29.79	756.7	58	14.4	64	NE	5	2.2		2c	0	Calm		0	0	Fair	
Fort Davis, Texas	25.26	641.6	30.22	767.6	65	18.3	49	Calm	0	0		0	0			0	0	Clear	
Fort Elliott, Texas	27.27	692.6	30.34	770.6	61	16.1	77	SE	4	1.8		10c	0	SE		0	0	Cloudy	
Fort Gibson, Indian T'y	29.42	747.3	29.95	760.7	67	19.4	84	Calm	0	0		5cs	0	N		0	0	Fair	
Fort Grant, Arizona	25.26	641.6	30.06	763.5	71	21.7	22	NE	4	1.8		5ck	5s	W		0	0	Cloudy	
Fort Griffin, Texas	28.71	729.2	29.95	760.7	66.4	19.1	74	Calm	0	0		0	0			0	0	Clear	
Fort Keogh, Montana	27.42	696.5	29.83	757.7	62	16.7	61	SE	17	7.6		5cs	0	SW		0	0	Fair	
Fort Macon, North Carolina	29.63	752.6	29.64	752.8	73	22.8	90	SW	13	5.8			10s	Calm		0.03	0.8	Cloudy	
Fort McKavett, Texas	27.74	704.6	29.62	752.3	62.3	16.8	89	W	2	0.9		1c	0			0	0	Clear	
Fort Missoula, Montana	26.50	673.1	29.88	758.9	68	20.0	65	SE	2	0.9		0	0			0	0	Clear	
Fort St. Michaels	29.86	758.4	29.89	759.2	36	2.2	100	SE	5	2.2			10k						
Fort Shaw, Montana	26.25	666.7	29.70	754.4	53	11.7	67	W	7	3.1		0	0			0	0	Clear	
Fort Sill, Indian Territory	28.78	731.0	29.99	761.7	68	20.0	84	N	3	1.3		8c	0	NW		0	0	Fair	
Fort Stevenson, Dakota	28.23	717.0	30.01	762.2	57	13.9	94	E	4	1.8		0	2s		Calm	0	0	Clear	
Fort Verde, Arizona					58.3	14.6	48	SW			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.26	717.8	29.79	756.7	64	17.8	78	Calm	0	0		0	0			0	0	Clear	
Galveston, Texas	29.92	760.0	29.96	761.0	79	26.1	74	NW	6	2.7		Hz	0			0	0	Dense haze	
Grand Haven, Michigan	29.01	736.8	29.66	753.4	58	14.4	88	N	7	3.1			10s		N	0.31	7.9	Cloudy	
Hatteras, North Carolina	29.60	751.8	29.62	752.3	73	22.8	95	SW	18	8.0		0	8ks		SW	0.12	3.0	Fair	
Helena, Montana	25.66	651.8	29.86	758.4	61	16.1	61	Calm	0	0		2c	0	Calm		0	0	Fair	
Henrietta, Texas	28.98	736.1	29.87	758.7	69	20.6	85	Calm	0	0		2cs	0			0	0	Clear	
Indianapolis, Indiana	28.86	733.0	29.63	752.6	64	17.8	78	W	2	0.9			10s		N	0	0	Cloudy	
Indianola, Texas	29.94	760.5	29.97	761.2	77.2	25.1	82	Calm	0	0		0	Hz			0	0	Clear	
Jacksboro, Texas	28.84	732.5	29.94	760.5	68	20.0	84	NE	1	0.4		2ck	0	E		0	0	Fair	
Jacksonville, Florida	29.84	757.9	29.86	758.4	80	26.7	78	SW	12	5.4		2cs	5s		SW	Inap.	Inap.	Fair	
Keokuk, Iowa	29.21	741.9	29.84	757.9	60.5	15.8	68	N	12	5.4		0	c			0.01	0.3	Clear	
Key West, Florida	29.97	761.2	30.00	762.0	82.0	27.8	82	S	7	3.1		9cs;k	0	W;S		0	0	Cloudy	
Kittyhawk, North Carolina	29.61	752.1	29.63	752.6	72	22.2	90	W	13	5.8		8k	2ks	W	W	0.57	14.5	Cloudy	
Knoxville, Tennessee	28.77	730.7	29.77	756.1	65	18.3	92	SW	7	3.1		5k	2s	SW	Calm	0.33	8.4	Fair	
La Crosse, Wisconsin	29.17	740.9	29.90	759.4	51	10.6	79	N	20	8.9			10s			0.03	0.8	Cloudy	
La Mesilla, New Mexico	26.12	663.4	30.27	768.8	63	17.2	57	Calm	0	0		0	0			0	0	Clear	
Laredo, Texas	29.50	749.3	29.83	757.7	73	22.8	85	Calm	0	0		0	0			0	0	Clear	
Leavenworth, Kansas	29.10	739.1	29.97	761.2	63	17.2	72	N	4	1.8		1cs	0	W		0	0	Clear	
Lewiston, Idaho	28.81	731.8	29.64	752.8	62	16.7	44	SE	1	0.4		0	2s		Calm	0	0	Clear	
Little Rock, Arkansas	29.57	751.1	29.88	758.9	73	22.8	76	NW	10	4.5		2ck	0	NW		0	0	Clear	
Los Angeles, California	29.59	751.6	29.96	761.0	57.2	14.0	74	SE	3	1.3			Fg		Calm	0	0	Dense fog	
Louisville, Kentucky	29.12	739.6	29.67	753.6	66.0	18.9	79	W	11	4.9		0	1ks			0	0	Clear	
Lynchburg, Virginia	29.02	737.1	29.68	753.9	67	19.4	74	Calm	0	0			10s			0.33	8.4	Cloudy	
Madison, Wisconsin	28.80	731.5	29.78	756.4	52	11.1	86	N	22	9.8			10s		N	0.54	13.7	Cloudy	
Marquette, Michigan	29.21	741.9	29.92	760.0	45	7.2	92	NW	10	4.5			10s		NW	0.99	25.1	Cloudy	
Mason, Texas	28.36	720.3	30.09	764.3	62	16.7	78	Calm	0	0		0	0			0	0	Clear	
Memphis, Tennessee	29.57	751.1	29.90	759.4	71	21.7	71	NW	8	3.6		0	0			Inap.	Inap.	Clear	
Milwaukee, Wisconsin	29.02	737.1	29.76	755.9	51	10.6	93	N	20	8.9			10s			0.28	7.1	Cloudy	

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction,		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—CONTINUED.																			
Mobile, Alabama	29.83	757.7	29.90	759.4	75	23.9	77	NW	6	2.7	.....	0	Hz	.....	.....	0.02	0.5	Clear.	
Montgomery, Alabama	29.64	752.8	29.86	758.4	72.2	22.3	90	W	4	1.8	.....	0	0	.....	.....	0.06	1.5	Clear.	
Moorhead, Minnesota	29.05	737.9	30.01	762.2	52.1	11.2	86	N	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Morgantown, W. Virginia	28.64	727.4	29.57	751.1	64	17.8	83	Calm	0	0	.....	.....	10s	.....	SW	0	0	Cloudy.....	
Mt. Washington, N. H.	23.70	602.0	29.73	755.1	37	2.8	45	SE	42	18.8	.....	2c	5s;sk	.....	SE	0	0	Clear.	
Nashville, Tennessee	29.23	742.4	29.75	755.6	68.2	20.1	83	W	4	1.8	.....	0	0	.....	.....	0.03	0.8	Clear.....	
New Haven, Connecticut	29.70	754.4	29.81	757.2	54	12.2	87	NE	8	3.6	.....	.....	10s	.....	NE	0.01	0.3	Cloudy.....	
New London, Connecticut	29.78	756.4	29.82	757.4	53	11.7	100	S	9	4.0	.....	.....	1on	.....	S	0.07	1.8	Light rain...	
New Orleans, Louisiana	29.86	758.4	29.91	759.7	75.7	24.3	84	NW	3	1.3	.....	0	Sk	.....	.....	0	0	Clear.	
Newport, Rhode Island	29.80	756.9	29.85	758.2	54.0	12.2	88	NE	8	3.6	.....	.....	1on	.....	NE	0.01	0.3	Light rain..	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	29.79	756.7	29.82	757.4	50.5	10.3	100	NE	28	12.5	.....	.....	1on	.....	NE	0.08	2.0	Light rain...	
New York, New York	29.59	751.6	29.76	755.9	55	12.8	93	NE	23	10.3	.....	.....	10s;fg	.....	NE	0.01	0.3	Cloudy.....	
Norfolk, Virginia	29.58	751.3	29.61	752.1	69	20.6	85	NW	8	3.6	.....	.....	10s	.....	.....	0.58	14.7	Cloudy.....	
North Platte, Nebraska	27.14	689.3	29.96	761.0	59.3	15.2	85	E	7	3.1	.....	8c	0	W	.....	0	0	Fair.....	
Olympia, Washington T'y	29.76	755.9	29.80	756.9	60.0	15.6	82	N	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy.....	
Omaha, Nebraska	28.86	733.0	30.00	762.0	63.5	17.5	72	N	4	1.8	.....	2cs	0	.....	.....	0	0	Clear.....	
Oswego, New York	29.40	746.7	29.72	754.9	63.2	17.3	70	S	5	2.2	.....	.....	10s	.....	.....	0	0	Cloudy.....	
Pensacola, Florida	29.87	758.7	29.90	759.4	76	24.4	91	SW	3	1.3	.....	0	0	.....	.....	0.28	7.1	Clear.....	
Philadelphia, Pa	29.65	753.1	29.71	754.6	56	13.3	94	E	24	10.7	.....	.....	10ks	.....	E	0.11	2.8	Cloudy.....	
Phœnix, Arizona	28.74	730.0	30.52	775.2	60	15.6	49	E	1	0.4	.....	0	0	.....	.....	0	0	Clear.....	
Pike's Peak, Colorado	18.06	458.7	30.27	768.8	34	1.1	61	W	20	8.9	.....	0	0	.....	.....	0.27	6.9	Clear.....	
Pioche, Nevada	24.01	609.8	29.80	758.4	56	13.3	19	S	2	0.9	.....	0	0	.....	.....	0	0	Clear.....	
Pittsburg, Pennsylvania	28.84	732.5	29.63	752.6	62	16.7	79	E	6	2.7	.....	.....	10s	.....	SW	0.22	5.6	Cloudy.....	
Port Eads, Louisiana	29.92	760.0	29.93	760.2	76.0	24.4	91	W	4	1.8	.....	0	0	.....	.....	0.40	10.2	Clear.....	
Port Huron, Michigan	28.97	735.8	29.63	752.6	51.7	10.9	79	NE	11	4.9	.....	.....	10s	.....	Calm	0	0	Cloudy.....	
Portland, Maine	29.90	759.4	29.95	760.7	51	10.6	79	E	9	4.0	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy.....	
Portland, Oregon	29.76	755.9	29.84	757.9	61.2	16.2	83	Calm	0	0	.....	.....	1on	.....	SE	0.02	0.5	Light rain...	
Portsmouth, N. Carolina	.....	.....	.....	.....	72	22.2	76	W	16	7.2	.....	.....	10s	.....	N	0	0	Cloudy.....	
Prescott, Arizona	24.79	629.7	29.86	758.4	50	10.0	32	S	1	0.4	.....	0	0	.....	.....	0	0	Clear.....	
Punta Rassa, Florida	29.94	760.5	29.95	760.7	80	26.7	82	SW	11	4.9	.....	8cs	2ks	SW	SW	0.01	0.3	Cloudy.....	
Red Bluff, California	29.52	749.8	29.85	758.2	60.5	15.8	83	SW	4	1.8	.....	.....	1on	.....	S	0.30	7.6	Light rain...	
Rio Grande City, Texas	29.76	755.9	29.97	761.2	75	23.9	77	E	3	1.3	.....	0	0	.....	.....	0	0	Clear.....	
Rochester, New York	29.06	738.1	29.68	753.9	62	16.7	83	SE	9	4.0	.....	.....	10ks	.....	Calm	0	0	Threaten ing	
Roseburg, Oregon	29.30	744.2	29.86	758.4	56	14.4	88	S	2	0.9	.....	.....	10ks	.....	SW	0.16	4.1	Cloudy.....	
Sacramento, California	29.83	757.7	29.90	759.4	62.0	16.7	77	S	4	1.8	.....	.....	10s	.....	S	0.05	1.3	Cloudy.....	
St. Louis, Missouri	29.26	743.2	29.84	757.9	61.5	16.4	77	NW	12	5.4	.....	0	0	.....	.....	0.73	18.5	Clear.	
St. Paul, Minnesota	29.13	739.9	29.97	761.2	53	11.7	86	N	10	4.5	.....	.....	10s	.....	N	0.03	0.8	Cloudy	
Salt Lake City, Utah	25.57	649.5	29.77	756.1	67	19.4	21	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear.....	
San Antonio, Texas	29.28	743.7	29.97	761.2	67.6	19.8	79	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.....	
San Diego, California	29.85	758.2	29.92	760.0	61.5	16.4	82	N	4	1.8	.....	.....	10s	.....	.....	0	0	Cloudy.....	
Sandusky, Ohio	28.92	734.6	29.58	751.3	62	16.7	77	SW	4	1.8	.....	5k	5s	.....	W	0.01	0.3	Cloudy.....	
Sandy Hook, New Jersey	29.72	754.9	29.75	755.6	57.3	14.1	94	E	40	17.9	.....	.....	10ks	.....	E	Inap.	Inap.	Cloudy.....	
San Francisco, California	29.82	757.4	29.88	758.9	60	15.6	82	NE	6	2.7	.....	.....	10s	.....	S	0	0	Threatening	
Santa Fé, New Mexico	23.40	594.3	29.91	759.7	59	15.0	28	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear.	
Savannah, Georgia	29.73	755.1	29.82	757.4	81	27.2	68	W	12	5.4	.....	0	0	.....	.....	0.04	1.0	Clear.....	
Shreveport, Louisiana	29.71	754.6	29.95	760.7	74	23.3	86	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear.....	
Silver City, New Mexico	24.35	618.5	29.81	757.2	60	15.6	71	Calm	0	0	.....	2c	0	Calm	.....	0	0	Clear.....	
Sitka Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Inap.	Inap.	.....	
Smithville, North Carolina	29.66	753.4	29.69	754.1	74	23.3	90	SW	13	5.8	.....	5k	5ks	SW	SW	0.24	6.1	Cloudy.....	
Spokane Falls, Wash. Ter.	27.65	702.3	29.61	752.1	59	15.0	76	Calm	0	0	.....	8k	0	.....	.....	0	0	Fair	
Springfield, Illinois	29.14	740.1	29.80	756.9	60	15.6	77	NW	12	5.4	.....	.....	10s	.....	NW	0.05	1.3	Cloudy.....	
Springfield, Massachusetts	29.74	755.4	29.87	758.7	53	11.7	86	NE	6	2.7	.....	.....	10s	.....	N	0	0	Cloudy.....	
Stockton, Texas	26.99	685.5	29.98	761.5	64.5	18.1	68	Calm	0	0	.....	2c	0	Calm	.....	0	0	Fair	
St. Vincent, Minnesota	29.20	741.7	30.04	763.0	44	6.7	92	NW	8	3.6	.....	0	0	.....	.....	0	0	Clear.....	
Thatcher's Island, Mass	29.88	758.9	29.91	760.5	49.5	9.7	93	E	16	7.2	.....	.....	10s	.....	E	0.06	1.5	Cloudy.....	
Toledo, Ohio	28.90	734.0	29.58	751.3	60	15.6	88	NW	8	3.6	.....	.....	10s	.....	NW	0.13	3.3	Threatening	
Tucson, Arizona	27.47	697.7	29.76	755.9	69	20.6	27	E	2	0.9	.....	8c	0	.....	.....	0	0	Fair	
Umatilla, Oregon	29.37	746.0	29.77	756.1	66.3	19.1	77	SW	32	14.3	.....	0	8ks	.....	SW	Inap.	Inap.	Cloudy.....	
Uvalde, Texas	29.01	736.8	29.80	756.9	68	20.0	79	E	4	1.8	.....	0	0	.....	.....	0	0	Clear.....	
Vicksburg, Mississippi	29.66	753.4	29.92	760.0	75	23.9	81	SW	5	2.2	.....	0	0	.....	.....	0	0	Clear.....	
Visalia, California	29.52	749.8	29.87	758.7	65	18.3	68	SE	1	0.4	.....	.....	10s	.....	.....	0	0	Cloudy.....	
Washington, D. C.	29.53	750.0	29.64	752.8	58	14.4	100	N	4	1.8	.....	.....	10n;fg	.....	NE	0.44	11.2	Light rain...	
Wickenburg, Arizona	.....	.....	.....	.....	60	15.6	34	Calm	.....	.....	0	1c	0	.....	.....	0	0	Clear.....	
Wilmington, N. Carolina	29.62	752.3	29.67	753.6	73	22.8	90	W	8	3.6	.....	.....	10s	.....	W	0.47	11.9	Cloudy.....	
Winnemucca, Nevada	25.44	646.2	29.65	753.1	56	13.3	57	SW	6	2.7	.....	0	0	.....	.....	0	0	Clear.....	
Wood's Holl, Mass	29.82	757.4	29.85	758.2	51	10.6	93	SE	14	6.3	.....	.....	1on	.....	SE	0.01	0.3	Light rain'...	
Yankton, Dakota	28.73	729.7	29.99	761.7	60	15.6	82	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Yuma, Arizona	29.64	752.8	29.78	756.4	71.4	21.9	71	N	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
SUB-SERIES.																			
Bogota, U. S. Columbia	22.10	561.3	.....	.....	55.0	12.8	80	Calm	0	0	.....	2k	5ks	.....	.....	0	0	Cloudy.....	Thomas Herman
Buff Bay Town, Jamaica.‡	29.78	756.4	30.09	764.3	75	23.9	95	E	.....	.....	.....	2c	5k	.....	.....	Bla	nk	.....	
Havana, Cuba, W. I.	29.97	761.2	30.02	762.5	83	28.3	74	Calm	0	0	.....	4qs	0	.....	.....	0	0	Fair...	A. Van Caneghem, Ass't.
Kingston, Jamaica, W. I.	29.98	761.5	29.99	761.7	80.1	26.7	80	Calm	0	0	.....	0	8s	.....	E	0	0	Cloudy.....	Robert Johnstone.
Navassa, W. I.	29.92	760.0	30.00	762.0	83	28.3	79	NE	10	4.5	.....	2s	2k	N	E	0	0	Fair.....	F. M. Everett.
Paramaribo, S. A.	30.00	762.0	30.00	762.0	80	26.7	82	E	.....	.....	3	.....	1on	.....	E	0.140	3.6	Rainy.....	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.43	747.5	29.98	761.5	82	27.8	68	Calm	.....	.....	0	0	5k	.....	Calm	0.08	2.0	Clear.....	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Earl Flint.
Santiago de Cuba, W. I.	29.99	761.7	30.02	762.5	80	26.7	82	Calm	0	0	.....	2cs	0	.....	.....	0	0	Fair.....	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.76	755.9	29.80	756.9	40.0	4.4	96	W	7	3.1	.....	4k	6s	NW	W	Inap.	Inap.	Raining	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross																			Comm A. J.Errington.
H. M. S. Alert, Thursday Island, Oceanica	29.84	757.9	80	26.7	84	SE			1		2							D. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, N. 36° 35′, E. 16° 23′	30.06	763.5	69.5	20.8	77	Calm			0		3					Sm'h		D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab, Aden, Arabia, Asia	29.63	752.6	90	32.2	80	S			2		0					Sm'h		Blue sky	Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N 29° 31′, E. 60° 49′	29.58	751.3	83	28.3	83	S			2–3		4	SW				5	SSW	Misty	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			70	21.1		NE			2		0					1	NE	Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N 12° 01′, W. 61° 48′	30.02	762.5	85	29.4	75	E			4		2							D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 27° 48′, E. 80° 54′	30.23	767.8	67	19.4	79	ESE			5		3	SE				4	S	D. clouds	Com. F. W. Richards.
H. M. S. Champion, S. 21° 06′, W. 34° 00′	30.21	767.3	74	23.3	81	NNE			4		7	Calm				4	E	Overcast	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Cheefoo Harbor, China	29.83	757.7	69	20.6	70	S			1–2		1							Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruiser, N 36° 07′, E. 13° 46′	29.92	760.0	72	22.2		W			2		1	WSW				1	WNW	Blue sky	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, N. 15° 49′, W. 25° 12	30.10	764.5	76	24.4	90	NE			4		3					4	NE	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.54	775.7	58	14.4		SE			3–6		4	SE						Squally	Capt C. Domville.
H. H. S. Dock-Yard, Bermuda, W.I.	29.95	760.7	79	26.1	90	SSW			2–3		6	SSW						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 43′, W. 53° 08′	30.10	764.5	45	7.2	84	NE			2		0					1	NE	Blue sky	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 3° 37′, E. 83° 25′	29.81	757.2	80	26.7		WSW			2–3		3					2	SSE	D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria																			Comm. C. Johnstone.
H. M. S. Emerald, N. 2° 40′, E. 172° 44′	29.76	755.9	84	28.9	83	ESE			3		3	E				3	SE	D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, S. 18° 03′, E. 56° 00′	30.07	763.8	79	26.1	73	ENE			3–4		3	ENE				2–3	ENE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 48° 56′, W. 52° 51′	30.09	764.3	40	4.4		NNW			1		7	N						D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn N. 13° 42′, E. 42° 42′	29.58	751.3	87.5	30.8	72	NW			2		3					1	NW	Showery	Capt. P. Aldrich.
H. M. S. Flamingo, Balize, Central America	29.94	760.5	86	30.0	88	E			2		6	E						D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish, Yokohoma, Japan	30.01	762.2	68	20.0	79	SW			1		6					1	S	Misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	29.76	755.9	54	12.2	90	Calm			0		6							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.64	752.8	39	3.9	91	SSW			3		10							Raining	Capt. L. F. Jones.
H. M. S. Griffin, Nassau, Bahamas	30.00	762.0	83	28.3	74	SE			1		1							Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C.P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. IronDuke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.99	761.7	63	17.2		Calm			0		6	Calm						D. clouds	Comm. R. H. Thornton
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, N. 33° 45′, E. 137° 30′	29.96	761.0	68	20.0		E			2–3		6	E				2	SE	D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	29.81	757.2	81.2	27.3	76	ESE			2		6							Squally	Capt. A. Carpenter.
H. M. S. Midge, Foochow, China	29.92	760.0				ENE			1		2	NE						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. N. S. Modeste, S. 15° 15′, E. 85° 05′	29.88	758.9	76	24.4	90	SSE			4–5		4					4	SE	D. clouds	Capt. J. G. Mead.
H. M. S Monarch, Tunis, Tunis, Africa	30.04	763.0	69	20.6	79	N			3		8	NNW						D. clouds	Capt. G. C. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen																			Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.95	760.7	50.5	10.3	64	SSE			1		0							Blue sky	Capt. E. B Drummond.
H. M. S. Oronte																			Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.84	757.9	80	26.7	100	Calm			0		10					1	SE	Overcast	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, LaGuayra, Venezuela, S.A.	29.95	760.7	80	26.7	86	ENE			1		3					1	NE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.73	755.1	79	26.1		SE			3-6		9							Raining	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	29.79	756.7	56	13.3		Calm			0		2							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 5° 25′, E. 46° 24′	29.98	761.5	79.3	26.3	86	S			2-3		2					2	S	D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, S. 4° 00′, E. 70° 42′	29.43	747.5	81	27.2	91	SSE			5-6		4	SE				6	SE	D. clouds	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 26° 30′, W. 19° 28′	30.24	768.1	70.5	21.4	77	N			3		6	N				3	N	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 7° 34′, W. 142° 40′	29.88	758.9	78	25.6	90	NNE			2		10					4	NE		Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A.	30.00	762.0	57	13.9	87	Calm			0		10	Calm						Misty	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott
H. M. S. Tweed																			
H. M. S. Tyne, N. 42° 00′, W. 9° 00′	30.10	754.5	66	18.9	90	NNW			4		0							Misty	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.			80	26.7		N			1		3							D. clouds	Com. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	29.38	746.2	51	10.6	78	SW			3-5		8							Raining	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, Shat el Arab River, Turkey	29.66	753.4	89.5	31.9	61	NW			3-4									Misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, S. 9° 08′, E. 12° 57′	30.07	763.7	75.9	24.4	79	ESE			3		9					2	SW	Overcast	Carlos Candid dos Reis, Comd't.
Quanza, Bulama, Senegambia	29.96	760.9	81.5	27.5	68	SSE			1		10			6 hours		1	SE	Overcast	Carlos M. de Silva Costa, Comd't
Rio Lima																			S. C da Silva Costa, Comd't.
Sado, St. Thomas, Gulf of Guinea	29.92	759.9	79.7	26.5	85	SW			3		6						SW	D. clouds	G. A de Brito Capello, Comd't.
Tamega, Macao, China	29.82	757.4	79.7	26.5	77	S			2		1					2		Blue sky	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga N. 52° 00′, E. 2° 44′	30.12	765.0	56.8	13.8	85	WSW			2		0							Hazy	Capt. M. von Krusenstierna.
H. M. Frigate Vanadis																			Com. Th. Ulner.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	29.95	760.7	76	24.4	86	W	4	1.8			5		W	0.23	5.8			Fair	
N. Yard, Portsmouth, N. H.	29.93	760.2	49	9.4	85	E	8	3.6		10c	0	E		0	0			Cloudy	
Naval Hospital, Yokahama, Japan	29.91	759.7	65.5	18.6	81	Calm			0		2		W	0	0			Clear	
Adams, N. 5° 39′, W. 78° 58′	29.71	754.6	81	27.2	91	WNW			2		8		SW			Long	SW	Cloudy	
Alaska, Callao, Peru	29.91	759.7	64	17.8	89	NW			1		10			0	0	Sm'h		Hazy	
Alert, N. 19° 26′, E. 140° 47′ *	29.85	758.2	84	28.9	79	E			4		2		E			Mod.	E	Clear	
Alliance, Norfolk, Va	29.51	749.5	70	21.1	95	SSE			1		10			Light				Cloudy	
Ashuelot, Kobe, Japan	29.98	761.5	69	20.6	85	ESE			1		2		Calm					Clear	
Colorado, New York, N. Y	29.84	757.9	56	13.3	94	NE	3	1.3			10							Raining	
Constitution. Norfolk, Va	29.54	750.3	66	18.9	94	W			1		10							Overcast	
Franklin, Norfolk, Va	29.55	750.6	69	20.6	90	WNW	1.2	0.5			10		W	0.08	2.0			Cloudy	
Galena. Cadiz, Spain	29.98	761.5	75	23.9	72	SSE			2		5		SE			Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	29.94	760.5	72	22.2	76	SW	2.4	1.1			8		SW	0	0			Fair	
Jamestown, Sitka, Alaska *	29.90	759.4	50	10.0	86	ESE			1		10			0.04	1.0			Cloudy	
Kearsarge. Norfolk, Va	29.63	752.6	68	20.0	95	WNW			2		10		Calm			Sm'h		Cloudy	
Lackawanna. S. 9° 38′, W. 139° 41′ *†	30.03	762.7	82	27.8	91	NNE			3-4		2		NNE			Mod.	NNE	Fair	
Marion, Montevideo, Uruguay *†	30.31	769.9	45	7.2	76	N			2		5		NW			Sm'h		Fair	
Michigan, Erie, Pennsylvania	29.74	755.4	60	15.6	76	ENE			4		10							Cloudy	
Minnesota, Newport, R. I	29.83	757.7	55	12.8	93	ENE			3		10					Sm'h		Drizzling	
Monocacy, Yokohama, Japan	30.06	763.5	69	20.6	80	S			1		8		Calm					Fair	
New Hampshire, Norfolk, Va	29.58	751.3	68	20.0	95	NW	6	2.7			10		NW	1.25	31.7			Cloudy	
Nipsic, Gibraltar, Mediterranean	30.04	763.0	68	20.0	84	E			4		10		E			Sm'h		Squally	
Onward, Callao, Peru †.	29.95	760.7	65	18.3	89	Calm			0		10					Long	W	Cloudy	
Palos, Nagasaki, Japan	29.98	761.5	71	21.7	90	E			1		5							Fair	
Passaic, Washington, D. C	29.69	754.1	60	15.6	94	NE			2		5							Misty	
Pensacola, San Francisco, Cal	29.90	759.4	59	15.0	88	SE			2		8			0	0	Sm'h		Cloudy	
Portsmouth. Hampton Roads, Va	29.59	751.6	65	18.3	?	SW			4		8		W					Cloudy	
Powhatan. Norfolk, Va	29.67	753.6	67	19.4	89	W			2		10		WNW					Threatening	
Quinnebaug, N. 25° 20′, W. 59° 45′	30.11	764.8	81	27.2	78	NNW			1		8		NE			Sm'h		Fair	
Ranger, Manzanilla, Mexico *	29.84	757.9	78	25.6	86	Calm			0		5		Calm	0	0	Sm'h		Fair	
Richmond, Nagasaki, Japan	29.99	761.7	72	22.2	76	Calm			0		0			0	0			Clear	
Saratoga, Hampton Roads, Va	29.58	751.3	68	20.0	90	NW			1		10		NW	Heavy				Overcast	
Shenandoah, Montevideo, Uruguay *	30.41	772.4	43	6.1	75	N			3		10					Sm'h		Cloudy	
St. Louis, League Island, Pa	29.28	743.7	56	13.3	94	NE	16	7.2			10		NE	0.06	1.5			Cloudy	
Swatara, Shanghai, China *†	29.82	767.4	73	22.8	90	SSE			2		10		Calm					Overcast	
Tennessee, New York, N. Y	29.79	756.7	59	15.0	88	ENE	15	6.7			10		ENE	0	0	Sm'h		Threatening	
Ticonderoga, S. 54° 38′, W. 78° 13′	29.91	759.7	37	2.8	90	S			6		10		S	Inap.	Inap.	R'gh	S	Cloudy	
Trenton, Barcelona, Spain *	30.09	764.3	70	21.1	70	S			2		5			0	0	Sm'h		Fair	
Vandalia. Navy Yard, N. Y *†	30.07	763.8	60	15.6	82	NE			2		10		NE					Cloudy	
Wabash, Boston, Massachusetts	29.95	760.7	51	10.6	93	ENE	16	7.2			10		Calm	0.01	0.3			Foggy	
Wachusetts, N. Yard, Mare I'd, Cal	29.90	759.4	62	16.7	88	SE			1		8		S	0	0			Cloudy	
Yantic, Off Key West, Florida *	29.90	759.4	81	27.2	91	SW			3		5							Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 55° 20′, W. 5° 25′	30.12	765.0	55	12.8	93	ESE			1		10							Overcast	Capt. W. N. Lailey.
City of Agra, N. 37° 35′, W. 17° 31′	30.31	769.9	64.5	18.1	84	NNE			5		3							D. clouds	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 50° 16′, W. 1° 04′	30.20	767.1	58.5	14.7	82	Calm			0									Heavy mist	Capt. A. Buchan.
Denbighshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 27° 00′, W. 31′ 20°	30.31	769.9	74.3	23.5	86	NNW			2		1							Clear	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee, ‡ N. 49° 18′, W. 5° 42′	30.30	769.6	58.3	14.6	96	NNW			5		2							Misty	Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 12° 26′, W. 31° 24′	30.08	764.0	80.5	26.9	82	NE			5		5							D. clouds	Capt. M. Parry.
Sierra Estrella, N. 46° 48′, W. 16° 20′	30.42	772.7	62.0	16.7	80	W			1		5							D. clouds	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 18° 54′, E. 39° 32′	29.67	753.6	84.5	29.2	72	NW			6		6							D. clouds	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 47° 26′, W. 50° 29′	30.09	764.3				NE			2		5		NW			Mod.	SSW	Fair	
S. S. Circassian, ‡ N. 46° 30′, W. 56° 08′	30.26	768.6	39	3.9	100	NE			3	20	0	NW		0	0	Sm'h	W	D. clouds	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Algeria																			Capt. W. Watson.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 41° 13′, W. 60° 18′ †	29.72	754.9	64	17.8	?	ENE			6		10		E			R'gh	E	Cloudy	Capt. J. W. Jennings.
S. S. Baltic, ‡ N. 51° 02′, W. 14° 38′	30.27	768.8	61	16.1	77	WSW			3		8		Var.	0	0	Light	W	D. clouds	Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, Queenstown, Ireland †	30.23	767.8	63	17.2	83	Var.			1–2		2		NW	0	0	Sm'h		Clear	Capt. Benj. Gleadell.
S. S. Germanic																			Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, N. 50° 42′, W. 0° 20′ ‡	30.13	765.3	54.5	12.5		Calm			0		2		NE	0	0	Sm'h	NE	Fair	
S. S. Köln, N. 44° 53′, W. 40° 43′	30.00	762.0	64.0	17.8	100	SW			4		8		SW	15 hrs	fog	Mod.	SW	Cloudy	Capt. Th. Jüngst
S. S. Leipzig, N. 47° 06′, W. 35° 05′	30.04	763.0	59.0	15.0		SSW			4		10		SW	8 hours		Mod.	SW	Light rain	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg, N. 37° 20′, W. 74° 11′	29.52	749.8	70.7	21.5		SW			3		8		WSW	7 hours		Mod.	E	Cloudy	Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. N. 44° 50′, W. 37° 26′	29.91	759.7	59	15.0	94	WSW			6		10		WSW			Mod.	S	Foggy	Capt. J. W. Shackford.
S. S. Indiana, N. 45° 16′, W. 38° 23′ †	30.00	762.0	64	17.8	89	WSW			4		8		W	Mode	rate	Mod.	W	Rainy	Capt. R. W. Sargent.
S. S. Ohio, N. 50° 30′, W. 16° 18′ *†	30.41	772.4	60	15.6	94	W			3		0			0	0	Sm'll	W	Fair	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, N. 40° 07′, W. 56° 18′ †	29.77	756.1	72	22.2	95	WSW			3		10		WSW			Sm'h	SW	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 41° 03′, W. 132° 14′ †	30.07	763.8	59	15.0	82	NNW			5		8		NNW	Driz	zles	Mod.	N	Cloudy	Capt. H. Davison.
S. S. Gaelic, N. 30° 05′, E. 130° 59′ *†	30.09	764.3	74	23.3	81	NE			3		2		NE			Sl't	NE	Fair	Capt. W. H. Kidley.
S. S. Oceanic, Hong Kong, China	30.09	764.3	82	27.8	70	SSE			1		1		SE					Fine	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon																			Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Francisco, Cal. †	29.88	758.9	59	15.0	88	E			2		10		SW	0	0			Cloudy	Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, Victoria, British Col'bia †	29.82	757.4	55	12.8	80	N			1		10		N					Cloudy	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, N. 37° 02′, W. 122° 24′ †	29.88	758.9	59	15.0	94	SE			4		5		SE			Mod.	S	Fair	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal. †	29.88	758.9	60	15.6	82	SE			3		8		SE					Showery	Capt. G. Debney.
S. S. Victoria, N. 41° 40′, W. 124° 30′ †	29.89	759.2	54	12.2	100	NNW			3		8					Sm'h		Hazy	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 8° 59′ W. 164° 17′	29.83	757.7	78	25.6	91	NE			4		8		NE			Long	NE	Showery	A. Bannerman, 2d Officer.
S. S. City of New York, Sydney, N. S. W. †	29.38	746.2	52	11.1	100	NW			2		10		W					Raining	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 11° 42′, W. 87° 26′ †	29.92	760.0	83	28.3	75	ESE			4		10ks		E	0	0	Mod.	ESE	Cloudy	Capt. D. S. Austin.
S. S. City of Peking, N. 47° 14′, E. 178° 43′ †	29.39	746.5	44	6.7	92	SSW			4		10		S	0	0	Light	S	Foggy	Capt. G. G. Berry.
S. S. City of Sidney																			Capt. H. C. Dearborn.
S. S. City of Tokio, N. 38° 44′, E. 177° 50′ †	29.50	749.3	60	15.6	88	S			5		5		SW			Mod.	NW	Fair	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 10° 16′, W. 86° 06′ †	29.85	758.2	82	27.8	79	W			2		5		W	0.08	2.0	Sm'll	SW	Fair	Capt. R. R. Searle.
S. S. Granada																			Capt. M. Connolly.
S. S. Zealandia																			
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland, Jersey City, N. J. †	29.85	758.2	60	15.6	88	ENE			5		10		E	0.3	8.			Cloudy	Capt. Wm. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, Fall River, Mass	29.85	758.2	56	13.3	81	NE					10s		NE	0	0			Overcast	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle ‡																			Capt. B. F. Woodbury.
Brigantine George, N. 24° 50′, W. 64° 05′ †	30.15	765.8	84	28.9		ESE			3		0			0	0	Sm'h			Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Susquehanna River, Md †	29.66	753.4	61	16.1	94	NE	6	2.7			5n			0.12	3.0			Cloudy	
Bark Sunbeam, Lisbon, Portugal †	30.07	763.8	83	28.3	74	Calm			0		2			0	0			Clear	Capt. Jos. Hand.

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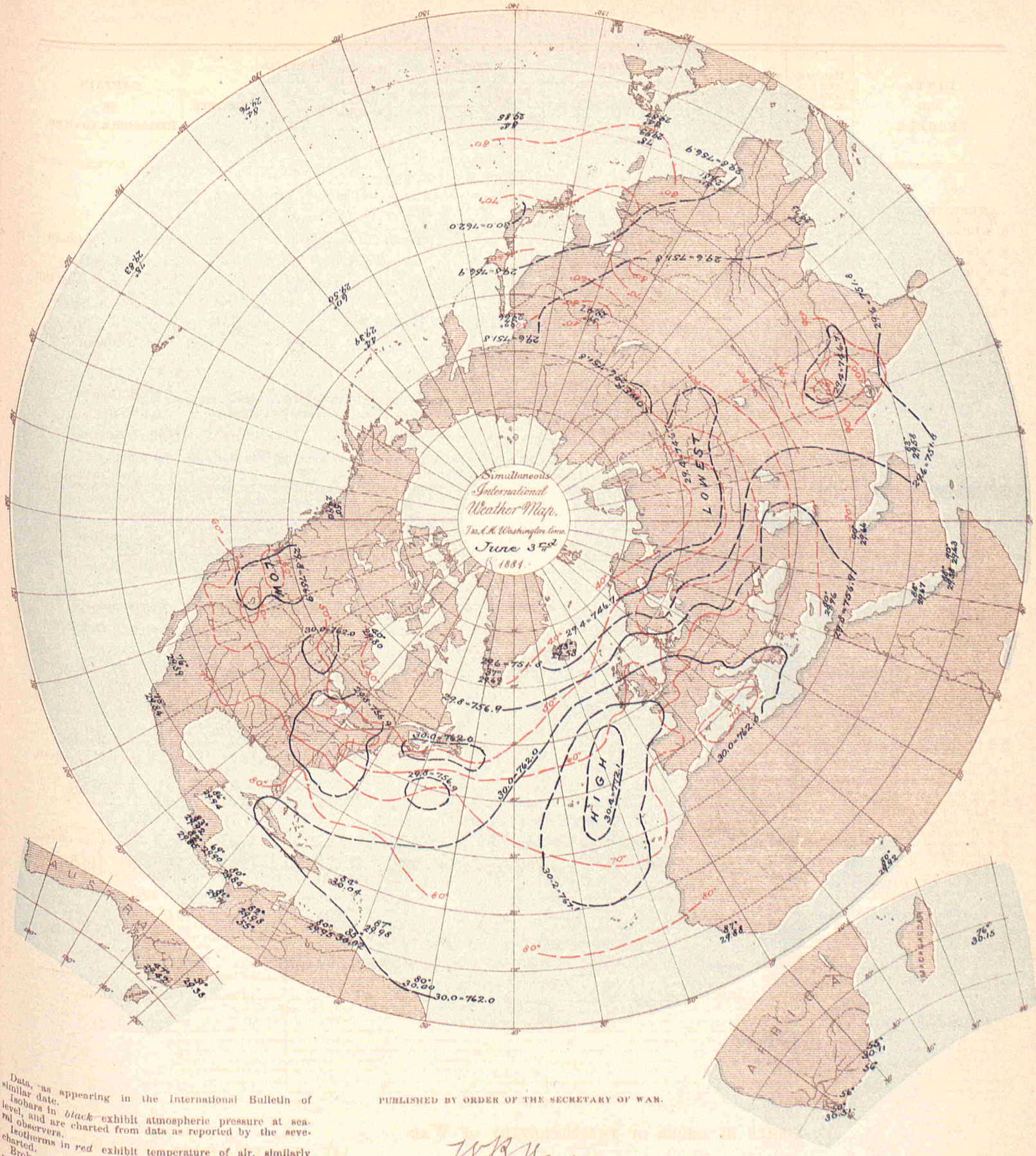
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 4, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Milk.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours‡			29.89	759.3	68.5	20.3	94	E			3		4			0	0	Cloudy	Raynard.
Algiers‡			29.95	760.8	71.2	21.8	80	NE			5		10			Inap.	Inap.	Covered	Nicolas.
La Calle‡			30.03	762.7	67.3	19.6	87	SSE			5		7			0	0	Very cloudy	Fonfréde.
Tunis‡			30.06	763.5															Jacques.
Sfax‡			30.11	764.9															Gau.
Saida‡			29.94	760.4	79.3	26.3	27	SE			2		8			0.098	2.5	Very cloudy	Dumas.
Tebessa‡			30.02	762.5	70.5	21.4	53	SE			4		7			Inap.	Inap.	Very cloudy	Watrin.
Geriville‡					64.8	18.2	27	SSE			8		0			0	0	Clear	Lonchamp.
Laghouat‡			29.95	760.7	81.3	27.4	25	NNE			6		4			0	0	Cloudy	Herbin.
Biskra‡			30.00	762.1	85.3	29.6	65	SE			2		2			0	0	Fair	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.55	750.6	29.64	752.8	49.4	9.7	88	WSW	15	6.7			8			0.38	9.6	Squally	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.46	748.3	29.98	761.5	81.0	27.2	37	SE			3		2			0.276	7.0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.14	740.2	29.87	758.8	74.5	23.6	48	W	11.9	5.3			7			0.004	0.1		Dr. Wierzbicki.
Eperies	29.04	737.5	29.92	759.9	63.9	17.7	86	Calm			0	ok	78		S	0.201	5.1		Julius Mikolik.
Gratz‡	28.77	730.7	29.98	761.4	69.8	21.0	63	NNE			4		8			0	0		Andreas Rospini.
Hermannstadt	28.53	724.7	29.89	759.2	82.6	28.1	37	NNW			2		2			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.68	728.4	29.97	761.1	72.7	22.6	51	WSW			1		8			0.110	2.8		The Staff.
Lemberg	28.84	732.4	29.77	756.2	73.8	23.2	52	NW			3		8			Inap.	Inap.		Dr. T. Stanecki.
Pola	29.94	760.5	30.05	763.3	75.9	24.4	55	W			2		1			0	0		I. R. HydrographicOffice.
Szathmar	29.45	747.9	29.89	759.3	69.8	21.0	70	SE			4		8			0	0		Belcht Peter, S. J.
Szegedin	29.67	753.5	29.93	760.3	74.1	23.4	55	S			1		4			0	0		Karl Stancel.
Trieste	29.97	761.1	30.07	763.7	75.4	24.1	61	SE			1		5			0	0		Secco.
Vienna	29.28	743.6	29.96	760.9	78.1	25.6	44	W			2		6			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter Printed June 5 1882.

BRITISH SERIES.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Aberdeen	29.50	749.3	29.60	751.8	62.7	17.1	62	SW	22	9.8			7			0.025	0.6	D. clouds	W. Boswell.
Armagh, Observatory	29.57	751.1	29.79	756.7	59.4	15.2	74	SW	17	7.6			10					D. clouds	S. Call.
Bidston, Liverpool Obs'y			29.90	759.4	66.8	19.3	61	SW	22	9.8			5					D. clouds	John Hartnup.
Bolton, Sharples	29.36	745.7	29.89	759.2	63.8	17.7	63	SSW	18	8.0			5					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.31	744.5	29.71	754.6	68.8	20.4	53	NW			1		6			0.25	6.3	D. clouds	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.94	760.5	29.98	761.5	85	29.4	64	NE			2		3					D. clouds	Corpl. J. Surgener, A.H.C.
Cardington																			John McLaren.
Chatham, School M. E	29.87	758.7	30.00	762.0	78.7	25.9	38	NW			1		3					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.88	758.9	30.10	764.5	65.3	18.5	62	WSW			3		4					D. clouds	The Staff.
Fort Napier, Natal	27.97	710.4	30.19	766.8	55.4	13.0	49	Calm			0		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.88	758.9	87	30.6	88	NW			1							Raining	Sgt. C. E. Keane.
Galway, Queen's College			29.73	755.1	57	13.9	100	SW			4		10					Raining	J. O'Donaghue.
Gibraltar, Mediterranean	29.95	760.7	30.00	762.0	64.6	18.1	93	E			4		8					Gloomy	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.50	749.5	29.70	754.4	59.0	15.0	72	SW			6		9					Gloomy	Harry Urquhart.
Greenwich, Royal Obs'y	29.83	757.7	29.99	761.7	78.5	25.8	30	WSW			1		0					Blue sky	The Staff.
Guernsey	29.88	758.9	30.09	764.3	62	16.7	74	WNW			3		3					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.96	761.0	30.00	762.0	74.4	23.6	27	SW	15	6.7			3					Blue sky	The Staff.
Leicester, Museum	29.66	753.4	29.91	759.7	74.0	23.3	88	SW			1		8					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.98	761.5	30.06	763.5	71	21.7	75	E			2		3					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.95	760.7	30.00	762.0	85.0	29.4	87	S			1		3					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.42	747.3	29.92	760.0	74.8	23.8	52	SW			3		5					D. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	29.74	755.4	29.97	761.2	72.2	22.3	39	W			3		6					D. clouds	The Staff.
Plymouth	30.01	762.2	30.08	764.0	69.5	20.8	59	S			3		2					D. clouds	John Merrifield.
Sandwick Manse, Orkneys			29.54	750.3	50.3	10.2	89	Calm	0	0			10					Showery	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.88	758.9	29.95	760.7	79.2	26.2	50	NE			2		1					D. clouds	Serg't W. H. Lyne.
Sheffield	29.55	750.6	29.85	758.2	72.0	22.2	61	SW			3		6			0.10	2.5	D. clouds	W. F. Cooper.
Silloth Rectory	29.76	755.9	29.79	756.7	60.0	15.6	76	W			6		7			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.90	759.4				SW	18	8.0			10					D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	29.89	759.2	30.00	762.0	76.3	24.6	34	SW			3		2					Squally	Rev. C. H. Griffiths, F.M.S
Truro, Royal Institution	30.08	764.0	30.09	764.3	68	20.0	56	SW			4		4					D. clouds	W. Newcombe.
Valencia, Observatory	29.90	759.4	29.92	760.0	57.6	14.2	94	SSW	33	14.8			10					Drizzling	The Met'g'l Office.

CANADIAN SERIES.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Bathurst, N. B	29.68	753.9	29.73	755.1	49.0	9.4		E	7	3.1			10ks			0	0	D. clouds	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.77	756.1	29.84	757.9	46	7.8	78	E	14	6.3			10n			0.030	0.8	Light rain	H. J. Cundall, C. E.
Chatham, N. B.*					49	9.4	75	E	8	3.6			10ks		E	0	0	Cloudy	G. A. Blair.
Chicontimi, Quebec					50.1	10.1		Calm			0		10s			0.03	0.8	Light rain	Rev. V. A. Huart.
Cornwall, Ontario	29.51	749.5	29.70	754.4	54.3	12.4	89	S			1		8s			0	0	D. clouds	James Smith, M. A
Dalhousie, N. B	29.80	756.9	29.83	757.7	44.0	6.7		E			1	0	0			0	0		H. A. Johnson.
Father Point, Quebec*	29.76	755.9	29.78	756.4	49	9.4	84	NW	2	0.9			Hz		NW	0	0	Hazy	J. McWilliams.
Fort Garry, Manitoba*	29.02	737.1	29.83	757.7	57	13.9	72	SW	8	3.6		2ck	5ks	NW	NW	0	0	Cloudy	James Stewart.
Fredericton, N. B	29.66	753.4	29.73	755.1	47.5	8.6	98	NE	15	6.7			10n			0.220	5.6	Raining	Prof. Harrison.
Granton, Ontario	28.81	731.8	29.90	759.4	53.0	11.7	86	N			1	0	0			1.65	41.9	Clear	James Grant.
Halifax, N. S.*	29.47	748.5	29.60	751.8	43	6.1	99	NE	19	8.5			10n			0.840	21.3	Heavy rain	A. Allison.
Hamilton, Ontario	29.44	747.8	29.87	758.7	59.5	15.3	87	NE			2	0	0			0.25	6.3	Clear	Geo. Dickson, B. A.
Kingston, Ontario*	29.39	746.5	29.72	754.9	57	13.9	90	W	4	1.8		2c	8ks	Calm	W	0.16	4.1	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S	29.70	754.4	29.74	755.4	38.0	3.3	91	E			5		10n			Inap.	Inap	Raining	C. H. Rigby.
Montreal, Quebec*	29.52	749.8	29.71	754.6	54	12.2	68	NE	4	1.8		2c	8s	S		0	0	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario	29.96	761.0	30.00	762.0	39.4	4.1	68	N			3	0	5s			Inap.	Inap.	D. clouds	J. R. Nason.
Parry Sound, Ontario*	29.19	741.4	29.86	758.4	59	15.0	64	NE	2	0.9		0	0			0	0	Clear	Rev. R. Moseley.
Peterboro, Ontario	29.06	738.1	29.79	756.7	61.7	16.5	66	W			1	0	0			0	0	Clear	J. F. Jeffers, M. A.
Port Dover, Ontario	29.15	740.4	29.83	757.7	57	13.9	94	N	11	4.9		5c	0	N		0.34	8.6	Fair	H. Morgan.
Port Stanley, Ontario	29.21	741.9	29.85	758.2	53	11.7	89	W	9	4.0		0	0			0.41	10.4	Clear	M. Payne.
Quebec, Quebec*	29.45	748.0	29.76	755.9	52	11.1	86	NE			1	2c	Hz	NE		0	0	Hazy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.36	745.7	29.81	757.2	53	11.7	86	NW	4	1.8		0	0			0	0	Clear	W. H. McIntyre.
Saugeen, Ontario*	29.18	741.2	29.89	759.2	53	11.7	72	N	9	4.0		0	0			0	0	Clear	K. Stewart.
St. Andrews, N .B	29.57	751.1	29.62	752.3	45	7.2	91	NE	13	5.8			10n			0.28	7.1	Heavy rain	
St. John, N. B	29.43	747.5	29.59	751.6	46.0	7.8	45	NE	17	7.6			10n			0.310	7.9	Heavy rain	G. Murdock, C. E.
Stratford, Ontario	28.61	726.7	29.88	758.9	52.9	11.6	87	N	7	3.1		0	0			0.076	1.9	Blue sky	C. J. Macgregor, M. A.
Sydney, C. B*	29.80	756.9	29.84	757.9	39	3.9	90	NE	11	4.9			10n			0.05	1.3	Light rain	T. C. Hill, C. E.
Toronto, Ontario*	29.47	748.5	29.84	757.9	59	15.0	80	N	17	7.6		0	2s			0.29	7.4	Clear	Magnetic Observatory
Windsor, N. S	29.49	749.0	29.58	751.3	45.5	7.5	92	E	14	6.3			10n			0.08	2.0	Raining	
Woodstock, Ontario	28.81	731.8	29.85	758.2	58.1	14.5	82	NW	12	5.4		0	0			0.98	24.9	Blue sky	Prof. Wolverton.
Yarmouth, N. S.*	29.41	747.0	29.48	748.8	45	7.2	96	E	19	8.5		Fg	Fg			0.61	15.5	Heavy rain	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	30.02	762.5	30.28	769.1	41	5.0	100	E	1	0.4			10n			0	0		John Delany.
St. Pierre, N. F			29.92	760.0	41.0	5.0		SE			4					1.34	34.0		N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Cape St. Francis Lt. House	30.50	774.7			56.0	13.3	83	W.	11.8	5.3		0	3ks			0.080	2.0		John Duthie.
Cape Town, C. G. H. Obs'y.	30.35	770.9	30.39	771.9	55.6	13.1		SSE	21.3	9.5		0	0			0	0	Hazy	The Staff, for D. Gill.
Worcester*†	29.39	746.5			57.1	13.9	58	S			1	0	0			0	0	Clear	C. Stokes.

CHINESE SERIES.

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.68	753.9	29.71	754.5	72.5	22.5	92	ESE	2.5	1.1			10			0	0	Covered	M. Marc Dechevrens, S. J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

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

San José	26.18	665.0	29.90	759.4	67.1	19.5	95	SE			1	7cs	1d			Inap.	Inap.	Cloudy.	Amand Maison.

DANISH SERIES.

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

Copenhagen	29.76	755.9	29.81	757.1	64.2	17.9	60	WNW	27	12			9						Oversergent Fischer.
Fanöe	29.81	757.2	29.83	757.7	59.9	15.5	80	W			6		10						Overloerer Lauridsen.
Godthaab, Greenland	29.95	760.7	29.99	761.8	33.8	1.0	79	NW			3		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.41	747.0	29.45	748.1	37.8	3.2		NE			7		8						A. O. Thorlacius.
Thorshavn	29.29	743.9	29.32	744.8	49.3	9.6	70	W	16	7			4						Overloerer Bergh.
Vestervig	29.65	753.1	29.74	755.5	54.3	12.4	91	WSW			6		10						Loearer Oestorbol.

FRENCH SERIES.

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

Agen, Normal School	29.50	749.3	30.13	765.2	72.7	22.6	45	WSW			1	0	k		NE	0.12	3.		M. Labroue, Director.
Alençon Normal School	29.59	751.6	30.14	765.6	72.0	22.2	69	S			1	0	5k		W	0	0	Cloudy	M. Nicot, Director.
Arras, Engineer School																			M. Klein, Commandant.
Avignon, Normal School	30.02	762.6	30.10	764.6	79.3	26.3	50	NNE			1		0			0	0	Clear.	M. Giraud, Director.
Bar-sur-Seine	29.54	750.2	30.07	763.8	75.4	24.1	45	NE			1	0	5kn		SW	0.126	3.2	Cloudy	M. Saillard, Director.
Beauvais, Normal School	29.84	757.8	30.09	764.3	73.9	23.3	48	W			1		0			0	0	Clear	M. Frère Eugene Marie.
Besançon, Normal School	29.20	741.6	30.01	762.2	75.2	24	53	SW			1	c	0	SE		0	0		M. Gobin, Director.
Bordeaux, Observatory	29.85	758.2	30.10	764.6	75.9	24.4	45	SSE			1		2			0.067	1.7	Slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	29.53	750.0	30.06	763.5	78.8	26	58	W			1	0	k		W	0	0		M. Postel, Director.
Brest, Naval Observatory	29.93	760.2	30.17	766.4	73.4	23.0	66	N			1		1		N	0	0		M. de Rermarec, Dir.
Caen, Normal School	29.99	761.7	30.06	763.5	76.1	24.5	65	WNW			1		5		W	0	0	Cloudy	M. Bitrix, Director.
Châlons-sur-Marne, N.Sch'l	29.70	754.4	30.01	762.2	81.5	27.5	65	E			1		2		E	0	0	Slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.56	750.7	30.06	763.4	79.5	26.4	55	WSW			1					0	0		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.75	730.3	30.05	763.3	75.9	24.4	45	N			1	0	2k			0	0	¼ covered	M. Alluard, Director.
Cluny, Normal School	29.27	743.4	30.09	764.2	77.7	25.4	65	NE			1		0			0	0	Clear	M. de Villemontée, Dir.
Commercy, Normal School	29.22	742.3	30.06	763.6	76.5	24.7	45	W			1	0	5k		W	0.008	0.2	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.59	700.7	30.03	762.7	73.4	23	44	SE			2	0	k			0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.04	737.7	30.19	766.7	73.8	23.2	43	S			1		5		S	0	0	½ covered	M. Kina, Director.
Grenoble, Normal School	29.33	744.9	30.06	763.6	75.9	24.4	49	W			1	0k	0	S		0	0		M. Ablard, Director.
Guéret, Normal School	28.56	725.5	30.10	764.6	72.5	22.5	54	SE			1	0	k		NW	0	0		M. Rivoire, Director.
Lamballe, Normal School	29.81	757.1	30.08	763.9	70.7	21.5	65	NNW			2		Fg		NNW	0	0	Foggy	M. Ollitrault, Director.
Lescar, Normal School	29.58	751.4	30.24	768.0	67.6	19.8	94	WNW			1	0	k		NW	0.646	16.4		M. Chauvin, Director.
Lorient, Naval Observatory	30.12	765.0	30.22	767.6	74.5	23.6	48	SSW			3		2	S	SW	0	0	¼ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.66	738.1	30.08	764.1	73.2	22.9	47	N			1		5		N	0	0	Cloudy	M. André, Director.
Mans, Normal School	29.81	757.1	30.11	764.8	73.2	22.9	74	WSW			1		5		SW	0	0	Cloudy	M. Piboon, Director.
Marseille, Observatory	29.83	757.7	30.10	764.4	73.9	23.3	44	SW			1		1		NE	0	0		M. Stephan, Director.
Montlouis l'instituteur	24.96	634.0	30.20	767.0	53.6	12.0	65	SW	9.4	4.2			3		S	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.98	761.6	30.09	764.3	78.1	25.6	62	SE			2		2		NE	0	0	Slightly cl'dy	M. P. Galzin, Director.
Nancy, Normal School	29.31	744.5	30.05	763.2	78.1	25.6	38	WSW			1	0	5kn			0.051	1.3	Cloudy	M. Hasse.
Nantes, Observatory	29.97	761.1	30.13	765.2	79.0	26.1	50	NE			0–1	0	8k		S	0	0		M. Larocque, Director.
Nice	30.05	763.6	30.10	764.4	73.8	23.2	65	SE			2		1	SE	SE	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.98	761.4	30.08	764.0	76.5	24.7	45	SE	9.4	4.2			3	SE	NE	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.66	575.6			39.9	4.4							10	SW	NE	0.217	5.5	Stormy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.07	738.3	30.09	764.3	76.3	24.6	50	N			1		2			0.283	7.2	Slightly cl'dy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.32	643.1			53.1	11.7	75	E			1	0	5k			0.004	0.1	½ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.13	765.3	30.16	766.1	77.0	25.0	79	Calm			1		0			0	0	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.90	759.5	30.11	764.8	77.5	25.3	53	NNE			1		2		N	0	0	Slightly cl'dy	M. Mouillot, Director.
Rodez, Normal School	27.96	710.2	30.04	763.0	71.6	22	58	W			1		10		S	0.571	14.5	Covered	M. Richard, Director.
Rouen, Normal School	29.98	761.4	30.06	763.6	78.8	26	55	W			1		0			0	0	Clear	M. Platrier, Director.
Saint Lô, Normal School	29.98	761.4	30.13	765.4	70.9	21.6	55	W			1		0			0	0	Clear	M. Delaplanche, Dir.
Saint Maur, Observatory	29.92	760.0	30.09	764.2	75.0	23.9	54	SW			1		9		W	0	0		M. Renou, Director.
Toulouse, Observatory	29.45	748.1	30.18	766.6	72.1	22.3	79	NW			1					0	0		M. Baillard, Director.
Tours	29.89	759.2	30.09	764.2	78.8	26.0	48	SSW			1		8		W	0	0	¼ cover. d	M. de Tastes.
Versailles, Observatory	29.60	751.9	30.10	764.4	74.8	23.8	49	W			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.82	757.3	30.11	764.7	76.1	24.5	53	SW			1		7		SW	0	0		M. Marié Dvy, Director.

GERMAN SERIES.

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

Bamberg	29.18	741.1	30.04	763.0	74.3	23.5	40	Calm			0	0	1s			0	0		Prof. Dr. Hoh.
Berlin	29.74	755.5	29.91	759.7	75.4	24.1	30	W			2		3			0	0		Prof. Dr. Arndt.
Breslau	29.43	747.6	29.97	761.1	73.2	22.9	41	WNW			3		2			0	0		Royal University Obs'y.
Carlsruhe	29.61	752.1	30.02	762.5	78.1	25.6	59	NW			1		2	NW		0	0		Albert Senz.
Cassel	29.27	743.4	29.98	761.5	75.9	24.4	33	W			3		2	NW		0	0		Dr. H. Möhl.
Frankfort on the Main	29.69	754.2	30.04	763.0	78.1	25.6	37	SW			1		2			0	0		Physical Society.
Friedrichshafen	28.65	727.8	30.04	763.0	72.0	22.2	56	SW			2		2	W		0	0		Wilhelm, Chief Tel.
Hamburg	29.85	758.2	29.92	760.0	70.3	21.3	57	WSW			5		7			0	0		Dr. R. Kleeman.
Kiel	29.87	758.6	29.88	759.0	65.7	18.7	57	W			6		2			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.59	751.5	29.99	761.8	73.6	23.1	41	NW			2		1			0	0		Prof. Dr. Bruhns.
Magdeburg	29.78	756.4	29.96	761.0	75.6	24.2	41	WSW			4	0	2k		NW	0	0		Dr. Assmann.
Memel	29.68	753.8	29.72	755.0	55.6	13.1	77	W			6	0	9k						Reinbrecht & Issermann.
Munich	28.25	717.6	30.12	765.0	72.1	22.3	38	NW			2		5	S		0	0		Central Station.
Neufahrwasser	29.79	756.6	29.80	757.0	67.3	19.6	40	NW			4		5			0	0	Squally	A. Lothes.
Neustadt, Palatinate	29.48	748.8	30.01	762.3	79.7	26.5	47	W			1		0			0	0		Dicknether.
Stuttgart	29.09	738.9	29.95	760.6	74.3	23.5	49	SW			1		5	W		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.55	725.2	30.01	762.3	72.7	22.6	49	SW			4		7	W		0	0		Prof. Kemlein.
Wustrow	29.84	758.0	29.87	758.7	61.9	16.6	67	SW			5	0	8s			0	0		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.65	753.1	30.03	762.7	77.4	25.2	.....	S	.....	.....	1.0	0	5k	.....	.....	.....	.....	½ clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.63	752.6	29.68	753.9	88.0	31.1	80	WSW	43.0	19.2	.....	0	.....	.....	.....	0	0	Misty	
Deesa	29.06	738.2	29.52	749.7	100.2	37.9	30	SSW	17.2	7.7	.....	8	SW	SW		0	0	D. clouds	
Bombay	29.67	753.6	29.70	754.5	88.6	31.4	73	WNW	17.0	7.6	.....	5	.....	WNW		0	0	D. clouds	
Poona, Yarrowda	27.86	707.5	29.69	754.0	83.5	28.6	51	WSW	.....	.....	.....	9	E	WNW		0	0	D. clouds	
Belgaum	27.20	690.8	29.70	754.4	80.9	27.2	59	W	19.0	8.5	.....	7	E	W		0	0	D. clouds	
Lahore	28.65	727.6	29.34	745.1	112.3	44.6	26	W	2.5	1.1	.....	0	.....	.....		0	0	Misty	
Roorkee	28.52	724.5	29.37	746.0	102.3	39.1	42	Calm	3.7	1.6	.....	0	.....	.....		[illegible]	0	.....	
Agra	28.84	732.5	29.37	745.9	107.6	42.0	22	NW	6.7	3.0	.....	7	.....	N		[illegible]	0	.....	
Nagpur	28.48	723.4	29.52	749.7	79.2	26.2	81	SW	5.9	2.6	.....	10	.....	W		1.28	32.5	.....	
Jubbulpore	28.15	714.9	29.44	747.8	97.7	36.5	30	NE	3.3	1.5	.....	4	W	.....		0	0	D. clouds	
Lucknow	29.07	738.4	29.43	747.6	99.4	37.4	38	ENE	2.8	1.2	.....	5	NW	.....		0	0	D. clouds	
Allahabad	29.11	739.3	29.40	746.8	101.6	38.7	37	ENE	2.7	1.2	.....	0	.....	.....		0	0	Blue sky	
Patna	29.29	744.0	29.47	748.5	90.8	32.7	63	E	4.1	1.8	.....	2	E	E		0	0	.....	
Hazaribagh	27.49	698.2	29.44	747.8	86.6	30.3	56	NNE	8.5	3.8	.....	1	.....	E		0	0	D. clouds	
Cuttack	29.[illegible]	745.7	29.44	747.8	81.5	27.5	90	Calm	0.5	0.2	.....	10	.....	.....		0.63	16.0	Overcast	
Calcutta, Alipore	29.37	746.1	29.40	746.6	83.4	28.6	84	NE	7.0	3.1	.....	9	.....	NE		0.65	16.5	D. clouds	
Dhubri	29.39	746.4	29.51	749.5	81.1	27.3	84	SE	10.1	4.5	.....	4	.....	.....		0.48	12.2	D. clouds	
Chittagong	29.41	746.9	29.50	749.2	77.2	25.1	94	ESE	7.5	3.4	.....	10	.....	.....		0.10	2.5	Drizzling	
Sibsagar	29.18	741.1	29.50	749.4	86.0	30.0	72	NE	1.5	0.7	.....	10	W	W		0.01	0.3	D. clouds	
Zanzibar, Africa	.....	.....	30.03	762.7	81.9	27.7	67	SSE	6	2.7	.....	9	.....	S		0	0	Threatening	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.63	752.7	30.04	762.8	78.3	25.7	45	SW	0.7	0.3	.....	3	.....	.....		0	0	.....	Prof. Giovanni Clodig.
Milan	29.54	750.4	30.05	763.2	77.7	25.4	37	SW	6.9	3.1	.....	4	.....	.....		0	0	.....	Prof. Schiaparelli.
Padua	29.95	760.7	30.05	763.3	77.7	25.4	40	WNW	6.9	3.1	.....	1	.....	.....		0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.17	741.0	30.06	763.5	74.7	23.7	39	ESE	3.1	1.4	.....	2	.....	.....		0	0	.....	Prof. P. F. Denza.
Genoa	29.93	760.3	30.12	765.1	70.7	21.5	61	SW	4.9	2.2	.....	0	.....	.....		0	0	.....	Prof. G. M. Garibaldi.
Mondovi	28.19	716.1	30.06	763.6	72.1	22.3	32	E	.....	.....	4	1	SSW	.....		0.126	3.2	.....	Prof. D. C. Bruno.
Pesaro	30.03	762.8	30.08	764.0	72.7	22.6	56	N	.....	.....	.....	0	.....	.....		0	0	.....	Prof. Luigi Guidi.
Florence	29.82	757.4	30.07	763.7	77.7	25.4	27	W	.....	.....	2	0	.....	.....		0	0	.....	Prof. Costantino Pitter.
Leghorn	30.04	763.0	30.12	765.1	71.8	22.1	68	W	0.7	0.3	.....	4	.....	.....		0	0	.....	Prof. P. Monte.
Rome	29.91	759.7	30.08	764.0	79.9	26.6	42	SW	5.6	2.5	.....	3	.....	.....		0	0	.....	Prof. P. S. Ferrari.
Lecce	29.82	757.3	30.06	763.5	77.0	25.0	37	N	7.4	3.3	.....	1	.....	.....		0	0	.....	Prof. C. de Giorgi.
Cosenza	29.19	741.5	30.06	763.6	74.8	23.8	70	SE	1.8	0.8	.....	5	ESE	.....		0	0	.....	Prof. D. Conti.
Cagliari	29.88	759.0	30.08	763.9	71.1	21.7	66	SSE	.....	.....	2	1	.....	.....		0	0	.....	Prof. A. Pacinotti.
Palermo	29.85	758.1	30.09	764.3	70.9	21.6	63	N	5.6	2.5	.....	5	.....	.....		0.079	2.0	.....	Prof. G. Ciaccatore.
Syracuse	30.09	764.2	30.13	765.3	72.1	22.3	65	ESE	6.9	3.1	.....	6	SW	.....		0	0	.....	Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.57	751.0	30.08	764.1	73.2	22.9	67	SW	0	0	.....	2	W	.....		0	0	.....	Prof. F. Brioschi.
Stelvio	22.34	567.4	.....	.....	49.3	9.6	53	SW	.....	.....	1	8cs	0	NE		0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.38	568.4	.....	.....	41.5	5.3	83	E	.....	.....	2	.....	10kn	E		0	0	Covered	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y....†	29.88	758.9	29.89	759.2	70.0	21.1	84	WNW	0.9	0.4	.....	ck	10s	.....	.....	0	0	Overcast	K. Sasaki.
Kioto	29.71	754.6	29.88	758.9	69.8	21.0	75	SSE	3.9	1.7	.....	10cs	0	.....	.....	0	0	Fair	M. Tojima.
Nagasaki, I. M. Obs'y	29.66	753.3	29.86	758.4	71.1	21.7	82	WSW	1.8	0.8	.....	6cs	0	.....	.....	0	0	Fair	S. Takehayashi.
Tokei Obs'y, Yeddo	29.81	757.2	29.88	758.9	66.5	19.2	84	SSW	3.5	1.6	.....	3cs	7s;ks	.....	.....	0	0	Cloudy	The Staff.
Wakayama	29.83	757.7	29.88	758.9	70.0	21.1	80	Calm	0	0	.....	.....	10s	.....	.....	0	0	Cloudy	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.92	760.0	30.12	764.9	75.0	23.9	67	E	9.5	4.2	.....	0	8	.....	.....	0.03	0.8	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanajuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez.
Leon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Leal.
Mazatlan	29.69	754.1	29.94	760.6	74.5	23.6	95	ESE	0.9	0.4	.....	0	1s	.....	.....	0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff.
Pabellon, Aguascalientes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. P. Spina.
San Luis Potosi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Barroeta, M. D.
Tlacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.03	762.8	30.03	762.8	68.7	20.4	.....	W	.....	.....	3	.....	.....	.....	.....	0	0	.....	
Groningen	29.91	759.8	29.97	761.2	67.6	19.8	.....	W	.....	.....	3	.....	.....	.....	.....	0	0	.....	
Helder	29.97	761.3	29.97	761.3	63.9	17.7	.....	SW	.....	.....	4	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	30.02	762.4	30.02	762.4	72.9	22.7	69	WSW	.....	.....	3	.....	.....	.....	.....	0	0	.....	
Utrecht	29.96	761.0	30.01	762.2	75.7	24.3	60	WSW	.....	.....	2	.....	2	.....	.....	0	0	Lightly cl'y	H. van der Broek

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Corrected for instrum'tal error and temperature. Mill	Reduced to sea-level. Inch.	Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Velocity. Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.50	749.4	29.57	751.0	53.2	11.8	69	SW	21.0	9.4		9						Raining	
Christiania	29.25	742.9	29.39	746.4	66.6	19.2	17	WNW	20	9		3				0	0		
Gjæsvær	29.35	745.6	29.38	746.2	34.7	1.5		NE			2	10							
Lodingen	29.10	739.0	29.14	740.2	41.2	5.1	87	WSW			4	10				0.224	5.7	Raining	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.26	768.5	30.27	768.9	50.9	10.5	80	NNE	6.9	3.1		4				0	0		Dr. J. A. Sampaio.
Campo Major	29.00	736.6	29.96	761.0	78.4	25.8	32	ENE	4.3	1.9		8				0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.03	762.7	30.11	764.9	68.5	20.3	61	SW	8.1	3.6		3				0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.68	753.9	30.03	762.8	74.7	23.7	55	WSW	11.2	5.0		5				0.12	0.3		The Staff.
Ponta Delgada, Azores	30.34	770.6	30.41	772.4	66.6	19.2	61	NE	3.1	1.4		1				0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.65	727.8	29.71	754.5	59.5	15.3	29	SW	13	6		0	1s						Capt. Lasarew.
Archangel	29.07	738.4	29.09	738.9	50.9	10.5	50	E	4	2			10					Light clouds	Capt. Sseliwerstow.
Astrakhan	29.93	760.2	29.85	758.1	72.1	22.3	44	WSW	22	10			9ks			Blank			Capt. Wisganow.
Barnaul ‡	29.26	743.3	29.75	755.6	62.4	16.9	47	NW	4	2			9						Meteorological Obs'y.
Dorpat	29.19	741.3	29.42	747.3	60.8	16.0	45	WNW	13	6		0	8k						Observatory.
Ekaterinburg	28.41	721.7	29.36	745.8	46.8	8.2	55	NW	4	2			10n						Meteorological Obs'y.
Kasan	29.10	739.0	29.35	745.6	57.4	14.1	45	WSW	16	7			8						Observatory.
Kertch	29.90	759.4	29.92	759.9	69.6	20.9	87	SSW	7	3			0						Lagorio & Sastyrez.
Kieff	29.02	737.0	29.62	752.2	74.1	23.4	41	WNW	27	12		c	9ksn					Raining	Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.48	748.9	29.68	753.9	72.9	22.7	40	WNW	34	15			2						Meteorological Obs'y.
Moscow	28.69	728.6	29.21	741.8	69.4	20.8	43	SE	13	6		0	8ks						Meteorological Obs'y.
Nertchinsk	27.54	699.5	29.84	758.0	40.8	4.9	62	NW	7	3			5			0	0		Meteorological Obs'y.
Nikolaiev	29.80	756.9	29.87	758.7	76.8	24.9	50	SW	4	2			0						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.52	749.7	29.60	751.9	53.8	12.1	96	Calm			0		10n			0.276	7.0	Raining	Lieut. Iwanow.
Pekin, China	29.42	747.3	29.56	750.9	80.8	27.1	58	Calm	0	0		0	3k						Physical Observatory.
St. Petersburg	29.24	742.8	29.26	743.2	52.3	11.3	71	WNW	22	10		0	6ks;n						Central Physical Obs'y.
Tashkend, Laboratory	28.28	718.2	29.75	755.7	82.8	28.2	45	Calm	0	0			2						Teich, A. M.
Tiflis	28.56	725.3	29.95	759.8	75.9	24.4	22	NW	4	2		0	1k						Physical Observatory.
Warsaw	29.38	746.2	29.78	756.5	74.3	23.5	34	W	20	9		0	3k						Astronomical Obs'y.
Wilna	29.21	741.8	29.61	752.0	68.2	20.1	42	W	13	6			9						Berg, Assistant.
Yeniseisk	29.43	747.4	29.71	754.5	57.6	14.2	40	W	18	8			8						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.72	754.9	64.2	17.9	54	W			6		10k			0.09	2.3	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			29.49	749.0	54	12.2	93	SW			4		10			0.5	13.	Raining	J. Youngclause.
North Unst, Shetland Isl'ds			29.47	748.5				W			7		Hz						Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.00	761.9	30.10	764.5	72.5	22.5	60	SE	2.7	1.2		10;ck	0			0	0	Clear	Antonio Rave, Director
Bilbao, Met. Obs'y	30.10	764.5	30.15	765.9	73.4	23.0	61	N	2.2	1.0		3	4	N		0	0	Cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.20	690.9			65.3	18.5	56	NE	6.5	2.9			1			0	0	Almost clear	Domingo Martin.
Madrid, Royal Obs'y	27.86	707.7	30.02	762.6	72.0	22.2	46	SE	7.6	3.4		0	7			0	0	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.93	760.1	30.08	763.9	60.4	15.8	94	NE	3.1	1.4		5	5			0.748	19.0	Raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.15	740.5	30.02	762.4	74.7	23.7	47	NE	8.7	3.9			4			0	0	Cloudy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.95	760.7	30.01	762.4	82.3	27.9	80	Calm	0	0		6c;cs	1k	W	WSW	0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.79	756.7	29.84	758.0	86.0	30.0	72	E	4.4	2.0		6ck	0	E		0	0		Federico Faura, S. J.
San Fernando, Naval Obs'y	29.92	760.0	30.02	762.4	72.0	22.2	52	E	17.8	8.0		0	8		SE	0	0		Capt. C. Pulason, R. N., Dir.
San Juan de Porto Rico, W. I	29.98	761.4	30.07	763.7	82.8	28.2	85	S	0	0		0	3k		S	0	0	Clear	Enrique Gedea, Chief Engineer.
Tuguegarao, Philippine Ids	29.74	755.5	29.89	759.2	80.2	26.8	83	SW	2.3	1.2			9kn		SW	0.17	4.2	Cloudy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.07	738.3	29.10	739.0	52.9	11.6	57	SW			4		10			0	0		
Umea	29.11	739.4	29.16	740.7	63.7	17.6	29	NW			4		7			0	0		
Hernosand	29.25	743.0	29.30	744.3	59.9	15.5	43	WSW			4		5			0	0		
Stockholm	29.19	741.4	29.37	745.9	63.3	17.4	38	W			7		3			0	0		
Wisby	29.48	748.7	29.54	750.2	54.3	12.4	65	W			4		5			0	0		
Sub-Series.																			
Upsala	29.15	740.3	29.23	742.5	64.8	18.2	34	W	13.9	6.2			9		WNW	0	0		S. G. Fineman.
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.68	728.5	30.06	763.5	70.9	21.6	44	N			2		2			0	0	Clear	The Observatory.
Zurich ‡	28.46	722.9	30.02	762.5	77.9	25.5	45	N			1		2			0	0	Clear	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.01	762.2	72.7	22.6	35	NE	11	5.0			0			0	0		The Observatory.
Valona			30.17	766.2	70.0	21.1		NW			1		2			0	0	Slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.92	760.0	78.4	25.8	61	SW			2	0	1k		SW	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.65	753.1	29.73	755.1	53	12.8	56	N	4	1.8	.....	2ck	5s;hz	NW	NW	0.26	6.6	Fair	
Alpena, Michigan	29.32	744.7	29.97	761.2	50	10.0	65	NW	14	6.3	.....	0	0	.....	.....	0	0	Clear	
Atlanta, Georgia	28.76	730.5	29.91	759.7	63.5	17.5	65	NW	13	5.8	.....	0	0	.....	.....	0	0	Clear	
Atlantic City, New Jersey	29.70	754.4	29.71	754.6	52	11.1	93	N	9	4.0	.....	.....	1on	.....	Calm	0.58	14.7	Light rain	
Augusta, Georgia	29.66	753.4	29.84	757.9	69.8	21.0	61	W	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Baltimore, Maryland	29.69	754.1	29.74	755.4	56	13.3	87	NE	4	1.8	.....	.....	1on	.....	.....	0.27	6.9	Light rain	
Barnegat, New Jersey	29.69	754.1	29.71	754.6	51	10.6	86	N	14	6.3	.....	.....	10s	.....	NE	0.62	15.8	Cloudy	
Bismarck, Dakota	29.98	761.5	29.72	754.9	62	16.7	71	E	10	4.5	.....	8c	0	W	.....	0	0	Cloudy	
Boise City, Idaho	27.20	690.9	29.96	761.0	49.3	9.6	64	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Boston, Massachusetts	29.49	749.0	29.64	752.8	45.7	7.6	93	N	15	6.7	.....	.....	1on	.....	N	0.61	15.5	Light rain	
Bracketville, Texas	28.85	732.8	29.86	758.4	73	22.8	85	E	6	2.7	.....	5cs	0	.....	.....	0	0	Fair	
Brownsville, Texas	29.94	760.5	29.98	761.5	74	23.3	90	Calm	0	0	.....	2c	0	.....	.....	0	0	Clear	
Buffalo, New York	29.10	739.1	29.79	756.7	55.4	13.0	86	NE	3	1.3	.....	.....	1on	.....	.....	0.54	13.7	Light rain	
Burlington, Vermont	29.42	747.3	29.70	754.4	52.5	11.4	73	N	2	0.9	.....	8cs	0	.....	.....	0	0	Fair	
Cairo, Illinois	29.72	754.9	30.11	764.8	60	15.6	77	N	12	5.4	.....	8c	0	W	.....	0	0	Fair	
Campo, California	27.42	696.5	29.99	761.7	37.2	2.9	71	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Camp Thomas, Arizona	27.19	690.6	.....	.....	81	27.2	35	Calm	.....	.....	0	.....	10ks	.....	.....	0	0	Cloudy	
Cape Henry, Virginia	29.66	753.4	29.68	753.9	62	16.7	88	NE	11	4.9	.....	.....	10s	.....	NE	0.05	1.3	Cloudy	
Cape May, New Jersey	29.68	753.9	29.71	754.6	55	12.8	87	NE	8	3.6	.....	.....	10s	.....	NE	0.06	1.5	Cloudy	
Castroville, Texas	29.24	742.7	29.93	760.2	71	21.7	75	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Cedar Keys, Florida	29.92	760.0	29.94	760.5	79	26.1	78	W	15	6.7	.....	0	8ks	.....	W	0	0	Fair	
Champaign, Illinois	29.28	743.7	30.08	764.0	51.2	10.7	79	N	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Charleston, S. Carolina	29.75	755.6	29.81	757.2	75	23.9	56	NW	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Charlotte, N. Carolina	28.95	735.3	29.81	757.2	72.4	22.4	46	NW	10	4.5	.....	0	0	.....	.....	0.02	0.5	Clear	
Chattanooga, Tennessee	29.15	740.4	29.95	760.7	63	17.2	67	NW	5	2.2	.....	2k	0	NW	.....	0	0	Fair	
Cheyenne, Wyoming	24.09	611.9	29.90	759.4	52.5	11.4	47	W	4	1.8	.....	2ck	0	.....	.....	0	0	Clear	
Chicago, Illinois	29.39	746.5	30.07	763.8	51.0	10.6	63	NW	7	3.1	.....	0	0	.....	.....	0.06	1.5	Clear	
Chincoteague, Virginia	29.68	753.9	29.70	754.4	56	13.3	87	SE	8	3.6	.....	.....	10s	.....	Calm	0.12	3.0	Cloudy	
Cincinnati, Ohio	29.33	745.0	29.97	761.2	58	14.4	76	NW	6	2.7	.....	0	0	.....	.....	0.18	4.6	Clear	
Cleveland, Ohio	29.15	740.4	29.87	758.7	55	12.8	86	N	14	6.3	.....	0	0	.....	.....	0.49	12.4	Clear	
Coleman City, Texas	28.23	717.0	29.84	757.9	69	20.6	70	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Columbus, Ohio	29.05	737.9	29.87	758.7	58	14.4	70	N	12	5.4	.....	0	0	.....	.....	0.10	2.5	Clear	
Concho, Texas	28.14	714.7	30.02	762.5	68	20.0	79	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Corsicana, Texas	29.58	751.3	30.04	763.0	75	23.9	77	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Davenport, Iowa	29.43	747.5	30.07	763.8	59	15.0	59	NW	1	0.4	.....	8cs	0	Calm	.....	0	0	Fair	
Dayton, Washington T'y	28.19	716.0	29.94	760.5	52.7	11.5	93	S	10	4.5	.....	.....	1on	.....	Calm	0.37	9.4	Light rain	
Deadwood, Dakota	25.21	640.3	29.76	755.9	68	20.0	34	S	5	2.2	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Decatur, Texas	28.86	733.0	29.98	761.5	74	23.3	76	SE	10	4.5	.....	2cs	0	.....	.....	0	0	Fair	
Delaware Breakwater, Del.	29.69	754.1	29.71	754.6	57	13.9	94	NE	10	4.5	.....	.....	10s	.....	N	0.01	0.3	Cloudy	
Denison, Texas	29.25	742.9	30.03	762.7	75	23.9	77	E	2	0.9	.....	2c	0	Calm	.....	0	0	Fair	
Denver, Colorado	24.81	630.2	29.85	758.2	59.5	15.3	41	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Des Moines, Iowa	29.19	741.4	30.07	763.8	57	13.9	75	NE	1	0.4	.....	8ck	0	.....	.....	0	0	Fair	
Detroit, Michigan	29.23	742.4	29.90	759.4	56.2	13.4	63	NW	13	5.8	.....	0	0	.....	.....	0.02	0.5	Clear	
Dodge City, Kansas	27.38	695.4	29.87	758.7	68	20.0	79	SE	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Dubuque, Iowa	29.38	740.2	30.00	763.5	55.5	13.1	67	Calm	0	0	.....	1cs	Hz	Calm	Calm	0	0	Fair	
Duluth, Minnesota	29.32	744.7	30.00	762.0	58	14.4	76	SW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Eagle Pass, Texas	29.25	742.9	30.06	763.5	72.4	22.4	76	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Eagle Rock, Idaho	25.24	641.1	29.95	760.7	54	12.2	43	NE	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Eastport, Maine	29.51	749.5	29.58	751.3	45	7.2	92	N	19	8.5	.....	.....	1on	.....	N	0.69	17.5	Light rain	
El Paso, Texas	26.26	667.0	29.91	759.7	64	17.8	53	SE	1	0.4	.....	0	1s	.....	.....	0	0	Clear	
Erie, Pennsylvania	29.10	739.1	29.80	756.9	54	12.2	100	NE	6	2.7	.....	.....	10s;fg	.....	.....	0.39	9.9	Cloudy	
Escanaba, Michigan	29.37	746.0	30.01	762.2	56	13.3	69	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Florence, Arizona	28.37	720.6	29.97	761.2	78	25.6	26	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Apache, Arizona	25.08	637.0	29.80	758.4	64	17.8	34	NE	3	1.3	.....	5c	5s	Calm	Calm	0	0	Cloudy	
Fort Assinnaboine, Montana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Bennett, Dakota	28.16	715.3	29.63	752.6	65	18.3	84	SE	13	5.8	.....	2k	0	NW	.....	0	0	Fair	
Fort Benton, Montana	27.00	685.8	29.74	755.4	56	13.3	51	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Buford, Dakota	27.93	709.4	29.85	758.2	63	17.2	67	E	3	1.3	.....	0	5ks	.....	W	0	0	Fair	
Fort Custer, Montana	26.60	675.6	29.69	754.1	60	15.6	55	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Davis, Texas	25.28	642.1	30.24	768.1	62	16.7	67	Calm	0	0	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Fort Elliott, Texas	27.26	692.4	30.33	770.4	66	18.9	84	SE	16	7.2	.....	10k	0	SE	.....	Inap.	Inap.	Cloudy	
Fort Gibson, Indian T'y	29.49	749.0	30.02	762.5	67	19.4	84	Calm	0	0	.....	10cs	0	N	.....	0	0	Cloudy	
Fort Grant, Arizona	25.27	641.8	30.07	763.8	71	21.7	33	E	4	1.8	.....	2ck	8s	S	S	0	0	Cloudy	
Fort Griffin, Texas	28.74	730.0	29.97	761.2	69.4	20.8	80	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Keogh, Montana	27.18	690.4	29.59	751.6	63	17.2	77	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Macon, North Carolina	29.66	753.4	29.67	753.6	70	21.1	80	NW	10	4.5	.....	5k	0	SW	.....	1.50	38.1	Fair	
Fort McKavett, Texas	27.78	705.6	29.65	753.1	67.2	19.6	69	SW	2	0.9	.....	1c	0	.....	.....	0	0	Clear	
Fort Missoula, Montana	26.62	676.1	30.00	762.0	67	19.4	64	N	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort St. Michaels	30.03	762.7	30.06	763.5	36	2.2	100	E	3	1.3	.....	.....	10ks	.....	.....	.....	.....	.....	
Fort Shaw, Montana	26.23	666.2	29.68	753.9	58	14.4	76	N	2	0.9	.....	2k	0	SW	.....	0	0	Clear	
Fort Sill, Indian Territory	28.81	731.8	30.02	762.5	67	19.4	89	S	4	1.8	.....	5c	0	.....	.....	0	0	Fair	
Fort Stevenson, Dakota	27.93	709.4	29.61	752.1	59	15.0	76	E	5	2.2	.....	10cs	0	N	.....	0	0	Cloudy	
Fort Verde, Arizona	.....	.....	.....	.....	75	23.9	77	SE	.....	.....	1	.....	10s	.....	SE	0	0	Cloudy	
Fredericksburg, Texas	28.32	719.3	29.83	757.7	72	22.2	67	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Galveston, Texas	29.97	761.2	30.01	762.2	80	26.7	82	NW	8	3.6	.....	Hz	Hz	.....	.....	0	0	Dense haze	
Grand Haven, Michigan	29.37	746.0	30.02	762.5	57	13.9	58	N	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Hatteras, North Carolina	29.66	753.4	29.68	753.9	70	21.1	90	NE	12	5.4	.....	.....	10ks	.....	NE	0.38	9.7	Cloudy	
Helena, Montana	25.64	651.2	29.84	757.9	69	20.6	48	S	21	9.4	.....	0	0	.....	.....	0	0	Clear	
Henrietta, Texas	29.01	736.8	29.89	759.2	72	22.2	76	SE	5	2.2	.....	2cs	0	.....	.....	0	0	Clear	
Indianapolis, Indiana	29.21	741.9	29.98	761.5	55	12.8	68	NW	6	2.7	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Indianola, Texas	30.00	762.0	30.02	762.5	77.3	25.2	86	W	5	2.2	.....	0	2s	.....	Calm	0	0	Fair	
Jacksboro, Texas	28.87	733.3	29.96	761.0	69	20.6	80	SE	4	1.8	.....	1cs	0	Calm	.....	0	0	Clear	
Jacksonville, Florida	29.85	758.2	29.87	758.7	80	26.7	78	SW	10	4.5	.....	5k	0	SW	.....	0	0	Fair	
Keokuk, Iowa	29.43	747.5	30.07	763.8	57.5	14.2	69	W	1	0.4	.....	5c	Hz	NW	Calm	0	0	Fair	
Key West, Florida	29.99	761.7	30.02	762.5	82.3	27.9	78	SW	7	3.1	.....	8cs;k	0	W.; SW	.....	0	0	Fair	
Kittyhawk, North Carolina	29.70	754.4	29.72	754.9	61	16.1	100	E	8	3.6	.....	.....	10s	.....	.....	0.50	12.7	Cloudy	
Knoxville, Tennessee	28.95	735.3	29.95	760.7	62	16.7	67	N	4	1.8	.....	0	0	.....	.....	Inap.	Inap.	Clear	
La Crosse, Wisconsin	29.29	744.0	30.03	762.7	53.2	11.8	86	W	3	1.3	.....	.....	Fg	.....	.....	0	0	Dense fog	
La Mesilla, New Mexico	26.12	663.4	30.27	768.8	65	18.3	49	NW	1	0.4	.....	0	1s	.....	.....	0	0	Clear	
Laredo, Texas	29.55	750.6	29.88	758.9	77	25.0	82	SE	1	0.4	.....	8c	0	Calm	.....	0	0	Fair	
Leavenworth, Kansas	29.19	741.4	30.06	763.5	64	17.8	63	SE	5	2.2	.....	9k	0	NW	.....	0	0	Cloudy	
Lewiston, Idaho	29.04	737.6	29.87	758.7	57	13.9	57	SW	1	0.4	.....	2k	0	Calm	.....	0.53	13.5	Clear	
Little Rock, Arkansas	29.73	755.1	30.04	763.0	68	20.0	70	NE	3	1.3	.....	2c	0	.....	.....	0	0	Clear	
Los Angeles, California	29.64	752.8	30.01	762.2	53.3	11.8	86	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Louisville, Kentucky	29.42	747.3	29.97	761.2	56.5	13.6	81	W	7	3.1	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Lynchburg, Virginia	29.02	737.1	29.70	754.4	67	19.4	55	NW	7	3.1	.....	.....	10s	.....	NW	0.06	1.5	Cloudy	
Madison, Wisconsin	29.07	738.4	30.05	763.3	52	11.1	93	NW	1	0.4	.....	2c	Fg	W	Calm	0	0	Light fog	
Marquette, Michigan	29.29	744.0	30.00	762.0	61	16.1	45	W	9	4.0	.....	0	0	.....	.....	0	0	Clear	
Mason, Texas	28.81	731.8	30.13	765.3	67.8	19.9	79	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Memphis, Tennessee	29.75	755.6	30.08	764.0	65	18.3	78	NE	4	1.8	.....	10cs	0	Calm	.....	0	0	Cloudy	
Milwaukee, Wisconsin	29.34	745.2	30.07	763.8	53	11.7	67	NW	3	1.3	.....	1ck	0	.....	.....	0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.93	760.2	30.00	762.0	72	22.2	67	N	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Montgomery, Alabama	29.78	756.4	30.00	762.0	68.2	20.1	65	NW	6	2.7	.....	0	0	.....	.....	Inap.	Inap	Clear	
Moorhead, Minnesota	28.93	734.8	29.89	759.2	59	15.0	82	S	14	6.3	.....	5c	0	S	.....	0	0	Fair	
Morgantown, W. Virginia	28.77	730.7	29.73	755.1	59	15.0	88	NE	11	4.9	.....	.....	1on	.....	NE	1.04	26.4	Light rain	
Mt. Washington, N. H.	23.50	596.9	29.53	750.0	30	— 1.1	48	NE	24	10.7	.....	.....	1os;sk	.....	NE	0	0	Cloudy	
Nashville, Tennessee	29.48	748.8	30.00	762.0	60.6	15.9	75	NW	5	2.2	.....	2ck	8ks	NW	NW	0	0	Cloudy	
New Haven, Connecticut	29.57	751.1	29.68	753.9	50	10.0	72	N	8	3.6	.....	.....	1os	.....	N	0.43	10.9	Cloudy	
New London, Connecticut	29.62	752.3	29.68	753.9	54	12.2	74	NE	3	1.3	.....	.....	1os	.....	NE	0.20	5.1	Cloudy	
New Orleans, Louisiana	29.94	760.5	29.99	761.7	78.8	26.0	61	N	5	2.2	.....	0	Hz	.....	.....	0	0	Clear	
Newport, Rhode Island	29.58	751.3	29.63	752.6	48.0	8.9	93	N	15	6.7	.....	.....	1on	.....	N	0.62	15.7	Light rain	
New River, N. Carolina																			
New Shoreham, Rhode I'd	29.61	752.1	29.64	752.8	48.3	9.1	85	N	22	9.8	.....	.....	1os	.....	N	3.85	97.8	Cloudy	
New York, New York	29.54	750.3	29.71	754.6	53	11.7	80	N	6	2.7	.....	2cs	8s	N	N	0.58	14.7	Cloudy	
Norfolk, Virginia	29.65	753.1	29.68	753.9	64	17.8	89	SE	4	1.8	.....	.....	1os	.....	S	0.08	2.0	Cloudy	
North Platte, Nebraska	27.02	686.3	29.84	757.9	61.2	16.2	87	SE	12	5.4	.....	2c	2ks	W	.....	0.88	22.4	Fair	
Olympia, Washington T'y	29.93	760.2	29.97	761.2	52.0	11.1	79	S	8	3.6	.....	.....	1os	.....	SW	0.01	0.3	Cloudy	
Omaha, Nebraska	28 87	733.3	30.01	762.2	62.8	17.1	59	SE	12	5.4	.....	.....	1os	.....	W	0	0	Cloudy	
Oswego, New York	29.42	747.3	29.74	755.4	54.0	12.2	80	NE	2	0.9	.....	.....	1os	.....	NE	0	0	Cloudy	
Pensacola, Florida	29.95	760.7	29.98	761.5	76	24.4	56	N	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Philadelphia, Pa	29.68	753.9	29.74	755.4	53	11.7	100	E	8	3.6	.....	.....	1on;fg	.....	.....	0.13	3.3	Light rain	
Phœnix, Arizona	28.77	730.7	30.50	774.7	75	23.9	52	E	2	0.9	.....	.....	1os	.....	.....	0	0	Cloudy	
Pike's Peak, Colorado	18.07	459.0	30.28	769.1	35	1.7	53	W	28	12.5	.....	0	0	.....	.....	0	0	Clear	
Pioche, Nevada	24.03	610.4	29.88	758.9	58	14.4	17	S	7	3.1	.....	1c.	0	Calm	.....	0	0	Clear	
Pittsburg, Pennsylvania	28.96	735.6	29.75	755.6	58	14.4	88	NW	8	3.6	.....	.....	1os	.....	NW	0.68	17.3	Cloudy	
Port Eads, Louisiana	29.98	761.5	29.99	761.7	77.2	25.1	95	N	12	5.4	.....	2k	0	N	.....	0	0	Fair	
Port Huron, Michigan	29.26	743.2	29.92	760.0	52.5	11.4	67	N	11	4.9	.....	0	0	.....	.....	0	0	Clear	
Portland, Maine	29.58	751.3	29.63	752.6	48	8.9	85	N	15	6.7	.....	.....	1on	.....	Calm	0.08	2.0	Light rain	
Portland, Oregon	30.02	762.5	30.09	764.3	54.1	12.3	82	SE	4	1.8	.....	.....	1os	.....	W	0.24	6.1	Cloudy	
Portsmouth, N. Carolina					70	21.1	80	NW	12	5.4	.....	5ck	0	N	.....	0.38	9.7	Fair	
Prescott, Arizona	24.82	630.4	29.89	759.2	61	16.1	26	SW	3	1.3	.....	.....	1os	.....	S	0	0	Cloudy	
Punta Rassa, Florida	29.96	761.0	29.97	761.2	81.5	27.5	76.5	W	12	5.4	.....	5c	1ks	W	W	Inap.	Inap.	Fair	
Red Bluff, California	29.68	753.9	30.01	762.2	55.0	12.8	87	NW	3	1.3	.....	0	0	.....	.....	0.14	3.6	Clear	
Rio Grande City, Texas	29.71	754.6	29.92	760.0	72	22.2	85	E	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Rochester, New York	29.16	740.7	29.78	756.4	53	11.7	86	NW	8	3.6	.....	.....	1oks	.....	NW	0.18	4.6	Cloudy	
Roseburg, Oregon	29.57	751.1	30.13	765.3	53	11.7	93	Calm	0	0	.....	.....	1on	.....	.....	1.66	42.2	Light rain	
Sacramento, California	29.95	760.7	30.02	762.5	55.6	13.1	87	S	2	0.9	.....	0	0	.....	.....	Inap	Inap.	Clear	
St. Louis, Missouri	29.51	749.5	30.09	764.3	57.5	14.2	75	NW	6	2.7	.....	7c;cs	0	NW	.....	0	0	Fair	
St. Paul, Minnesota	29.18	741.2	30.02	762.5	54	12.2	80	E	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Salt Lake City, Utah	25.59	650.0	29.79	756.7	65	18.3	26	Calm	0	0	.....	2c	0	W	.....	0	0	Clear	
San Antonio, Texas	29.34	745.2	30.03	762.7	72.3	22.4	80	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
San Diego, California	29.88	758.9	29.95	760.7	57.0	13.9	81	N	4	1.8	.....	0	1s	.....	.....	0	0	Clear	
Sandusky, Ohio	29.22	742.2	29.88	758.9	59	15.0	76	N	29	13.0	.....	0	0	.....	.....	0.21	5.3	Clear	
Sandy Hook, New Jersey	29.68	753.9	29.71	754.6	53.5	11.9	80	NE	16	7.2	.....	5cs	5s	.....	.....	0.50	12.7	Cloudy	
San Francisco, California	29.98	761.5	30.05	763.3	56	13.3	90	SW	3	1.3	.....	5ck	1s	W	Calm	0.41	10.4	Fair	
Santa Fé, New Mexico	23.40	594.4	29.91	759.7	57	13.9	31	SE	5	2.2	.....	0	0	.....	.....	0.01	0.3	Clear	
Savannah, Georgia	29.76	755.9	29.85	758.2	78.5	25.8	48	W	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Shreveport, Louisiana	29.83	757.7	30.07	763.8	71	21.7	75	Calm	0	0	.....	2cs	0	.....	.....	0	0	Fair	
Silver City, New Mexico	24.35	618.5	29.81	757.2	60	15.6	44	S	1	0.4	.....	2ck	0	S	.....	0	0	Clear	
Sitka Alaska																			
Smithville, North Carolina	29.68	753.9	29.71	754.6	70	21.1	70	NW	10	4.5	.....	1k	0	W	.....	0	0	Clear	
Spokane Falls, Wash. Ter.	27.86	707.6	29.82	757.4	56	13.3	80	S	4	1.8	.....	.....	1oks	.....	SW	0.04	1.0	Cloudy	
Springfield, Illinois	29.43	747.5	30.09	764.3	58	14.4	70	N	4	1.8	.....	5c	0	NW	.....	0	0	Fair	
Springfield, Massachusetts	29.55	750.6	29.68	753.9	49	9.4	93	N	6	2.7	.....	.....	1on;fg	.....	N	0.19	4.8	Light rain	
Stockton, Texas	27.00	685.8	29.99	761.7	62.0	16.7	61	S	4	1.8	.....	2c	0	S	.....	0	0	Fair	
St. Vincent, Minnesota	29.01	736.8	29.85	758.2	56	13.3	81	SW	8	3.6	.....	8cs	0	W	.....	0	0	Fair	
Thatcher's Island, Mass.	29.57	751.1	29.62	752.3	46.2	7.9	100	N	31	13.9	.....	.....	1on	.....	N	0.15	3.8	Heavy rain	
Toledo, Ohio	29.23	742.4	29.91	759.7	58	14.4	70	NW	10	4.5	.....	0	0	.....	.....	0.44	11.2	Clear	
Tucson, Arizona	27.50	698.5	29.80	756.9	84	28.9	22	SW	5	2.2	.....	.....	1os	.....	.....	0	0	Cloudy	
Umatilla, Oregon	29.58	751.3	29.98	761.5	54.6	12.6	85	SW	30	13.4	.....	.....	1on	.....	SW	0.52	13.2	Light rain	
Uvalde, Texas	29.06	738.1	29.86	758.4	68	20.0	84	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Vicksburg, Mississippi	29.79	756.7	30.04	763.0	72	22.2	67	N	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Visalia, California	29.62	752.3	29.97	761.2	56.5	13.6	81	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C.	29.61	752.1	29.72	754.9	55	12.8	100	N	4	1.8	.....	.....	1on;fg	.....	NE	0.49	12.4	Light rain	
Wickenburg, Arizona					74	23.3	36	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	29.66	753.4	29.71	754.6	70	21.1	73	NW	7	3.1	.....	5k	0	NW	.....	0.07	1.8	Fair	
Winnemucca, Nevada	25.66	651.8	29.87	758.7	42	5.6	66	S	4	1.8	.....	8ck	0	SW	.....	0	0	Cloudy	
Wood's Holl, Mass.	29.55	750.6	29.58	751.3	49	9.4	85	NE	15	6.7	.....	.....	1on	.....	NE	0.41	10.4	Light rain	
Yankton, Dakota	28.70	729.0	29.96	761.0	66	18.9	79	SE	13	5.8	.....	5c	0	W	.....	0	0	Fair	
Yuma, Arizona	29.67	753.6	29.81	757.2	73.6	23.1	63	N	1	0.4	.....	2ck	5ks	.....	S	0	0	Cloudy	
Sub-Series.																			
Bogota, U. S. Columbia	22.10	561.3	.....	.....	55.5	13.1	80	Calm	0	0	.....	2c;k	5ks	.....	.....	0.09	2.3	Cloudy	Thomas Herran
Buff Bay Town, Jamaica	29.76	755.9	30.07	763.8	75	23.9	76	E	.....	.....	.....	0	0	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.99	761.7	30.04	763.0	83	28.3	79	Calm	0	0	.....	8cs	0	Calm	.....	0	0	Cloudy	A. Van Caneghem, Ass't.
Kingston, Jamaica, W. I.	29.99	761.7	30.00	762.0	80.0	26.7	68	N	1	0.4	.....	10cs	0	.....	.....	0	0	.....	Robert Johnstone.
Navassa, W. I.	29.92	760.0	30.00	762.0	82	27.8	83	E	8	3.6	.....	5s	2k	N	E	0	0	Hazy	F. M. Everett.
Paramaribo, S. A.	30.01	762.2	30.02	762.5	81	27.2	83	E	.....	.....	3	3c	5k	E	.....	0.67c	17.0	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.35	745.5	29.91	759.7	76	24.4	100	N	.....	.....	3	.....	1on	.....	N	0.70	17.8	Raining	Francesco J. Cisneros.
Rivas, Nicaragua																			Earl Flint.
Santiago de Cuba, W. I.	29.95	760.7	29.98	761.5	81	27.2	78	Calm	0	0	.....	4cs	0	.....	.....	0	0	Fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.86	758.4	29.90	759.4	36.0	2.2	96	NW	16	7.2	.....	1c	0	N	.....	0.05	1.3	Fair	J. Fortescue & W Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	Up'er 0—10	Lo'er 0—10	Upper From.	Lower. From.	Inch.	Mill.				
H. M. S. Albatross																			Comm. A. J. Errington.
H M. S. Alert, Thursday Island, Oceanica,	29.85	758.2	78.5	25.8	85	SE			2		3							D. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, N. 36° 57′, E. 17° 55′	30.11	764.8	68.2	20.1	79	NNE			1							1	NNE		Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 21° 46′, E. 61° 56′	29.60	751.8	85	29.4	87	SE			2-3		10					3	S	Misty	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			71	21.7		NE			1		0					1	NE	Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N. 12° 03′, W. 61° 45′	30.01	762.2	81	27.2	87	ESE			2		3							D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 26° 14′, E 6° 54′	30.10	764.5	63	17.2	83	SE			4-5		2	SE				3	SSE	D. clouds	Com. F. W. Richards.
H. M. S. Champion, S. 22° 42′, W. 36° 27′	30.23	767.8	75	23.9	76	NE			4		2	Calm				4	E	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Chefoo Harbor, China	29.67	753.6	68	20.0	84	S			1		2	W						D. clouds	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 35° 58′, E. 12° 55′	30.16	766.1	74	23.3		NNE			1		4	ESE				2	ENE	D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, N. 16° 53′, W. 25° 01′	30.08	764.0				NE			5-6									D. clouds	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.42	772.7	59	15.0		SE			5-6		5	SE						Squally	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.87	758.7	80.5	26.9	89	SSW			3-4		3	SSW						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 43′, W. 53° 08′	30.15	765.8	42.5	5.8	79	NE			3-4		10					1	NE	Squally	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 5° 17′, E. 82° 53′	29.80	756.9	77	25.0		SSE			3-4		2					2	SE	D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 1° 00′, E. 104° 25′	29.70	754.4	81	27.2		NE			4		8	NE				1	NE	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, N. 3° 06′, E. 172° 44′	29.79	756.7	84	28.9	79	E			1		2	E						D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, S. 18° 08′, E. 54° 00′	30.07	763.8	78	25.6	86	SE			2		4	ESE				1	ENE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 50° 00′, W. 54° 30′	30.07	763.8	38	3.3		S			1		8	S						D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn N. 13° 42′, E. 42° 42′	29.66	753.4	86.5	30.3	79	NNW			3		3					1	NNW	D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo N. 18° 01′, W. 87° 24′	29.92	760.0	86	30.0	83	E			1-2		2	ENE				2	E	D. clouds	Comm. R. N. Custance.
H M. S. Flying Fish, Yokohama, Japan	29.85	758.2	70	21.1	79	SW			1		7							Overcast	Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, VancouverI'd.	29.86	758.4	51	10.6	78	W			5-6		8							Squally	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.99	761.7	34	1.1	90	SSW			2		3					2	SSW	D. clouds	Capt. L. F. Jones.
H. M. S. Griffon, Nassau, W. I	30.03	762.7	82	27.8	74	SSW			1		0							Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 39° 52′, W. 26° 45′	30.43	772.9	64	17.8		WNW			1		1					Sm'h		Blue sky	Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.00	762.0	62	16.7		Calm			0		7	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.88	758.9	69	20.6		S			1		3							Misty	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 03′, E. 109° 55′	29.66	753.4	83.1	28.4	81	SSE			1		3	SE				1	SSE	D. clouds	Capt. A. Carpenter.
H. M. S. Midge, N. 26° 26′, E. 120° 02′	29.92	760.0				Calm			0		2	NW						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur,																			Capt. H. H. Rawson.
H. M. S. Modeste, S. 15° 50′ E. 83° 00′	29.88	758.9	77	25.0	82	SSE			3-4		3	SSE				3	SE	D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Tunis, Tunis, N. Africa	30.07	763.8	68	20.0	90	NNE			3		4	NNW						D. clouds	Capt. G. Tryon, C. B

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, N. 1° 04′, E. 105° 54.′			79.5	26.4		Var.			1-2		2					2	SW	D. clouds	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.89	759.2	45	7.2	92	ESE			3									Misty	Capt. E. B. Drummond.
H. M. S. Orontes																			Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.86	758.4	80	26.7	100	Calm			0		10					1	SE	Overcast	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, La Guayra, Venezuela, S. A.	29.91	759.7	80	26.7	82	Calm			0		3					1	NNE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A.C.Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.70	754.4	82	27.8		S			2-3		4							D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	29.83	757.7	50	10.0		WSW			4		5								
H. M. S. Ruby, S. 5° 20′, E. 43° 45′	29.99	761.7	79.3	26.3	82	SSE			3-4		5					2	S	Showery	Capt. V. B. Orlebar.
H. M. S. Salamis																		D. clouds	Capt. C. E. Foot.
H. M. S. Sea Gull, S. 5° 30′, E. 68° 00.′	29.47	747.5	81	27.2	70	SE			2-3		2					5	SE	D. clouds	Capt. A. Fitz George.
H. M. S. Seraphis																			Comm. W. Byles.
H. M. S. Shannon, N. 28° 08′, W. 18° 47′	30.21	767.3	70	21.1	75	N			3		1					3	N	Misty	Capt. G. O. Twiss.
H. M. S. Superb																			Capt. J. D'Arcy.
H. M. S. Tenedos																			Capt. T. L. H. Ward.
H. M. S. Thetis, S. 9° 29′, W. 142° 57′	29.88	758.9	79	26.1	86	ENE			4		7					4	NE	D. clouds	Capt. C. G. Fane.
H. M. S. Thunderer																			Capt. P. W. Stephens.
H. M. S. Triumph, Coquimbo, Chili, S. A.	29.97	761.2	57	13.9	87	Calm			0		8	Calm							Capt. P. H. Colomb.
H. M. S. Turquoise, S. 48° 29′, W. 74° 23′	30.00	762.0	35	1.7	90	Calm			0		5							D. clouds	Capt. A. H. Markham.
H. M. S. Tweed																		D. clouds	Capt. M. B. Medlycott.
H. M. S. Tyne, N. 44° 34′, W. 8° 30′	30.16	766.1	61	16.1	94	NNE			3		9	NNE				1	WNW	D. clouds	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.			79	26.1		N			1		2							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	29.62	752.3	52	11.1	65	W			2-3		0							Blue sky	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Shat el Arab River, Turkey	29.69	754.1	89.5	31.9		NW			4-5									Misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, St. Paul deLoando, Benguela	30.05	763.3	75.6	24.2	85	WNW			2		3					1		D. clouds	Carlos Candido dos Reis, Comd't.
Quanza, Bulama	29.92	760.0	83.8	28.8	58	SE			1		2		SE			1	SE	D. clouds	Carlos M. da Silva Costa, Comd t.
RioLima																			S. C. da Silva Costa, Comd't.
Sado, S. 1° 04′, E. 7° 48′	29.91	759.8	78.8	26.0	84	SSE			4		5					3	SSE	D. clouds	G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.75	755.6	77.0	25.9	84	S			1		1							Blue sky	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockho.m.																			
H. M. Corvette Saga, N. 51° 39′, E. 2° 17.′	30.01	762.2	58.1	14.5	90	WSW			2		3							D. clouds	Capt. M. von Krusenstierna
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

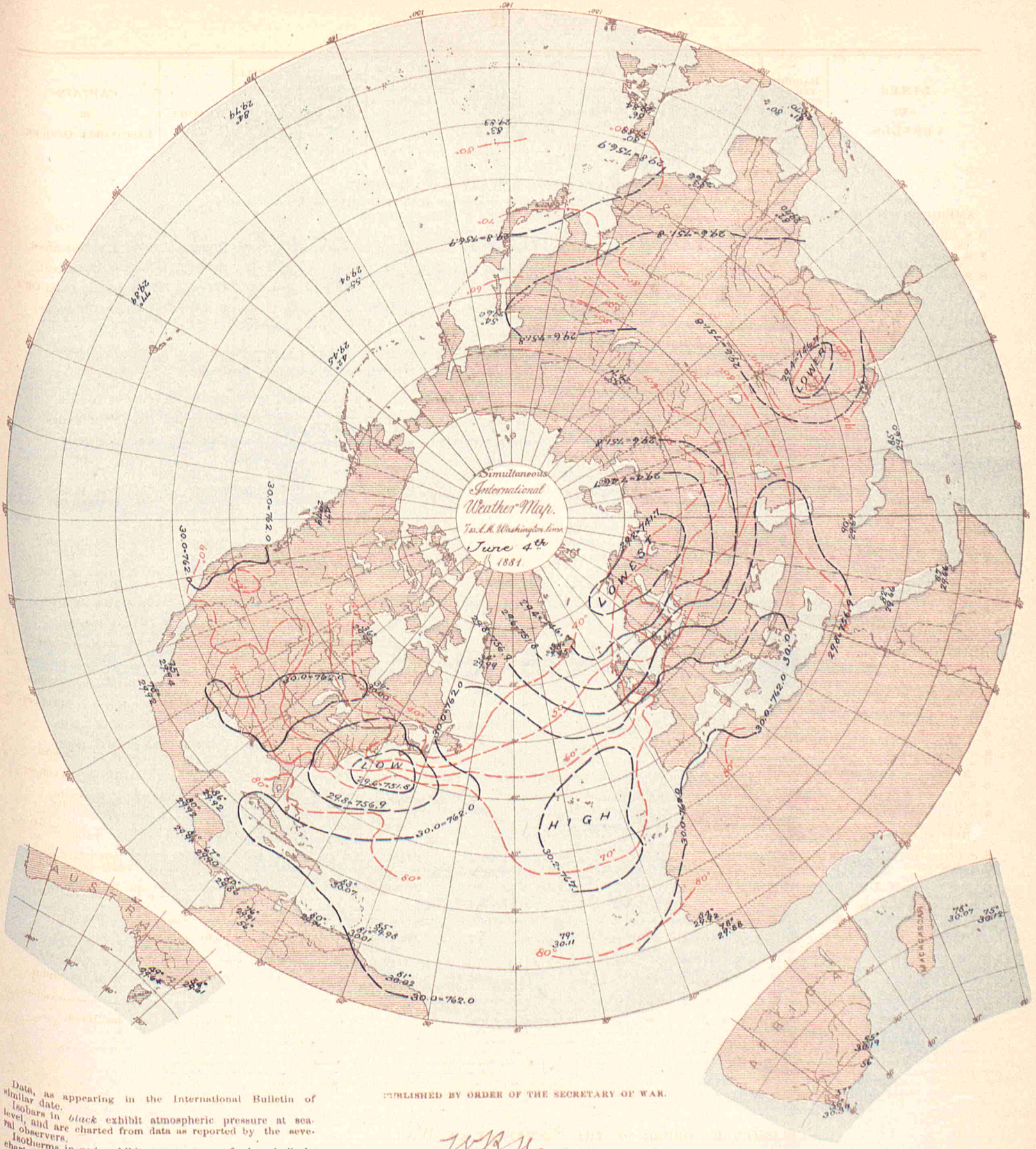
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. s.	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.03	762.7	75	23.9	53	N	4	1.8			5		SW	0	0			Fair	
N. Yard, Portsmouth, N. H.	29.65	753.1	46	7.8	100	N	9	4.0		10c	0	N		0.3	8.			Rainy	
Naval Hospital, Yokahama, Japan	29.76	755.9	67.5	19.7	89	Calm			0		8		W	0	0			Fair	
Adams, N. 8° 53′, W. 79° 28	29.69	754.1	82	27.8	91	WNW			2		10		Calm			Sm'h		Cloudy	
Alaska, Callao, Peru	29.93	760.2	65	18.3	89	SE			1		10			0	0	Sm'h		Overcast	
Alert, N. 19° 32′, E. 141° 27′ *	29.83	757.7	83	28.3	83	NE			4		8		NE			Mod.	NE	Cloudy	
Alliance, Norfolk, Va	29.58	751.3	67	19.4	89	E			1		10			Light				Cloudy	
Ashuelot, Kobe, Japan	29.90	759.4	69	20.6	95	W			2		10		Calm					Cloudy	
Colorado, New York, N. Y	29.71	754.6	53	11.7	80	NNW	2	0.9			10			0.02	0.5			Overcast	
Constitution, Norfolk, Va	29.61	752.1	63	17.2	100	SE			2		10		NW					Cloudy	
Franklin, Norfolk, Va	29.53	750.0	64	17.8	94	SE	3	1.3			10		SE	0.90	22.9			Cloudy	
Galena, Cadiz, Spain	29.98	761.5	71	21.7	75	SE			4		5					Mod.	E	Fair	
Independence, N. Yard, Mare I'd, Cal.	29.92	760.0	67	19.4	84	SSW	7.2	3.1			10		SSW	0.2	5.			Cloudy	
Jamestown, Sitka, Alaska *	29.79	756.7	47	8.3	92	SSW			2		10			0.01	0.3			Drizzling	
Kearsarge, Norfolk, Va	29.70	754.4	64	17.8	89	E			1		10		Calm			Sm'h		Cloudy	
Lackawanna, Marquesa Island †	30.03	762.7	81	27.2	78	NE			2		2		NE					Fair	
Marion, Montevideo, Uruguay *†	30.13	765.3	55	12.8	87	NE			5		10		Calm	Mod	erate	Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	29.73	755.1	54	12.2	100	NE			2		10							Cloudy	
Minnesota, Newport, R. I	29.62	752.3	52	11.1	86	N			5-6		10		N			Mod.	N	Squally	
Monocacy, Yokohama, Japan	29.90	759.4	70	21.1	80	WSW			1		8		Calm					Cloudy	
New Hampshire, Norfolk, Va	29.72	754.9	63	17.2	94	ESE	4	1.8			10		ESE	1.40	35.6			Overcast	
Nipsic, N. 36° 02′, W. 6° 16′	29.97	761.2	71	21.7	66	E			5		5					Mod.	ESE	D. clouds	
Onward, Callao, Peru †	29.95	760.7	65	18.3	89	SE			1		10		NW			Long	W	Cloudy	
Palos, Nagasaki, Japan	29.87	758.7	72	22.2	80	Calm			0		8							Fair	
Passaic, Washington, D. C	29.68	753.9	57	13.9	94	NE			3		10		NE					Raining	
Pensacola, San Francisco, Cal	30.07	763.8	55	12.8	93	SW			1		5			Slight		Sm'h		Fair	
Portsmouth, Hampton Roads, Va	29.67	753.6	63	17.2	100	ESE			3		10		SE					Cloudy	
Powhatan, Norfolk, Va	29.70	754.4				SE			1		10		SE					Threatening	
Quinnebaug, N. 27° 28′, W. 62° 34′	30.08	764.0	79	26.1	82	SW			2		8		SW			Sm'h		Fair	
Ranger, N. 19° 56′, W. 105° 30′ *	29.92	760.0	78	25.6	86	Calm			0		2		NW	0	0	Sm'h		Fair	
Richmond, Nagasaki, Japan	29.87	758.7	74	23.3	76	Calm			0		0			0	0			Clear	
Saratoga, Hampton Roads, Va	29.69	754.1	61	16.1	100	SE			3		10			Light				Overcast	
Shenandoah, Montevideo, Uruguay *	30.16	766.1	56	13.3	87	NNE			4		10					Sm'h		Cloudy	
St. Louis, League Island, Pa	29.30	744.2	54	12.2	87	NE	4	1.8			10		NE	0.42	10.7			Rainy	
Swatara, Shangbai, China *†	29.70	754.4	75	23.9	90	E			2		10		Calm					Overcast	
Tennessee, New York, N. Y	29.72	754.9	55	12.8	80	N	6	2.7			10		NW	0.49	12.4	Sm'h		Overcast	
Ticonderoga, S. 55° 18′, W. 78° 00′	30.18	766.6	39	3.9	91	SSE			3		10		S	0	0	Long	SSE	Cloudy	
Trenton, Barcelona, Spain *	30.09	764.3	73	22.8	72	S			0-1		5			0	0	Sm'h		Fair	
Vandalia, Navy Yard, N. Y *†	30.06	763.5	55	12.8	80	NE			2		10		NE					Cloudy	
Wabash, Boston, Massachusetts	29.67	753.6	48	8.9	85	N	14	6.3			10		NNE	0.69	17.5			Drizzling	
Wachusetts, N. Yard, Mare I'd, Cal	30.01	762.2	62	16.7	83	SSW			1		5		S	0	0			Fair	
Yantic, Key West, Florida *	29.95	760.7	82	27.8	87	SW			1		8		SW					Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Bellelsle, N. 27° 00′, W. 79° 00′	29.98	761.5	79.5	26.4	87	W			5		10							Overcast	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero																			W. N. Lailey.
City of Agra, N. 34° 41′, W. 19° 18′	30.24	768.1	66.5	19.2	79	NNE			5		8							D. clouds	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 50° 07′, W. 3° 20′	30.11	764.8	56	13.3	81	WSW			4		2							Blue sky	Capt. Jas. Buchan.
Denbighshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 26° 28′, W. 30° 40′	30.39	771.9	73.0	22.8	85	SSW			2		7							D. clouds	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee, ‡ N. 50° 10′, W. 2° 10′	30.09	764.3	55.6	13.1	94	WSW			2		2							Misty	Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 14° 35′, W. 32° 57′	30.11	764.8	79	26.1	78	NE			4		10							Overcast	Capt. M. Parry.
Sierra Estrella, N. 45° 12′, W. 15° 22′	30.26	768.6	63.1	17.3	80	SSW			4		3							D. clouds	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 21° 27′, E. 37° 55′	29.66	753.4	82	27.8	87	NW			6		6							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton ‡																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 46° 55′, W. 57° 25′	30.02	762.5				SE			6		10		WNW			Mod.	SE	Cloudy	
S. S. Circassian, ‡ N. 48° 45′, W. 63° 20′	30.17	766.3	45	7.2	84	SE			5	6ck;c	0	NW		0	0	Sm'h	W	D. clouds	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 41° 26′, W. 53° 21′ †	29.84	757.9	72	22.2	100	SSW			5		8		S			Sm'h		Cloudy	Capt. J. W. Jennings.
S. S. Baltic ‡																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 51° 06′, W. 14° 41′ †	29.85	758.2	57	13.9	?	SSW			6		10		WSW	6h'rs	light	Mod.	W	Overcast	Capt. Benj. Gleadell.
S. S. Germanic																			Capt. Ch. W. Kennedy
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, N. 49° 48′, W. 7° 00′ ‡	30.05	763.3	59.0	15.0		WSW			4		5		W	0	0	Mod.	W	Cloudy	
S. S. Köln, N. 46° 37′, W. 34° 43′	30.11	764.8	59.0	15.0	94	NE			2		10		NE	18h'rs and	rain fog	Mod.	wsw	Cloudy	Capt. Th. Jüngst.
S. S. Leipzig, N. 46° 13′, W. 41° 07′	30.10	764.5	53.0	11.7		SE			4		10		SE	24 hours		Mod.	SW	Light rain	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg, N. 38° 20′, W. 69° 37′	29.55	750.6	62.6	17.0		NNW			6		10		NNW	4 hours		Mod.	W	Cloudy	Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Pern																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, N. 47° 28′, W. 30° 22′	29.93	760.2	59	15.0	94	W			4		10		WSW			Mod.	wsw	Overcast.	Capt. J. W. Shackford.
S. S. Indiana, N. 43° 12′, W. 42° 34′ †	30.11	764.8	62	16.7	94	SW			4		8		W	Mode	rate	Mod.	W	Rainy	Capt. R. W. Sargent.
S. S. Ohio, N. 49° 40′, W. 22° 38′ *†	30.00	762.0	56	13.3	94	WSW			4		10		WSW	Li	ght	Mod.	W	Rainy	W. Shackford, Chief Off'r
S. S. Pennsylvania, N. 39° 45′, W. 62° 52′ †	29.50	749.3	74	23.3	95	WSW			3		8		W			Mod.	wsw	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 38° 47′, W. 125° 27′ †	30.18	766.6	58	14.4	82	NNW			5		8		NW	0	0	Mod.	N	Cloudy	Capt. H. Davison.
S. S. Gaelic, N. 33° 01′, E. 135° 23′ *†	30.07	763.8	73	22.8	85	E			5		5		NE			Sl't	NE	Fair	Capt. W. H. Kidley.
S. S. Oceanic, Hong Kong, China	30.08	764.0	82	27.8	70	SSE			1		2		SE					Fine	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 44° 11′, W. 124° 25′ †	30.13	765.3	52	11.1	86	NNW			2		10		WNW			Sm'h		Cloudy	Capt. Fred. Bolles.
S. S. Oregon																			Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, San Francisco, Cal. †	30.04	763.0	55	12.8	87	SW			1		5			0	0			Fair	Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, Seattle, Washington Ter †	29.96	761.0	52	11.1	86	ESE			3		10		E					Light rain	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, San Francisco, Cal. †	30.09	764.3	55	12.8	87	SW			1		2							Fair	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal. †	30.03	762.7	55	12.8	87	W			2		5		W					Fair	Capt. G. Debney.
S. S. Victoria, N. 44° 10′, W. 124° 50′ †	30.14	765.5	53	11.7	73	NW			3		8					Sm'h		Hazy	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 13° 06′, W. 162° 25′	29.89	759.2	77	25.0	85	ENE			4		5?		ENE			Long	NE	Cloudy?	A. Bannerman, 2d Officer
S. S. City of New York, Sydney, N. S. W. †	29.61	752.1	54	12.2	100	W			2		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 9° 47′, W. 84° 54′ †	29.91	759.7	81	27.2	87	Calm			0		10ks		SW	0	0	Mod.	SW	Cloudy	Capt. D. S. Austin.
S. S. City of Peking, N. 47° 27′, W. 174° 57′ †	29.45	748.0	42	5.6	74	WSW			2		10		S	0	0	Light	S	Cloudy	Capt. G. G. Berry.
S. S. City of Sidney																			Capt. H. C. Dearborn.
S. S. City of Tokio, N. 38° 35′, E. 172° 35′ †	29.94	760.5	55	12.8	73	WNW			4		10		W			R'gh	W	Cloudy	A. L. Ritchie, 2d Officer
S. S. Colima, N. 13° 30′, W. 89° 18′ †	29.92	760.0	80	26.7	74	NNW			2		5		Calm	0.70	17.8	Mod.	SSW	Fair	Capt. R. R. Searle.
S. S. Granada																			Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. Wales	30.18	766.6	64	17.8	52	SW			4		10		SW					Dull	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland, New Jersey, N. J. †	29.77	756.1	60	15.6	88	NE			2		10		NE	0.05	1.3			Cloudy	Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Fall River, Mass	29.57	751.1	52	11.1	79	NNE					10n		N	0.12	3.0			Light rain	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, N. 23° 55′, W. 65° 05′ †	30.11	764.8	84	28.9		SSE			5		2			0	0	Sm'h		Fine	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Susquehanna River, Md. †	29.71	754.6	57	13.9	87	N	2	0.9			10n			0.14	3.6			Cloudy	
Bark Sunbeam, Lisbon, Portugal †	30.02	752.5	75	23.9	72	W			6		2		W	0	0			Fair	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 5, 1881,

7 A. M., Washington Mean Time.

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

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

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

ALGERIAN SERIES.

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

Nemours	‡		29.89	759.3	68.0	20.0	89	N			2		4			0.689	17.5	Cloudy... ...	Raynard.
Algiers	‡		29.88	758.9	69.8	21.0	87	ENE			2		5			0.114	2.9	Cloudy.....	Nicolas.
La Calle	‡		29.93	760.3	86.0	30.0	65	SSE			6		1			0.020	0.5	Very fair.....	Fonfrède.
Tunis	‡		29.89	759.2															Jacques.
Sfax	‡		29.95	760.8															Gau.
Saida	‡		29.94	760.5	66.9	19.4	79	NW			2		9			1.220	31.0	Covered.....	Dumas.
Tebessa	‡		29.90	759.4	75.6	24.2	42	S			3		1			0	0	Very fair....	Watrin.
Geriville	‡				75.9	24.4	25	W			1		0			0	0	Clear.....	Lonchamp.
Laghouat	‡		29.87	758.7	79.5	26.4	26	E			2		1			0	0	Very fair....	Herbin.
Biskra	‡		29.87	758.6	86.4	30.2	90	SE			2		0			0	0	Clear.....	Baudassé.

AUSTRALIAN SERIES.

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

Melbourne, Victoria	29.87	758.7	29.96	761.0	50.0	10.0	79	N	10	4.5			9			0	0	Dull.....	R. L. J. Ellery.
SUB-SERIES.																			

AUSTRO-HUNGARIAN SERIES.

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

Agram	29.39	746.4	29.91	759.6	79.7	26.5	40	SW			3		1			0	0		Prof. Ivan Stoxir.
Cracow, I. R. Obs'y	29.10	739.2	29.83	757.7	79.2	26.2	43	W	8.1	3.6			2			0	0		Dr. Wierzbicki.
Eperies	29.02	737.2	29.86	758.4	77.0	25.0	56	S			1	20	0			0	0		Julius Mikolik.
Gratz	28.65	727.6	29.85	758.1	73.6	23.1	71	S			1		3			0.134	3.4		Andreas Rospini.
Hermannstadt	28.55	725.2	29.90	759.4	79.9	26.6	41	NW			3		4			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.53	724.6	29.80	756.9	75.5	24.7	64	NE			1		2			0.051	1.3		The Staff.
Lemberg	28.89	733.8	29.83	757.7	75.0	23.9	47	NW			2		3			0	0		Dr. T. Stanecki.
Pola	29.87	758.6	29.97	761.3	79.2	26.2	57	NE			3		0			0	0		I. R. Hydrographic Office.
Szathmar	29.46	748.2	29.90	759.4	80.4	26.9	56	S			2		5			0	0		Beicht Peter, S. J.
Szegedin	29.65	753.1	29.92	759.9	77.0	25.0	60	Calm			0		0			0	0		Karl Stancel.
Trieste	29.90	759.4	30.00	762.0	75.2	24.0	58	SE			1		1			0	0		Secco.
Vienna	29.20	741.6	29.88	758.9	78.1	25.6	44	SE			2		1			0	0		I. R. Central Met. Obs'y

BELGIAN SERIES.

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

Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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BRITISH SERIES.

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

STATIONS.	Barometer: Corrected for instrum'tal error and temperature. Inch.	Barometer: Corrected for instrum'tal error and temperature. Mill.	Barometer: Reduced to sea-level. Inch.	Barometer: Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Aberdeen	29.25	742.9	29.35	745.5	56.5	13.6	48	NW	13	5.8	.....	.....	6	.....	.....	0.075	1.9	D. clouds	W. Boswell.
Armagh, Observatory	29.33	745.0	29.56	750.8	56.1	13.4	69	NW	7	3.1	.....	.....	.....	.....	.....	.....	.....	.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.54	750.3	55.0	12.8	67	WNW	14	6.3	.....	.....	9	.....	.....	.....	.....	Overcast	John Hartnup.
Bolton, Sharples	28.96	735.6	29.48	748.8	54.6	12.6	66	NW	6	2.7	.....	.....	8	.....	.....	.....	.....	D. clouds	Thomas Mackereth.
Bradford, Yorkshire	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.01	0.3	.....	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.97	761.2	30.00	762.0	86	30.0	65	NE	.....	.....	1	.....	3	.....	.....	.....	.....	D. clouds	Corpl.J.Surgener,A.H.C.
Cardington	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John McLaren.
Chatham, School M. E.	29.50	749.3	29.63	752.6	61.5	16.4	75	SW	.....	.....	3	.....	10	.....	.....	.....	.....	Gloomy	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.36	745.7	29.59	751.6	58.7	14.8	93	SW	.....	.....	4	.....	10	.....	.....	.....	.....	Rain & fog	The Staff.
Fort Napier, Natal	28.01	711.4	30.23	767.8	57.2	14.0	52	Calm	.....	.....	0	.....	0	.....	.....	.....	.....	Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.88	758.9	88	31.1	84	SW	.....	.....	1	.....	3	.....	.....	.....	.....	D. clouds	Sgt. C. E. Keane.
Galway, Queen's College	.....	.....	29.53	750.0	55	12.8	80	S	.....	.....	3	.....	8	.....	.....	.....	.....	Showery	J. O'Donaghue.
Gibraltar, Mediterranean	29.94	760.5	29.99	761.7	72.4	22.4	82	S	.....	.....	1	.....	5	.....	.....	.....	.....	D. clouds	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.20	741.7	29.40	746.7	54.9	12.7	67	W	.....	.....	5	.....	4	.....	.....	.....	.....	D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	29.44	747.8	29.61	752.1	62.5	16.9	71	SW	.....	.....	4	.....	10	.....	.....	.....	.....	Raining	The Staff.
Guernsey	29.45	748.0	29.67	753.6	61.5	16.4	66	SSW	.....	.....	3	.....	8	.....	.....	.....	.....	Gloomy	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.57	751.1	29.61	752.1	60.2	15.7	79	SW	23	10.3	.....	.....	10	.....	.....	.....	.....	Raining	The Staff.
Leicester, Museum	29.24	742.7	29.49	749.0	54.5	12.5	90	NW	.....	.....	2	.....	10	.....	.....	.....	.....	Raining	J. E. Carryer.
Malta, Mediterranean	29.82	757.4	29.90	759.4	71	21.7	75	E	.....	.....	3	.....	2	.....	.....	.....	.....	Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.95	760.7	29.99	761.7	82.0	27.8	83	NW	.....	.....	1	.....	6	.....	.....	.....	.....	D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.01	736.8	29.53	750.0	52.8	11.6	88	NNW	.....	.....	2	.....	10	.....	.....	.....	.....	Raining	John Mac Email.
Oxford, Radcliffe Obs'y	29.33	745.0	29.56	750.8	58.1	14.5	94	S	.....	.....	4	.....	10	.....	.....	.....	.....	Raining	The Staff.
Plymouth	29.51	749.5	29.59	751.6	58.3	14.6	93	SW	.....	.....	5	.....	10	.....	.....	.....	.....	Raining	John Merrifield.
Sandwick Manse, Orkneys	.....	.....	29.26	743.2	49	9.4	77	W	37	16.5	.....	.....	2	.....	.....	.....	.....	Showery	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.91	759.7	29.97	761.2	71.8	22.1	70	SW	.....	.....	1	.....	1	.....	.....	.....	.....	Blue sky	Serg't W. H. Lyne.
Sheffield	29.28	743.7	29.55	750.6	61.1	16.2	78	W	.....	.....	1	.....	10	.....	.....	0	0	Overcast	W. F. Cooper.
Silloth Rectory	29.46	748.3	29.49	749.0	59.6	15.3	79	W	.....	.....	4	.....	4	.....	.....	0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.54	750.3	56.0	13.3	58	W	15	6.7	.....	.....	10	.....	.....	.....	.....	Overcast	Rev. S. J. Perry.
Stratfield Turgiss	29.37	746.0	29.58	751.3	56.8	13.8	96	SW	.....	.....	3	.....	10	.....	.....	.....	.....	Raining	Rev.C.H.Griffiths,F.M.S
Truro, Royal Institution	29.58	751.3	29.59	751.6	60	15.6	94	N	.....	.....	6	.....	10	.....	.....	.....	.....	Raining	W. Newcombe.
Valencia, Observatory	29.67	753.6	29.70	754.4	53.3	11.8	67	NW	14	6.3	.....	.....	8	.....	.....	.....	.....	D. clouds	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.61	752.1	29.65	753.1	43	6.1	90	NW	8	3.6	.....	.....	10n	.....	.....	0.365	9.3	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	29.58	751.3	29.64	752.8	43	6.1	87	S	6	2.7	.....	8k	2ks	S	S	0.85	21.6	Fair	G. A. Blair.
Chicontimi, Quebec	.....	.....	.....	.....	.....	.....	.....	NW	.....	.....	4	0	8ks	.....	.....	0.04	1.0	D. clouds	Rev. V. A. Huart.
Cornwall, Ontario	29.46	748.3	29.65	753.1	55.8	13.2	83	W	.....	.....	1	.....	9s	.....	.....	0	0	D. clouds	James Smith, M. A
Dalhousie, N. B.	29.53	750.0	29.57	751.1	47.0	8.3	.....	E	.....	.....	1	0	0	.....	.....	0.11	2.8	.....	H. A. Johnson.
Father Point, Quebec*	29.59	751.6	29.61	752.1	44	6.7	89	NW	1	0.4	.....	.....	10n	.....	.....	0	0	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.00	736.6	29.81	757.2	58	14.4	86	E	8	3.6	.....	5k	5s	SE	SE	0	0	Cloudy	James Stewart.
Fredericton, N. B.	29.63	752.6	29.69	754.1	49.0	9.4	79	SE	7	3.1	.....	.....	0	.....	.....	0.790	20.1	Clear	Prof. Harrison.
Granton, Ontario	28.71	729.2	29.80	756.9	53.0	11.7	86	W	.....	.....	1	.....	10n	.....	.....	0	0	Cloudy	James Grant.
Halifax, N. S.*	29.60	751.8	29.73	755.1	44	6.7	88	NW	8	3.6	.....	.....	10ks	.....	W	0.281	7.1	Cloudy	A. Allison.
Hamilton, Ontario	29.38	746.2	29.76	755.9	61.3	16.3	80	SW	.....	.....	3	8cs	0	SW	.....	0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.40	746.7	29.73	755.1	58	14.4	79	SW	11	4.9	.....	.....	10s	.....	SW	0	0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S.	29.55	750.6	29.59	751.6	46.5	8.1	73	N	.....	.....	4	7k	0	N	.....	0.62	15.7	Cloudy	C. H. Rigby.
Montreal, Quebec*	29.49	749.0	29.68	753.9	53	11.7	82	NW	8	3.6	.....	.....	10n	.....	.....	0.02	0.5	Light rain	C. H. McLeod, C. E.
Moose Factory, Ontario	29.99	761.7	30.02	762.5	33.4	0.8	64	N	.....	.....	3	.....	10n	.....	.....	Inap.	Inap.	Raining	J. R. Nason.
Parry Sound, Ontario*	29.12	739.6	29.81	757.2	49	9.4	85	N	13	5.8	.....	5k	5ks	NE	NE	0	0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. F. Jeffers, M. A.
Port Dover, Ontario	29.13	739.9	29.81	757.2	60	15.6	94	SW	5	2.2	.....	.....	10n	.....	.....	0	0	Cloudy	H. Morgan.
Port Stanley, Ontario	29.18	741.2	29.82	757.4	60	15.6	79	W	5	2.2	.....	.....	10ks	.....	W	0	0	Cloudy	M. Payne.
Quebec, Quebec*	29.30	744.2	29.62	752.3	48	8.9	92	NE	.....	.....	3	.....	10n	.....	NE	0.03	0.8	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.34	745.2	29.80	756.9	46	7.8	73	N	4	1.8	.....	.....	8n	.....	NW	0.06	1.5	Cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.08	738.6	29.79	756.7	53	11.7	79	N	16	7.2	.....	.....	10ks	.....	.....	0.05	1.3	Cloudy	K. Stewart.
St. Andrews, N. B.	29.65	753.1	29.70	754.4	46	7.8	85	W	3	1.3	.....	0	0	.....	.....	0.46	11.7	Clear	.....
St. John, N. B.	29.51	749.5	29.67	753.6	44.0	6.7	75	NW	7	3.1	.....	0	0	.....	.....	0.470	11.9	Blue sky	G. Murdock, C. E.
Stratford, Ontario	28.52	724.4	29.78	756.4	54.3	12.4	80	W	10	4.5	.....	.....	10s	.....	.....	0	0	D. clouds	C. J. Macgregor, M. A.
Sydney, C. B*	29.52	749.8	29.56	750.8	48	8.9	80	W	11	4.9	.....	0	8ks	.....	W	0.35	8.9	Clearing	T. C. Hill, C. E.
Toronto, Ontario*	29.41	747.0	29.79	756.7	57	13.9	84	S	9	4.0	.....	.....	8ks	.....	W	0.12	3.0	Cloudy	Magnetic Observatory
Windsor, N. S.	29.61	752.1	29.70	754.4	43.0	6.1	83	N	.....	.....	.....	.....	10ks	.....	.....	0.07	1.8	Cloudy	.....
Woodstock, Ontario	28.74	730.0	29.78	756.4	55.6	13.1	78	SW	13	5.8	.....	0	1s	.....	.....	0	0	Blue sky	Prof. Wolverton.
Yarmouth, N. S.*	29.68	753.9	29.75	755.6	45	7.2	86	W	3	1.3	.....	8k	0	W	.....	0.11	2.8	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.58	751.3	29.82	757.4	66	18.9	76	S	3	1.3	.....	.....	10s	.....	.....	0.53	13.5	Fair	John Delany.
St. Pierre, N. F.	.....	.....	29.56	750.8	49.3	9.6	.....	SW	.....	.....	2	.....	.....	.....	.....	0	0	.....	N. F. Land, Comd't

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

CAPE COLONY SERIES.

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

Cape St. Francis Lt. House	30.36	771.1	.....	.....	65.5	18.6	88	E	16.4	7.3	.....	0	2k	.....	.....	0	0	.....	John Duthie.
Cape Town, C. G. H. Obs'y.	30.01	762.2	30.06	763.5	57.0	13.9	.....	SSE	14.0	6.3	.....	4cs	4	.....	.....	0	0	.....	The Staff, for D. Gill.
Worcester*†	29.10	739.1	.....	.....	63.8	17.7	42	S	.....	.....	1	0	2	.....	.....	0	0	Clear	C. Stokes.

CHINESE SERIES.

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

.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.63	752.7	29.66	753.4	68.0	20.0	08	NW	0.9	0.4	.....	.....	10k	.....	NW	2.276	57.8	Covered	M. Marc Dechevrens, S. J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

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

San José	26.15	664.2	29.87	758.7	65.8	18.8	84					10ck;cs	0			0.55	14.	Cloudy	Amand Maison.

DANISH SERIES.

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

Copenhagen	29.48	748.9	29.53	750.1	68.7	20.4	55	SW	20	9			10						Oversergent Fischer.
Fanöe	29.46	748.3	29.48	748.8	55.9	13.3	94	WSW			6		10						Overloerer Lauridsen.
Godthaab, Greenland	29.93	760.2	29.97	761.3	38.1	3.4	75	NE			4		1						S. Kleinschmidt.
Stykkisholm, Iceland	29.69	754.2	29.74	755.3	37.4	3.0		NE			7		8						A. O. Thorlacius.
Thorshavn	29.14	740.2	29.18	741.1	44.8	7.1	73	N	22	10			7						Overloerer Bergh.
Vestervig	29.29	743.9	29.38	746.3	54.0	12.2	97	SW			6		10						Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.30	744.3	29.94	760.4	68.4	20.2	77	S			1	0	km			0	0		M. Labroue, Director.
Alençon Normal School	29.27	743.4	29.82	757.4	69.8	21	49	SW			1	0	2k		S	0	0	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	29.50	749.3	29.75	755.6	68.4	20.2	62	NW			3	0	k						M. Klein, Commandant.
Avignon, Normal School	29.87	758.8	29.95	760.8	79.3	26.3	41	SSE			1		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.16	740.6	29.68	753.9	77.0	25		SW			3	0	5kn		SW	0	0	Cloudy	M. Saillard, Director.
Beauvais, Normal School	29.50	749.2	29.75	755.7	75.7	24.3	39	SW			4		2		SW	0	0	Slightly cl'dy	M. Frère Eugene Marie.
Besançon, Normal School	29.02	737.2	29.83	757.7	77.0	25	47	SSW			1	clk	0	S		0	0		M. Gobin, Director.
Bordeaux, Observatory	29.61	752.0	29.86	758.4	77.7	25.4	47	SW			1		8		WSW	0.004	0.1	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.28	743.6	29.81	757.1	76.1	24.5	48	W			2	0	k		W	0	0		M. Postel, Director.
Brest, Naval Observatory	29.55	750.5	29.79	756.6	62.6	17.0	70	SW			3		10		SW	0	0		M. de Rermaree, Dir.
Caen, Normal School	29.64	752.8	29.71	754.6	72.0	22.2	75	SW			1		0			0	0	Clear	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.54	750.3	29.85	758.3	73.4	23.0	52	N			6		8	NE	N	0	0	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.28	743.7	29.77	756.1	81.3	27.4	38	SW			2					0	0		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.51	724.2	29.81	757.4	72.7	22.6	71	W			3		8			0	0	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.03	737.4	29.76	756.8	70.0	21.1	84	S			1		10		S	0.126	3.2	Raining	M. de Villemontée, Dir.
Commentry, Normal School	28.96	735.6	29.79	756.6	75.6	24.2	45	W			2	0	5kn	W	W	0	0	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.45	697.2	29.90	759.5	71.2	21.8	42	NE			4	0	k		E	0	0		M. Jeanglrard, Director.
Gréasque, du. Rhone	28.91	734.4	30.06	763.4	74.1	23.4	43	S			2		5		S	0	0	½ covered	M. Kina, Director.
Grenoble, Normal School	29.12	739.7	29.85	758.2	76.6	24.8	43	WNW			1	0s	k		N	0	0		M. Ablard, Director.
Guéret, Normal School	28.30	718.9	29.84	757.8	72.0	22.2	44	SW			2	clk	0	NE		0	0		M. Rivoire, Director.
Lamballe, Normal School	29.49	749.0	29.76	755.8	69.8	21.0	57	WSW			4				WSW	0	0		M. Olliffrault, Director.
Lescar, Normal School	29.31	744.5	29.96	761.0	73.4	23	69	S			1	clk	0	S		0.55	14.		M. Chauvin, Director.
Lorient, Naval Observatory	29.75	755.7	29.85	758.3	63.3	17.4	67	SW			8		10		SW	0.630	16.0	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.87	733.4	29.91	759.0	68.5	20.3	46	SW			2		8		SW	0	0	Very cloudy	M. André, Director.
Mans, Normal School	29.52	749.9	29.74	755.4	76.1	24.5	45	SW			6		2		SW	0	0	Slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	29.72	754.8	29.98	761.5	73.8	23.2	56	S			1		6		SW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.82	630.5	30.06	763.5	53.2	11.8	77	E	11.2	5.0			5		N	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.84	758.0	29.95	760 7	72.3	22.4	62	S			3		2		SE	0	0	Foggy	M. P. Galzin, Director.
Nancy, Normal School	29.05	737.8	29.78	756.4	77.4	25.2	39	SSW			2	0	5k			0	0	Cloudy	M. Hasse.
Nantes, Observatory	29.69	754.1	29.85	758.2	70.9	21.6	53	SW			1-2	4ck	0	WSW	WSW	0	0		M. Larocque, Director.
Nice	29.94	760.5	29.97	761.3	70.5	21.4	54	SE			2		1	SE	SE	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.83	757.6	29.93	760.2	71.6	22.0	55	S	15.0	6.7			6	W		0.134	3.4	Raining	Dr. Fines.
Pic-du-Midi, Plantade	22.50	571.4			42.8	6.0							10	SW	NE	0.142	3.6	Stormy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.91	734.4	29.93	760.2	76.1	24.5	46	S			3		2	S	S	c	0	Slightly cl'dy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.12	638.1			49.5	9.7	81	SSW			3		10			0.004	0.1	Covered	M. Alluard, Director.
Rochefort, Naval Obs'y	29.91	759.6	29.94	760.4	73.4	23.0	87	SW			1		8		SW	0.020	0.5	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.61	752.0	29.81	757.2	73.8	23.2	60	E			2		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.82	706.7	29.91	759.7	69.4	20.8	53	S			3		10			0.04	1.	Covered	M. Richard, Director.
Rouen, Normal School	29.65	753.0	29.73	755.2	77.7	25.4	26	SW			2		0			0	0	Clear	M. Platrier, Director.
Saint Lô, Normal School	29.64	752.9	29.80	756.9	68.4	20.2	54	S			2		5		SSW	0	0	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.60	751.9	29.77	756.1	76.8	24.9	42	SW			2		1		SW	0	0		M. Renou, Director.
Toulouse, Observatory	29.23	742.4	29.95	760.7	76.3	24.6	43	SE			3		0			0	0	Clear	M. Baillard, Director.
Tours													5			0.055	1.4	½ covered	M. de Tastes.
Versailles, Observatory	29.28	743.7	29.77	756.2	75.9	24.4	38	SW			4					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.49	749.1	29.78	756.5	78.6	25.9	37	SW			3		2		SSW	0	0		M. Marié Dvy, Director.

GERMAN SERIES.

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

Bamberg	29.00	736.5	29.85	758.3	74.5	23.6	45	SSE			4	0	5k		SE	0	0		Prof. Dr. Hoh.
Berlin	29.52	749.7	29.08	753.8	82.6	28.1	32	SW			3		6			0	0		Prof. Dr. Arndt.
Breslau	29.31	744.4	29.84	757.8	80.6	27.0	31	SW			2		1			0	0		Royal University Obs'y.
Carlsruhe	29.38	746.3	29.79	756.6	78.1	25.6	60	SW			2		9	NW		0.098	2.5		Albert Senx.
Cassel	28.98	736.2	29.70	754.3	78.0	25.6	45	S			7		5	S		0.079	2.0	Thun'retorm	Dr. H. Möhl.
Frankfort on the Main	29.43	747.6	29.78	756.3	79.5	26.4	44	SSW			2		8			0.106	2.7		Physical Society.
Friedrichshafen	28.47	723.0	29.84	757.9	72.3	22.4	62	SW			3		3	WSW		0.091	2.3		Wilhelm, Chief Tel.
Hamburg	29.52	749.8	29.59	751.6	75.9	24.4	40	WSW			7		0			0	0		Dr. R. Kleeman.
Kiel	29.59	751.5	29.60	751.9	69.8	21.0	56	W			5		3			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.34	745.1	29.73	755.2	81.7	27.6	35	SW			3		4	SW		0	0		Prof. Dr. Bruhns.
Magdeburg	29.49	749.1	29.67	753.5	83.3	28.5	33	SSW			5	0	7k		SW	0	0		Dr. Assmann.
Memel	29.58	751.4	29.63	752.6	63.3	17.4	61	SW			4	90	0						Reinbrecht & Issermann.
Munich	28.08	713.3	29.94	760.4	75.9	24.4	35	W			1		2	SW		0.079	2.0		Central Station.
Neufahrwasser	29.61	752.1	29.63	752.5	81.0	27.2	17	SW			4		9			0	0		A. Lothes.
Neustadt, Palatinate																0.071	1.8		Dicknether.
Stuttgart	28 89	733.7	29.73	755.2	76.1	24.5	47	W			2		4	W		0.091	2.3		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.36	720.4	29.82	757.3	77.9	25.5	38	Calm			0		5	S		0.398	10.1		Prof. Kemlein.
Wustrow	29.56	750.8	29.59	751.5	67.3	19.6	44	WSW			4	0	3s			0	0		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.61	753.2	30.03	762.8	78.6	25.9		SW			1.0		0					Clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.47	748.5	29.53	749.7	87.8	31.0	69	W	39.0	17.4			2		W	0	0	D. clouds	
Deesa	29.08	738.8	29.54	750.2	100.5	38.1	26	WSW	18.0	8.0			2		SW	0	0	D. clouds	
Bombay	29.67	753.6	29.71	754.6	87.5	30.8	69	WNW	16.0	7.2			7		WNW	0	0	D. clouds	
Poona, Yarrowda	27.86	707.6	29.70	754.3	81.8	27.7	51	WSW					6		WNW	0	0	D. clouds	
Belgaum	27.18	690.3	29.68	753.7	81.4	27.4	55	W	18.0	8.0			3	E	NW	0	0	D. clouds	
Lahore	28.65	727.8	29.34	745.2	113.3	45.2	23	W	2.1	0.9			0			0	0	Misty	
Roorkee	28.53	724.6	29.38	746.1	102.3	39.1	37	E	5.8	2.6			1			0	0	Very sultry	
Agra	28.86	733.1	29.39	746.4	109.6	43.1	22	NW	5.6	2.5			4		N	0	0		
Nagpur	28.46	723.0	29.46	748.4	96.2	35.7	46	NW	7.8	3.5			6		W	3.54	89.9	D. clouds	
Jubbulpore	28.10	713.8	29.39	746.4	102.7	39.3	25	N	7.0	3.1			10			0	0	D. clouds	
Lucknow	29.08	738.6	29.44	747.6	102.4	39.1	37	E	3.2	1.4			4	NW		0	0	D. clouds	
Allahabad	29.15	740.3	29.44	747.8	102.3	39.1	36	ENE	3.2	1.4			0			0	0	Blue sky	
Patna	29.32	744.6	29.49	749.1	93.3	34.1	57	E	5.5	2.5			4	E	E	0	0	D. clouds	
Hazaribagh	27.55	699.8	29.51	749.6	85.8	29.9	53	E	10.8	4.8			9		NE	0	0	Hazy	
Cuttack	29.36	745.8	29.44	747.8	82.2	27.9	84	SSW	0.3	0.1			10			0.46	11.7	Overcast	
Calcutta, Alipore	29.35	745.4	29.37	745.9	79.8	26.6	96	E	9.0	4.0			10		E	0.47	11.9	Drizzling	
Dhubri	29.44	747.9	29.56	750.9	84.3	29.1	83	Calm	5.4	2.4			8		E	0	0	D. clouds	
Chittagong	29.47	748.5	29.56	750.8	80.2	26.8	86	E	7.1	3.2			10			0.06	1.5	Overcast	
Sibsagar	29.21	741.8	29.53	750.1	90.9	32.7	65	NE	1.6	0.7			0			0	0	Blue sky	
Zanzibar, Africa			30.03	762.7	83.9	28.8	62	S	10	4.5			2		S	0	0	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.58	751.3	29.98	761.4	76.8	24.9	36	SW	3.8	1.7			1			0	0		Prof. Giovanni Clodig.
Milan	29.41	746.9	29.91	759.7	76.6	24.8	30	SW	4.9	2.2			2			0	0		Prof. Schiaparelli.
Padua	29.84	757.9	29.94	760.5	79.5	26.4	42	SSW	4.3	1.9			2			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.05	737.8	29.93	760.3	77.4	25.2	34	E	6.3	2.8			3	E		0.165	4.2		Prof. P. F. Denza.
Genoa	29.84	758.0	30.03	762.8	70.3	21.3	65	SW	3.1	1.4			6	SW		0	0		Prof. G. M. Garibaldi.
Mondovi	28.07	713.0	29.94	760.5	73.9	23.3	43	S			4		7			0	0		Prof. D. C. Bruno.
Pesaro	29.93	760.2	29.98	761.4	72.0	22.2	55	NE					0			0	0		Prof. Luigi Guidi.
Florence	29.72	754.9	29.97	761.2	78.1	25.6	28	W			2		1	S		0	0		Prof. Costantino Pitter.
Leghorn	29.93	760.3	30.02	762.4	76.6	24.8	45	SW	3.1	1.4			8			0	0		Prof. P. Monte.
Rome	29.84	758.0	30.01	762.3	80.4	26.9	49	SW	5.6	2.5			8			0	0		Prof. P. S. Ferrari.
Lecce	29.84	758.9	30.08	764.1	84.0	28.9	26	ENE	0.7	0.3			0			0	0		Prof. C. de Giorgi.
Cosenza	29.15	713.3	30.02	762.4	77.0	25.0	73	ESE	2.5	1.1			2	SE		0	0		Prof. D. Conti.
Cagliari	29.73	755.1	29.92	760.0	75.6	24.2	44	E			4		3			0	0		Prof. A. Pacinotti.
Palermo	29.76	755.8	30.00	762.0	70.7	21.5	75	ENE	5.6	2.5			2			0	0		Prof. G. Ciacciatore.
Syracuse	29.97	761.3	30.02	762.4	72.7	22.6	67	E	1.3	0.6			2	SW		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.49	749.1	30.00	762.0	76.6	24.8	57	SE	0.7	0.3			2	SE		0	0		Prof. F. Brioschi.
Stelvio	22.24	565.0			44.4	6.9	54	SW			2	8cs	0	NW		0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.27	565.6			48.6	9.2	71	E			2	0	7kns		SE	0	0	Cloudy	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y †	29.63	752.6	29.65	753.1	68.8	20.4	95	WNW	0.8	0.4		ck	10s;ks			0.990	25.2	Covered	K. Sasaki.
Kioto	29.59	751.6	29.76	755.9	68.1	20.1	89	N	3.9	1.7			10n			3.010	76.4	Raining	M. Tojima.
Nagasaki, I. M. Obs'y	29.41	747.0	29.61	752.1	70.8	21.6	96	S	7.3	3.3			10n			2.730	69.3	Raining	S. Takehnyashi.
Tokei Obs'y, Yeddo	29.78	756.4	29.85	758.2	70.1	21.2	84	S	8.7	3.9			10s;ks		S	0.714	18.1	Cloudy	The Staff.
Wakayama	29.65	753.1	29.70	754.4	70.3	21.3	94	WSW	3.7	1.6			10n			1.000	25.4	Raining	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.87	758.7	30.06	763.5	76.3	24.6	59	NNW	3.5	1.6		0	4		SE	0	0	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.69	754.1	29.95	760.6	74.5	23.6	95	ESE	0.9	0.4		0	1k		ESE	0	0	Clear	F. Quijano, U. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascallentes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.70	754.3	29.70	754.3	67.1	19.5		W			4					0	0		
Groningen	29.56	750.9	29.62	752.3	68.4	20.2		SW			5					0	0		
Helder	29.61	752.1	29.61	752.1	57.4	14.1		SSW			5					0.016	0.4		
Hellevoetsluis	29.69	754.0	29.69	754.0	65.3	18.5	78	WSW			5					0	0		
Utrecht	29.62	752.4	29.67	753.6	73.9	23.3	45	SW			4		2			0	0	Slightly cl'dy	H. van der Brink

STATIONS.	Barometer, Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.17	740.9	29.23	742.5	51.8	11.0	59	W	9.8	4.4	.....	.....	6	.....	.....	0.886	22.5	.....	.....
Christiania	28.95	735.2	29.08	738.7	64.4	18.0	66	S	11	5	.....	.....	6	.....	.....	0	0	.....	.....
Gjæsvær	29.37	745.9	29.39	746.5	28.2	— 2.1	.....	N	.....	.....	4	.....	10	.....	.....	.....	.....	.....	.....
Lodingen	29.24	742.7	29.29	743.9	38.7	3.7	56	E	.....	.....	4	.....	10	.....	.....	0	0	.....	.....
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.16	766.1	30.18	766.5	60.4	15.8	88	WNW	9.8	4.4	.....	.....	5	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	28.99	736.4	29.96	760.9	76.6	24.8	38	WSW	2.5	1.1	.....	.....	5	.....	.....	0.094	2.4	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.11	764.9	30.20	767.1	68.7	20.4	66	SW	4.9	2.2	.....	.....	8	.....	.....	0	0	.....	Capt. D. A. de Gunha.
Lisbon, Observatory	29.65	753.1	30.00	762.0	71.8	22.1	57	NNE	10.5	4.7	.....	.....	1	.....	.....	0.118	3.0	.....	The Staff.
Ponta Delgada, Azores	30.31	769.9	30.38	771.7	68.0	20.0	72	WNW	7.4	3.3	.....	.....	3	.....	.....	0	0	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.59	726.2	29.63	752.6	63.1	17.3	38	WNW	22	10	.....	9ck	0	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	29.10	739.1	29.12	739.6	46.2	7.9	68	NW	9	4	.....	.....	10	.....	.....	.....	.....	.....	Capt. Sselliwerstow.
Astrakhan	29.90	759.5	29.82	757.4	79.5	26.4	34	SW	22	10	.....	0	3ks	.....	.....	.....	.....	Light clouds	Capt. Wisganow.
Barnaul ‡	29.16	740.7	29.64	752.8	68.9	20.5	24	SW	2	1	.....	.....	9	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	29.24	742.8	29.48	748.8	60.3	15.7	66	SW	11	5	.....	.....	10kn	.....	.....	.....	.....	Light rain	Observatory.
Ekaterinburg	28.22	716.9	29.16	740.6	49.3	9.6	91	SSE	7	3	.....	.....	10	.....	.....	.....	.....	.....	Meteorological Obs'y.
Kasan	28.95	735.3	29.22	742.1	52.0	11.1	75	WNW	13	6	.....	.....	10n	.....	.....	.....	.....	.....	Observatory.
Kertch	29.90	759.4	29.92	759.9	74.1	23.4	64	SW	7	3	.....	.....	2	.....	.....	.....	.....	.....	Lagorio & Sastyrez.
Kieff	29.14	740.2	29.75	755.6	72.7	22.6	43	NW	20	9	.....	c;cs	7ks	.....	.....	.....	.....	.....	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.46	748.2	29.65	753.2	77.2	25.1	46	WNW	34	15	.....	.....	5	.....	.....	.....	.....	.....	Meteorological Obs'y.
Moscow	28.85	732.9	29.38	746.3	62.1	16.7	44	S	13	6	.....	0	6ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.56	700.1	29.85	758.1	46.1	7.3	69	Calm	0	0	.....	.....	7	.....	.....	0	0	.....	Meteorological Obs'y.
Nikolaiev	29.82	757.5	29.89	759.3	81.9	27.7	47	NNW	4	2	.....	0	2k	.....	.....	.....	.....	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.53	750.0	29.61	752.2	48.7	9.3	96	E	.....	.....	2	.....	10n	.....	.....	0.094	2.4	Raining	Lieut. Iwanow.
Pekin, China	29.42	747.3	29.56	750.9	81.7	27.6	42	SE	7	3	.....	0	4ks	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	29.36	745.7	29.37	746.1	56.3	13.5	61	NW	18	8	.....	c;cs	4ks	.....	.....	.....	.....	Light clouds	Central Physical Obs'y.
Tashkend, Laboratory	28.40	721.4	29.89	759.2	80.6	27	39	NE	9	4	.....	.....	0	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	29.53	724.7	29.88	759.0	77.7	25.4	31	S	2	1	.....	0	1k	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	29.37	745.9	29.75	756.0	77.9	25.5	41	WNW	11	5	.....	0	4k	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.29	743.9	29.69	754.2	64.4	18.0	64	WSW	4	2	.....	.....	10	.....	.....	.....	.....	Heavy cl'ds.	Berg, Assistant.
Yeniseisk	29.53	750.1	29.82	757.3	55.4	13.0	61	ESE	9	4	.....	.....	1	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	29.45	748.0	60.0	15.6	47	W	.....	.....	3	0	6k	.....	.....	0.03	0.8	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.41	747.0	53	11.7	100	NW	.....	.....	4	5	5	NW	.....	0.2	5.	D. clouds	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	29.17	740.9	.....	.....	.....	W	.....	.....	4	.....	10	.....	.....	Bla	nk	.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.88	759.0	29.98	761.6	68.4	20.2	74	E	3.1	1.4	.....	.....	10	.....	.....	0	0	Covered	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.80	756.9	29.85	758.3	78.6	25.9	51	S	2.0	0.9	.....	3	1	SW	.....	0	0	Cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.01	686.0	.....	.....	70.2	21.2	40	SW	4.7	2.1	.....	.....	1	.....	.....	0	0	Almost clear	Domingo Martin.
Madrid, Royal Obs'y	27.74	704.5	29.89	759.2	72.0	22.2	43	SW	6.5	2.9	.....	0	3	.....	.....	Inap.	Inap.	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.80	756.9	29.95	760.7	69.8	21.0	70	W	1.8	0.8	.....	5	5	E	.....	0.421	10.7	Raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.00	736.7	29.88	758.9	67.3	19.6	68	N	0.	0	.....	.....	6	.....	.....	0	0	Cloudy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.95	760.7	30.01	762.4	80.6	27.0	80	Calm	0	0	.....	6ck	2k;s	WNW	NNE	0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.75	755.7	29.80	757.0	85.6	30.3	68	SE	3.3	1.5	.....	2cs	0	.....	.....	0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.88	759.1	29.98	761.5	70.7	21.5	62	W	8.9	4.0	.....	0	7	.....	W	0	0	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.94	760.4	30.03	762.7	83.8	28.8	81	SW	0	0	.....	0	1k	.....	S	0	0	Clear	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.69	754.1	29.84	757.8	81.9	27.7	81	NNW	4.0	2.1	.....	0	7k	.....	NW	0.04	1.1	Cloudy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.34	745.1	29.37	746.1	43.9	6.6	43	NE	.....	.....	2	.....	5	.....	.....	0	0	.....	
Umea	29.29	744.0	29.34	745.3	44.2	6.8	57	E	.....	.....	2	.....	9	.....	.....	0.303	7.7	.....	
Hernosand	29.21	742.0	29.26	743.3	41.5	5.3	83	ENE	.....	.....	4	.....	10	.....	.....	0	0	.....	
Stockholm	29.10	739.0	29.27	743.5	55.8	13.2	100	W	.....	.....	4	.....	10	.....	.....	0.008	0.2	.....	
Wisby	29.34	745.1	29.39	746.6	55.8	13.8	82	SW	.....	.....	4	.....	10	.....	.....	0.024	0.6	.....	
Sub-Series.																			
Upsala	29.05	737.8	29.13	740.0	57.0	13.9	93	S	13.0	5.8	.....	.....	10	.....	SW	0.102	2.6	Raining	S. G. Fineman.
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.50	724.0	29.87	758.7	75.7	24.3	45	SSW	.....	.....	3	.....	1	.....	.....	0	0	Clear	The Observatory.
Zurich ‡	28.28	718.2	29.84	757.8	78.4	25.8	46	W	.....	.....	3	.....	3	.....	.....	0.008	0.2	Clear	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.03	762.8	75.6	24.8	31	S	4	2.0	.....	.....	2	.....	NE	0	0	.....	The Observatory.
Valona	.....	.....	30.10	764.6	75.7	24.3	.....	Calm	.....	.....	0	.....	0	.....	.....	0	0	Clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.89	759.2	76.3	24.6	62	W	.....	.....	2	0	1k	.....	SE	0	0	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.73	755.1	29.81	757.2	63.5	17.5	62	S	3	1.3		2c	5s			0	0	Fair	
Alpena, Michigan	29.18	741.2	29.83	757.7	50.5	10.3	93	NW	4	1.8			1cn		NW	0.05	1.3	Light rain	
Atlanta, Georgia	28.89	733.8	30.04	763.0	61.2	16.2	70	NW	5	2.2		0	0			0	0	Clear	
Atlantic City, New Jersey	29.87	758.7	29.88	758.9	60	15.6	77	N	6	2.7		0	0			0.02	0.5	Clear	
Augusta, Georgia	29.87	758.7	30.05	763.3	65.2	18.4	73	N	2	0.9		0	Hz			0	0	Clear	
Baltimore, Maryland	29.89	759.2	29.94	760.5	63	17.2	62	NW	8	3.6		5c;cs	0	N:NW		0.03	0.8	Fair	
Barnegat, New Jersey	29.84	757.9	29.86	758.4	63	17.2	67	NW	10	4.5		2c	0	Calm		0	0	Clear	
Bismarck, Dakota	27.88	708.1	29.62	752.3	64	17.8	94	NE	6	2.7		1c	0	Calm		0	0	Clear	
Boise City, Idaho	27.06	687.3	29.82	757.4	54.1	12.3	74	W	1	0.4			10s		Calm	0.02	0.5	Cloudy	
Boston, Massachusetts	29.62	752.3	29.77	756.1	60.0	15.6	58	Calm	0	0		0	Hz			0.32	8.1	Dense haze	
Brackettville, Texas	28.79	731.3	29.80	756.9	71	21.7	71	NE	2	0.9		0	0			0	0	Clear	
Brownsville, Texas	29.81	757.2	29.85	758.2	83	28.3	67	Calm	0	0		0	0			0	0	Clear	
Buffalo, New York	29.11	739.4	29.80	756.9	55.2	12.9	84	SW	5	2.2			10s		SW	0.03	0.8	Cloudy	
Burlington, Vermont	29.41	747.0	29.69	754.1	60.0	15.6	62	S	5	2.2		2k	5s	W	W	0	0	Fair	
Cairo, Illinois	29.57	751.1	29.96	761.0	69	20.6	65	SW	12	5.4		0	0			0	0	Clear	
Campo, California	27.42	696.5	29.99	761.7	40.3	4.6	82	S	2	0.9		2c	0	S		0	0	Fair	
Camp Thomas, Arizona	27.21	691.1			65	18.3	66	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	29.91	759.7	29.93	760.2	65	18.3	78	NW	12	5.4		0	0			0.43	10.9	Clear	
Cape May, New Jersey	29.84	757.9	29.87	758.7	63	17.2	72	NW	16	7.2		8cs	0			0	0	Cloudy	
Castroville, Texas	29.20	741.7	29.88	758.9	71	21.7	71	W	2	0.9		0	0			0	0	Clear	
Cedar Keys, Florida	30.00	762.0	30.02	762.5	71	21.7	53	N	9	4.0		1c	0			0.09	2.3	Clear	
Champaign, Illinois	28.96	735.6	29.73	755.1	58.8	14.9	76	SW	15	6.7			10s		SW	0	0	Cloudy	
Charleston, S. Carolina	29.98	761.5	30.04	763.0	69	20.6	75	NE	8	3.6		0	0			0	0	Clear	
Charlotte, N. Carolina	29.18	741.2	30.04	763.0	69.0	20.6	48	N	2	0.9		0	0			0	0	Clear	
Chattanooga, Tennessee	29.24	742.7	30.04	763.0	62	16.7	77	W	3	1.3		0	Sk		Calm	0	0	Clear	
Cheyenne, Wyoming	23.98	609.1	29.80	756.9	61.2	16.2	26	NW	20	8.9		10k	0	W		0	0	Cloudy	
Chicago, Illinois	29.10	739.1	29.78	756.4	56.5	13.6	78	SW	6	2.7			1cn		Calm	0.26	6.6	Light rain	
Chincoteague, Virginia	29.90	759.4	29.92	760.0	62	16.7	77	NW	11	4.9		1k	0	Calm		0.08	2.0	Clear	
Cincinnati, Ohio	29.28	743.7	29.92	760.0	60	15.6	77	SE	3	1.3		10ck	0	NW		0	0	Cloudy	
Cleveland, Ohio	29.14	740.1	29.86	758.4	59.5	15.3	51	S	11	4.9			10ks		W	0	0	Cloudy	
Coleman City, Texas	28.16	715.3	29.77	756.1	67	19.4	69	Calm	0	0		0	0			0	0	Clear	
Columbus, Ohio	29.07	738.4	29.89	759.2	56	13.3	75	S	6	2.7			10s		W	0	0	Cloudy	
Concho, Texas	28.05	712.5	29.93	760.2	68	20.0	74	Calm	0	0		0	0			0	0	Clear	
Corsicana, Texas	29.52	749.8	29.98	761.5	74	23.3	81	S	4	1.8		0	0			0	0	Clear	
Davenport, Iowa	29.06	738.1	29.70	754.4	61	16.1	82	NE	6	2.7			10s		NE	0.51	13.0	Cloudy	
Dayton, Washington T'y	28.22	716.8	29.97	761.2	45.9	7.7	85	S	3	1.3		5ck	0	S		0.07	1.8	Fair	
Deadwood, Dakota	25.27	641.8	29.82	757.4	55	12.8	68	SW	1	0.4		5cs	0	SW		0	0	Fair	
Decatur, Texas	28.75	730.2	29.87	758.7	75	23.9	72	SE	8	3.6		0	0			0	0	Clear	
Delaware Breakwater, Del.	29.89	759.2	29.91	759.7	61	16.1	82	NW	14	6.3		2cs	Hz	NW		0.08	2.0	Fair	
Denison, Texas	29.13	739.9	29.91	759.7	75	23.9	72	S	12	5.4		1cs	0	Calm		0	0	Clear	
Denver, Colorado	24.71	627.6	29.75	755.6	60.5	15.8	55	S	4	1.8		5k	2s	SW	Calm	0	0	Fair	
Des Moines, Iowa	28.78	731.0	29.66	753.4	70	21.1	80	S	8	3.6		0	0			0	0	Clear	
Detroit, Michigan	29.13	739.9	29.80	756.9	61.2	16.2	66	SW	5	2.2			10s		W	0	0	Cloudy	
Dodge City, Kansas	27.20	690.9	29.69	754.1	74.1	23.4	43	SW	16	7.2		0	0			0	0	Clear	
Dubuque, Iowa	28.98	736.1	29.66	753.4	60	15.6	82	SE	12	5.4			10s		Calm	0.86	21.8	Cloudy	
Duluth, Minnesota	29.18	741.2	29.86	758.4	46	7.8	84	NE	22	9.8			10s		NE	0.05	1.3	Cloudy	
Eagle Pass, Texas	29.18	741.2	29.99	761.7	71.4	21.9	85	SE	5	2.2		0	0			0	0	Clear	
Eagle Rock, Idaho	25.12	638.0	29.83	757.7	44	6.7	68	SW	1	0.4		2cs	0			0	0	Fair	
Eastport, Maine	29.64	752.8	29.71	754.6	47.5	8.6	80	S	6	2.7			10s		S	0.55	14.0	Cloudy	
El Paso, Texas	26.21	665.7	29.86	758.4	66	18.9	59	NW	6	2.7		0	1s			0.01	0.3	Clear	
Erie, Pennsylvania	29.13	739.9	29.82	757.4	59	15.0	65	SW	5	2.2			10s			0	0	Cloudy	
Escanaba, Michigan	29.18	741.2	29.82	757.4	52	11.1	79	N	21	9.4		5k	0	W		0	0	Fair	
Florence, Arizona	28.36	720.3	29.96	761.0	75	23.9	33	NE	1	0.4		1c	0	Calm		0	0	Clear	
Fort Apache, Arizona	25.05	636.3	29.83	757.7	52	11.1	54	E	4	1.8		0	0			Inap.	Inap.	Clear	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota	28.06	712.7	29.53	750.0	65	18.3	89	NE	3	1.3		1c	0	SW		0	0	Clear	
Fort Benton, Montana	27.08	687.8	29.82	757.4	61	16.1	40	NE	2	0.9		0	0			0	0	Clear	
Fort Buford, Dakota	27.76	705.1	29.68	753.9	62	16.7	83	Calm	0	0		2cs	0	W		0	0	Clear	
Fort Custer, Montana	26.66	677.2	29.75	755.6	61	16.1	66	N	6	2.7		0	2s		NW	0	0	Fair	
Fort Davis, Texas	25.21	640.3	30.17	766.3	67	19.4	46	W	4	1.8		0	0			0	0	Clear	
Fort Elliott, Texas	27.15	689.6	30.22	767.6	69	20.6	61	S	18	8.0		c	0			0	0	Clear	
Fort Gibson, Indian T'y	29.32	744.7	29.85	758.2	76	24.4	73	S	4	1.8		0	0			0	0	Clear	
Fort Grant, Arizona	25.26	641.6	30.06	763.5	62	16.7	61	SE	2	0.9		0	2ks			Inap.	Inap.	Clear	
Fort Griffin, Texas	28.65	727.7	29.87	758.7	70.2	21.2	66	Calm	0	0		0	0			0	0	Clear	
Fort Keogh, Montana	27.28	692.9	29.69	754.1	62	16.7	77	SW	2	0.9		2c	0	SW		0	0	Fair	
Fort Macon, North Carolina	29.95	760.7	29.96	761.0	62	16.7	88	NW	12	5.4		2cs	Hz	NW	Calm	0.10	2.5	Clear	
Fort McKavett, Texas	27.74	704.6	29.59	751.6	66.5	19.2	69	S	7	3.1		0	0			0	0	Clear	
Fort Missoula, Montana	26.59	675.4	29.97	761.2	57	13.9	58	Calm	0	0		0	0			0	0	Clear	
Fort St. Michaels																			
Fort Shaw, Montana	26.26	667.0	29.71	754.6	50	10.0	65	E	3	1.3		8cs	0	SW		0	0	Cloudy	
Fort Sill, Indian Territory	28.68	728.5	29.88	758.9	71	21.7	80	S	2	0.9		0	0			0	0	Clear	
Fort Stevenson, Dakota	27.98	710.7	29.76	755.9	65	18.3	84	NE	4	1.8		0	5s		NE	0	0	Fair	
Fort Verde, Arizona					59.2	15.1	48	S			2	5cs	0	SW		0	0	Fair	
Fredericksburg, Texas	28.26	717.8	29.77	756.1	72	22.2	67	Calm	0	0		0	0			0	0	Clear	
Galveston, Texas	29.96	761.0	30.00	762.0	80	26.7	70	S	5	2.2		0	0			0	0	Clear	
Grand Haven, Michigan	29.16	740.7	29.80	756.9	55	12.8	74	S	12	5.4			10s		SW	0	0	Cloudy	
Hatteras, North Carolina	29.93	760.2	29.95	760.7	64	17.8	78	N	14	6.3		0	2ks		N	1.05	26.7	Fair	
Helena, Montana	25.63	651.0	29.83	757.7	55	12.8	35	SW	1	0.4		8ck	0	Calm		0	0	Cloudy	
Henrietta, Texas	28.91	734.3	29.78	756.4	77	25.0	69	S	6	2.7		0	0			0	0	Clear	
Indianapolis, Indiana	29.09	738.9	29.86	758.4	59.5	15.3	73	S	2	0.9		9cs	1ks	Calm	W	0	0	Cloudy	
Indianola, Texas	29.95	760.7	29.98	761.5	78.8	26.0	86	S	3	1.3		2k	2ks	S	Calm	0	0	Fair	
Jacksboro, Texas	28.78	731.0	29.85	758.2	74	23.3	76	SW	3	1.3		0	0			0	0	Clear	
Jacksonville, Florida	29.98	761.5	30.00	762.0	73	22.8	55	W	4	1.8		0	0			0	0	Clear	
Keokuk, Iowa	29.13	739.9	29.75	755.6	68.5	20.3	74	E	9	4.0			1cn		NW	Inap.	Inap.	Light rain	
Key West, Florida	29.99	761.7	30.02	762.5	81.6	27.6	75	NW	7	3.1		5k	0	NW		0	0	Fair	
Kittyhawk, North Carolina	29.93	760.2	29.95	760.7	62	16.7	88	N	10	4.5		0	1ks			0.28	7.1	Clear	
Knoxville, Tennessee	29.03	737.3	30.03	762.7	55	12.8	94	NW	2	0.9			Fg		Calm	0	0	Dense fog	
La Crosse, Wisconsin	28.96	735.6	29.66	753.4	64	17.8	78	NW	8	3.6			5s			0.35	8.9	Fair	
La Mesilla, New Mexico	26.09	662.7	30.24	768.1	62	16.7	61	Calm	0	0		1c	0			Inap.	Inap.	Clear	
Laredo, Texas	29.50	749.3	29.82	757.4	75	23.9	81	SE	2	0.9		0	0			0	0	Clear	
Leavenworth, Kansas	28.82	732.0	29.69	754.1	73	22.8	76	S	5	2.2		1ck	0			0.05	1.3	Clear	
Lewiston, Idaho	29.12	739.6	29.95	760.7	48	8.9	85	SW	1	0.4			10ks		Calm	0	0	Cloudy	
Little Rock, Arkansas	29.63	752.6	29.94	760.5	70	21.1	80	S	4	1.8		2ck	2ks		S	0	0	Fair	
Los Angeles, California	29.62	752.3	29.99	761.7	58.0	14.4	88	E	3	1.3			10s		Calm	0	0	Cloudy	
Louisville, Kentucky	29.37	746 0	29.92	760.0	62.5	16.9	72	S	4	1.8		5c	0			0	0	Fair	
Lynchburg, Virginia	29.30	744.2	29.97	761.2	64	17.8	58	Calm	0	0		0	0			0.23	5.8	Clear	
Madison, Wisconsin	28.74	730.0	29.72	754.9	60	15.6	88	SE	8	3.6			10s		E	0.46	11.7	Cloudy	
Marquette, Michigan	29.24	742.7	29.95	760.7	42	5.6	83	N	7	3.1			10s		Calm	0.01	0.3	Cloudy	
Mason, Texas	28.36	720.3	30.07	763.8	68.2	20.1	79	SW	1	0.4		0	0			0	0	Clear	
Memphis, Tennessee	29.67	753.6	30.00	762.0	70	21.1	61	SE	2	0.9		0	0			0	0	Clear	
Milwaukee, Wisconsin	29.05	737.9	29.78	756.4	51	10.6	93	E	9	4.0			10s			0.32	8.1	Threatening	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.97	761.2	30.04	763.0	66	18.9	72	N	3	1.3		0	Hz			0	0	Clear	
Montgomery, Alabama	29.82	757.4	30.04	763.0	65.4	18.6	83	N	2	0.9		0	0			0	0	Clear	
Moorhead, Minnesota	28.72	729.5	29.68	753.9	60	15.6	88	SE	7	3.1			10s		SE	0	0	Cloudy	
Morgantown, W. Virginia	28.95	735.3	29.92	760.0	58	14.4	82	SW	4	1.8			10s		SW	0.05	1.3	Cloudy	
Mt. Washington, N. H.	23.52	597.4	29.55	750.6	36	2.2	80	NW	48	21.5		8k	Sk	NW		0	0	Fair	
Nashville, Tennessee	29.46	748.3	29.98	761.5	61.8	16.6	80	Calm	0	0		0	Sk			0	0	Dense smoke	
New Haven, Connecticut	29.70	754.4	29.82	757.4	60	15.6	71	Calm	0	0		0	2s			0	0	Fair	
New London, Connecticut	29.71	754.6	29.76	755.9	55	12.8	56	W	6	2.7		0	0			0	0	Clear	
New Orleans, Louisiana	29.96	761.0	30.01	762.2	74.5	23.6	74	N	3	1.3		0	0			0	0	Clear	
Newport, Rhode Island	29.75	755.6	29.80	756.9	57.5	14.2	79	SW	2	0.9		1cs	0	Calm		0.02	0.5	Clear	
New River, N. Carolina																			
New Shoreham, Rhode I'd	29.77	756.1	29.80	756.9	57.5	14.2	81	W	2	0.9		0	0			0	0	Clear	
New York, New York	29.67	753.6	29.84	757.9	61	16.1	71	W	2	0.9		1cs	0			0	0	Clear	
Norfolk, Virginia	29.92	760.0	29.95	760.7	66	18.9	74	NW	7	3.1		2cs	0			0.59	15.0	Clear	
North Platte, Nebraska	26.79	680.5	29.61	752.1	67	19.4	70	NW	4	1.8		5c	0	W		0	0	Fair	
Olympia, Washington T'y	29.95	760.7	29.99	761.7	50.0	10.0	90	S	1	0.4		10ck	0	W		0	0	Cloudy	
Omaha, Nebraska	28.47	723.1	29.61	752.1	76.2	24.6	74	S	6	2.7		1c	0			0	0	Clear	
Oswego, New York	29.47	748.5	29.79	756.7	53.0	11.7	80	W	13	5.8			10s		W	0	0	Cloudy	
Pensacola, Florida	30.01	762.2	30.04	763.0	69	20.6	65	N	4	1.8		0	0			0	0	Clear	
Philadelphia, Pa	29.84	757.9	29.90	759.4	63	17.2	62	NW	9	4.0		5c	0			Inap.	Inap.	Fair	
Phœnix, Arizona	28.74	730.0	30.48	774.2	70	21.1	53	E	4	1.8		0	0			0	0	Clear	
Pike's Peak, Colorado	17.97	456.4	30.18	766.6	34	1.1	61	W	22	9.8		2k	5ks	W		0.23	5.8	Cloudy	
Pioche, Nevada	23.92	607.6	29.78	756.4	55	12.8	17	S	7	3.1		10k	0	W		0	0	Cloudy	
Pittsburg, Pennsylvania	29.11	739.4	29.90	759.4	55.5	13.1	81	S	3	1.3		10cs	Fg	Calm	Calm	0.01	0.3	Cloudy	
Port Eads, Louisiana	30.02	762.5	30.02	762.5	73.0	22.8	85	W	5	2.2		0	0			0	0	Clear	
Fort Huron, Michigan	29.42	747.3	29.80	756.9	58.4	14.7	70	SW	4	1.8			10s		W	0	0	Cloudy	
Portland, Maine	29.66	753.4	29.71	754.6	55	12.8	81	SW	5	2.2		0	3s		Calm	0.10	2.5	Clear	
Portland, Oregon	29.95	760.7	30.02	762.5	53.2	11.8	88	NE	2	0.9			10s		W	Inap.	Inap.	Cloudy	
Portsmouth, N. Carolina					65	18.3	73	N	16	7.2		2c	0	Calm		0.26	6.6	Clear	
Prescott, Arizona	24.75	628.6	29.82	757.4	53	11.7	31	SW	6	2.7		0	0			0	0	Clear	
Punta Rassa, Florida	29.97	761.2	29.98	761.5	78.5	25.8	70	NE	5	2.2		1k	0	Calm		0	0	Clear	
Red Bluff, California	29.59	751.6	29.92	760.0	59.0	15.0	65	SE	5	2.2		0	2s		S	0	0	Clear	
Rio Grande City, Texas	29.79	756.7	30.00	762.0	72	22.2	85	SE	3	1.3		0	0			0	0	Clear	
Rochester, New York	29.21	741.9	29.83	757.7	56	13.3	87	W	2	0.9			1cn		W	0.03	0.8	Light rain	
Roseburg, Oregon	29.48	748.8	30.04	763.0	52	11.1	86	Calm	0	0			10s			0.04	1.0	Cloudy	
Sacramento, California	29.90	759.4	29.97	761.2	55.4	13.0	87	S	12	5.4			10s			0	0	Cloudy	
St. Louis, Missouri	29.25	742.9	29.83	757.7	64.2	17.9	73	S	13	5.8		2cs	8ks		W	0	0	Threatening	
St. Paul, Minnesota	28.85	732.8	29.69	754.1	59	15.0	82	E	6	2.7		5cs	0	W		0.48	12.2	Fair	
Salt Lake City, Utah	25.48	647.2	29.68	753.9	64	17.8	30	Calm	0	0		10k	0	W		0	0	Cloudy	
San Antonio, Texas	29.32	744.7	30.01	762.2	70.6	21.4	80	Calm	0	0		0	0			0	0	Clear	
San Diego, California	29.88	758.9	29.95	760.7	61.5	16.4	66	N	2	0.9			10s			0	0	Cloudy	
Sandusky, Ohio	29.18	741.2	29.84	757.9	60	15.6	60	S	13	5.8			10s			0	0	Cloudy	
Sandy Hook, New Jersey	29.81	757.2	29.84	757.9	62.3	16.8	67	NW	11	4.9		5c	0			0	0	Fair	
San Francisco, California	29.94	760.5	30.01	762.2	53	11.7	86	W	15	6.7			10s		W	0	0	Cloudy	
Santa Fé, New Mexico	23.31	592.1	29.82	757.4	55	12.8	45	Calm	0	0		5k	0	Calm		0.02	0.5	Fair	
Savannah, Georgia	29.95	760.7	30.04	763.0	69.5	20.8	63	N	5	2.2		0	0			0	0	Clear	
Shreveport, Louisiana	29.76	755.9	30.00	762.0	74	23.3	76	SE	2	0.9		0	0			0	0	Clear	
Silver City, New Mexico	24.31	617.5	29.77	756.1	54	12.2	74	NW	1	0.4		0	0			0.14	3.6	Clear	
Sitka Alaska																			
Smithville, North Carolina	29.96	761.0	29.99	761.7	64	17.8	78	NW	5	2.2		0	0			0	0	Clear	
Spokane Falls, Wash. Ter.	27.92	709.2	29.88	758.9	47	8.3	85	S	9	4.0		5k	0	S		0.12	3.0	Fair	
Springfield, Illinois	29.11	739.4	29.77	756.1	64	17.8	68	S	14	6.3			10s		W	0	0	Threatening	
Springfield, Massachusetts	29.67	753.6	29.79	756.7	60	15.6	71	N	2	0.9		0	0			Inap.	Inap.	Clear	
Stockton, Texas	26.93	684.0	29.92	760.0	66.2	19.0	64	SE	8	3.6		0	0			0	0	Clear	
St. Vincent, Minnesota	28.97	735.8	29.81	757.2	57	13.9	94	Calm	0	0			1on		Calm	0.10	2.5	Light rain	
Thatcher's Island, Mass.	29.71	754.6	29.77	756.1	54.8	12.7	69	SW	12	5.4		0	Hz			0.12	3.0	Clear	
Toledo, Ohio	29.16	740.7	29.84	757.9	59.8	15.4	65	W	7	3.1			10s		W	0	0	Threatening	
Tucson, Arizona	27.48	698.0	29.77	756.1	71	21.7	45	E	1	0.4		5k	0	E		0	0	Fair	
Umatilla, Oregon	29.62	752.3	30.02	762.5	47.0	8.3	92	E	4	1.8		0	0			0.16	4.1	Clear	
Uvalde, Texas	29.02	737.1	29.82	757.4	67	19.4	79	Calm	0	0		0	0			0	0	Clear	
Vicksburg, Mississippi	29.76	755.9	30.02	762.5	67	19.4	69	SE	7	3.1		0	0			0	0	Clear	
Visalia, California	29.56	750.8	29.91	759.7	58	14.4	70	NW	6	2.7		0	0			0	0	Clear	
Washington, D. C.	29.82	757.4	29.93	760.2	60	15.6	77	W	4	1.8		8cs	0	N		0.04	1.0	Fair	
Wickenburg, Arizona					60	15.6	39	Calm			0	0	0			0	0	Clear	
Wilmington, N. Carolina	29.94	760.5	30.00	762.0	65	18.3	78	N	2	0.9		Hz	0	Calm		0	0	Clear	
Winnemucca, Nevada	25.56	649.2	29.77	756.1	49	9.4	93	SW	8	3.6			1on		SW	0.09	2.3	Light rain	
Wood's Holl, Mass.	29.76	755.9	29.80	756.9	59	15.0	82	SW	5	2.2		0	Hz			0	0	Clear	
Yankton, Dakota	28.31	719.1	29.56	750.8	74	23.3	76	W	2	0.9		5c	0	W		0	0	Fair	
Yuma, Arizona	29.68	753.9	29.82	757.4	67.6	19.8	42	N	2	0.9		0	Hz			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.10	561.3			55.0	12.8	83	Calm	0	0			1on			0.23	5.8	Cloudy	Thomas Herran
Buff Bay Town, Jamaica	29.78	756.4	30.09	764.3	76	24.4	72	E				0	0						
Havana, Cuba, W. I.	29.99	761.7	30.04	763.0	83	28.3	87	Calm	0	0		8ck	4ks	Calm	NE	0	0	Cloudy	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	29.99	761.7	30.00	762.0	82.2	27.9	71	Calm	0	0		2cs	0			0	0	Fair	Robert Johnstone.
Navassa, W. I.	29.91	759.7	29.99	761.7	82	27.8	83	E	5	2.2		2cs;ck	8n	NE	NE	0.01	0.3	Fair	F. M. Everett.
Paramaribo, S. A.	30.03	762.7	30.03	762.7	81	27.2	83	E			2	4c	5k	E		0.220	5.6	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.39	746.5	29.94	760.5	80	26.7	76	Calm	0	0			10ks		N	1.20	30.5	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					77.0	25		NE			1		10ks		NE	0	0		Earl Flint.
Santiago de Cuba, W. I.	29.97	761.2	29.99	761.7	81	27.2	78	Calm	0	0		2cs	0			0	0	Fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.97	761.2	30.02	762.5	31.0	1.1	95	N	11	4.9		2c	0	NE		0	0	Fair	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																			Comm A. J.Errington.
H. M. S. Alert, Thursday Island, Oceanica	29.88	758.9	77.8	25.4	86	SE			3-4		8							Showery	Capt. J. P. Maclear.
H. M. S. Alexandra, N. 37° 17′, E. 19° 44′	30.08	764.0	74	23.3	72	NNE			2		3					Sm'h		D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab,																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N 23° 55′, E. 64° 00′	29.64	752.8	85	29.4	79	SW			3		4	SW				3	SW	D. clouds	Comm. G. W. Haud.
H. M. S. Bittern, Constantinople, Turkey			75	23.9		NE			1		2	NE						D. clouds	Capt. E. B. Pusey.
H. M. S. Blanche, N 13° 05′, W. 61° 21′	30.01	762.2	84	28.9	79	ESE			3		4					1	E	D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 24° 42′, E. 5° 00′	30.09	764.3	65	18.3	73	SSW			3		3	SW				4	S	D. clouds	Com. F. W. Richards.
H. M. S. Champion, S. 24° 15′, W. 38° 36′	30.31	769.9	75	23.9	76	NE			5		2	Calm				4	NE	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Cheefoo Harbor, China	29.61	752.1	66	18.9	84	Calm			0		1	SW						Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruiser, N. 36° 59′, E. 11° 18′	29.97	761.2	71	21.7		ESE			4		5	ESE				4	ENE	Misty	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, N. 17° 46′, W. 25° 37	30.13	765.3	74	23.3	90	NNE			5		6					4	NNE	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Eliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.09	764.3	65	18.3		Calm			0		1	NNE						Blue sky	Capt C. Domville.
H. M. S. Dock-Yard, Bermuda, W.I.	29.79	756 7	78	25.6	90	SSW			3-4		5	SSW						Showery	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 43′, W. 53° 08′	29.56	750.8	59.5	15.3	94	SSW			2-3		10							Misty	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 6° 21′, E. 81° 08′	29.81	757.2	78	25.6		S			1-2		4					1	SE	D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 0° 20′, E. 172° 44′	29.70	754.4	85	29.4		SE			2		1	NE				Sm'h		Blue sky	Comm. C. Johnstone.
H. M. S. Emerald, N. 3° 05′, E. 172° 44′	29.76	755.9	84	28.9	83	E			2		5	NE						D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, S. 17° 58′, E. 52° 24′	30.02	762.5	79	26.1	78	ESE			1		8	ESE				2	SE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, La Soie, Newfoundland	29.89	759.2	43	6.1		E			1-3		5	E						D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn N. 13° 22′, E. 43° 07′	29.65	753.1	85.5	29.7	83	NNW			1		10							Overcast	Capt. P. Aldrich.
H. M. S. Flamingo, N. 19° 51′, W. 86° 38′	30.03	762.7	86	30.0	83	E			2		2	E				2	E	D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish, Yokohoma, Japan	29.85	758.2	72	22.2	80	S			1		9							Showery	Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	29.98	761.5	49.5	9.7	89	SSW			2		5							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	30.15	765.8	40	4.4	73	SW			2		4							D. clouds	Capt. L. F. Jones.
H. M. S. Griffin, Nassau, Bahamas	30.03	762.7	83	28.3	72	W			1		0							Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 41° 35′, W. 22° 45′	30.20	767.1	64	17.8		WNW			3-4		10					3	WNW	Drizzling	Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C.P. Fitzgerald.
H. M. S. Iris,																			Capt. E. H. Seymour.
H. M. S. IronDuke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.00	762.0	62	16.7		Calm			0		6	Calm						D. clouds	Comm. R. H. Thornton
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.82	757.4	72	22.2		S			1		9							D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 03′, E. 109° 55′	29.69	754.1	79.5	26.4	84	SSW			1		10							Raining	Capt. A. Carpenter.
H. M. S. Midge, N. 27° 41′, E. 121° 15′	29.63	752.6				Calm			0		2?	SW				1	SW	Raining?	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. N. S. Modeste, S. 16° 40′, E. 80° 00′	29.93	760.2	75	23.9	85	SSE			3-4		4	SE				5	SE	Squally	Capt. J. G. Mead.
H. M. S Monarch, Tunis, Tunis, Africa	29.89	759.2	74	23.3	81	ESE			4		1	ESE						Blue sky	Capt. G. O. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, N. 1° 37′, E. 107° 47′	.....	.....	82.5	28.1	.....	SE	.....	.....	1	.....	4	SE	.....	.....	.....	1	SW	D. clouds.....	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.68	753.9	45	7.2	84	NNW	.....	.....	2	.....	10	NNW	.....	.....	.....	.....	.....	Overcast.....	Capt. E. B Drummond.
H. M. S. Orontes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. R. P. Kinahan.
H. M. S. Pegasus	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.99	761.7	80.5	26.9	97	NE	.....	.....	3	.....	10	.....	.....	.....	.....	2	SE	Overcast.....	Capt. F. R. Dicken.
H. M. S. Penguin	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. A. C. Paget.
H. M. S. Phœnix, LaGuayra, Venezuela, S.A.	29.94	760.5	79	26.1	86	W	.....	.....	1	.....	4	.....	.....	.....	.....	1	NNE	D. clouds.....	Capt. H. H. Grenfel.
H. M. S. Rambler	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Hon. A. C. Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.71	754.6	83	28.3	.....	SSE	.....	.....	4	.....	5	.....	.....	.....	.....	.....	.....	D. clouds.....	Comm. W. H. Edwards.
H. M. S. Rifleman	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Comm. P. H. W. Mayow.
H. M. S. Rocket, Esquimalt, Vancouvers Id.	29.97	761.2	49	9.4	.....	SSW	.....	.....	1	.....	4	.....	.....	.....	.....	.....	.....	D. clouds.....	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 5° 13′, E. 41° 03′	30.02	762.5	79.3	26.3	82	SSE	.....	.....	4–5	.....	4	.....	.....	.....	.....	4	SSE	Squally	Capt. C. E. Foot.
H. M. S. Salamis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. A. Fitz George.
H. M. S. Sea Gull, S. 60 38′, E. 65° 18′	29.47	748.5	81	27.2	70	SE	.....	.....	2–3	.....	1	.....	.....	.....	.....	6	SE	Blue sky.....	Comm. W. Byles.
H. M. S. Seraphis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. G. O. Twiss.
H. M. S. Shannon, N. 29° 45′, W. 17° 55′	30.26	768.6	79.5	26.4	77	NNE	.....	.....	2	.....	7	NNE	.....	.....	.....	3	N	Misty.....	Capt. J. D'Arcy.
H. M. S. Superb	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. T. L. H. Ward.
H. M. S. Tenedos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. C. G. Fane.
H. M. S. Thetis, S. 12° 09′, W. 144° 17′	29.97	761.2	76	24.4	100	ENE	.....	.....	5	.....	10	.....	.....	.....	.....	4	NE	D. clouds.....	Capt. P. W. Stephen.
H. M. S. Thunderer	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A.	30.08	764.0	56	13.3	87	Calm	.....	.....	0	.....	10	Calm	.....	.....	.....	.....	.....	Overcast.....	Capt. A. H. Markham.
H. M. S. Turquoise, S. 48° 55′, W. 74° 20′	30.32	770.1	23	— 5.0	100	Calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	Blue sky.....	Capt. M. B. Medlycott.
H. M. S. Tweed	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
H. M. S. Tyne, N. 47° 20′, W. 6° 23′	29.74	755.4	64	17.8	89	SW	.....	.....	4	.....	10	Calm	.....	.....	.....	2	wsw	Overcast.....	Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.	.....	.....	80	26.7	.....	NNE	.....	.....	1	.....	3	.....	.....	.....	.....	.....	.....	D. clouds.....	Com. W. S. Brown.
H. M. S. Wild Swan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	30.04	763.0	54	12.2	61	SW	.....	.....	2	.....	0	.....	.....	.....	.....	.....	.....	Blue sky	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, Shat el Arab River, Turkey	29.66	753.4	88.5	31.4	69	NNW	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	Misty.....	Capt. T. P. Nesham.
H. M. S. Zephyr	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
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PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, Loando, Africa	30.06	763.6	74.1	23.4	77	NW	.....	.....	3	.....	1	.....	.....	.....	.....	1	.....	Blue sky.....	Carlos Candid dos Reis, Comd't.
Quanza, Rio Geba, Senegambia	29.90	759.5	86.0	30.0	71	NW	.....	.....	2	.....	2	.....	NW	.....	.....	2	NW	D. clouds.	Carlos M. de Silva Costa, Comd't
Rio Lima	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. C da Silva Costa, Comd't.
Sado, S. 20 58,′ E. 9° 27′	29.90	759.4	80.4	26.9	79.	SSE	.....	.....	3	.....	3	.....	SSE	.....	.....	3	SSE	D. clouds.....	G. A de Brito Capello, Comd't.
Tamega, Macao, China	29.71	754.5	76.6	24.8	82	NNW	.....	.....	3	.....	10	.....	NW	11 hours	.....	.....	.....	Thund'rst'm	P. I. de Rio Carvallio, Comd't.
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SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga N. 51° 25′, E. 2° 26′	29.63	752.5	60.8	16.0	78	WSW	.....	.....	5	.....	9	.....	.....	.....	.....	.....	.....	Overcast.....	Capt. M. von Krusenstierna.
H. M. Frigate Vanadis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Com. Th. Ulner.
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UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

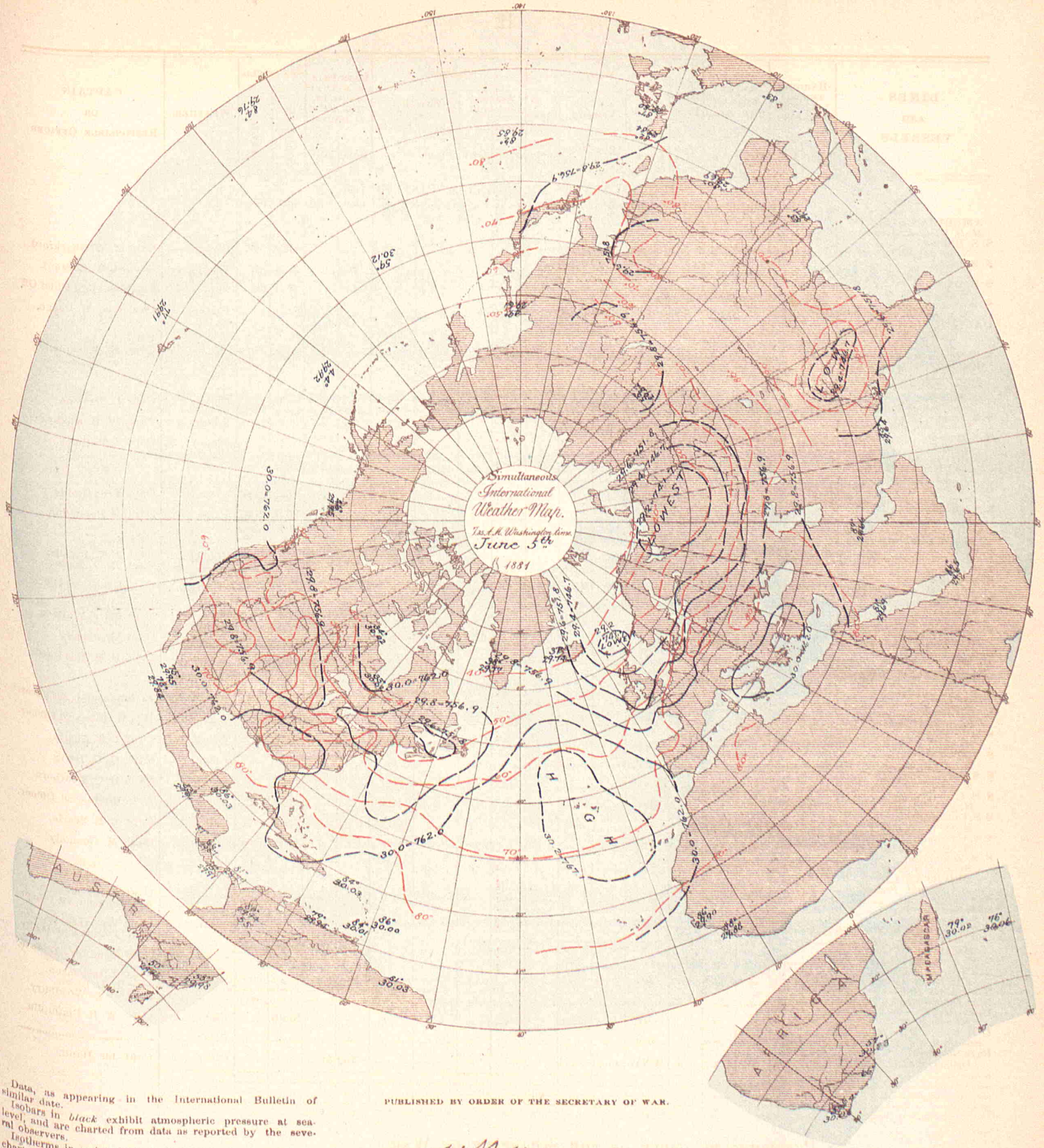
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	o—10	o—10	o—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.09	764.3	70	21.1	61	NE	3	1.3		0				0	0			Clear	
N. Yard, Portsmouth, N. H	29.75	755.6	57	13.9	81	Calm	0	0		0				0	0			Clear	
Naval Hospital, Yokahama, Japan	29.74	755.4	70	21.1	87	SW			1	10		W		0	0			Threatening	
Adams, Panama, Panama	29.70	754.4	79	26.1	91	ENE			2	10						Sm'h		Cloudy	
Alaska, Callao, Peru	29.97	761.2	65	18.3	89	Calm			0	10				0	0	Sm'h		Misty	
Alert, N. 22° 03′, E. 140° 59′ *	29.85	758.2	82	27.8	74	ENE			3	8		ENE				Long	ENE	Cloudy	
Alliance, Norfolk, Va	29.85	758.2	63	17.2	94	WNW			1	0				Heavy				Clear	
Ashuelot, Kobe, Japan	29.74	755.4	69	20.6	95	NE			3	10		SW						Rainy	
Colorado, New York, N. Y	29.84	757.9	64	17.8	68	WSW	4	1.8		2		Calm		0	0			Fair	
Constitution, Norfolk, Va	29.89	759.2	61	16.1	94	SSW			1	9								Clearing	
Franklin, Norfolk, Va	29.86	758.4	63	17.2	94	W	6	2.7		0				0.54	13.7			Clear	
Galena, Cadiz, Spain	29.96	761.0	70	21.1	75	NW			3	8		E				Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	30.04	763.0	71	21.7	75	SW	1.2	0.5		8		SW		0	0			Fair	
Jamestown, Sitka, Alaska *	29.95	760.7	46	7.8	92	Calm			0	5				0	0			Fair	
Kearsarge, Norfolk, Va	29.96	761.0	63	17.2	89	WNW			1	2		NW						Hazy	
Lackawanna, Marquesa Island †	30.09	764.3	81	27.2	91	NE			2	5		NE						Fair	
Marion, Montevideo, Uruguay *†	30.04	763.0	57	13.9	94	WSW			2	10						Sm'h		Misty	
Michigan, Erie, Pennsylvania	29.76	755.9	59	15.0	59	S			2	10		W						Cloudy	
Minnesota, Newport, R. I	29.81	757.2	58	14.4	82	SSW			1	0						Sm'h		Clear	
Monocacy, Yokohama, Japan	29.88	758.9	72	22.2	80	S			1	10		S						Hazy	
New Hampshire, Norfolk, Va	29.94	760.5	62	16.7	88	NW	2	0.9		2		Calm		0.22	5.6			Clear	
Nipsic, N. 36° 28′, W. 7° 54′	29.97	761.2	73	22.8	67	Calm			0	0						Long	SE	Blue sky	
Onward, Callao, Peru †	29.97	761.2	65	18.3	89	Calm			0	10						Long	W	Cloudy	
Palos, Nagasaki, Japan	29.63	752.6	72	22.2	95	ENE			1	10								Rainy	
Passaic, Washington, D. C	29.95	760.7	60	15.6	94	W			3	8								Cloudy	
Pensacola, San Francisco, Cal	30.04	763.0	55	12.8	87	SW			3	10				0	0	Sm'h		Cloudy	
Portsmouth, Hampton Roads, Va	29.94	760.5	63	17.2	94	NW			2	2								Clear	
Powhatan, Norfolk, Va	29.95	760.7	62	16.7	88	WNW			1	2								Clear	
Quinnebaug, N. 28° 46′, W. 64° 31′	29.97	761.2	79	26.1	91	SW			5	8		SW				Mod.		Cloudy	
Ranger, N. 20° 45′, W. 105° 32′ *	29.84	757.9	78	25.6	86	Calm			0	5		Calm		0	0	Sm'h		Fair	
Richmond, Nagasaki, Japan	29.59	751.6	73	22.8	100	SSW			1	10				0.86	21.8			Heavy rain	
Saratoga, Hampton Roads, Va	29.93	760.2	62	16.7	88	NW			3	0				0	0			Hazy	
Shenandoah, Montevideo, Uruguay *	30.05	763.3	56	13.3	94	WSW			3	10						Sm'h		Cloudy	
St. Louis, League Island, Pa	29.46	748.3	64	17.8	68	W	3	1.3		5				0	0			Fair	
Swatara, Shanghai, China *†	29.64	752.8	72	22.2	85	N			1	10		Calm						Overcast	
Tennessee, New York, N. Y	29.84	757.9	76	24.4	89	NW	1	0.4		5		NW		0	0	Sm'h		Hazy	
Ticonderoga, S. 56° 45′, W. 76° 32′	30.18	766.6	37	2.8	100	S			3	8		S		0	0	Mod.	S	Cloudy	
Trenton, Barcelona, Spain *	29.96	761.0	69	20.6	75	ESE			2	8				5 h'r s h'vy		Sm'h		Fair	
Vandalia, Navy Yard, N. Y *†	30.10	764.5	60	15.6	82	NW			1	2		Calm						Fair	
Wabash, Boston, Massachusetts	29.79	756.7	60	15.6	71	WSW	8	3.6						0.29	7.4			Hazy	
Wachusetts, N. Yard, Mare I'd, Cal	30.01	762.2	57	13.9	75	SW			1-2	10		S						Cloudy	
Yantic, N. 24° 00′, W. 84° 09′ *	29.93	760.2	80	26.7	91	W			1	2		W				Sm'h		Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire,																			Capt. John Arbuckle.
Barque Bellelsle, N. 28° 51′, W. 79° 11′	29.99	761.7	78.5	25.8	90	N			2		0							Blue sky	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. N. Youlden.
S. S. Clpero																			Capt. W. N. Lalley.
City of Agra, N. 31° 49′, W. 20° 12′	30.24	768.1	69.0	20.6	68	NNE			5		8							D. clouds	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 48° 38′, W. 4° 29′	29.57	751.1	57.5	14.2	94	SSW			6		10							Raining	Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 24° 36′, W. 30° 40′	30.39	771.9	71.5	21.9	85	ESE			5		5							Showery	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randell.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R.N R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria, ‡ N. 16° 53′, W. 34° 42′	30.14	765.5	78.6	25.9	73	NE			4		4							D. clouds	Capt. M. Parry.
Sierra Estrella, N. 42° 14′, W. 14° 56′	30.04	763.0	63.3	17.4	88	W			5		9							Showery	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 24° 14′, E. 36° 12′	29.69	754.1	80.5	26.9	91	NW			3		7							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 49° 12′, W. 64° 34′	29.60	751.8				NNW			2		5		NW			Sm'h		Fair	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 43° 11′, W. 46° 36′ †	30.00	762.0	61	16.1	71	SSW			4		Fog					Sm'h		Foggy	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 50° 12′, W. 22° 33′ †	29.96	761.0	53	11.7	?	NNW			6		8		NW	8h'rs	mod.	Mod.	NW	Fair	Capt. Benj. Gleadell.
S. S. Germanic																			Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, ‡ N. 49° 48′, W. 12° 22′	29.92	760.0	59.0	15.0		NNW			5		2		N	6 hours		Mod.	NW	Fair	
S. S. Köln, N. 47° 45′, W. 29° 14′	30.34	770.6	61.5	16.4	61	ENE			2		2		E	0	0	Sm'h	wsw	Clear	Capt. Th. Jüngst.
S. S. Leipzig, N. 43° 26′, W. 45° 18′	30.15	765.8	52.5	11.4		SSW			3					4 hours		Mod.	SSW	Foggy	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg, N. 39° 17′, W. 64° 43′	29.74	755.4	58.1	14.5		NNE			5		8		NE	0	0	Mod.	NNE	Cloudy	Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm
Barque Fredrik																			Capt. Sjöström.
Ship Poru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. N. 49° 24′, W. 23° 01′...*†	30.18	766.6	52	11.1	93	N			6		5?		NW			Mod.	N	Clear?.....	Capt. J. W. Shackford.
S. S. Indiana, N. 41° 30′, W. 47° 52′.....†	30.11	764.8	63	17.2	88	SSW			4		5		W	Light		Mod.	W	Foggy.....	Capt. R. W. Sargent.
S. S. Ohio, N. 48° 08′, W. 30° 03′....*†	30.35	770.9	57	13.9	94	SE			1		2		SE	Light		Mod.	Con.	Fair	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, N. 39° 19′, W. 69° 00′.....†	29.78	756.4	54	12.2	93	E			2		2		W			Sm'h		Fair.....	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern.....																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, San Francisco, Cal.....†	30.05	763.3	53	11.7	86	W			4		10		W	0	0	Sm'h		Cloudy.....	Capt. H. Davison.
S. S. Gaelic, Yokohama, Japan .....*†	30.02	762.5	70	21.1	95	NE			1		10		NE					Raining.....	Capt. W. H. Kidley.
S. S. Oceanic, Hong Kong, China.....	30.10	764.5	82	27.8	70	SSE			1		9		SE					Cloudy.....	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 39° 05′, W. 123° 55′....†	30.03	762.7	53	11.7	83	WNW			6		2		NNW			Mod.	NW	Clear.....	Capt. Fred. Bolles.
S. S. Oregon, N. 40° 15′, W. 124° 25′...†	30.11	764.8	52.0	11.1	96	NW			3		8		NW			Mod.	NW	Fair	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Francisco, Cal.... ....†	30.01	762.2	53	11.7	86	W			4		8		W	0	0			Cloudy.....	Capt. J. N. Ingalls.
S. S. Dakota.....																			Capt. H. G. Morse.
S. S. Idaho, Olympia, Wash. Ter'y ..†	30.00	762.0	51	10.6	93	NE			1		10		E					Cloudy.....	C. E. Lyons, 1st Officer.
S. S. Orizaba.....																			Geo. H. Harrison.
S. S. Senator, San Francisco, Cal.....†	30.06	763.5	54	12.2	87	NW			2		10		NW					Cloudy	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal.....†	29.99	761.7	52	11.1	86	W			4		5		W					Fair.....	Capt. G. Debney.
S. S. Victoria, N. 48° 30′, W. 124° 10′...†	30.07	763.8	52	11.1	73	NW			1		8					Sm'h		Cloudy.....	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 17° 25′ W. 160° 33′.....	29.91	759.7	77	25.0	77	ENE			4		5		ENE			Long	NE	Cloudy	A. Bannerman, 2d Officer.
S. S. City of New York, Sydney, N. S. W.....†	29.98	761.5	58	14.4	87	W			2		0							Clear.....	Wm. H. Hawes, 2d Officer.
S. S. City of Panama N. 7° 10′, W. 81° 09′.....†	29.91	759.7	75	23.9	100	Calm			0		103		NE	5 hours		Sm'h	SE	Rainy...	Capt. D. S. Austin.
S. S. City of Peking N. 47° 30′, W. 168° 02′.....†	29.92	760.0	44	6.7	52	WSW			4		2		S	0	0	Light	S	Clear.....	Capt. G. G. Berry.
S. S. City of Sidney, N. 36° 57′, W. 124° 41′...*†	30.11	764.8	58	14.4	70	WNW			6		8		NW	0	0	Mod.	NE	Cloudy.....	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 38° 18′, E. 167° 15′.....†	30.12	765.0	59	15.0	70	W			1		10		NW			Mod.	W	Cloudy.....	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 14° 15′, W. 92° 44′.....†	29.91	759.7	83	28.3	75	W			2		5		WSW	0.15	3.8	Sm'll	SW	Fair.....	Capt. R. R. Searle.
S. S. Granada, N. 35° 22′, W. 121° 25′.....†	30.02	762.5	56	13.3	87	NW			5		10		NW	0	0	H'vy	WNW	Cloudy.....	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. W.....	30.24	768.1	68	20.0	60	SW			3		10		SW					Dull.....	.....
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland.....																			Capt. Sam'l Jackson.
S. S. Nederland.....																			A. Feddersen, 2d Officer.
S. S. Rhynland, Jersey City, N. J.....†	29.98	761.5	70	21.1	81	Calm			0		0			0	0			Clear.....	Capt. Wm. Geo. Randle.
S. S. Vaderland.....																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			A. R. Mehaffey, 2d Mate.
Sch'r Abby K. Bentley.....																			
Sch'r Addie Fuller, Fall River, Mass.....	29.73	755.1	60	15.6	71	W					0			0	0			Clear.....	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.....																			Capt. L. L. Lewis.
Bark Carrie Heckle.....†																			Capt. B. F. Woodbury.
Brigantine George, N. 23° 15′, W. 64° 30′.....†	30.13	765.3	86	30.0		SSE			1		2			0	0	Sm'h		Fine.....	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Susquehanna River, Md†	29.91	759.7	64	17.8	73	NW	2	0.9		0	28			0	0			Clear.....	.....
Bark Sunbeam, Lisbon, Portugal.....†	30.07	763.8	74	23.3	63	WNW			6		0			Light				Clear.....	Capt. Jos. Rand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 6, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours	‡		29.93	760.1	73.9	23.3	90	W			1		4			0	0	Cloudy	Raynard.
Algiers	‡		29.85	758.3	72.0	22.2	79	W			5		5			0.264	6.7	Cloudy	Nicolas.
La Calle	‡		29.85	758.2	67.3	19.6	90	NW			1		6			0.197	5.0	Cloudy	Fonfrède.
Tunis	‡		29.77	756.1															Jacques.
Sfax	‡		29.89	759.3															Gau.
Saida	‡		29.97	761.3	65.5	18.6	70	NW			7		6			0.063	1.6	Cloudy	Dumas.
Tebessa	‡		29.84	758.0	68.0	20.0	60	N			4		4			0	0	Cloudy	Watrin.
Geriville	‡				64.4	18.0	44	NW			1		5			0.181	4.6	Cloudy	Lonchamp.
Laghouat	‡		29.89	759.2	75.6	24.2	33	N			3		3			0.047	1.2	Cloudy	Herbin.
Biskra	‡		29.85	758.2	83.8	28.8	69	NW			5		0			0	0	Clear	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.59	751.6	29.68	753.9	52.8	11.6	65	N	24	10.7			8			0	0	Squally	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.14	740.1	29.65	753.2	81.3	27.4	37	SW			3		5			0.063	1.6		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.86	733.1	29.58	751.3	82.4	28.0	26	S	16.8	7.5			1			0	0		Dr. Wierzbicki.
Eperies	28.84	732.5	29.68	753.9	68.0	20.0	78	S			2		10ks			0.299	7.6		Julius Mikolik.
Gratz	‡ 28.45	722.6	29.65	753.0	72.1	22.3	55	SSE			4		7			0.004	0.1		Andreas Rospini.
Hermannstadt	28.46	722.8	29.83	757.7	71.1	21.7	59	SW			4		8			0.055	1.4		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.19	715.9	29.46	748.3	68.0	20.0	68	SSE			2		6			0	0		The Staff.
Lemberg	28.77	730.7	29.69	754.2	78.8	26.0	53	SE			2		7			0.224	5.7		Dr. T. Stanecki.
Pola	29.60	751.8	29.71	754.6	71.6	22.0	69	SSE			5		10			1.213	30.8		I. R. Hydrographic Office.
Szathmar	29.32	744.8	29.76	755.8	83.8	28.8	50	SE			4		3			0.059	1.5		Belcht Peter, S. J.
Szegedin	29.45	748.0	29.71	754.7	78.8	26.0	59	SW			1		3			0	0		Karl Stancel.
Trieste	29.66	753.4	29.76	756.0	71.4	21.9	72	Calm			0		10			0.327	8.3	Raining	Secco.
Vienna	28.89	733.9	29.57	751.0	78.1	25.6	38	SSE			3		9			0	0		I. R. Central Met. Obv'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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

BRITISH SERIES.

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

Aberdeen	29.45	748.0	29.55	750.6	49.4	9.7	60	NW	15	6.7			7			0.105	2.7	D. clouds	W. Boswell.
Armagh, Observatory	29.34	745.2	29.57	751.1	47.8	8.8	89	NW	4	1.8			10					Showery	S. Call.
Bidston, Liverpool Obs'y			29.52	749.8	53.2	11.8	63	WNW	19	8.5			3					Blue sky	John Hartnup.
Bolton, Sharples	28.95	735.3	29.48	748.8	54.8	12.7	69	WNW	12	5.4			7					D. clouds	Thomas Mackereth.
Bradford, Yorkshire																0.63	16.0		J.McLandsborough,F.R.S
Bridgetown, Barbadoes	30.00	762.0	30.04	763.0	85	29.4	68	NE			2		4					D. clouds	Corpl.J.Surgener,A.H.C.
Cardington																			John McLaren.
Chatham, School M. E.	29.33	745.0	29.46	748.3	50.1	10.1	91	N			2		10			Blank		Gloomy	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.43	747.5	29.65	753.1	54.4	12.4	64	WNW			5		9					Overcast	The Staff.
Fort Napier, Natal	27.90	708.6	30.12	765.0	59.3	15.2	49	Calm			0		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.88	758.9	86	30.0	84	SW			1		2					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			29.57	751.1	53	11.7	67	WNW			2		8					Showery	J. O'Donoghue.
Gibraltar, Mediterranean	29.98	761.5	30.03	762.7	70.6	21.4	89	WSW			6		6					D. clouds	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.31	744.5	29.52	749.8	48.6	9.2	77	ESE			6		10					D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	29.28	743.7	29.45	748.0	54.7	12.6	65	N			1		10					Overcast	The Staff.
Guernsey	29.38	746.2	29.60	751.8	56.5	13.6	65	WNW			4		5			Blank		D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.43	747.5	29.46	748.3	58.0	14.4	46	NNW	12	5.4			9					Threatening	The Staff.
Leicester, Museum	29.26	743.2	29.51	749.5	62.0	16.7	93	NW			2		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.66	753.4	29.73	755.1	72	22.2	85	E			2		0					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	30.00	762.0	30.04	763.0	81.8	27.7	92	N			1		2					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	28.98	736.1	29.50	749.3	55.0	12.8	67	NW			3		5					D. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	29.26	743.2	29.49	749.0	56.2	13.4	65	W			2		8					Threatening	The Staff.
Plymouth	29.53	750.0	29.61	752.1	57.4	14.1	78	NW			4		6					D. clouds	John Merrifield.
Sandwick Manse, Orkneys			29.59	751.6	45.2	7.3	81	N	28	12.5			1					Showery	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.84	757.9	29.90	759.4	81.4	27.4	48	N			1		0					Blue sky	Serg't W. H. Lyne.
Sheffield	29.22	742.2	29.50	749.3	59.1	15.1	71	NW			2		5			0.25	6.3	D. clouds	W. F. Cooper.
Silloth Rectory	29.47	748.5	29.50	749.3	53.6	12.0	74	W			1		6			0.274	7.0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.51	749.5	55.3	12.9	71	W	17	7.6			7					D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	29.30	744.2	29.51	749.5	50.6	10.3	86	N			3		9					Showery	Rev.C.H.Griffiths,F.M.S
Truro, Royal Institution	29.64	752.8	29.65	753.1	58	14.4	88	NW			6		5					D. clouds	W. Newcombe.
Valencia, Observatory	29.72	754.9	29.74	755.4	53.5	11.9	67	NW	26	11.6			7					Squally	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B					47.0	8.3		NW	5	2.2		10s	0			0	0	Blue sky	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.69	754.1	29.73	755.1	45	7.2	89	Calm	0	0			10n			0.200	5.1	Light rain	H. J. Cundall, C. E.
Chatham, N. B.*	29.71	754.6	29.77	756.1	44	6.7	69	W	7	3.1		0	0			0.68	17.3	Clear	G. A. Blair.
Chicontimi, Quebec					38.5	3.6		NW			4		9ks			0	0	D. clouds	Rev. V. A. Huart.
Cornwall, Ontario	29.76	755.9	29.96	761.0	42.5	5.8	59	N			2	0	0			0.026	0.7	Blue sky	James Smith, M. A
Dalhousie, N. B	29.74	755.4	29.77	756.1	45.0	7.2		W			2	0	0			0	0	Blue sky	H. A. Johnson.
Father Point, Quebec*	29.89	759.2	29.91	759.7	50	10.0	84	N	15	6.7		2cs	0			0.05	1.3	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.14	740.1	29.96	761.0	49	9.4	85	SE	6	2.7		2ck	5s	SE	SE	0	0	Cloudy	James Stewart.
Fredericton, N. B	29.77	756.1	29.83	757.7	45.3	7.4	59	W	6	2.7		0	0			0.440	11.2	Clear	Prof. Harrison.
Granton, Ontario	28.97	735.8	30.10	764.5	42.0	5.6	83	NE			1	0	0			0	0	Clear	James Grant.
Halifax, N. S.*	29.61	752.1	29.74	755.4	45	7.2	98	N	9	4.0			10n		N	0.217	5.5	Heavy rain	A. Allison.
Hamilton, Ontario	29.67	753.6	30.07	763.8	48.5	9.2	77	NE			2	0	0			0	0	Clear	Geo. Dickson, B. A.
Kingston, Ontario*	29.69	754.1	30.03	762.7	45	7.2	69	N	6	2.7		0	0			0.44	11.2	Clear	S. Woods, M. A.
Little Glace Bay, N. S	29.63	752.6	29.67	753.6	49.3	9.6	82	SW			3	8k	0	SW		0.10	2.5	Cloudy	C. H. Rigby.
Montreal, Quebec*	29.76	755.9	29.96	761.0	46	7.8	57	N	6	2.7		0	0			0.14	3.6	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario	29.97	761.2	30.01	762.2	35.0	1.7	79	SW			2		10n					Raining	J. R. Nason.
Parry Sound, Ontario*	29.40	746.7	30.10	764.5	45	7.2	61	NE	5	2.2		0	0			0	0	Clear	Rev. R. Moseley.
Peterboro, Ontario	29.52	749.8	30.28	769.1	47.9	8.8	72	E			1	0	0			0	0	Clear	J. F. Jeffers, M. A.
Port Dover, Ontario	29.36	745.7	30.05	763.3	46	7.8	94	NE	7	3.1		10k	0	NE		0.04	1.0	Fair	H. Morgan.
Port Stanley, Ontario	29.36	745.7	30.02	762.5	47	8.3	68	NE	6	2.7		2ck	0	NW		0	0	Clear	M. Payne.
Quebec, Quebec*	29.58	751.3	29.91	759.7	40	4.4	56	N			5	0	2s		N	0.01	0.3	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.61	752.1	30.07	763.8	41	5.0	61	N	4	1.8		0	0			0	0	Clear	W. H. McIntyre.
Saugeen, Ontario*	29.38	746.2	30.11	764.8	44	6.7	83	SE	2	0.9		0	0			Inap.	Inap.	Clear	K. Stewart.
St. Andrews, N. B	29.76	755.9	29.81	757.2	44	6.7	66	NW	1	0.4		0	0			0.49	12.4	Clear	
St. John, N. B	29.65	753.1	29.81	757.2	46.0	7.8	73	NW	8	3.6		0	0			0.190	4.8	Blue sky	G. Murdock, C. E.
Stratford, Ontario	28.77	730.7	30.07	763.8	43.0	6.1	68	E	7	3.1		1cs	0			0	0	Blue sky	C. J. Macgregor, M. A.
Sydney, C. B*	29.65	753 1	29.69	754.1	51	10.6	80	SW	9	4.0		8cs	2n			0	0	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.73	755.1	30.12	765.0	46	7.8	62	N	8	3.6		0	0			Inap.	Inap.	Clear	Magnetic Observatory
Windsor, N. S	29.62	752.3	29.71	754.6	45.5	7.5	92	N					10ks			0.39	9.9	Cloudy	
Woodstock, Ontario	28.98	736.1	30.05	763.3	46.8	8.2	60	N	10	4.5		1c	0	W		0	0	Blue sky	Prof. Wolverton.
Yarmouth, N. S.*	29.72	754.9	29.79	756.7	48	8.9	89	NW	6	2.7		2k	0	NW		0	0	Fair	Lt. F. E. Wilmot, R. N.
SUB-SERIES.																			
St. Johns, Newfoundland	29.62	752.3	29.87	758.7	46	7.8	100	NE	0	0			10n			0.18	4.6	Rainy	John Delany.
St. Pierre, N. F			29.63	752.6	42.8	6.0		Calm			0					0	0		N. F. Land, Comd't

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

CAPE COLONY SERIES.

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

Cape St. Francis Lt. House	30.05	763.3			62.0	16.7	72	NNE	26.6	11.9			10ks			0	0	Threatening	John Duthie.
Cape Town, C. G. H. Obs'y	30.03	762.7	30.07	763.8	53.0	11.7		NW	11.6	5.2		5	4n			0.420	10.7		The Staff, for D. Gill.
Worcester*†	28.92	734.6			59	15.0	67	WNW			2	4	5			0.06	1.5	Threatening	C. Stokes.

CHINESE SERIES.

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

SUB-SERIES.																			
Zi-Ka-Wei, near Shanghai	29.75	755.6	29.77	756.2	66.6	19.2	97	SE	2.0	0.9		10ck	0	SSW		0.445	11.3	Covered	M. Marc Dechevrens, S J.

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

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

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

San José	26.18	665.0	29.90	759.4	67.6	19.8	91	NE			1	108	0			0	0	Cloudy	Amand Maison.

DANISH SERIES.

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

Copenhagen	29.37	746.0	29.42	747.2	66.2	19.0	57	S	11	5			10						Oversergent Fischer.
Fanöe	29.27	743.5	29.29	744.0	56.8	13.8	90	NE			2		10						Overloerer Lauridsen.
Godthaab, Greenland	29.54	750.2	29.58	751.3	42.6	5.9	78	SW			2		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.94	760.5	29.98	761.6	39.0	3.9		NE			2		2						A. O. Thorlacius.
Thorshavn	29.67	753.6	29.71	754.5	40.6	4.8	76	N	22	10			7					Raining	Overloerer Bergh.
Vestervig	29.28	743.7	29.37	746.1	52.3	11.3	80	E			2		10					Raining	Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.15	740.4	29.79	756.7	55.8	13.2	77	NW			2	0	cn	NW	NW	5.04	128.		M. Labroue, Director.
Alençon Normal School	29.09	738.8	29.64	752.8	53.6	12	87	NW			3		5		SW	0.20	5.	Rain & hail.	M. Nicot, Director.
Arras, Engineer School	29.15	740.4	29.41	746.9	48.2	9.0		NW			3		10		NW			Raining	M. Klein, Commandaut.
Avignon, Normal School	29.58	751.2	29.65	753.2	67.1	19.5	79	SE			2		8		S	0	0	Very cloudy	M. Giraud, Director.
Bar-sur-Seine	28.94	735.0	29.48	748.7	59.5	15.3	77	SW			1		10		SW	0.079	2.0	Raining	M. Saillard, Director.
Beauvais, Normal School	29.23	742.4	29.49	749.0	52.2	11.2	75	W			2		10		W	0.08	2.	Raining	M. Frère Eugene Marie.
Besançon, Normal School	28.62	727.0	29.42	747.2	70.7	21.5	61	SW			2	0	n		N	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.51	749.6	29.77	756.2	60.3	15.7	61	NW			1		8		NW	0.504	12.8	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.04	737.6	29.58	751.4	53.6	12	72	W			2	0	n		W	0.87	22.		M. Postel, Director.
Brest, Naval Observatory	29.52	749.9	29.76	756.0	60.4	15.8	68	NW			2		6		NW	0.610	15.5		M. de Kermaree, Dir.
Caen, Normal School	29.46	748.3	29.53	750.1	60.4	15.8	81	NNW			3		5		NNW	0.386	9.8	Cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.20	741.6	29.47	748.5	58.6	14.8	86	NE			2		8		NE	0.315	8.0	Very cloudy	M. Jadot, Director.
Charleville, Normal School	28.89	733.8	29.39	746.4	57.2	14	80	SSW			2					0.08	2.		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.31	719.0	29.65	753.2	51.1	10.6	72	WSW			3		10		W	0.654	16.6	Covered	M. Alluard, Director.
Cluny, Normal School	28.76	730.5	29.51	749.6	57.2	14	93	SW			3		10		S	0.12	3.	Raining	M. de Villemontée, Dir.
Commercy, Normal School	28.60	726.3	29.42	747.2	61.3	16.3	69	W			0	0	8kn			0.20	5.	Very cloudy	Dr. Coulet, Director.
Gap, Normal School	27.07	687.6	29.62	752.3	50.4	10.2	84									0.51	13.		M. Jeangirard, Director.
Gréasque, du. Rhone	28.60	726.3	29.74	755.3	64.8	18.2	69	SE			3		10		SE	0.020	0.5	Covered	M. Kina, Director.
Grenoble, Normal School	28.79	731.2	29.52	749.8	68.7	20.4	50	SSW			2	0	kn		N	0	0		M. Ablard, Director.
Guéret, Normal School	28.08	713.2	29.72	754.8	58.1	14.5	55	SW			3	0	n		NE	0.138	3.5		M. Rivoire, Director.
Lamballe, Normal School	29.41	747.0	29.68	753.8	56.5	13.6	90	W			1		10		W	0.47	12.	Hailing	M. Ollitrault, Director.
Lescar, Normal School	29.23	742.4	29.89	759.2	59.5	15.3	78	E			4	0	sk		W	0	0		M. Chauvin, Director.
Lorient, Naval Observatory	29.67	753.5	29.77	756.1	62.6	17.0	52	NW			3		5	W	NW	0.118	3.0	½ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.56	725.3	29.60	751.8	53.8	12.1	76	W			2		10			0.024	0.6	Covered	M. André, Director.
Mans, Normal School	29.30	744.3	29.61	752.0	58.1	14.5	59	NW			4		5		N	0.256	6.5	Cloudy	M. Piboen, Director.
Marseille, Observatory	29.41	746.9	29.67	753.7	66.7	19.3	68	SE			1		9		SSE;SW	0.067	1.7	Showery	M. Stephan, Director.
Montlouis l'instituteur	24.56	623.9	29.80	756.9	44.6	7.0	71	NW	5.6	2.5			10		NW	0.256	6.5	Raining	M. Cave, for Dr. Fines.
Montpellier, Normal School	29.56	750.9	29.67	753.6	55.9	13.3	100	NW			2		5	SSE	SW	0.362	9.2	Cloudy	M. P. Galzin, Director.
Nancy, Normal School	28.70	728.9	29.44	747.7	60.8	16	67	SW			2		10n		SW	0.031	0.8	Raining	M. Husse.
Nantes, Observatory	29.57	751.1	29.73	755.2	56.3	13.5	74	NW			1–2		9kn	WNW	WNW	0.323	8.2	Sprinkling	M. Larocque, Director.
Nice	29.64	752.9	29.68	753.8	63.3	17.4	84	E			2		10	E	E	0.051	1.3	Light rain	Capt. Boissière, Director.
Perpignan, Observatory	29.58	751.2	29.68	753.8	58.8	14.9	64	N	37.4	16.7			10		WNW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.30	566.5			30.7	—0.7							10		NW	0.445	11.3	Snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.59	726.1	29.64	752.8	56.5	13.6	82	S			4		10		S			Raining	M. Taillou.
Puy de Dôme Obs'y, Summit	24.70	627.4			33.8	1.0	100	W			8		10			0.087	2.2	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	29.71	754.6	29.74	755.4	66.6	19.2	83	W			3		8	NW	W	0.055	1.4	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.49	749.0	29.70	754.4	62.2	16.8	55	W			2		5		N	0.189	4.8	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.67	702.7	29.82	757.4	49.3	9.6	85	W			3		10			0.303	7.7	Covered	M. Richard, Director.
Rouen, Normal School	29.41	747.1	29.50	749.3	54.0	12.2	74	W			3		10		NW	0.12	3.	Covered	M. Platrier, Director.
Saint Lô, Normal School	29.44	747.8	29.60	751.8	59.4	15.2	68	W			1		5		W	0.610	15.5	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.34	745.2	29.50	749.4	53.4	11.9	76	NW			2		10		WNW	0.280	7.1		M. Renou, Director.
Toulouse, Observatory	29.11	739.4	29.83	757.7	55.4	13.0	97	NW			1		10			0.276	7.0	Raining	M. Baillard, Director.
Tours	29.43	747.4	29.62	752.4	60.4	15.8	67	WNW			2		5		W	0.327	8.3	Stormy	M. de Tastes.
Versailles, Observatory	29.02	737.1	29.51	749.6	52.9	11.6	78	NW			3					0.248	6.3		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.22	742.2	29.51	749.6	54.0	12.2	75	W			3		10		W	0.307	7.8		M. Marié Dvy, Director.

GERMAN SERIES.

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

Bamberg	28.61	726.6	29.45	748.1	75.7	24.3	40	SE			2	0	6k		S	0.016	0.4		Prof. Dr. Hoh.
Berlin	29.22	742.1	29.38	746.2	81.1	27.3	41	SW			3		3			0.197	5.0		Prof. Dr. Arndt.
Breslau	29.00	736.6	29.52	749.9	82.2	27.9	34	S			2		4			0	0		Royal University Obs'y.
Carlsruhe	28.97	735.7	29.36	745.8	74.8	23.8	57	SW			4		9	SW		0.075	1.9	Raining	Albert Senx.
Cassel	28.66	727.9	29.37	746.0	75.6	24.2	38	S			6		2	S		0.004	0.1		Dr. H. Möhl.
Frankfort on the Main	29.08	738.5	29.41	747.1	76.6	24.8	31	SW			2		5			0.091	2.3		Physical Society.
Friedrichshafen	28.08	713.1	29.43	747.6	71.2	21.8	60	SW			2		7	SW		0.354	9.0		Wilhelm, Chief Tel.
Hamburg	29.23	742.5	29.30	744.3	67.3	19.6	76	SSW			4		4			0.244	6.2		Dr. R. Kleeman.
Kiel	29.33	744.9	29.34	745.3	62.1	16.7	79	WSW			2		10			0.189	4.8		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.02	737.1	29.41	747.1	81.7	27.6	33	S			4		8			0	0		Prof. Dr. Bruhns.
Magdeburg	29.21	741.8	29.38	746.2	78.3	25.7	34	S			5	8cs	0	SW		0.004	0.1		Dr. Assmann.
Meinel	29.50	749.3	29.54	750.4	66.4	19.1	83	NW			3	0	1k						Reinbrecht & Issermann.
Munich	27.71	703.7	29.54	750.2	73.9	23.3	35	SE			2		7	S		0.909	23.1		Central Station.
Neufahrwasser	29.44	747.8	29.46	748.2	82.8	28.2	34	SW			2		8			0	0		A. Lothes.
Neustadt, Palatinate																			Dicknether.
Stuttgart	28.53	724.6	29.37	745.9	75.2	24.0	42	S			1		6	W		0.051	1.3		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	27.99	710.9	29.42	747.3	73.9	23.3	38	S			4		5	W		0.213	5.4		Prof. Kemlein.
Wustrow	29.35	745.5	29.38	746.2	64.0	17.8	75	N			1	0	8k			0.146	3.7	Thunder	Brandes & Reimer.

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

GREEK SERIES.

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

Athens	29.57	751.0	29.95	760.6	79.7	26.5		SW			2.5		0					Clear	Schmidt & Wourlisch.

INDIAN SERIES.

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

Kurrachee	29.53	750.0	29.58	751.3	87.8	31.0	69	WSW	37.0	16.5			0			0	0	Misty	
Deesa	29.08	738.5	29.53	749.9	100.9	38.3	26	W	16.3	7.3			0			0	0	Blue sky	
Bombay	29.65	753.0	29.68	754.0	82.9	28.3	85	WNW	17.0	7.6			10		NW	0.40	10.2	Overcast	
Poona, Yarrowda.	27.84	707.1	29.68	753.9	79.8	26.6	59	W					9		WNW	0	0	D. clouds	
Belgaum	27.17	690.1	29.68	754.0	77.6	25.3	69	W	11.0	4.9			9		NW	0	0	D. clouds	
Lahore	28.67	728.2	29.36	745.6	111.3	44.1	17	W	3.1	1.4			4			0	0	Misty	
Roorkee	28.62	727.0	29.49	748.9	94.6	34.8	51	W	5.7	2.6			5			0	0	Misty	
Agra	28.94	735.0	29.48	748.7	98.1	36.7	66	E	7.1	3.2			6		E	0	0		
Nagpur	28.40	721.2	29.39	746.4	100.2	37.9	32	NNE	10.7	4.8			8		NE	0	0	D. clouds	
Jubbulpore	28.13	714.5	29.43	747.4	97.8	36.6	33	Calm	5.6	2.5			10			0.03	0.8	Overcast	
Lucknow	29.10	739.2	29.46	748.3	99.5	37.5	47	ENE	5.0	2.2			2	NNE		0	0	D. clouds	
Allahabad																			
Patna	29.31	744.5	29.48	748.9	93.1	33.9	61	E	7.0	3.1			6	E	E	0	0	D. clouds	
Hazaribagh	27.49	698.3	29.48	748.7	77.8	25.4	89	E	18.3	8.2			10		E	0.60	15.2	Raining	
Cuttack	29.37	745.9	29.45	748.0	79.0	26.1	86	WSW	1.0	0.4			10			0.47	11.9	Raining	
Calcutta, Alipore	29.46	748.2	29.48	748.7	80.9	27.2	91	ESE	12.0	5.4			10		SE	0.96	24.4	Overcast	
Dhubri	29.46	748.3	29.58	751.3	83.8	28.8	85	Calm	2.0	0.9			4	ESE		0	0	D. clouds	
Chittagong	29.55	750.6	29.64	752.9	75.1	23.9	89	SE	6.9	3.1			9			0.08	2.0	D. clouds	
Sibsagur	29.22	742.1	29.54	750.3	92.3	33.5	64	NE	1.4	0.6			0			0	0	Blue sky	
Zanzibar, Africa			30.05	763.3	82.1	27.8	68	SSE	11	4.9			5			0	0	D. clouds	

ITALIAN SERIES.

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

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

Udine	29.35	745.6	29.75	755.7	64.4	18.0	77	SE	0.7	0.3			10			0.189	4.8		Prof. Giovanni Clodig.
Milan	29.15	740.5	29.66	753.3	61.7	16.5	76	E	6.3	2.8			10	SE		0.043	1.1		Prof. Schiaparelli.
Padua	29.63	752.6	29.73	755.2	63.5	17.5	85	NNW	15.0	6.7			10	SW		0.039	1.0		Prof. Dott. Lorenzoni.
Moncalieri	28.81	731.7	29.69	754.2	58.3	14.6	87	E	4.3	1.9			10	ESE		0.457	11.6		Prof. P. F. Denza.
Genoa	29.52	749.9	29.71	754.7	62.0	17.0	84	E	2.5	1.1			10	SE		1.386	35.2		Prof. G. M. Garibaldi.
Mondovi	27.81	706.3	29.68	753.8	60.1	15.6	79	NW			2		9			0.181	4.6		Prof. D. C. Bruno.
Pesaro	29.67	753.6	29.72	754.8	71.2	21.8	75	SW					10			0	0		Prof. Luigi Guidi.
Florence	29.46	748.3	29.71	754.6	64.4	18.0	82	W			2		10	SW		0.055	1.4		Prof. Costantino Pitter.
Leghorn	29.61	752.2	29.70	754.3	66.9	19.4	83	SE	2.5	1.1			10			0.780	19.8		Prof. P. Monte.
Rome	29.57	751.1	29.74	755.4	77.0	25.0	44	SSW	13.0	5.8			10			0	0		Prof. P. S. Ferrari.
Lecce	29.62	752.3	29.86	758.5	81.5	27.5	29	SSE	32.9	14.7			0			0	0		Prof. C. de Giorgi.
Cosenza	28.91	734.3	29.78	756.4	77.0	25.0	73	ESE	1.8	0.8			1	SE		0	0		Prof. D. Conti.
Cagliari	29.50	749.3	29.69	754.2	76.1	24.5	64	SE			4		9	W		0	0		Prof. A. Pacinotti.
Palermo	29.55	750.6	29.80	756.8	72.3	22.4	64	NE	9.4	4.2			0			0	0		Prof. G. Ciacciatore.
Syracuse	29.78	756.5	29.83	757.6	69.1	20.6	81	E	9.4	4.2			8	SW		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.26	743.2	29.76	756.0	73.9	23.3	59	WSW	4.9	2.2			8	W		0	0		Prof. F. Brioschi.
Stelvio	21.98	558.4			37.8	3.2	78	SW			6		10n		S	0.102	2.6	Covered	Prof. P. F. Denza.
Valdobbia	21.95	557.6			41.5	5.3	81	E			2		10n			0	0	Covered	Prof. P. F. Denza.

JAPANESE SERIES.

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

Hiroshima, I. M. Obs'y †	29.75	755.6	29.77	756.1	68.4	20.2	98	NNW	1.5	0.7			10n			0.753	19.1	Light rain	K. Sasaki.
Kioto	29.62	752.3	29.79	756.6	67.6	19.8	92	NW	0.9	0.4			10n			0.600	15.2	Raining	M. Tojima.
Nagasaki, I. M. Obs'y	29.55	750.6	29.75	755.6	68.6	20.3	99	N	1.3	0.6			10n			1.520	38.6	Raining	S. Takehayashi.
Tokei Obs'y, Yeddo	29.71	754.6	29.78	756.4	67.4	19.7	93	E	5.4	2.4			10n			0.515	13.1	Light rain	The Staff.
Wakayama	29.74	755.4	29.79	756.6	67.5	19.7	95	NNE	1.8	0.8			10n			1.685	42.8	Raining	Y. Kuwamuca.

MAURITIUS SERIES.

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

Mauritius Obs'y, Mauritius	29.86	758.4	30.06	763.4	70.8	21.6	78	SSE	11.5	5.1			10			0	0	Cloudy	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

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

Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.63	752.6	29.89	759.2	74.0	23.3	95	E	1.6	0.8		0	1k		ESE	0	0	Clear	F. Quijano, U. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.

NETHERLANDS SERIES.

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

Flushing	29.35	745.4	29.35	745.4	51.4	10.8		NNW			4					0	0		
Groningen	29.21	742.0	29.27	743.4	65.5	18.6		S			4					0.087	2.2		
Helder	29.28	743.6	29.28	743.6	55.0	12.8		N			4					0.370	9.4		
Hellevoetsluis	29.29	743.9	29.29	743.9	52.7	11.5	95	NW			3					0	0		
Utrecht	29.21	741.8	29.25	743.0	59.4	15.2	84	W			2		8			0.374	9.5	Very cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.31	744.4	29.37	746.0	52.2	11.2	85	S	12.3	5.5	.....	.....	9	.....	.....	0.094	2.4	Raining	
Christiania	29.17	740.8	29.31	744.4	60.1	15.6	43	S	7	3	.....	.....	10	.....	.....	0.008	0.2	.....	
Gjæsvær	29.30	744.2	29.32	744.8	31.5	— 0.3	.....	NNW	.....	.....	2	.....	10	.....	.....	.....	.....	.....	
Lodingen	29.21	741.8	29.25	743.0	43.2	6.2	53	NNE	.....	.....	3	.....	9	.....	.....	0.004	0.1	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.24	768.2	30.26	768.6	69.6	20.9	82	N	8.1	3.6	.....	.....	2	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	28.93	734.9	29.91	759.8	67.1	19.5	38	W	3.1	1.4	.....	.....	6	SSW	.....	0.539	13.7	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.20	767.0	30.29	769.3	69.3	20.7	62	SSW	3.1	1.4	.....	.....	6	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.70	754.4	30.10	764.6	63.1	17.3	50	N	19.9	8.9	.....	.....	5	.....	.....	Bla	nk	.....	The Staff.
Ponta Delgada, Azores	30.34	770.6	30.41	772.4	71.2	21.8	72	NNE	6.9	3.1	.....	.....	3	.....	.....	0	0	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.52	724.5	29.56	750.8	64.4	18.0	52	W	22	10	.....	0	8ks	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	29.00	736.5	29.02	737.0	48.0	8.9	65	SE	9	4	.....	.....	10	.....	.....	.....	.....	.....	Capt. Sseliwerstow.
Astrakhan	30.00	762.0	29.92	759.9	77.4	25.2	59	NE	7	3	.....	0	2ks	.....	.....	.....	.....	.....	Capt. Wisganow.
Barnaul ‡	29.21	741.9	29.68	753.9	73.8	23.2	32	SW	13	6	.....	.....	9	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	29.30	744.1	29.53	750.0	71.8	22.1	52	WSW	11	5	.....	0	4k	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	28.50	723.8	29.44	747.7	52.2	11.2	62	W	27	12	.....	.....	10n	.....	.....	.....	.....	.....	Meteorological Obs'y.
Kasan	29.41	746.9	29.67	753.5	67.1	19.5	36	WSW	7	3	.....	10ck	0	.....	.....	.....	.....	.....	Observatory.
Kertch	29.97	761.2	29.99	761.7	72.5	22.5	79	S	2	1	.....	.....	0	.....	.....	.....	.....	.....	Lagorio & Sastyrez.
Kieff	29.21	742.0	29.81	757.1	81.9	27.7	38	SSW.	11	5	.....	ck	2ks	.....	.....	.....	.....	.....	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.39	746.4	29.58	751.4	79.0	26.1	41	NW	4	2	.....	.....	7	.....	.....	.....	.....	.....	Meteorological Obs'y.
Moscow	29.07	738.4	29.59	751.5	79.0	26.1	41	E	7.8	3.5	.....	0	3ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.72	704.2	30.02	762.4	46.8	8.2	66	Calm	0	0	.....	.....	1	.....	.....	0	0	.....	Meteorological Obs'y.
Nikolaiev	29.91	759.6	29.98	761.4	83.7	28.7	47	S	4	2	.....	0	1k	.....	.....	.....	.....	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.80	756.8	29.88	759.0	44.4	6.9	96	Calm	.....	.....	0	.....	10n	.....	.....	0.102	2.6	.....	Lieut. Iwanow.
Pekin, China	29.41	747.1	29.56	750.7	83.7	28.7	48	NE	4	2	.....	0	5k	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	29.45	748.1	29.47	748.5	57.4	14.1	79	NW	13	6	.....	.....	10n;ks	.....	.....	.....	.....	.....	Central Physical Obs'y.
Tashkend, Laboratory	28.32	719.2	29.78	756.4	85.3	29.6	48	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.58	726.0	29.95	760.6	75.6	24.2	41	SE	7	3	.....	0	8ks	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	29.16	740.7	29.56	750.8	83.8	28.8	30	S	18	8	.....	0	6ks	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.19	741.4	29.58	751.4	78.8	26.0	46	SSW	11	5	.....	.....	6	.....	.....	.....	.....	Heavy cld's	Berg, Assistant.
Yeniseisk	29.49	749.1	29.77	756.2	64.4	18.0	49	S	7	3	.....	.....	10	.....	.....	.....	.....	.....	M. O. Marks.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	29.55	750.6	52.9	11.6	62	NE	.....	.....	2	0	7k	.....	.....	0.18	4.6	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.68	753.9	50	10.0	93	NNE	.....	.....	6	3	5	NNE	.....	0	0	D clouds	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	29.03	737.3	.....	.....	.....	NW	.....	.....	6	.....	10	.....	.....	Bla	nk	.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.58	751.3	29.68	753.9	68.0	20.0	82	SSW	3.1	1.4	.....	.....	10	.....	.....	0.004	0.1	Covered	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.88	759.0	29.94	760.4	63.1	17.3	71	NW	7.2	3.2	.....	2	7	NW	.....	0.783	19.9	Almost cov'd	Prof. Manuel de Naveran
Burgos, Met. Obs'y	26.95	684.5	.....	.....	52.9	11.6	62	N	4.5	2.0	.....	.....	7	.....	.....	0.354	9.0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.60	701.0	29.77	756.2	64.9	18.3	40	NW	19.7	8.8	.....	.....	10	.....	.....	0.075	1.9	Covered	The Staff.
Murcia, Met. Obs'y ‡	29.64	752.9	29.79	756.6	77.0	25.0	61	WSW	4.0	1.8	.....	5	5	E	.....	0.130	3.3	Raining	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.10	739.1	29.99	761.7	59.7	15.4	60	NW	13.6	6.1	.....	.....	8	.....	.....	0.441	11.2	Almost cov'd	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.97	751.1	30.03	762.8	80.3	26.8	77	E	3.1	1.4	.....	0	0	.....	.....	0	0	Clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.78	756.4	29.83	757.7	84.2	29.0	80	SSW	2.2	1.0	.....	9kn	.....	E	0	0	.....	Covered	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.97	761.3	30.07	763.7	67.1	19.5	68	WSW	16.2	7.2	.....	10	.....	W	0.016	0.4	.....	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.95	760.7	30.04	763.0	82.4	28.0	89	SE	3.1	1.4	.....	5c	1k	SE	SE	0.177	4.5	.....	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.74	755.5	29.89	759.2	82.1	27.8	79	ESE	7.4	3.3	.....	.....	9kn	.....	SE	0.03	0.8	Cloudy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.31	744.5	29.35	745.5	34.5	1.4	95	N	.....	.....	4	.....	10	.....	.....	0.236	6.0	Snowing	
Umea	29.31	744.4	29.36	745.7	52.2	11.2	68	NW	.....	.....	2	.....	10	.....	.....	0.043	1.1	.....	
Hernosand	29.27	743.4	29.32	744.7	55.9	13.3	63	SE	.....	.....	2	.....	2	.....	.....	0.236	6.0	.....	
Stockholm	29.22	742.3	29.40	746.8	64.8	18.2	37	W	.....	.....	2	.....	10	.....	.....	0.012	0.3	.....	
Wisby	29.38	746.2	29.44	747.7	62.2	16.8	64	WNW	.....	.....	2	.....	0	.....	.....	0.126	3.2	.....	
Sub-Series.																			
Upsala	29.35	745.6	29.44	747.8	62.8	17.1	35	SSW	13.2	5.9	.....	.....	6	.....	WSW	0.181	4.6	.....	S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.15	715.0	29.55	750.5	63.7	17.6	60	SW	.....	.....	4	.....	10	.....	.....	.....	.....	Raining	The Observatory.
Zurich ‡	27.91	708.9	29.49	749.0	71.2	21.8	49	W	.....	.....	5	.....	6	.....	.....	0.728	18.5	Cloudy	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.97	761.3	76.5	24.7	39	NE	17	7.5	.....	.....	0	.....	.....	0	0	.....	The Observatory.
Valona	.....	.....	29.97	761.3	74.3	23.5	.....	SW	.....	.....	1	.....	2	.....	.....	0	0	Slightly cld'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.86	758.4	81.9	27.7	60	WSW	.....	.....	3	.....	0	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
UNITED STATES SERIES.																			
By authority of the SECRETARY OF WAR.																			
Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	29.90	759.4	29.98	761.5	56	13.3	63	NW	4	1.8		1k	0			0.17	4.3	Clear.	
Alpena, Michigan	29.48	748.8	30.13	765.3	46	7.8	62	SE	10	4.5		0	0			0	0	Clear.	
Atlanta, Georgia	28.83	732.3	29.98	761.5	70.2	21.2	61	W	6	2.7		5c	0	Calm		0	0	Fair	
Atlantic City, New Jersey	29.90	759.4	29.91	759.7	61	16.1	82	N	6	2.7			10s		Calm	0	0	Cloudy	
Augusta, Georgia	29.80	756.9	29.98	761.5	69.7	20.9	75	S	2	0.9		0	Hz			0	0	Clear	
Baltimore, Maryland	29.90	759.4	29.95	760.7	64	17.8	73	W	4	1.8			10s		W	0.03	0.8	Cloudy	
Barnegat, New Jersey	29.91	759.7	29.93	760.2	61	16.1	82	N	12	5.4		8k	0	SW		0	0	Fair	
Bismarck, Dakota	27.98	710.7	29.72	754.9	61	16.1	82	SE	12	5.4			10s		SE	1.65	41.9	Cloudy	
Boise City, Idaho	26.98	685.3	29.74	755.4	50.2	10.1	79	Calm	0	0			10s		Calm	0.08	2.0	Cloudy	
Boston, Massachusetts	29.75	755.6	29.90	759.4	54.0	12.2	67	N	2	0.9		0	0			0.11	2.8	Clear	
Bracketville, Texas	28.66	728.0	29.67	753.6	71	21.7	71	E	2	0.9		0	0			0	0	Clear	
Brownsville, Texas	29.77	756.1	29.81	757.2	77	25.0	86	Calm	0	0		0	0			0	0	Clear	
Buffalo, New York	29.33	745.0	30.02	762.5	47	8.3	76	NE	6	2.7			10s		SW	0.05	1.3	Cloudy	
Burlington, Vermont	29.67	753.6	29.95	760.7	45.0	7.2	46	N	8	3.6		0	0			0.12	3.0	Clear	
Cairo, Illinois	29.48	748.8	29.88	758.9	75	23.9	86	SW	6	2.7		5ck	0	S		0	0	Fair	
Campo, California	27.36	694.9	29.93	760.2	48	8.9	85	SW	4	1.8			Fg		W	0	0	Dense fog	
Camp Thomas, Arizona	27.05	687.1			65	18.3	25	Calm			0	2ck	0			0	0	Clear	
Cape Henry, Virginia	29.85	758.2	29.87	758.7	68	20.0	74	SW	11	4.9		5k	0			0	0	Fair	
Cape May, New Jersey	29.88	758.9	29.91	759.7	63	17.2	72	N	8	3.6			10s		NW	0.10	2.5	Cloudy	
Castroville, Texas	29.07	738.4	29.74	755.4	72	22.2	80	Calm	0	0			2s		S	0	0	Fair	
Cedar Keys, Florida	30.02	762.5	30.04	763.0	78	25.6	50	W	2	0.9		0	0			0	0	Clear	
Champaign, Illinois	28.99	736.3	29.66	753.4	61.2	16.2	94	SE	7	3.1			10s		SE	1.93	49.0	Cloudy	
Charleston, S. Carolina	29.94	760.5	30.00	762.0	78	25.6	78	SW	5	2.2		5c	0	N		0	0	Fair	
Charlotte, N. Carolina	29.07	738.4	29.93	760.2	69.2	20.7	65	SW	3	1.3		10cs	0	SW		0	0	Cloudy	
Chattanooga, Tennessee	29.12	739.6	29.92	760.0	67.5	19.7	72	SW	6	2.7		8cs	2ks	Calm	SW	0	0	Cloudy	
Cheyenne, Wyoming	23.87	606.3	29.68	753.9	50.2	10.1	58	NW	2	0.9		0	0			0	0	Clear	
Chicago, Illinois	29.22	742.2	29.90	759.4	53.8	12.1	86	E	9	4.0		10c;k	0			0.30	7.6	Cloudy	
Chincoteague, Virginia	29.88	758.9	29.90	759.4	63	17.2	94	E	8	3.6		10k	0	W		0.03	0.8	Cloudy	
Cincinnati, Ohio	29.26	743.2	29.90	759.4	64.5	18.1	87	W	4	1.8			10n			0.48	12.2	Light rain	
Cleveland, Ohio	29.27	743.4	29.99	761.7	54	12.2	80	NE	7	3.1		8c	0	W		Inap.	Inap.	Fair	
Coleman City, Texas	28.01	711.4	29.61	752.1	66	18.9	74	S	4	1.8		0	0			0	0	Clear	
Columbus, Ohio	29.06	738.1	29.88	758.9	57	13.9	81	NE	6	2.7			4ks		SW	0.27	6.9	Cloudy	
Concho, Texas	27.90	708.6	29.78	756.4	70	21.1	70	S	13	5.8		0	0			0	0	Clear	
Corsicana, Texas	29.42	747.3	29.88	758.9	73	22.8	81	SW	6	2.7		0	0			0	0	Clear	
Davenport, Iowa	29.16	740.7	29.80	756.9	58	14.4	88	E	8	3.6			10s		E	0.85	21.6	Cloudy	
Dayton, Washington T'y	28.10	713.7	29.85	758.2	50	10.0	78	S	4	1.8			10n		Calm	Inap.	Inap.	Light rain	
Deadwood, Dakota	25.15	638.8	29.70	754.4	64	17.8	53	NW	5	2.2		c	10ks		NW	0.02	0.5	Cloudy	
Decatur, Texas	28.62	726.9	29.72	754.9	74	23.3	76	SE	14	6.3		0	0			0	0	Clear	
Delaware Breakwater, Del.	29.90	759.4	29.92	760.0	64	17.8	83	N	6	2.7			10s		W	0.02	0.5	Cloudy	
Denison, Texas	29.05	737.9	29.83	757.7	76	24.4	82	S	8	3.6		0	0			0	0	Clear	
Denver, Colorado	24.62	625.3	29.66	753.4	54.1	12.3	71	S	4	1.8		0	0			0	0	Clear	
Des Moines, Iowa	28.85	732.8	29.73	755.1	62	16.7	100	SE	6	2.7			10n		S	2.87	72.9	Light rain	
Detroit, Michigan	29.32	744.7	29.99	761.7	48.4	9.1	56	NW	10	4.5		5cs	Hz	W		0	0	Fair	
Dodge City, Kansas	27.09	688.1	29.58	751.3	65.2	18.4	83	N	6	2.7		0	0			0	0	Clear	
Dubuque, Iowa	29.14	740.1	29.82	757.4	54.2	12.3	90	NE	13	5.8			10s		Calm	0.19	4.8	Cloudy	
Duluth, Minnesota	29.35	745.5	30.03	762.7	42	5.6	83	NE	12	5.4		5cs	0	NE		0	0	Fair	
Eagle Pass, Texas	29.07	738.4	29.88	758.9	72.1	22.3	71	SE	1	0.4		0	0			0	0	Clear	
Eagle Rock, Idaho	25.07	636.8	29.78	756.4	58	14.4	53	W	8	3.6		0	5s		W	0	0	Fair	
Eastport, Maine	29.75	755.6	29.82	757.4	46	7.8	62	NW	9	4.0		0	0			0.27	6.9	Clear	
El Paso, Texas	26.09	662.7	29.74	755.4	73	22.8	31	NW	7	3.1		0	5s			0	0	Fair	
Erie, Pennsylvania	29.27	743.4	29.98	761.5	51	10.6	79	NE	9	4.0		8c	0			0.01	0.3	Fair	
Escanaba, Michigan	29.44	747.8	30.08	764.0	43	6.1	67	N	9	4.0		2c	0	Calm		0	0	Clear	
Florence, Arizona	28.36	720.3	29.96	761.0	67	19.4	37	Calm	0	0		0	0			0	0	Clear	
Fort Apache, Arizona	24.90	632.4	29.68	753.9	46	7.8	26	E	3	1.3		0	5s		Calm	0	0	Fair	
Fort Assinnaboine, Montana	27.94	709.7	30.49	774.4	60	15.6	73	W	13	5.8		10k	0	Calm		0	0	Cloudy	
Fort Bennett, Dakota	28.14	714.7	29.61	752.1	65	18.3	89	SE	12	5.4			10ks		SE	Inap.	Inap.	Cloudy	
Fort Benton, Montana	27.00	685.8	29.74	755.4	49	9.4	64	Calm	0	0		0	0			0.06	1.5	Clear	
Fort Buford, Dakota	27.72	704.1	29.64	752.8	61	16.1	94	E	4	1.8		8cs	0	SW		0.13	3.3	Cloudy	
Fort Custer, Montana	26.01	675.9	29.70	754.4	58	14.4	82	Calm	0	0		0	0			Inap.	Inap.	Clear	
Fort Davis, Texas	25.10	637.5	30.06	763.5	64	17.8	78	SW	4	1.8		5k	0	SW		0	0	Fair	
Fort Elliott, Texas	26.98	685.3	30.05	763.3	67	19.4	60	W	10	4.5		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.22	742.2	29.76	755.9	77	25.0	77	S	4	1.8		0	0			0	0	Clear	
Fort Grant, Arizona	25.13	638.3	29.93	760.2	60	15.6	20	N	1	0.4		0	2s			Inap.	Inap.	Clear	
Fort Griffin, Texas	28.49	723.6	29.69	754.1	74.0	23.3	55	SE	10	4.5		0	0			0	0	Clear	
Fort Keogh, Montana	27.17	690.1	29.58	751.3	59	15.0	81	NE	5	2.2		0	0			0.34	8.6	Clear	
Fort Macon, North Carolina	29.93	760.2	29.94	760.5	73	22.8	81	SW	17	7.6		5ck	Hz	Calm	Calm	0	0	Fair	
Fort McKavett, Texas	27.59	700.8	29.42	747.3	67.2	19.6	69	S	7	3.1		0	0			0	0	Clear	
Fort Missoula, Montana	26.50	673.1	29.88	758.9	56	13.3	63	NW	1	0.4		10k	0	NW		0.06	1.5	Cloudy	
Fort St. Michaels	29.82	757.4	29.85	758.2	40	4.4	100	S	2	0.9			10k		S	0	0		
Fort Shaw, Montana	26.18	665.0	29.63	752.6	47	8.3	85	E	2	0.9		5k	0	NE		0.21	5.3	Fair	
Fort Sill, Indian Territory	28.52	724.4	29.73	755.1	69	20.6	90	S	12	5.4		0	0			0	0	Clear	
Fort Stevenson, Dakota	27.94	709.7	29.72	754.9	64	17.8	83	SE	8	3.6			10s		SE	0	0	Cloudy	
Fort Verde, Arizona					56.5	13.6	40	SW			1	2cs	c	W		0	0	Fair	
Fredericksburg, Texas	28.13	714.5	29.64	752.8	67	19.4	89	SW	4	1.8		5k	0	SW		0	0	Fair	
Galveston, Texas	29.85	758.2	29.89	759.2	80	26.7	74	S	8	3.6		1ck	2ks	SW	S	0	0	Fair	
Grand Haven, Michigan	29.36	745.7	30.01	762.2	50	10.0	52	NE	14	6.3			10s		NE	0	0	Cloudy	
Hatteras, North Carolina	29.91	759.7	29.93	760.2	72	22.2	80	SW	22	9.8		8cs	0			0	0	Fair	
Helena, Montana	25.58	649.7	29.78	756.4	55	12.8	68	S	1	0.4		2c	0	Calm		0	0	Fair	
Henrietta, Texas	28.95	735.3	29.82	757.4	73	22.8	72	SE	11	4.9		0	0			0	0	Clear	
Indianapolis, Indiana	29.06	738.1	29.83	757.7	61	16.1	91	NE	4	1.8			10n		Calm	0.67	17.0	Light rain	
Indianola, Texas	29.84	757.9	29.87	758.7	79.1	26.2	78	S	10	4.5		2k	0	S		0	0	Fair	
Jacksboro, Texas	28.63	727.2	29.69	754.1	76	24.4	65	SE	9	4.0		0	0			0	0	Clear	
Jacksonville, Florida	29.98	761.5	30.00	762.0	77	25.0	65	SW	6	2.7		0	0			0	0	Clear	
Keokuk, Iowa	29.08	738.6	29.70	754.4	65.0	18.3	89	SE	13	5.8			10s		SE	0.02	0.5	Cloudy	
Key West, Florida	30.00	762.0	30.03	762.7	81.0	27.2	74	E	5	2.2		0	5ks		E	0	0	Fair	
Kittyhawk, North Carolina	29.90	759.4	29.92	760.0	73	22.8	67	W	22	9.8		0	8ks		NW	0.02	0.5	Fair	
Knoxville, Tennessee	28.97	735.8	29.97	761.2	66	18.9	79	SW	4	1.8			10n		SW	0.05	1.3	Light rain	
La Crosse, Wisconsin	29.11	739.4	29.84	757.9	55	12.8	68	E	4	1.8			10s			0	0	Cloudy	
La Mesilla, New Mexico	25.95	659.1	30.10	764.5	70	21.1	28	S	3	1.3			10s		SW	0	0	Cloudy	
Laredo, Texas	29.36	745.7	29.69	754.1	74	23.3	86	SE	2	0.9		0	0			0	0	Clear	
Leavenworth, Kansas	28.78	731.0	29.65	753.1	75	23.9	72	S	4	1.8		9cs	0			0	0	Cloudy	
Lewiston, Idaho	28.98	736.1	29.81	757.2	57	13.9	93	SW	1	0.4			10n		Calm	0.04	1.0	Light rain	
Little Rock, Arkansas	29.54	750.3	29.85	758.2	75	23.9	77	Calm	0	0		0	0			0	0	Clear	
Los Angeles, California	29.54	750.3	29.91	759.7	59.0	15.0	88	SE	1	0.4			10s		Calm	0	0	Cloudy	
Louisville, Kentucky	29.26	743.2	29.82	757.4	65.5	18.6	94	NE	10	4.5			10n		NE	0.85	21.6	Light rain	
Lynchburg, Virginia	29.23	742.4	29.90	759.4	67	19.4	74	Calm	0	0			10s			Inap.	Inap.	Cloudy	
Madison, Wisconsin	28.90	734.0	29.88	758.9	52	11.1	86	E	14	6.3			10s		E	0	0	Cloudy	
Marquette, Michigan	29.38	746.2	30.09	764.3	48	8.9	63	N	3	1.3		0	0			0	0	Clear	
Mason, Texas	28.21	716.5	29.88	758.9	73	22.8	67	S	5	2.2		0	0			0	0	Clear	
Memphis, Tennessee	29.58	751.3	29.91	759.7	75	23.9	72	SE	4	1.8		0	0			0	0	Clear	
Milwaukee, Wisconsin	29.24	742.7	29.97	761.2	47	8.3	70	N	15	6.7			10s			0	0	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.91	759.7	29.98	761.5	74	23.3	76	S	2	0.9	.....	0	Hz	.....	.....	0	0	Dense haze.	
Montgomery, Alabama	29.78	756.4	30.00	762.0	69.1	20.6	79	NW	1	0.4	.....	0	Hz	.....	.....	0	0	Clear.	
Moorhead, Minnesota	28.88	733.5	29.84	757.9	50.5	10.3	75	SE	4	1.8	.....	.....	10s	.....	SE	0.28	7.1	Cloudy	
Morgantown, W. Virginia	28.94	735.1	29.90	759.4	60	15.6	88	NE	6	2.7	.....	5cs	5s	NW	NE	0.07	1.8	Cloudy	
Mt. Washington, N. H.	23.53	597.7	29.56	750.8	19	— 7.2	84	NW	34	15.2	.....	0	2s	.....	NW	0.21	5.3	Clear.	
Nashville, Tennessee	29.36	745.7	29.88	758.9	73.8	23.2	69	SW	3	1.3	.....	80k;cs	0	W	.....	0	0	Fair	
New Haven, Connecticut	29.81	757.2	29.92	760.0	54	12.2	61	N	8	3.6	.....	0	2s	.....	W	0.06	1.5	Fair	
New London, Connecticut	29.90	759.4	29.95	760.7	50	10.0	65	N	6	2.7	.....	0	0	.....	.....	0.20	5.1	Clear.	
New Orleans, Louisiana	29.90	759.4	29.95	760.7	76.0	24.4	77	S	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
Newport, Rhode Island	29.85	758.2	29.90	759.4	58.1	14.5	73	N	3	1.3	.....	4k	0	NE	.....	0.11	2.8	Fair	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	29.88	758.9	29.91	759.7	54.0	12.2	80	N	12	5.4	.....	0	0	.....	.....	0.03	0.8	Clear.	
New York, New York	29.78	756.4	29.95	760.7	55	12.8	77	N	8	3.6	.....	.....	10s	.....	NW	0.13	3.3	Cloudy	
Norfolk, Virginia	29.85	758.2	29.88	758.9	70	21.1	70	W	7	3.1	.....	8ck	0	W	.....	0	0	Fair	
North Platte, Nebraska	26.81	681.0	29.63	752.6	63	17.2	83	Calm	0	0	.....	10c	0	.....	.....	0.10	2.5	Cloudy	
Olympia, Washington T'y	29.80	756.9	29.84	757.9	47.0	8.3	92	W	2	0.9	.....	8ck	0	S	.....	0.04	1.0	Fair	
Omaha, Nebraska	28.48	723.4	29.62	752.3	67.2	19.6	83	SE	19	8.5	.....	.....	10s	.....	.....	0.11	2.8	Cloudy	
Oswego, New York	29.70	754.4	30.02	762.5	44.8	7.1	64	NE	15	6.7	.....	0	0	.....	.....	0.02	0.5	Clear.	
Pensacola, Florida	29.95	760.7	29.98	761.5	73	22.8	81	SW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Philadelphia, Pa	29.89	759.2	29.95	760.7	60	15.6	71	E	12	5.4	.....	10cs;k	Hz	W	.....	0	0	Cloudy	
Phœnix, Arizona	28.63	727.2	30.37	771.4	65	18.3	40	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.80	452.1	30.02	762.5	28	— 2.2	54	SW	18	8.0	.....	5c	0	SW	.....	0.14	3.6	Fair	
Pioche, Nevada	23.81	604.8	29.66	753.4	50	10.0	26	S	6	2.7	.....	0	1s	.....	Calm	0	0	Clear	
Pittsburg, Pennsylvania	29.16	740.7	29.95	760.7	56.5	13.6	87	NE	3	1.3	.....	.....	10s	.....	NE	0.01	0.3	Cloudy	
Port Eads, Louisiana	29.96	761.0	29.97	761.2	76.0	24.4	86	SE	7	3.1	.....	0	Hz	.....	Calm	0	0	Clear	
Port Huron, Michigan	29.39	746.5	30.05	763.3	46.7	8.2	65	NE	9	4.0	.....	5cs	0	Calm	.....	0	0	Fair	
Portland, Maine	29.83	757.7	29.88	758.9	52	11.1	54	N	9	4.0	.....	2ck	0	NW	.....	0.04	1.0	Clear	
Portland, Oregon	29.81	757.2	29.88	758.9	52.3	11.3	84	S	4	1.8	.....	.....	10s	.....	S	0.13	3.3	Cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	73	22.8	85	SW	23	10.3	.....	.....	10s	.....	Calm	0	0	Cloudy	
Prescott, Arizona	24.61	625.1	29.68	753.9	55	12.8	39	SW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	30.01	762.2	30.02	762.5	78	25.6	57	NE	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Red Bluff, California	29.51	749.5	29.84	757.9	55.5	13.1	81	S	2	0.9	.....	0	2s	.....	Calm	0.02	0.5	Clear	
Rio Grande City, Texas	29.64	752.8	29.85	758.2	73	22.8	81	SE	8	3.6	.....	0	0	.....	.....	0	0	Clear.	
Rochester, New York	29.41	747.0	30.03	762.7	46	7.8	69	E	11	4.9	.....	2cs	5s	Calm	N	0.02	0.5	Fair	
Roseburg, Oregon	29.33	745.0	29.89	759.2	52.5	11.4	83	NW	1	0.4	.....	.....	10ks	.....	.....	0	0	Cloudy	
Sacramento, California	29.80	756.9	29.87	758.7	53.3	11.8	86	SE	8	3.6	.....	0	0	.....	.....	0	0	Clear.	
St. Louis, Missouri	29.20	741.7	29.78	756.4	75.4	24.1	75	S	7	3.1	.....	10c;cs	0	.....	.....	Inap.	Inap.	Cloudy	
St. Paul, Minnesota	29.01	736.8	29.85	758.2	55	12.8	68	E	4	1.8	.....	8k	2ks	W	E	0	0	Cloudy	
Salt Lake City, Utah	25.36	644.1	29.56	750.8	57	13.9	41	Calm	0	0	.....	5k	0	SW	.....	0	0	Fair	
San Antonio, Texas	29.17	740.9	29.86	758.4	73.0	22.8	90	Calm	0	0	.....	0	4s	.....	S	0	0	Fair	
San Diego, California	29.82	757.4	29.88	758.9	58.5	14.7	70	W	10	4.5	.....	.....	10s	.....	SW	0	0	Cloudy	
Sandusky, Ohio	29.30	744.2	29.96	761.0	58	14.4	82	NE	14	6.3	.....	.....	10s	.....	N	0.02	0.5	Cloudy	
Sandy Hook, New Jersey	29.93	760.2	29.96	761.0	58.0	14.4	68	NE	16	7.2	.....	5k	5s	W	.....	0.06	1.5	Cloudy	
San Francisco, California	29.84	757.9	29.91	759.7	52	11.1	93	W	16	7.2	.....	2ck	Fg	NW	W	0	0	Foggy	
Santa Fé, New Mexico	23.19	589.0	29.70	754.4	54	12.2	21	N	5	2.2	.....	2c	5s	Calm	Calm	0.01	0.3	Fair	
Savannah, Georgia	29.92	760.0	30.01	762.2	76	24.4	62	SW	8	3.6	.....	1cs	0	.....	.....	0	0	Clear	
Shreveport, Louisiana	29.67	753.6	29.91	759.7	73	22.8	81	SW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Silver City, New Mexico	24.17	613.9	29.63	752.6	58	14.4	64	Calm	0	0	.....	8c	0	Calm	.....	0	0	Fair	
Sitka, Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	.....	
Smithville, North Carolina	29.92	760.0	29.95	760.7	75	23.9	81	S	12	5.4	.....	8k	Hz	SW	.....	0	0	Cloudy	
Spokane Falls, Wash. Ter.	27.81	706.4	29.77	756.1	42	5.6	83	S	1	0.4	.....	.....	10s	.....	.....	0	0	Cloudy	
Springfield, Illinois	29.12	739.6	29.78	756.4	67	19.4	87	E	6	2.7	.....	5c	5s	W	W	0.85	21.6	Cloudy	
Springfield, Massachusetts	29.80	756.9	29.92	760.0	57	13.9	58	N	4	1.8	.....	0	0	.....	.....	0.41	10.4	Clear	
Stockton, Texas	26.79	680.5	29.78	756.4	64.7	18.2	73	S	12	5.4	.....	0	1s	.....	Calm	0.08	2.0	Clear.	
St. Vincent, Minnesota	29.05	737.9	29.89	759.2	49	9.4	78	SE	4	1.8	.....	0	0	.....	.....	0.47	11.9	Clear.	
Thatcher's Island, Mass	29.84	757.9	29.90	759.4	54	12.2	74	NW	8	3.6	.....	0	0	.....	.....	0.52	13.2	Clear	
Toledo, Ohio	29.29	744.0	29.97	761.2	51	10.6	79	N	8	3.6	.....	.....	10s	.....	E	0.04	1.0	Cloudy	
Tucson, Arizona	27.37	695.2	29.66	753.4	65	18.3	22	E	3	1.3	.....	1c	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.49	749.0	29.89	759.2	54.3	12.4	77	NW	9	4.0	.....	0	2s	.....	.....	0	0	Clear	
Uvalde, Texas	28.90	734.0	29.70	754.4	67	19.4	79	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Vicksburg, Mississippi	29.69	754.1	29.94	760.5	73	22.8	81	S	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Visalia, California	29.49	749.0	29.84	757.9	55	12.8	77	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C.	29.83	757.7	29.94	760.5	61	16.1	82	N	2	0.9	.....	.....	1on	.....	NW	0.02	0.5	Light rain	
Wickenburg, Arizona	.....	.....	.....	.....	55	12.8	28	Calm	.....	.....	0	5ck	0	.....	.....	0	0	Fair	
Wilmington, N. Carolina	29.89	759.2	29.95	760.7	71	21.7	86	SW	5	2.2	.....	8k	0	NW	.....	0	0	Fair	
Winnemucca, Nevada	25.46	646.7	29.67	753.6	45	7.2	76	SW	10	4.5	.....	0	8ks	.....	SW	0.53	13.5	Cloudy	
Wood's Holl, Mass	29.85	758.2	29.89	759.2	58	14.4	82	E	3	1.3	.....	10ck	0	NE	.....	0.15	3.8	Cloudy	
Yankton, Dakota	28.38	720.8	29.64	752.8	64	17.8	89	NE	19	8.5	.....	.....	10s	.....	NE	0	0	Cloudy	
Yuma, Arizona	29.57	751.1	29.71	754.6	64.7	18.2	49	W	2	0.9	.....	2c	0	SW	.....	0	0	Fair	
Sub-Series.																			
Bogota, U. S. Columbia	22.12	561.8	.....	.....	54.0	12.2	85	Calm	0	0	.....	.....	10ks	.....	.....	0.22	5.6	Cloudy	Thomas Herran.
Buff Bay Town, Jamaica	29.78	756.4	30.09	764.3	77	25.0	82	E	.....	.....	.....	0	2k	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	30.01	762.2	30.06	763.5	82	27.8	70	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	A. Van Caneghem, Asst
Kingston, Jamaica, W. I.	29.99	761.7	30.00	762.0	80.8	27.1	74	Calm	0	0	.....	0	2ks	.....	E	0	0	Fair	Robert Johnstone.
Navassa, W. I.	29.91	759.7	29.99	761.7	82	27.8	79	NE	8	3.6	.....	2s	2k	NE	E	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.05	763.3	30.05	763.3	78	25.6	86	E	.....	.....	2	5k	7ks	E	.....	0.380	9.6	½ Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.44	747.8	30.00	762.0	78	25.6	89	Calm	0	0	.....	.....	10ks	.....	N	0.86	21.8	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	77.0	25	.....	N	.....	.....	1	10ck	1ks	N	N	0.39	9.9	.....	Earl Flint.
Santiago de Cuba, W. I.	29.98	761.5	30.00	762.0	81	27.2	78	Calm	0	0	.....	4ks	0	.....	.....	0.07	1.8	Fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	30.10	764.5	30.15	765.8	32.0	0.0	94	NE	10	4.5	.....	1c	0	NE	.....	0	0	Fair	J. Fortescue & W Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert, Thursday Island, Oceanica	29.91	759.7	77	25.0	90	SE			3-4		6							Misty	Capt. J. P. Maclear.
H. M. S. Alexandra, Zante, Ionian Islands	29.94	760.5	72.5	22.5	73	NE			1		1							Blue sky	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 24° 47′, E. 66° 59′	29.63	752.6	81	27.2	91	W			5		2	NW						D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			74	23.3		N			2-3		0					1	NE	Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N. 13° 09′, W. 61° 14′	30.03	762.7	82	27.8	83	ESE			2		3							D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 23° 27′, E 3° 27′	30.16	766.1	68	20.0	69	SW			1		1	SW				2	SSW	Blue sky	Com. F. W. Richards.
H. M. S. Champion, S. 25° 36′, W. 40° 27′	30.23	767.8	74	23.3	81	NNE			3-4		3					3	E	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Chefoo Harbor, China	29.67	753.6	69	20.6	75	S			1-2		1	SW						Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, Tunis, Africa	29.77	756.1	74	23.3		ENE			2		4	WSW						D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, N. 19° 24′, W. 27° 10′	30.16	766.1	73	22.8	81	NNE			5		3					4	NNE	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.10	764.5	59	15.0		NNW			1-3		8	NNW						Showery	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I	29.98	761.5	76	24.4	81	WNW			2-3		6	WNW						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 47′, W. 53° 07′	29.66	753.4	45	7.2	96	NE			1		10					1	NE	Misty	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 6° 48′, E. 79° 40′	29.81	757.2	78	25.6		S			2-3		3					2	SE	D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 2° 40′, E. 105° 20′	29.73	755.1	83	28.3		E			3		3	SE				1	E	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, N. 3° 47′, E. 172° 44′	29.81	757.2	83	28.3	87	E			1		10	E						Showery	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, S. 18° 08′, E. 49° 36′	30.06	763.5	78	25.6	77	ESE			5		10	ESE				4	SE	Raining	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Pasquet, Newfoundland	29.64	752.8	47	8.3		SSE			1		4	S						D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn N. 13° 03′, E. 43° 13′	29.62	752.3	87.5	30.8	75	NW			1		2					1	WNW	D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo N. 20° 11′, W. 86° 10′	29.98	761.5	87	30.6	79	ESE			1-2		2	E				2	ESE	D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish, Yokohama, Japan	29.74	755.4	71	21.7	90	ESE			2		10					1	E	Raining	Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd	29.81	757.2	50	10.0	86	Calm			0		9							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	30.31	769.9	37	2.8	90	Calm			0		0							Blue sky	Capt. L. F. Jones.
H. M. S. Griffon, Nassau, W. I	30.07	763.8	82	27.8	74	Calm			0		1							Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 43° 21′, W. 18° 28′	30.23	767.8	61	16.1		NNW			3		5	NNW				4	N	D. clouds	Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.99	761.7	62	16.7		Calm			0		3	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.75	755.6	70	21.1		Calm			0		10							Raining	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 03′, E. 109° 55′	29.69	754.1	81.9	27.7	89	ESE			1		5							Misty	Capt. A. Carpenter.
H. M. S. Midge, Wenchow, China	29.76	755.9				Calm			0		1	E				1		D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. M. S. Modeste, S. 18° 10′ E. 76° 50′	29.97	761.2	76	24.4	76	ESE			3		2	SE				3	ESE	D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Tunis, Tunis, N. Africa	29.73	755.1	71	21.7	95	WNW			4		9	NNW						D. clouds	Capt. G. Tryon, C. B

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, N. 2° 00′, E. 110° 04′			79.5	26.4		E			1		10	ESE				2-3	S	Overcast	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.67	753.6	48	8.9	85	NNW			2		10	NNW						Overcast	Capt. E. B Drummond.
H. M. S. Orontes																			Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.88	758.9	79.5	26.4	97	NE			1		9					1	SE	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, LaGuayra, Venezuela, S.A.	29.94	760.5	80	26.7	86	NE			1		3					1	NNE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.73	755.1	80	26.7		Calm			0		6	SSE						Raining	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 48° 26′, W. 123° 27′	29.82	757.4	49	9.4		WSW			1		8							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 04′, E. 39° 47′	30.03	762.7	78.3	25.7	82	S			4-5		10					4	SSE	Squally	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, S. 7° 03′, E. 64° 08′	29.49	749.0	81	27.2	78	ESE			1		1					6	SE	Blue sky	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 31° 35′, W. 160° 54′	30.34	770.6	69	20.6	73	NNE			1		1					2	N	Blue sky	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 14° 19′, W. 146° 18′	30.02	762.5	76	24.4	76	NE			5		10					4	NE	Overcast	Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A.	30.05	763.3	53	11.7	86	SSE			1		2	Calm						Misty	Capt. A. H. Markham.
H. M. S. Turquoise, S. 49° 25′, W. 74° 17′	30.34	770.6	21	— 6.1	100	NNE			1		0							Blue sky	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.			81	27.2		NNW			1		4							D. clouds	Com. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	29.95	760.7	55	12.8	74	Calm			0		0							Blue sky	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, Shat el Arab River, Turkey	29.69	754.1	90.5	32.5	61	NW			2									Misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, Loando, Africa	30.05	763.2	75.6	24.2	74	WNW			3		3					1		D. clouds	Carlos Candid dos Reis, Comd't.
Quanza, N. 12° 51′, W. 18° 29′	30.04	763.1	80.6	27.0	78	N			3		0					3	N	Blue sky	Carlos M. de Silva Costa, Comd't
Rio Lima																			S. C da Silva Costa, Comd't.
Sado, S. 5° 04,′ E. 10° 42′	29.93	760.3	80.1	26.7	82	SSE			5		9			20 minutes		3	SSE	Gloomy	G. A de Brito Capello, Comd't.
Tamega, Macao, China	29.73	755.1	77.0	25.0	76	SE			2		9		S					D. clouds	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga N. 50° 50′, E. 0° 54′	29.44	747.7	51.1	10.6	88	NNW			4		10							Overcast	Capt. M. von Krusenstierna.
H. M. Frigate Vanadis																			Com. Th. Ulner.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.05	763.3	75	23.9	59	SW	9	4.0			0			0	0			Clear	
N. Yard, Portsmouth, N. H.	29.89	759.2	52	11.1	?	Calm	0	0			0			0.2	5.			Clear	
Naval Hospital, Yokahama, Japan	23.60	751.8	68.5	20.3	95	E			2		10		ENE	1.65	41.9			Light rain	
Adams Panama, Panama	29.71	754.6	79	26.1	91	NNE			2		8		W			Sm'h		Cloudy	
Alaska, Callao, Peru	29.94	760.5	64	17.8	94	E			1		10			0	0	Sm'h		Overcast	
Alert, N. 25° 01′, E. 141° 42′	29.90	759.4	83	28.3	79	NNW			2		2		NNW			Long	ENE	Clear	
Alliance, Norfolk, Va	29.79	756.7	68	20.0	90	S			2		2		ESE	0	0			Fair	
Ashuelot, Kobe, Japan	29.79	756.7	70	21.1	95	Calm			0		10		Calm					Rainy	
Colorado, New York, N. Y.	29.92	760.0	56	13.3	81	N	4	1.8			8		Calm	0.02	0.5			Cloudy	
Constitution, Norfolk, Va.	29.83	757.7	68	20.0	79	WSW			2		8		W					Cloudy	
Franklin, Norfolk, Va	29.82	757.4	69	20.6	80	WSW	8.4	3.8			2		NW	0	0			Fair	
Galena, Cadiz, Spain	30.02	762.5	68	20.0	79	WSW			5		10					Mod.	W	Cloudy	
Independence, N. Yard, Mare I'd, Cal.	30.00	762.0	65	18.3	84	SW	1.2	0.5			8		SW					Fair	
Jamestown, Sitka, Alaska	29.80	756.9	50	10.0	93	Calm			0		8			0	0			Fair	
Kearsarge. Norfolk, Va	29.92	760.0	68	20.0	79	WSW			2		2					Sm'h		Fair	
Lackawanna. S. 10° 23′, W. 141° 19′	30.10	764.5	82	27.8	96	E			4-5		2		E			Long	E	Fair	
Marion, Montevideo, Uruguay	30.36	771.1	53	11.7	67	SE			5		8		SE			Mod.	SE	Cloudy	
Michigan, Erie, Pennsylvania	29.87	758.7	55	12.8	80	NE			2		2							Fair	
Minnesota, Newport, R. I.	29.92	760.0	57	13.9	87	N			1		3		NNE			Sm'h		Fair	
Monocacy, Yokohama, Japan	29.74	755.4	70	21.1	95	E			2		10		S					Cloudy	
New Hampshire. Norfolk, Va	29.85	758.4	70	21.1	80	SW	5	2.2			8		SW	0	0			Cloudy	
Nipsic. N. 36° 35′, W. 8° 36′	30.06	763.5	66	18.9	89	W			5		8					Sm'h		D. clouds	
Onward, Callao, Peru	29.97	761.2	64	17.8	94	E			1		10					Long	W	Cloudy	
Palos, Nagasaki, Japan	29.76	755.9	70	21.1	100	NE			1		10							Rainy	
Passaic, Washington, D. C.	30.00	762.0	62	16.7	94	Calm			0		10							Cloudy	
Pensacola. San Francisco, Cal.	29.95	760.7	53	11.7	93	W			5		5		W	0	0	Sm'h		Fair	
Portsmouth. Hampton Roads, Va.	29.88	758.9	67	19.4	95	SW			4		5							Fair	
Powhatan. Norfolk, Va	29.88	758.9	71	21.7	75	SW			1		2		SW					Fair	
Quinnebaug, N. 29° 14′, W. 64° 53′	30.05	763.3	75	23.9	77	WNW			3		2		SSW			Mod.		Fair	
Ranger, N. 20° 45′, W. 105° 32′	29.82	757.4	79	26.1	82	SSW			1		10		Calm	0	0	Sm'h		Cloudy	
Richmond, Nagasaki, Japan	29.73	755.1	71	21.7	100	Calm			0		10			0.63	16.0			Rainy	
Saratoga, Hampton Roads, Va.	29.85	758.2	67	19.4	89	SW			3		0			Rain				Clear	
Shenandoah, Montevideo, Uruguay	30.45	773.4	52	11.1	73	SE			4		8		SE			Mod.	SE	Misty	
St. Louis, League Island, Pa.	29.49	749.0	61	16.1	71	NNE	11	4.9			8		W	0	0			Cloudy	
Swatara, Shanghai, China	29.72	754.9	69	20.6	90	NNE			1		10		Calm					Overcast	
Tennessee, New York, N. Y.	29.95	760.7	58	14.4	76	NNE	12	5.4			8		NW	0.06	1.5	Sm'h		Cloudy	
Ticonderoga, S. 57° 48′, W. 71° 32′	30.11	764.8	37	2.8	100	SSW			5		10		SSW	Inap.	Inap.	R'gh	SSW	Misty	
Trenton, Barcelona, Spain	29.62	752.3	69	20.6	80	WSW			4		10			4 hours		Sm'h		Fair	
Vandalia. Navy Yard, N. Y	30.20	767.1	59	15.0	70	NE			3		8		W					Fair	
Wabash, Boston, Massachusetts	29.92	760.0	60	15.6	60	NW	3	1.3			0			0.12	3.0			Clear	
Wachusetts, N. Yard, Mare I'd, Cal.	29.94	760.5	57	13.9	87	SW			2		8		S	0	0			Cloudy	
Yantic, N. 22° 25′, W. 87° 10′	29.90	759.4	79	26.1	95	SSE			3		5		SSE			Sm'h		Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 29° 43′, W. 78° 20′	30.02	762.5	77.5	25.3	82	S			3		0							Blue sky	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Olpero																			W. N. Lailey.
City of Agra, N. 29° 12′, W. 20° 49′	30.34	770.6	68.7	20.4	70	NE			5		0							Blue sky	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 48° 53′, W. 5° 27′	29.69	754.1	53.5	11.9	80	WNW			6		6							Showery	Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 22° 20′, W. 31° 41′	30.30	769.6	72.0	22.2	90	ESE			3		8							Showery	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamports																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 19° 36′, W. 36° 11′	30.19	766.8	77.8	25.4	73	NE			5		5							Showery	Capt. M. Parry.
Sierra Estrella, N. 39° 11′, W. 16° 07′	30.24	768.1	63.2	17.3	66	NNE			4		3							Misty	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 27° 15′, E. 34° 12′	29.71	754.6	78.5	25.8	62	NW			6		0							Blue sky	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 47° 28′, W. 70° 11′	29.88	758.9				NW			4		5		W			Sm'h		Fair	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Scythia, N. 50° 55′, W. 13° 58′	29.70	754.4				NW			6		8		N	Showers		Long	NW	Fair	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 46° 15′, W. 38° 42′ †	30.22	767.6	62	16.7	77	W			2		Fog					Sm'h		Foggy	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 49° 06′, W. 30° 28′ †	30.04	763.0	56	13.3	100	W			4		10		W	10h'rs	light	Mod.	W	Overcast	Capt. Benj. Gleadell.
S. S. Germanic																			Capt. Ch. W. Kennedy
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, N. 49° 13′, W. 18° 19′ ‡	30.12	765.0	54.5	12.5		NNW			6		8		N	6 hours		H'vy	NW	Hailing	
S. S. Köln, N. 48° 51′, W. 23° 24′	30.25	768.3	58.0	14.4	76	SW			4		8		SW	2 hours		Sm'h	SW	Fair	Capt. Th. Jüngst.
S. S. Leipzig, N. 41° 45′, W. 49° 52′	30.02	762.5	67.5	19.7		SSW			4		8		SSW	Light rain 0	0	Mod.	SSW	Fair	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg, N. 40° 00′, W. 60° 02′	29.77	756.1	69.8	21.0		NNW			2		2		NW	3 hours		Mod.	NNW	Fair	Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. N. 50° 53′, W. 14° 40′	29.85	758.2	52	11.1	93	NNW			6		5		N			R'gh	N	Fair	Capt. J. W. Shackford.
S. S. Indiana, N. 40° 40′, W. 53° 16′ †|	29.84	757.9	74	23.3	85	SW			5		8		SW	0	0	Mod.	SW	Cloudy	Capt. R. W. Sargent.
S. S. Ohio, N. 45° 45′, W. 36° 50′ *†	30.42	772.7	63	17.2	94	SW			3		Fog		SE	Light		Mod.	SW	Foggy	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, Delaware River †|	29.87	758.7	65	18.3	100	NE			2		10		NE			Sm'h	NE	Cloudy	Capt. Geo H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, San Francisco, Cal. †|	29.95	760.7	51	10.6	93	W			5		10		W	0	0	Sm'h		Foggy	Capt. H. Davison.
S. S. Gaelic, Yokohama, Japan *†		29.94	760.5	71	21.7	95	ESE			1		10		NE					Raining	Capt. W. H. Kidley.
S. S. Oceanic, Hong Kong, China		29.97	761.2	80	26.7	70	SSE			2		7		SE					Fine	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, N. 44° 35′, W. 124° 20′ †|	29.85	758.2	51.5	10.8	93	NNW			1		10		NW			Sm'h	NW	Cloudy	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Francisco, Cal. †|	29.90	759.4	52	11.1	93	W			5		Fg			0	0			Foggy	Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, Tacoma, Washington Ter. †|	29.86	758.4	53	11.7	80	SE			1		10		E					Cloudy	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, San Francisco, Cal. †|	29.86	758.4	53	11.7	93	NW			2		10		NW					Hazy	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal. †|	29.89	759.2	51	10.6	100	SW			2		10		SW					Foggy	Capt. G. Debney.
S. S. Victoria, Fraser River, B. C. †|	29.87	758.7	52	11.1	73	Var.			2		8					Sm'h		Cloudy	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 19° 49′ W. 159° 29′		30.02	762.5	76	24.4	86	ENE			4		2		NE			Mod.	ENE	Clear	A. Bannerman, 2d Officer.
S. S. City of New York, Sydney, N. S. W. †|	29.99	761.7	54	12.2	100	W			2		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, Panama, Panama †|	29.95	760.7	79	26.1	86	Calm			0	0	8		NE	0	0	Sm'll	NE	Cloudy	Capt. D. S. Austin.
S. S. City of Peking, N. 47° 17′, W. 161° 14′ †|	30.25	768.3	46	7.8	92	SSW			2		10		SW	0	0	Light	S	Misty	Capt. G. G. Berry.
S. S. City of Sidney, N. 35° 01′, W. 129° 43′ *†		30.12	765.0	62	16.7	78	WNW			5		8		NW	0	0	Mod.	NW	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 37° 40′, E. 161° 07′ †|	30.13	765.3	60	15.6	82	E			3		10		SE			Mod.	W	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 15° 34′, W. 97° 00′ †|	29.90	759.4	83	28.3	87	WNW			2		8		W	0.02	0.5	Mod.	SSE	Cloudy	Capt. R. R. Searle.
S. S. Granada, N. 31° 30′, W. 119° 10′ †|	29.97	761.2	60	15.6	82	NW			4		10		NW	0	0	Long	WNW	Cloudy	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. W.		30.20	767.1	68	20.0	69	W			1		5		W					Fair	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, 1 N. 49° 42′, W. 6° 21′ †|	29.89	759 2	54	12.2	?	NW			5		2		NW	6 hours		Mod.	W	Fine	A. Feddersen, 2d Officer.
S. S. Rhyniand, Jersey City, N. J. †|	30.01	762.2	60	15.6	88	N			4		10		NW	0.15	3.8			Cloudy	Capt. Wm. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, Fall River, Mass		29.85	758.2	57	13.9	69	NW			0		5k		NW	0.16	4.1			D. clouds	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, N. 23° 00′, W. 64° 28′ †|	30.13	765.3	86	30.0		SSE			1		2			0	0	Sm'h		Fine	Capt. W H. Champlin.
U. S. F. C. S. Fish Hawk, Baltimore, Md †|	29.93	760.2	65	18.3	83	NW	2	0.9		2c	5k			0.01	0.3			Cloudy	
Bark Sunbeam, Lisbon, Portugal †|	30.02	762.5	68	20.0	56	NNE			6		2		NNE	Light				Fair	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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

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

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

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

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

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

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W. B. Hazen

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

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 7, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours ‡			29.97	761.1	70.0	21.1	94	W			4		4			0	0	Cloudy... ...	Raynard.
Algiers ‡			29.87	758.8	67.6	19.8	67	W			6		8			1.331	33.8	Very cloudy	Nicolas.
La Calle ‡			29.80	756.8	68.7	20.4	78	NW			6		5			0	0	Cloudy.....	Fonfrède.
Tunis ‡			29.77	756.2															Jacques.
Sfax ‡			29.93	760.3															Gau.
Saida ‡			29.99	761.8	70.3	21.3	43	NW			6		8			0	0	Very cloudy	Dumas.
Tebessa ‡			29.86	758.5	68.4	20.2	53	WSW			4		7			0.350	8.9	Very cloudy	Watrin.
Geriville ‡					66.2	19.0	46	NW			1		0			0.012	0.3	Clear.....	Louchamp.
Laghouat ‡			29.95	760.6	76.6	24.8	27	W			3		1			0	0	Very fair....	Herbin.
Biskra ‡			29.91	759.5	82.8	28.2	61	NW			4		4			0	0	Cloudy.....	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.45	748.0	29.54	750.3	45.0	7.2	76	NW	10	4.5			6			0.06	1.5	Squally.....	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	28.87	733.4	29.39	746.6	71.6	22.0	58	SW			5		10			0.386	9.8	Raining	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.68	728.5	29.40	746.7	79.2	26.2	41	W	5.6	2.5			9			0	0		Dr. Wierzbicki.
Eperies	28.64	727.4	29.47	748.5	73.6	23.1	64	SE			1	0	9ks		N	0	0		Julius Mikolik.
Gratz ‡	28.21	716.4	29.40	746.8	64.2	17.9	85	N			2		10			0.138	3.5		Andreas Rospini.
Hermannstadt	28.23	717.0	29.60	751.7	68.7	20.4	67	SSE			4		10			0.803	20.4		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.21	716.5	29.54	750.2	49.8	9.9	86	WSW			2		10			0.457	11.6		The Staff.
Lemberg	28.60	726.4	29.54	750.3	67.5	19.7	71	SE			2		10			0.205	5.2		Dr. T. Stanecki.
Pola	29.37	745.9	29.48	748.7	64.8	18.2	92	SSE			3		10			0.236	6.0		I. R. Hydrographic Office.
Szathmar	29.07	738.3	29.50	749.3	79.2	26.2	59	SE			5		4			0.890	22.6		Beicht Petér, S. J.
Szegedin	29.19	741.5	29.46	748.2	75.9	24.4	57	S			5		6			0	0		Karl Stancel.
Trieste	29.36	745.7	29.46	748.3	61.9	16.6	89	WSW			1		10			0.394	10.0	Raining.....	Secco.
Vienna	28.80	731.6	29.51	749.5	53.6	12.0	89	W			1		10			0.217	5.5	Raining	I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force o—10	Clouds. Amount and kind. Up'er o—10	Lo'er o—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.58	751.3	29.68	753.9	48.0	8.9	50	NNW	19	8.5			6			0.035	0.9	Squally	W. Boswell.
Armagh, Observatory	29.60	751.8	29.84	757.9	50.6	10.3	56	N	8	3.6			5					D. clouds	S. Call.
Bidston, Liverpool Obs'y			29.71	754.6	52.4	11.3	47	NW	21	9.4			5					D. clouds	John Hartnup.
Bolton, Sharples	29.15	740.4	29.68	753.9	46.8	8.2	71	N	6	2.7			8					Raining	Thomas Mackereth.
Bradford, Yorkshire	29.33	745.0	29.72	754.9	44.6	7.0	90	N			1		8			0.07	1.8	D. clouds	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.99	761.7	30.02	762.5	85	29.4	68	NE			2		3					D. clouds	Corpl.J.Surgener,A.H.C.
Cardington																			John McLaren.
Chatham, School M. E.	29.48	748.8	29.61	752.1	47.1	8.4	92	NE			2	10						Raining	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.57	751.1	29.80	756.9	51.6	10.9	51	NNW			6	5						Squally	The Staff.
Fort Napier, Natal	27.72	704.1	29.94	760.5	87.1	30.6	97	NE			1	0						Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.88	758.9	87	30.6	80	SW			1							Raining	Sgt. C. E. Keane.
Galway, Queen's College			29.87	758.7	53	11.7	67	N			2	2						Blue sky	J. O'Donaghue.
Gibraltar, Mediterranean	29.99	761.7	30.04	763.0	72.4	22.4	89	W			5	2						Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.50	749.3	29.71	754.6	52.8	11.6	40	N			4	6				Blank		D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	29.45	748.0	29.62	752.3	51.7	10.9	75	N			1	10						Raining	The Staff.
Guernsey	29.42	747.3	29.63	752.6	52.5	11.4	63	NW			5	7						Showery	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.61	752.1	29.64	752.8	49.0	9.4	73	NNE	12	5.4		10						Raining	The Staff.
Leicester, Museum	29.50	749.3	29.75	755.9	51.3	10.7	85	NW			1	10				Blank		Overcast	J. E. Carryer.
Malta, Mediterranean	29.64	752.8	29.71	754.6	75	23.9	66	NW			2	1						Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	30.09	764.3	30.13	765.3	85.8	29.9	72	E			2	3						D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.17	740.9	29.69	754.1	48.4	9.1	60	NW			2	8				Blank		D. clouds	John Mac Emall.
Oxford, Radcliffe Obs'y	29.43	747.5	29.66	753.4	50.2	10.1	55	NW			4	10						Threatening	The Staff.
Plymouth	29.67	753.6	29.74	755.4	55.0	12.8	57	N			5	5						D. clouds	John Merrifield.
Sandwick Manse, Orkneys			29.71	754.6	44	6.7	60	N	30	13.4		1						Showery	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.66	753.4	29.72	754.9	80.0	26.7	48	Calm			0	1						Blue sky	Serg't W. H. Lyne.
Sheffield	29.41	747.0	29.69	754.1	56.7	13.7	70	N			2	5				0.01	0.3	D. clouds	W. F. Cooper.
Siloth Rectory	29.70	754.4	29.73	755.1	52.7	11.5	67	NW			2	10				0.100	2.5	Overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.72	754.9	47.1	8.4	68	N	15	6.7		10						D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	29.44	747.8	29.65	753.1	53.3	11.8	71	N			3	10						Squally	Rev.C.H.Griffiths,F.M.S
Truro, Royal Institution	29.81	757.2	29.83	757.7	56	13.3	57	NW			7	6						D. clouds	W. Newcombe.
Valencia, Observatory	29.93	760.2	29.95	761.0	52.4	11.3	69	NNW	14	6.3		4				Blank		Squally	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B					53.0	11.7		NW	7	3.1			9ks			0	0	D. clouds	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.03	762.7	30.07	763.8	47	8.3	55	W	11	4.9		0	0			Inap.	Inap.	Clear	H. J. Cundall, C. E.
Chatham, N. B.*	30.00	762.0	30.06	763.5	45	7.2	57	S	6	2.7		0	0			0	0	Clear	G. A. Blair.
Chicontimi, Quebec					47.0	8.3		NW			2		10s					Raining	Rev. V. A. Huart.
Cornwall, Ontario	29.90	759.4	30.10	764.5	47.3	8.5	78	S			1	0	0			0	0	Blue sky	James Smith, M. A
Dalhousie, N. B	29.92	760.0	29.95	760.7	47.5	8.6		W			2	0	7ks			0	0	D. clouds	H. A. Johnson.
Father Point, Quebec*	29.93	760.2	29.95	760.7	47	8.3	66	NW	10	4.5			10n			0	0	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	28.97	735.8	29.77	756.1	58	14.4	87	SE	3	1.3		2k	2ks	S	S	0.030	0.8	Fair	James Stewart.
Fredericton, N. B	30.07	763.8	30.13	765.3	46.6	8.1	53	NW	8	3.6		0	0			0	0	Clear	Prof. Harrison.
Granton, Ontario	28.88	733.5	29.99	761.7	46.0	7.8	100	E			1		10n			0.15	3.8	Raining	James Grant.
Halifax, N. S.*	30.02	762.5	30.15	765.8	49	9.4	64	NW	10	4.5		0	0			0.038	1.0	Clear	A. Allison.
Hamilton, Ontario	29.60	751.8	29.98	761.5	46.1	7.8	78	NE			1	10cs	0	NE				Raining	Geo. Dickson, B. A.
Kingston, Ontario*	29.76	755.9	30.09	764.3	50	10.0	73	E	5	2.2		10cs	0			0	0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S	29.97	761.2	30.01	762.2	51.5	10.8	66	W			4	3k	0	W		0	0	Fair	C. H. Rigby.
Montreal, Quebec*	29.91	759.7	30.11	764.8	54	12.2	57	SW	7	3.1		0	0			0	0	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario	29.77	756.1	29.81	757.2	49.0	9.4	65	SE			1	0	0			0	0	Blue sky	J. R. Nason.
Parry Sound, Ontario*	29.35	745.5	30.04	763.0	51	10.6	73	SE	8	3.6		2k	2s	W	W	0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario	29.31	744.5	30.07	763.8	47.7	8.7	77	W			1		10ks			0	0	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.27	743.4	29.97	761.2	47	8.3	94	NE	9	4.0			10n		NE	0.10	2.5	Light rain	H. Morgan.
Port Stanley, Ontario	29.29	744.0	29.94	760.5	48	8.9	96	N	8	3.6			10n		NE	0.12	3.0	Light rain	M. Payne.
Quebec, Quebec*	29.78	756.4	30.10	764.5	45	7.2	68	N			1	0	2s		N	0	0	Clear	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.61	752.1	30.07	763.8	43	6.1	83	NE	2	0.9		2c	0	W		0	0	Fair	W. H. McIntyre.
Saugeen, Ontario*	29.26	743.2	29.98	761.5	45	7.2	90	E	7	3.1			9ks			0	0	Cloudy	K. Stewart.
St. Andrews, N .B	30.08	764.0	30.14	765.5	46	7.8	59	NW	3	1.3		0	0			0	0	Clear	
St. John, N. B	29.97	761.2	30.14	765.5	50.0	10.0	82	SW	9	4.0		0	0			0	0	Blue sky	G. Murdock, C. E.
Stratford, Ontario	28.67	728.2	29.96	761.0	45.0	7.2	98	SE	2	0.9			10s			0.102	2.6	Overcast	C. J. Macgregor, M. A.
Sydney, C. B*	29.98	761.5	30.02	762.5	55	12.8	65	W	8	3.6		0	2ks			0.22	5.6	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.63	752.6	30.02	762.5	47	8.3	63	E	15	6.7		2ck	8ks	SW	NE	0	0	Cloudy	Magnetic Observatory
Windsor, N. S	30.01	762.2	30.10	764.5	47.5	8.6	89	W				0	1k			0	0	Fair	
Woodstock, Ontario	28.89	733.8	29.96	761.0	44.5	6.9	93	NE	7	3.1			10s			0.20	5.1	Raining	Prof. Wolverton.
Yarmouth, N.S.*	30.12	765.0	30.19	766.8	47	8.3	66	NW	6	2.7		0	0			0	0	Clear	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.72	754.9	29.97	761.2	49	9.4	78	SW	1	0.4		2k	5s			0.30	7.6	Fair	John Delany.
St. Pierre, N. F			29.88	758.9	44.6	7.0		NW			2					0	0		N. F. Land, Comd't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	29.99	761.7			62.0	16.7	85	W	13.4	6.0		8c	0			0	0	Fine	John Duthie.
Cape Town, C. G. H. Obs'y	30.08	763.5	30.10	764.5	46.7	8.2		NNE	3.6	1.6		5	5ks;n			0.250	6.4		The Staff, for D. Gill.
Worcester *†	28.98	736.1			59.2	15.1	67	W			1	5	5			0	0	Threatening	C. Stokes.
CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.87	758.7	29.90	759.4	67.8	19.9	92	ESE	2.9	1.3		2ck	0			0	0	Clear	M. Marc Dechevrens, S J.

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COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

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

San José	25.23	666.2	29.95	750.7	68.9	20.5	93	SE			1	7cs	1d			1.02	26.	Cloudy	Amand Maison.

DANISH SERIES.

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

Copenhagen	29.39	746.5	29.44	747.7	56.7	13.7	55	W	22	10			9						Oversergent Fischer.
Fanöe																			Overloerer Lauridsen.
Godthaab, Greenland	29.51	749.6	29.56	750.7	39.9	4.4	92	S			4		10					Raining	S. Kleinschmidt.
Stykkisholm, Iceland	30.06	763.5	30.10	764.6	44.6	7.0		E			2		n						A. O. Thorlacius.
Thorshavn	29.87	758.8	29.91	759.7	38.8	3.8	69	NNE	16	7			6					Snowing	Overloerer Bergh.
Vestervig	29.24	742.8	29.34	745.2	52.5	11.4	81	WSW			6		1						Loerer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.08	738.6	29.73	755.2	49.6	9.8	95	NNW			1		10			0.740	18.8	Raining	M. Labroue, Director.
Alençon Normal School	29.13	739.8	29.68	753.8	54.0	12.2	93	W			2	5ck	o	NW		0.08	2.	Cloudy	M. Nicot, Director.
Arras, Engineer School	29.30	744.2	29.55	750.6	55.4	13.0	64	NW			1	o	k		NW				M. Klein, Commandant.
Avignon, Normal School	29.52	749.9	29.60	751.9	63.9	17.7	52	WSW			1		5		W	0.697	17.7	Cloudy	M. Giraud, Director.
Bar-sur-Seine	29.02	737.0	29.56	750.7	58.6	14.8	59	NE			1	o	8km		WSW	0.177	4.5	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.33	744.9	29.58	751.3	57.2	14	48	W			2		8		W	0.04	1.	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	28.72	729.4	29.54	750.4	53.6	12	76	SSW			1	ck	o	S		1.02	26.		M. Gobin, Director.
Bordeaux, Observatory	29.43	747.5	29.69	754.1	57.2	14.0	55	NW			2		8		NW	0.311	7.9	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.07	738.3	29.61	752.2	50.9	10.5	74	NNE			1	o	1m		NNE	0.339	8.6		M. Postel, Director.
Brest, Naval Observatory	29.60	751.7	29.84	757.9	54.0	12.2	48	NNW			3		6		NW	0.268	6.8		M. de Rermaree, Dir.
Caen, Normal School	29.50	749.4	29.58	751.2	58.1	14.5	67	NW			3		5		NW	0.189	4.8	Cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.25	743.0	29.57	751.0	61.3	16.3	53	NNE			1		8			0.059	1.5	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.02	737.1	29.52	749.7	57.9	14.4	58	S			1					0.24	6.		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.24	717.3	29.58	751.3	52.7	11.5	61	W			2		8			0.039	1.0	¾ covered	M. Alluard, Director.
Cluny, Normal School	28.85	732.9	29.60	751.9	61.5	16.4	54	SSW			1		10		SSW		o	Covered	M. de Villemontée, Dir.
Commercy, Normal School	28.70	729.0	29.54	750.4	57.9	14.4	61	W			1	o	3kn	W	W	0.057	1.7	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.03	686.6	29.50	749.4	56.3	13.5	52	SE			3	ck	o	N		o	o		M. Jeangirard, Director.
Grenasque, du. Rhone	28.51	724.2	29.65	753.2	60.4	15.8	44	NW			3		5		NW	0.220	5.6	½ covered	M. Kina, Director.
Grenoble, Normal School	28.82	732.0	29.58	751.4	49.6	9.8	81	N			3	o	ckn			o	o		M. Ablard, Director.
Guéret, Normal School	28.12	714.2	29.77	756.1	43.5	6.4	91	SW			1	o	n		NE	0.457	11.6		M. Rivoire, Director.
Lamballe, Normal School	29.50	749.4	29.78	756.3	52.9	11.6	80	W			1		10		W	0.35	9.	Raining	M. Ollitrault, Director.
Lescar, Normal School	29.30	744.1	29.99	761.8	50.9	10.5	86	W			3	o	n			o	o		M Chauvin, Director.
Lorient, Naval Observatory	29.69	754.2	29.80	756.8	59.7	15.4	89	WNW			3		8		WNW	0.028	0.7	¾ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.53	724.7	29.56	750.7	64.4	18.0	35	SW			1		8		NNE	0.138	3.5	Very cloudy	M. André, Director.
Mans, Normal School	29.28	743.7	29.59	751.5	49.6	9.8	86	N			3		8		W	0.024	0.6	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.34	745.3	29.61	752.0	62.8	17.1	50	W			5		5		NW	o	o		M. Stephan, Director.
Montlouis l'Instituteur	24.49	622.1	29.73	755.1	40.6	4.8	60	N	20.6	9.2			9		NW	0.008	0.2	Sleeting	M. Cave, for Dr. Fines.
Montpellier, Normal School	29.52	749.8	29.62	752.4	65.1	18.4	56	WNW			4		5		SSE	o	o	Cloudy	M. P. Galzin, Director.
Nancy, Normal School	28 82	732.1	29.59	751.5	51.4	10.8	68	SSW			1		10	SW		0.087	2.2	Raining	M. Hasse.
Nantes, Observatory	29.56	750.8	29.72	755.0	54.0	12.2	76	WNW			2-3	c	8n	WSW	WNW	0.287	7.3		M. Larocque, Director.
Nice	29.32	744.6	29.35	745.4	71.2	21.8	38	W			8		1	NW	W	0.291	7.4	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.55	750.6	29.65	753.2	63.7	17.6	33	N	33.6	15.0			5	WNW	NW	o	o		Dr. Fines.
Pic-du-Midi, Plantade	22.22	564.5			24.4	—4.2							10		NW	1.118	28.4	Snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.54	724.9	29.58	751.3	61.2	16.2	58	N			4		5	NW	N	0.28	7.	Raining	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.70	627.4			32.0	0.0	100	WSW			4		10			0.177	4.5	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	29.71	754.5	29.74	755.3	64.0	17.8	90	NW			2		8		NW	o	o	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.50	749.2	29.72	754.8	48.9	9.4	81	NNW			2		10					Raining	M. Mouillot, Director.
Rodez, Normal School	27.53	699.2	29.08	753.9	47.1	8.4	87	W			2		10			0.20	5.	Raining	M. Richard, Director.
Rouen, Normal School	29.49	749.0	29.58	751.2	55.5	13.6	62	SW			1		5		NW	0.295	7.5	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.50	749.4	29.66	753.4	51.4	10.8	95	W			1		8		N	0.12	3.	Very cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.41	747.0	29.58	751.2	61.3	16.3	51	W			2		7	S	W	0.028	0.7		M. Renou, Director.
Toulouse, Observatory	29.08	738.5	29.80	756.8	50.5	10.3	94	W			3		10			0.406	10.3	Covered	M. Bailland, Director.
Tours	29.42	747.3	29.62	752.3	55.4	13.0	64	SW			2		8		NW	0.142	3.6	¾ covered	M. de Tastes.
Versailles, Observatory	29.09	738.9	29.58	751.4	56.5	13.6	57	NW			3					0.008	0.2		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.30	744.2	29.59	751.6	57.7	14.3	53	WNW			2		7		SW	0.079	2.0		M. Marié Dvy, Director.

GERMAN SERIES.

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

Bamberg	28.71	729.2	29.56	750.7	57.2	14.0	50	WNW			3	o	7k		W	0.024	0.6		Prof. Dr. Hoh.
Berlin	29.35	745.5	29.52	749.8	56.1	13.4	61	NW			3		10			0.079	2.0		Prof. Dr. Arndt.
Breslau	28.97	735.8	29.49	749.1	61.5	16.4	68	WNW			2		10			o	o		Royal University Obs'y.
Carlsruhe	29.14	740.2	29.56	750.7	59.0	15.0	66	SW			2		9	SW		o	o		Albert Senz.
Cassel	28.82	732.0	29.54	750.2	60.1	15.6	46	NNW			4		6	NW		0.079	2.0		Dr. H. Möhl.
Frankfort on the Main	29.23	742.5	29.58	751.4	63.0	17.2	47	SW			1		8			0.031	0.8		Physical Society.
Friedrichshafen	28 19	716.0	29.00	751.8	54.9	12.7	80	SSE			1		10	WSW		0.843	21.4		Wilhelm, Chief Tel.
Hamburg	29.44	747.7	29.51	749.5	58.3	14.6	56	WSW			4		8			o	o		Dr. R. Kleeman.
Kiel	29.43	747.6	29.45	748.0	57.4	14.1	55	W			4		6			0.283	7.2		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.13	740.0	29.55	750.5	54.7	12.6	67	NNW			2		9	WNW		0.315	8.0		Prof. Dr. Bruhns.
Magdeburg	29.34	745.3	29.53	750.0	52.7	13.7	60	WNW			4		9n		NW	0.181	4.6		Dr. Assmann.
Memel	29.40	740.7	29.44	747.8	78.1	25.6	42	S			3	o	5s					Thun'rstorm	Reinbrecht & Issermann.
Munich	27.78	705.7	29.02	752.4	50.0	10.0	68	W			2		9	W		0.055	1.4	Light rain	Central Station.
Neufahrwasser	29.41	740.9	29.42	747.3	81.0	27.2	34	SSE			3		8			o	o		A. Lothes.
Neustadt, Palatinate	29.02	737.0	29.54	750.2	59.0	15.0	58	SW			2		10			o	o		Dicknether.
Stuttgart	28.63	727.3	29.51	749.5	57.6	14.2	50	N			1		9	W		0.075	1.9		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.09	713.5	29.53	750.1	51.6	10.9	70	S			4		8	N		0.331	8.4		Prof. Kemlein.
Wustrow	29.43	747.6	29.40	748.2	55.4	13.0	69	NNW			4	o	8s			0.118	3.0		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.35	745.5	29.73	755.1	82.0	27.8		SW			2.0		0					Clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.55	750.5	29.60	751.7	87.1	30.6	72	SW	26.0	11.6			0			0	0	Misty	
Deesa	29.08	738.5	29.53	750.0	99.3	37.4	27	WSW	14.3	6.4			8		W	0	0	D. clouds	
Bombay	29.63	752.7	29.67	753.6	86.9	30.5	72	WNW	18.0	8.0			5		WNW	0	0	D. clouds	
Poona, Yarrowda.	27.82	706.6	29.66	753.4	80.5	26.9	57	W					9		WNW	0	0	Gloomy	
Belgaum	27.17	690.1	29.70	754.3	75.8	24.3	74	WSW	10.0	4.5			10			0	0	Overcast	
Lahore	28.69	728.6	29.38	746.2	110.8	43.8	23	W	3.1	1.4			2			0	0	Misty	
Roorkee	28.62	726.9	29.49	748.9	92.6	33.7	56	E	4.9	2.2			2			0	0	Thunder	
Agra	28.91	734.3	29.44	747.8	104.1	40.1	34	E	4.8	2.2			0			0	0		
Nagpur	28.43	722.0	29.46	748.3	77.7	25.4	92	SW	7.4	3.3			10		W	1.27	32.3	Overcast	
Jubbulpore	28.11	714.1	29.43	747.4	89.7	32.1	57	E	6.6	3.0			10			0.06	1.5	Overcast	
Lucknow	29.14	740.1	29.50	749.3	99.0	37.2	40	ENE	5.2	2.3			5		NNE	0	0	D. clouds	
Allahabad	29.16	740.6	29.46	748.3	92.7	33.7	59	NE	6.3	2.8			5		W	0	0	D. clouds	
Patna	29.37	745.9	29.54	750.4	89.6	32.0	68	E	8.7	3.9			4		E	0	0	D. clouds	
Hazaribagh	27.57	700.2	29.56	750.8	77.8	25.4	83	SE	16.1	7.2			10		NW	SE	0.25	6.4	Showery
Cuttack	29.48	748.7	29.56	750.7	82.9	28.3	85	W	0.8	0.4			7				1.62	41.1	D. clouds
Calcutta, Alipore	29.62	752.4	29.65	753.4	79.8	26.6	96	SE	6.0	2.7			10				1.74	44.2	Gloomy
Dhubri	29.57	751.1	29.69	754.1	82.8	28.2	81	SW	1.7	0.8			5			SE	0.03	0.8	D. clouds
Chittagong	29.66	753.4	29.75	755.7	77.3	25.2	92	SE	4.0	1.8			10				0 06	1.5	Drizzling
Sibsagar	29.33	745.0	29.66	753.4	85.4	29.7	79	S	2.3	1.0			10		W	W	1.71	43.4	D. clouds
Zanzibar, Africa			30.03	762.7	81.7	27.6	50	S	12	5.4			2				0	0	Blue sky
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.04	737.7	29.44	747.8	61.9	16.6	85	E	1.3	0.6			10				1.457	37.0	Prof. Giovanni Clodig.
Milan	28.87	733.4	29.38	746.2	63.5	17.5	60	NW	8.7	3.9			8		S		0.516	13.1	Prof. Schiaparelli.
Padua	29.32	744.7	29.42	747.3	65.8	18.8	65	S	8.7	3.9			10		SE		0.394	10.0	Prof. Dott. Lorenzoni.
Moncalieri	28.50	723.9	29.39	746.4	65.1	18.4	52	ESE	2.5	1.1			7		SW		0.146	3.7	Prof. P. F. Denza.
Genoa	29.24	742.6	29.43	747.4	64.4	18.0	62	SE	9.8	4.4			10		E		0.146	3.7	Prof. G. M. Garibaldi.
Mondovi	27.52	699.3	29.40	746.8	55.8	13.2	67	SE			4		9				0.197	5.0	Prof. D. C. Bruno.
Pesaro	29.42	747.2	29.47	748.4	61.9	16.6	90	NW					10		SW		0.492	12.5	Prof. Luigi Guidi.
Florence	29.22	742.2	29.47	748.5	65.8	18.8	59	SW			4		10				0.850	21.6	Prof. Costantino Pitter.
Leghorn	29.40	746.8	29.48	748.9	64.9	18.3	63	SW	8.1	3.6			7		NE		1.327	33.7	Prof. P. Monte.
Rome	29.38	746.2	29.55	750.5	65.8	18.8	70	WSW	10.5	4.7			10				0.945	24.0	Prof. P. S. Ferrari.
Lecce	29.37	746.1	29.61	752.1	78.3	25.7	43	SSE	18.1	8.1			5		SW		0.008	0.2	Prof. C. de Giorgi.
Cosenza	28.81	731.8	29.68	753.9	78.4	25.8	73	SSW	1.8	0.8			6		SW		0	0	Prof. D. Conti.
Cagliari	29.45	747.9	29.64	752.8	65.3	18.5	31	NW			4		7		W		0.551	14.0	Prof. A. Pacinotti.
Palermo	29.45	748.0	29.69	754.2	73.8	23.2	51	NW	6.3	2.8			10		WNW		0.028	0.7	Prof. G. Ciaccatore.
Syracuse	29.58	751.3	29.62	752.4	81.1	27.3	31	W	3.6	1.6			4		W		0	0	Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.83	757.7	29.56	750.7	66.2	19.0	93	WSW	10.5	4.7			10		SW		0.409	10.4	Prof. F. Brioschi.
Stelvio	21.74	552.2			31.1	—0.5	82	NE			4		10n			SE	0.114	2.9	Covered. Prof. P. F. Denza.
Valdobbia	21.73	551.9			34.2	1.2	79	NE			6		10n			SE	0.012	0.3	Covered. Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.84	757.9	29.86	758.4	69.3	20.7	95	W	0.7	0.3		ck	9s			0.049	1.2	Very cloudy	K. Sasaki.
Kioto	29.71	754.6	29.88	758.9	66.6	19.2	92	NNW	1.1	0.5		ck	10s		W	0.270	6.9	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.67	753.6	29.86	758.4	69.8	21.0	96	SW	1.7	0.8			10s			0.320	8.1	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	29.84	757.9	29.90	759.4	63.2	17.3	98	NE	10.2	4.6			10n		E	0.430	10.9	Raining	The Staff.
Wakayama	29.83	757.7	29.88	758.9	69.1	20.6	89	NNE	2.2	1.0		ck	10s			0.310	7.9	Cloudy	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.88	758.9	30.07	763.8	72.7	22.6	58	SSE	13.0	5.8		4	2	W		1.02	25.9	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Barcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.67	753.5	29.92	760.0	75.5	24.2	93	E	0.9	0.4		0	3n		SE	0	0	Clear	F. Quijano, U. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.58	751.3	29.60	751.8	57.6	14.2		WSW			3					0.539	13.7		
Groningen	29.48	748.8	29.54	750.2	55.8	13.2		NNW			2					0.401	11.7		
Helder	29.54	750.3	29.54	750.3	52.0	11.1		NW			2					0.035	0.9		
Hellevoetsluis	29.55	750.6	29.55	750.6	57.0	13.9	77	NNE			3					0.331	8.4		
Utrecht	29.52	749.7	29.50	750.9	55.2	12.9	78	W			1		8			0.551	14.0	Very cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instru'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.10	739.2	29.17	740.8	47.1	8.4	78	N	19.7	8.8	.....	.....	10	.....	.....	.....	.....	Raining	
Christiania	29.01	736.8	29.15	740.4	51.1	10.6	90	ENE	7	3	.....	.....	10	.....	.....	0.256	6.5	.....	
Gjæsvær	29.61	752.0	29.63	752.6	34.5	1.4	.....	ESE	.....	.....	2	.....	10	.....	.....	.....	.....	.....	
Lodingen	29.61	752.2	29.66	753.4	42.1	5.6	55	Calm	.....	.....	0	.....	7	.....	.....	0	0	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.24	768.0	30.25	768.4	73.4	23.0	75	NNE	4.9	2.2	.....	.....	4	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.00	736.6	29.98	761.6	66.2	19.0	32	NW	3.1	1.4	.....	.....	8	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.15	765.8	30.24	768.0	68.4	20.2	63	SW	4.9	2.2	.....	.....	10	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.78	756.3	30.13	765.4	62.6	17.0	46	NNW	21.0	9.4	.....	.....	8	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.32	770.0	30.39	771.8	69.1	20.6	85	NE	10.5	4.7	.....	.....	10	.....	.....	0	0	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.79	731.2	29.85	758.1	59.2	15.1	47	NNW	16	7	.....	0	7k	.....	.....	.....	.....	Heavy cl'ds	Capt. Lasarew.
Archangel	29.82	757.3	29.84	757.8	47.7	8.7	56	WNW	9	4	.....	4cs	0	.....	.....	.....	.....	.....	Capt. Sseliwerstow.
Astrakhan	30.17	766.2	30.08	764.1	74.3	23.5	66	ESE	11	5	.....	.....	10s	.....	.....	.....	.....	Light clouds	Capt. Wisganow.
Barnaul ‡	29.10	739.0	29.57	751.1	66.9	19.4	52	NW	9	4	.....	.....	10	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	29.29	743.9	29.51	749.6	81.0	27.2	46	S	7	3	.....	8ck	0	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	28.82	732.1	29.74	755.5	69.8	21.0	39	W	22	10	.....	.....	9ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Kasan	29.83	757.6	30.08	764.1	80.2	26.8	46	SW	4	2	.....	0	5kn	.....	.....	.....	.....	.....	Observatory.
Kertch	29.88	758.9	29.90	759.4	72.5	22.5	79	S	7	3	.....	.....	0	.....	.....	.....	.....	.....	Lagorio & Sastyres.
Kieff	29.13	740.0	29.73	755.2	79.0	26.1	41	SE	18	8	.....	c	7ks	.....	.....	.....	.....	.....	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.72	755.0	29.92	760.0	80.8	27.1	36	ESE	22	10	.....	.....	4	.....	.....	.....	.....	.....	Meteorological Obs'y.
Moscow	29.25	742.9	29.76	755.9	83.7	28.7	41	S	7.8	3.5	.....	0	2ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.77	705.4	30.03	762.7	53.6	12.0	64	Calm	0	0	.....	.....	10	.....	.....	0.181	4.6	.....	Meteorological Obs'y.
Nikolaiev	29.80	757.0	29.87	758.8	80.1	26.7	62	SSW	18	8	.....	0	1k	.....	.....	.....	.....	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.88	758.9	29.97	761.1	53.8	12.1	72	Calm	.....	.....	0	0	1k	.....	.....	0	0	.....	Lieut. Iwanow.
Pekin, China	29.62	752.3	29.76	755.9	77.9	25.5	55	SE	7	3	.....	0	5k	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	29.54	750.4	29.56	750.8	76.8	24.9	49	S	9	4	.....	.....	9n;ks	.....	.....	.....	.....	Light clouds	Central Physical Obs'y.
Tashkend, Laboratory	28.37	720.7	29.85	758.1	84.9	29.4	25	NNW	13	6	.....	.....	3	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.59	726.2	29.98	761.6	66.4	19.1	68	Calm	0	0	.....	9cs	0	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	28.99	736.4	29.38	746.2	84.2	29.0	31	SSE	20	9	.....	ck	10s	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.15	740.3	29.53	750.1	84.7	29.3	33	S	18	8	.....	.....	4	.....	.....	.....	.....	Heavy cl'ds	Berg, Assistant.
Yeniseisk	29.32	744.8	29.60	751.8	66.2	19.0	50	SSW	9	4	.....	.....	4	.....	.....	.....	.....	.....	M. O. Marks.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
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SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	29.71	754.6	51.9	11.1	40	N	.....	.....	2	0	7k	.....	.....	0.21	5.3	Cloudy..	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.87	758.7	48	8.9	92	N	.....	.....	4	5	3	N	.....	0.1	3.	D. clouds	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	29.54	750.3	.....	.....	.....	N	.....	.....	7	.....	.....	.....	.....	Blank		.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.62	752.4	29.72	755.0	71.2	21.8	40	WSW	4.3	1.9	.....	.....	1	.....	.....	0.012	0.3	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.86	758.5	29.92	760.0	55.0	12.8	93	NW	3.1	1.4	.....	1	8	N	.....	0.799	20.3	Raining	Prof. Manuel de Naveran
Burgos, Met. Obs'y	26.96	684.7	.....	.....	47.3	8.5	79	N	6.7	3.0	.....	.....	9	.....	.....	0	0	Almost cov'd	Domingo Martin.
Madrid, Royal Obs'y	27.69	703.2	29.89	759.1	61.0	16.1	33	NW	19.5	8.7	.....	0	5	.....	.....	0	0	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.69	754.1	29.84	757.8	73.6	23.1	45	NW	3.6	1.6	.....	2	3	SE	.....	0	0	Cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.10	739.1	29.99	761.8	56.3	13.5	78	NW	8.7	3.9	.....	.....	7	.....	.....	0.991	2.3	Cloudy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	30.02	762.5	30.09	764.2	81.3	27.4	76	ESE	3.1	1.4	.....	0	0	.....	.....	0	0	Clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.83	757.7	29.88	759.0	80.6	27.0	84	ESE	0.7	0.3	.....	.....	10n	.....	W	0.65	16.6	.....	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.97	761.3	30.07	763.8	65.7	18.7	54	WNW	13.1	5.9	.....	0	3	.....	NW	0	0	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.01	762.3	30.10	764.6	82.4	28.0	89	SE	2.2	1.0	.....	0	2k	.....	S	0.118	3.0	Clear	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.77	756.1	29.91	759.8	80.5	26.9	84	W	0.2	0.1	.....	.....	10kn	.....	WSW	0.05	1.5	Cloudy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.64	752.9	29.68	753.9	50.7	10.4	56	S	.....	.....	2	.....	5	.....	.....	0.106	2.7	.....	
Umea	29.51	749.6	29.56	750.9	50.7	10.4	65	ENE	.....	.....	2	.....	10	.....	.....	0.024	0.6	.....	
Hernosand	29.41	747.1	29.47	748.4	45.1	7.3	88	NE	.....	.....	4	.....	10	.....	.....	0	0	.....	
Stockholm	29.15	740.4	29.72	754.9	67.1	19.5	70	ESE	.....	.....	2	.....	5	.....	.....	0.106	2.7	.....	
Wisby	29.27	743.5	29.33	745.0	68.0	20.0	66	SSE	.....	.....	4	.....	7	.....	.....	0.024	0.6	Raining	
Sub-Series.																			
Upsala	29.12	739.6	29.21	741.8	72.0	22.2	59	SE	11.2	5.0	.....	.....	4	S	.....	0.020	0.5	.....	S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.19	716.0	29.62	752.4	51.4	10.8	69	SSE	.....	.....	1	.....	9	.....	.....	0.602	15.3	Covered	The Observatory.
Zurich ‡	27.99	710.9	29.63	752.7	51.4	10.8	70	E	.....	.....	1	.....	8	.....	.....	0.287	7.3	Covered	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.76	756.0	77.4	25.2	37	ENE	6	2.5	.....	.....	0	.....	.....	0	0	.....	The Observatory.
Valona	.....	.....	29.74	755.5	75.6	24.2	.....	S	.....	.....	4	.....	10	.....	.....	0	0	Covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.89	759.3	82.0	27.8	64	SW	.....	.....	3	0	2s	.....	SW	0	0	.....	Prof. C. V. A. van Dyck.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er	Lo'er	Direction. Upper.	Lower.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.11	764.8	30.19	766.8	54.5	12.5	67	S	2	0.9	.....	Hz	Hz	.....	.....	0	0	Dense haze.	
Alpena, Michigan	29.32	744.7	29.97	761.2	47.3	8.5	70	E	6	2.7	.....	5cs	0	W	.....	0	0	Fair.	
Atlanta, Georgia	28.93	734.8	30.08	764.0	76.0	24.4	65	W	7	3.1	.....	0	0	.....	.....	0	0	Clear.	
Atlantic City, New Jersey	30.18	766.6	30.19	766.8	61	16.1	66	SE	9	4.0	.....	8ck	0	Calm	.....	0	0	Fair.	
Augusta, Georgia	29.92	760.0	30.10	764.5	71.0	21.7	75	S	1	0.4	.....	Hz.	Hz	.....	.....	0	0	Light haze.	
Baltimore, Maryland	30.10	764.5	30.16	766.1	63	17.2	72	SE	6	2.7	.....	.....	10s	.....	.....	Inap.	Inap.	Cloudy.	
Barnegat, New Jersey	30.16	766.1	30.18	766.6	61	16.1	66	E	7	3.1	.....	8ck	0	W	.....	0	0	Fair.	
Bismarck, Dakota	27.93	709.4	29.67	753.6	58	14.4	93	SE	10	4.5	.....	.....	10s	.....	Calm	0.02	0.5	Cloudy.	
Boise City, Idaho	26.89	683.0	29.65	753.1	52.3	11.3	63	N	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy.	
Boston, Massachusetts	30.08	764.0	30.23	767.8	56.0	13.3	51	Calm	0	0	.....	0	Hz	.....	.....	0	0	Clear.	
Bracketville, Texas	28.63	727.2	29.64	752.8	75	23.9	77	SE	5	2.2	.....	5cs	0	E	.....	0.01	0.3	Fair.	
Brownsville, Texas	29.73	755.1	29.77	756.1	82	27.8	83	S	10	4.5	.....	0	5k	.....	S	0	0	Fair.	
Buffalo, New York	29.27	743.4	29.96	761.0	56.5	13.6	67	SE	3	1.3	.....	.....	10s;sk	.....	.....	0	0	Cloudy.	
Burlington, Vermont	29.86	758.4	30.14	765.5	51.5	10.8	63	S	7	3.1	.....	0	0	.....	.....	0	0	Clear.	
Cairo, Illinois	29.50	749.3	29.89	759.2	79	26.1	66	S	12	5.4	.....	0	0	.....	.....	0	0	Clear.	
Campo, California	27.38	695.4	29.95	760.7	51	10.6	79	SW	4	1.8	.....	.....	10s	.....	W	0.04	1.0	Cloudy.	
Camp Thomas, Arizona	27.12	688.8	.....	.....	59	15.0	43	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear.	
Cape Henry, Virginia	30.12	765.0	30.14	765.5	66	18.9	84	E	18	8.0	.....	1k	0	.....	.....	0.02	0.5	Clear.	
Cape May, New Jersey	30.12	765.0	30.15	765.8	61	16.1	66	SE	16	7.2	.....	.....	10s	.....	SE	0.01	0.3	Cloudy.	
Castroville, Texas	29.02	737.1	29.68	753.9	80	26.7	66	SE	6	2.7	.....	.....	10s	.....	S	0	0	Cloudy.	
Cedar Keys, Florida	30.11	764.8	30.13	765.3	77	25.0	73	E	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Champaign, Illinois	28.94	735.1	29.69	754.1	69.8	21.0	85	SE	14	6.3	.....	.....	10s	.....	SE	0.77	19.6	Cloudy.	
Charleston, S. Carolina	30.06	763.5	30.12	765.0	80	26.7	78	SW	5	2.2	.....	0	0	.....	.....	0	0	Clear.	
Charlotte, N. Carolina	29.22	742.2	30.08	764.0	75.2	24.0	64	E	1	0.4	.....	2c	Hz	.....	.....	0.02	0.5	Fair.	
Chattanooga, Tennessee	29.24	742.7	30.04	763.0	76	24.4	69	W	8	3.6	.....	0	Sk	.....	Calm	Inap.	Inap.	Clear.	
Cheyenne, Wyoming	23.88	606.5	29.68	753.9	48.3	9.1	49	NW	8	3.6	.....	0	0	.....	.....	0	0	Clear.	
Chicago, Illinois	29.03	737.3	29.71	754.6	52.1	11.2	93	N	6	2.7	.....	.....	10n	.....	.....	2.26	57.4	Light rain.	
Chincoteague, Virginia	30.13	765.3	30.15	765.8	61	16.1	77	SE	17	7.6	.....	10k	0	NW	.....	0	0	Cloudy.	
Cincinnati, Ohio	29.24	742.7	29.88	758.9	70	21.1	85	SE	4	1.8	.....	8cs	0	SW	.....	0.12	3.0	Fair.	
Cleveland, Ohio	29.16	740.7	29.88	758.9	56.2	13.4	93	SE	14	6.3	.....	.....	10n	.....	SW	0.60	15.2	Thund'r st'm	
Coleman City, Texas	28.04	712.2	29.63	752.6	70	21.1	75	S	4	1.8	.....	0	8s	.....	S	0.02	0.5	Cloudy.	
Columbus, Ohio	29.03	737.3	29.85	758.2	65	18.3	84	S	6	2.7	.....	.....	10s	.....	.....	0.17	4.3	Cloudy.	
Concho, Texas	27.91	708.9	29.79	756.7	68	20.0	79	Calm	0	0	.....	5c	0	.....	.....	0	0	Fair.	
Corsicana, Texas	29.39	746.5	29.85	758.2	76	24.4	82	S	8	3.6	.....	0	5s	.....	.....	0	0	Fair.	
Davenport, Iowa	29.06	738.1	29.70	754.4	62	16.7	94	NE	5	2.2	.....	.....	10n	.....	Calm	1.99	50.5	Light rain.	
Dayton, Washington T'y	28.00	711.2	29.74	755.4	46.8	8.2	70	S	3	1.3	.....	.....	10s	.....	Calm	0.11	2.8	Cloudy.	
Deadwood, Dakota	25.10	637.5	29.65	753.1	60	15.6	60	SW	11	4.9	.....	10cs	0	.....	.....	1.50	38.1	Cloudy.	
Decatur, Texas	28.61	726.7	29.71	754.6	77	25.0	82	SE	14	6.3	.....	.....	10s	.....	.....	0	0	Cloudy.	
Delaware Breakwater, Del.	30.15	765.8	30.17	766.3	61	16.1	66	SE	22	9.8	.....	5ck	5s	W	SW	0	0	Cloudy.	
Denison, Texas	28.99	736.3	29.77	756.1	77	25.0	82	S	16	7.2	.....	0	5ks	.....	S	0	0	Fair.	
Denver, Colorado	24.60	624.8	29.64	752.8	56.0	13.3	43	S	4	1.8	.....	5ck	5s	SW	SW	0	0	Cloudy.	
Des Moines, Iowa	28.86	733.0	29.74	755.4	53	12.8	93	NE	7	3.1	.....	.....	10s	.....	NE	1.65	41.9	Cloudy.	
Detroit, Michigan	29.12	739.6	29.79	756.7	56.9	13.8	87	E	17	7.6	.....	.....	10n	.....	Calm	0.70	17.8	Light rain.	
Dodge City, Kansas	27.09	688.1	29.58	751.3	66	18.9	74	W	8	3.6	.....	5k	0	SW	.....	0.42	10.7	Fair.	
Dubuque, Iowa	29.04	737.6	29.72	754.9	53.5	11.9	93	NE	7	3.1	.....	.....	10s	.....	Calm	1.52	38.6	Cloudy.	
Duluth, Minnesota	29.24	742.7	29.92	760.0	44	6.7	76	Calm	0	0	.....	5cs	0	Calm	.....	0	0	Fair.	
Eagle Pass, Texas	29.03	737.3	29.84	757.9	77.1	25.1	82	W	2	0.9	.....	0	5s	.....	W	0	0	Fair.	
Eagle Rock, Idaho	25.08	637.0	29.79	756.7	46	7.8	77	N	4	1.8	.....	0	0	.....	.....	0.07	1.8	Clear.	
Eastport, Maine	30.08	764.0	30.14	765.5	50	10.0	52	W	2	0.9	.....	0	Hz	.....	.....	0	0	Clear.	
El Paso, Texas	26.15	664.2	29.80	756.9	62	16.7	18	NW	5	2.2	.....	0	0	.....	.....	0	0	Clear.	
Erie, Pennsylvania	29.16	740.7	29.86	758.4	57	13.9	94	SE	8	3.6	.....	.....	10n	.....	.....	0.24	6.1	Light rain.	
Escanaba, Michigan	29.26	743.2	29.90	759.4	55	12.8	87	E	5	2.2	.....	2c	0	Calm	.....	0	0	Clear.	
Florence, Arizona	28.35	720.1	29.95	760.7	65	18.3	35	W	1	0.4	.....	0	0	.....	.....	0	0	Clear.	
Fort Apache, Arizona	24.94	633.5	29.72	754.9	46	7.8	33	E	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Fort Assinnaboine, Montana	26.75	679.4	29.30	744.2	70	21.1	100	NW	20	8.9	.....	.....	10n	.....	Calm	0.05	1.3	Light rain.	
Fort Bennett, Dakota	28.11	714.0	29.58	751.3	61	16.1	94	SE	8	3.6	.....	.....	10s	.....	SE	0.05	1.3	Cloudy.	
Fort Benton, Montana	26.93	684.0	29.67	753.6	57	13.9	75	Calm	0	0	.....	0	5ks	.....	W	0.07	1.8	Fair.	
Fort Buford, Dakota	27.68	703.1	29.60	751.8	60	15.6	94	E	8	3.6	.....	8cs	0	SW	.....	0.03	0.8	Cloudy.	
Fort Custer, Montana	26.57	674.9	29.66	753.4	52	11.1	93	E	4	1.8	.....	0	2ks	.....	NE	0.01	0.3	Fair.	
Fort Davis, Texas	25.14	638.5	30.10	764.5	61	16.1	66	W	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
Fort Elliott, Texas	27.09	688.1	30.16	766.1	65	18.3	73	S	12	5.4	.....	0	0	.....	.....	0	0	Clear.	
Fort Gibson, Indian T'y	29.20	741.7	29.73	755.1	76	24.4	77	SE	8	3.6	.....	10cs	0	SW	.....	0	0	Cloudy.	
Fort Grant, Arizona	25.18	639.6	29.98	761.5	55	12.8	12	N	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Fort Griffin, Texas	28.48	723.4	29.68	753.9	73.0	22.8	63	S	6	2.7	.....	10cs	0	.....	.....	0	0	Cloudy.	
Fort Keogh, Montana	27.16	689.9	29.57	751.1	57	13.9	87	W	9	4.0	.....	5cs	0	W	.....	0.14	3.6	Fair.	
Fort Macon, North Carolina	30.10	764.5	30.11	764.8	74	23.3	86	E	8	3.6	.....	Hz	Hz	.....	.....	0	0	Light haze.	
Fort McKavett, Texas	27.60	701.0	29.42	747.3	71.2	21.8	71	S	1	0.4	.....	.....	7ks	.....	NW	0	0	Threatening	
Fort Missoula, Montana	26.50	673.1	29.88	758.9	58	14.4	76	E	1	0.4	.....	2c	0	E	.....	0.14	3.6	Fair.	
Fort St. Michaels	29.92	760.0	29.95	760.7	28	— 2.2	100	N	2	0.9	.....	.....	Fg	.....	N	0	0	.....	
Fort Shaw, Montana	26.14	663.9	29.60	751.8	51	10.6	93	SW	9	4.0	.....	.....	10s	.....	W	0.30	7.6	Cloudy.	
Fort Sill, Indian Territory	28.52	724.4	29.73	755.1	68	20.0	84	S	8	3.6	.....	8c	0	W	.....	0.02	0.5	Fair.	
Fort Stevenson, Dakota	28.00	711.2	29.78	756.4	62	16.7	88	SE	4	1.8	.....	.....	10s	.....	Calm	0.42	10.7	Cloudy.	
Fort Verde, Arizona	.....	.....	.....	.....	52.3	11.3	29	W	.....	.....	1	0	0	.....	.....	0	0	Clear.	
Fredericksburg, Texas	28.10	713.7	29.59	751.6	70	21.1	90	SE	1	0.4	.....	5cs	0	.....	.....	0	0	Fair.	
Galveston, Texas	29.86	758.4	29.91	759.7	81	27.2	70	S	12	5.4	.....	0	0	.....	.....	0	0	Clear.	
Grand Haven, Michigan	29.14	740.1	29.79	756.7	51	10.6	93	NE	7	3.1	.....	.....	10n	.....	NE	0.54	13.7	Light rain.	
Hatteras, North Carolina	30.10	764.5	30.12	765.0	73	22.8	81	NE	13	5.8	.....	Hz	Hz	.....	.....	0	0	Dense haze	
Helena, Montana	25.57	649.5	29.77	756.1	50	10.0	72	S	2	0.9	.....	0	0	.....	.....	0.22	5.6	Clear.	
Henrietta, Texas	28.74	730.0	29.60	751.8	77	25.0	65	SE	7	3.1	.....	2ck	0	S	.....	0	0	Clear.	
Indianapolis, Indiana	29.00	736.6	29.76	755.9	74	23.3	76	SW	7	3.1	.....	4ck	4ks	W	W	0.02	0.5	Fair.	
Indianola, Texas	29.85	758.2	29.88	758.9	80.2	26.8	78	SE	11	4.9	.....	1k	1s	S	Calm	0	0	Clear.	
Jacksboro, Texas	28.61	726.7	29.67	753.6	75	23.9	68	S	9	4.0	.....	2c	2s	SW	SE	0	0	Fair.	
Jacksonville, Florida	30.11	764.8	30.13	765.3	78	25.6	69	SW	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
Keokuk, Iowa	29.04	737.6	29.64	752.8	72.3	22.4	78	SW	12	5.4	.....	.....	10s	.....	SW	1.48	37.6	Cloudy.	
Key West, Florida	30.08	764.0	30.11	764.8	85.0	29.4	72	SE	3	1.3	.....	1k;hz	0	SE	.....	0	0	Clear.	
Kittyhawk, North Carolina	30.14	765.5	30.16	766.1	67	19.4	84	E	8	3.6	.....	4c	0	.....	.....	Inap.	Inap.	Fair.	
Knoxville, Tennessee	29.06	738.1	30.06	763.5	68.2	20.1	94	NW	1	0.4	.....	0	Fg	.....	Calm	0.53	13.5	Clear.	
La Crosse, Wisconsin	29.04	737.6	29.76	755.9	53	11.7	80	NE	4	1.8	.....	.....	10s	.....	.....	0.03	0.8	Cloudy.	
La Mesilla, New Mexico	26.02	660.9	30.18	766.6	55.0	12.8	28	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Laredo, Texas	29.35	745.5	29.67	753.6	76	24.4	91	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
Leavenworth, Kansas	28.85	732.8	29.72	754.9	72	22.2	85	S	6	2.7	.....	.....	10n	.....	S	0.06	1.5	Light rain.	
Lewiston, Idaho	28.84	732.5	29.67	753.6	53	11.7	79	NE	1	0.4	.....	.....	10ks	.....	Calm	0.03	0.8	Cloudy.	
Little Rock, Arkansas	29.56	750.8	29.87	758.7	75	23.9	86	S	8	3.6	.....	2ck	2ks	S	SW	0	0	Fair.	
Los Angeles, California	29.59	751.6	29.96	761.0	58.8	14.9	82	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy.	
Louisville, Kentucky	29.32	744.7	29.87	758.7	75.0	23.9	77	S	8	3.6	.....	9cs	0	.....	.....	0.06	1.5	Fair.	
Lynchburg, Virginia	29.44	747.8	30.11	764.8	67.	19.4	79	Calm	0	0	.....	.....	10s	.....	.....	0.05	1.3	Cloudy.	
Madison, Wisconsin	28.76	730.5	29.74	755.4	51	10.6	93	E	11	4.9	.....	.....	10s	.....	E	0.75	19.1	Cloudy.	
Marquette, Michigan	29.22	742.2	29.93	760.2	52	11.1	54	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Mason, Texas	28.21	716.5	29.87	758.7	74.2	23.4	72	S	3	1.3	.....	1cs	1s	SW	Calm	0	0	Fair.	
Memphis, Tennessee	29.62	752.3	29.94	760.5	76.8	24.9	67	SE	6	2.7	.....	2k	1s	S	Calm	0	0	Fair.	
Milwaukee, Wisconsin	29.06	738.1	29.79	756.7	46	7.8	92	N	11	4.9	.....	.....	10s;fg	.....	.....	0.37	9.4	Cloudy.	

STATIONS.	Barometer. Corrected for instru'm'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.98	761.5	30.05	763.3	81	27.2	87	SW	7	3.1	.....	2cs	8ks	.....	SW	0	0	Cloudy	
Montgomery, Alabama	29.87	758.7	30.09	764.3	74	23.3	85	S	1	0.4	.....	5k	5ks	SW	SW	0	0	Cloudy	
Moorhead, Minnesota	28.82	732.0	29.78	756.4	56.2	13.4	87	SE	10	4.5	.....	5cs	0	SE	.....	0	0	Fair	
Morgantown, W. Virginia	28.96	735.6	29.92	760.0	65	18.3	89	N	3	1.3	.....	.....	10n	.....	N	0.10	2.5	Light rain	
Mt. Washington, N. H.	23.89	606.8	29.92	760.0	31	— 0.6	69	NW	12	5.4	.....	0	Sk	.....	.....	0	0	Clear	
Nashville, Tennessee	29.44	747.8	29.96	761.0	76.9	24.9	65	SW	4	1.8	.....	5k	0	SW	.....	Inap.	Inap.	Fair	
New Haven, Connecticut	30.08	764.0	30.20	767.1	51	10.6	65	NE	7	3.1	.....	10c	Hz	W	.....	0	0	Cloudy	
New London, Connecticut	30.18	766.6	30.23	767.8	58	14.4	70	Calm	0	0	.....	7k	0	Calm	.....	0	0	Fair	
New Orleans, Louisiana	29.95	760.7	30.00	762.0	77.3	25.2	89	S	6	2.7	.....	2c	1s	SW	S	1.30	33.0	Fair	
Newport, Rhode Island	30.17	766.3	30.22	767.6	54.0	12.2	82	NE	5	2.2	.....	.....	10s	.....	NE	0	0	Cloudy	
New River, N. Carolina	.....	.....	.....	.....	73	22.8	81	S	.....	2	.....	5k	0	SW	.....	.....	.....	Fair	
New Shoreham, Rhode I'd	30.17	766.3	30.20	767.1	51.2	10.7	93	E	6	2.7	.....	.....	10s;fg	.....	C;SE	0	0	Cloudy	
New York, New York	30.02	762.5	30.19	766.8	58	14.4	76	SW	2	0.9	.....	5cs	Fg	W	.....	0	0	Fair	
Norfolk, Virginia	30.10	764.5	30.14	765.5	68	20.0	79	SE	9	4.0	.....	Hz	0	.....	.....	0	0	Clear	
North Platte, Nebraska	26.82	681.2	29.64	752.8	63	17.2	78	SE	16	7.2	.....	5c	5s	S	SE	0.19	4.8	Cloudy	
Olympia, Washington T'y	29.67	753.6	29.71	754.6	51.0	10.6	86	S	2	0.9	.....	.....	10n	.....	Calm	0.07	1.8	Light rain	
Omaha, Nebraska	28.59	726.2	29.73	755.1	58.5	14.7	92	N.	7	3.1	.....	.....	10s;fg	.....	.....	Inap.	Inap.	Cloudy	
Oswego, New York	29.76	755.9	30.08	764.0	49.0	9.4	71	SE	10	4.5	.....	10cs	0	.....	.....	0	0	Cloudy	
Pensacola, Florida	30.03	762.7	30.06	763.5	80	26.7	91	S	12	5.4	.....	.....	10s	.....	S	0	0	Cloudy	
Philadelphia, Pa.	30.12	765.0	30.18	766.6	57	13.9	81	SW	4	1.8	.....	2k	8s	W	W	0	0	Cloudy	
Phœnix, Arizona	28 72	729.5	30.49	774.4	62	16.7	56	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.77	451.3	29.98	761.5	30	— 1.1	68	SW	12	5.4	.....	5c	0	W	.....	0.03	0.8	Fair	
Ploche, Nevada	23.87	606.3	29.72	754.9	51	10.6	34	S	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Pittsburg, Pennsylvania	29.13	739.9	29.92	760.0	62.2	16.8	87	Calm	0	0	.....	.....	10n	.....	Calm	0.40	10.2	Thund'r st'm	
Port Eads, Louisiana	30.04	763.0	30.05	763.3	79.1	26.2	95	SE	12	5.4	.....	0	5s	.....	SE	0.05	1.3	Fair	
Port Huron, Michigan	29.19	741.4	29.85	758.2	47.6	8.7	100	NE	8	3.6	.....	.....	10n	.....	Calm	0.32	8.1	Light rain	
Portland, Maine	30.16	766.1	30.21	767.3	51	10.6	59	W	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Portland, Oregon	29.66	753.4	29.72	754.9	50.8	10.4	74	S	2	0.9	.....	0	9s	.....	S;SE	0.20	5.1	Cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	73	22.8	81	E	14	6.3	.....	0	Hz	.....	Calm	0	0	Clear	
Prescott, Arizona	24.64	625.8	29.72	754.9	52	11.1	41	S	8	3.6	.....	0	Fg	.....	.....	0	0	Clear	
Punta Rassa, Florida	30.09	764.3	30.10	764.5	80	26.7	74	E	5	2.2	.....	1k	0	Calm	.....	0	0	Clear	
Red Bluff, California	29.41	747.0	29.74	755.4	57.5	14.2	91	S	11	4.9	.....	0	8ks	.....	S	0.05	1.3	Cloudy	
Rio Grande City, Texas	29.62	752.3	29.82	757.4	79	26.1	82	SE	6	2.7	.....	.....	10s	.....	SE	0	0	Cloudy	
Rochester, New York	29.41	747.0	30.03	762.7	49	9.4	71	SE	7	3.1	.....	.....	10s	.....	Calm	0	0	Cloudy	
Roseburg, Oregon	29.18	741.2	29.74	755.4	46.5	8.1	77	SE	2	0.9	.....	0	5ks	.....	SW	0.20	5.1	Fair	
Sacramento, California	29.79	756.7	29.86	758.4	58.8	14.9	94	S	9	4.0	.....	.....	10n	.....	.....	0.32	8.1	Light rain	
St. Louis, Missouri	29.20	741.7	29.78	756.4	75.0	23.9	70	S	16	7.2	.....	5cs	0	.....	.....	0	0	Fair	
St. Paul, Minnesota	28.98	736.1	29.82	757.4	55	12.8	74	E	8	3.6	.....	.....	10s	.....	E	0	0	Cloudy	
Salt Lake City, Utah	25.44	646 2	29.64	752.8	53	11.7	48	NE	4	1.8	.....	4c	0	Calm	.....	Inap	Inap.	Fair	
San Antonio, Texas	29.15	740.4	29.84	757.9	77.1	25.1	82	SE	6	2.7	.....	.....	10s	.....	SE	0	0	Cloudy	
San Diego, California	29.86	758.4	29.93	760.2	59.5	15.3	88	SE	4	1.8	.....	.....	10s	.....	.....	0.05	1.3	Cloudy	
Sandusky, Ohio	29.17	740.9	29.83	757.7	60	15.6	94	S	11	4.9	.....	.....	10n	.....	SW	0.94	23.9	Light rain	
Sandy Hook, New Jersey	30.17	766.3	30.20	767.1	61.5	16.4	71	NW	1	0.4	.....	5c	Hz	.....	.....	0	0	Fair	
San Francisco, California	29.82	757.4	29.89	759.2	56	13.3	81	W	16	7.2	.....	.....	10s	.....	SW	0.28	7.1	Threatening	
Santa Fé, New Mexico	23.19	589.0	29.70	754.4	44	6.7	55	E	1	0.4	.....	0	0	.....	.....	Inap.	Inap.	Clear	
Savannah, Georgia	30.04	763.0	30.13	765.3	79.5	26.4	64	SW	7	3.1	.....	0	Fg	.....	.....	0	0	Clear	
Shreveport, Louisiana	29.67	753.6	29.91	759.7	77	25.0	82	S	2	0.9	.....	2cs	0	.....	.....	0	0	Fair	
Silver City, New Mexico	24.20	614.7	29.06	753.4	46	7.8	54	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Sitka Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	.....	
Smithville, North Carolina	30.08	764.0	30.11	764.8	77	25.0	91	SW	4	1.8	.....	1k	Hz	SW	.....	0	0	Clear	
Spokane Falls, Wash. Ter.	27.67	702.8	29.63	752.6	43	6.1	91	SW	1	0.4	.....	2k	Fg	.....	.....	0	0	Fair	
Springfield, Illinois	29.07	738.4	29.73	755.1	73	22.8	79	SW	13	5.8	.....	2cs	3ks	W	SW	Inap.	Inap.	Cloudy	
Springfield, Massachusetts	30.09	764.3	30.22	767.6	54.2	12.3	55	N	4	1.8	.....	5c;hz	0	N	.....	0	0	Fair	
Stockton, Texas	26.83	681.5	29.82	757.4	61.8	16.6	83	SW	8	3.6	.....	0	0	.....	.....	0.43	10.9	Clear	
St. Vincent, Minnesota	28.95	735.3	29.79	756.7	57	13.9	94	SE	4	1.8	.....	0	2s	.....	Calm	0	0	Clear	
Thatcher's Island, Mass.	30.07	763.8	30.13	765.3	56	13.3	87	SW	10	4.5	.....	0	5s	.....	SW	0	0	Fair	
Toledo, Ohio	29.14	740.1	29.82	757.4	57	13.9	100	NE	6	2.7	.....	.....	10s	.....	E	0.72	18.3	Cloudy	
Tucson, Arizona	27.45	697.2	29.74	755.4	59	15.0	23	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.36	745.7	29.76	755.9	52.0	11.1	66	SW	22	9.8	.....	.....	10s	.....	SW	0.04	1.0	Cloudy	
Uvalde, Texas	28.84	732.5	29.62	752.3	75	23.9	81	SE	2	0.9	.....	8cs	2s	Calm	E	0	0	Cloudy	
Vicksburg, Mississippi	29.73	755.1	29.98	761.5	76	24.4	85	SE	10	4.5	.....	10ck	0	S	.....	0	0	Cloudy	
Visalia, California	29.50	749 3	29.85	758.2	57	13.9	69	NW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C.	30.04	763.0	30.15	765.8	61	16.1	88	SE	4	1.8	.....	.....	10s	.....	SE	Inap.	Inap.	Cloudy	
Wickenburg, Arizona	.....	.....	.....	.....	52	11.1	54	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	30.05	763.3	30.10	764.5	74	23.3	86	Calm	0	0	.....	Hz	Hz	Calm	.....	0	0	Dense haze	
Winnemucca, Nevada	25.38	644.6	29.59	751.6	40	7.8	62	SW	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Wood's Holl, Mass.	30.18	766.6	30.22	767.6	61	16.1	77	SE	2	0.9	.....	5ck	0	Calm	.....	0	0	Fair	
Yankton, Dakota	28.50	723.9	29.76	755.9	58	14.4	88	E	8	3.6	.....	.....	10s	.....	E	0	0	Cloudy	
Yuma, Arizona	29.67	753.0	29.81	757.2	63.5	17.5	62	SW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.13	562.1	.....	.....	51.8	11.0	85	Calm	0	0	.....	.....	10n	.....	.....	0.52	13.2	Cloudy	Thomas Herman
Buff Bay Town, Jamaica	29.85	758.2	30.16	766.1	79	26.1	82	E	.....	.....	.....	2c	5k	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	30.04	763.0	30.09	764.3	83	28.3	70	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	A. Van Caneghem, Ass't.
Kingston, Jamaica, W. I.	30.03	762.7	30.04	763.0	82.0	27.8	70	Calm	0	0	.....	2cs	2s	W	.....	0	0	Fair	Robert Johnstone
Navassa, W. I.	29.95	760.7	30.03	762.7	81	27.2	83	E	5	2.2	.....	8cs	2k	NE	E	0.18	4.6	Cloudy	F. M. Everett.
Paramaribo, S. A.	30.08	764.0	30.09	764.3	79	26.1	87	E	.....	.....	2	4k	5k	E	.....	1.370	34.8	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.43	747.5	29.99	761.7	83	28.3	64	Calm	0	0	.....	0	5ks	.....	N	0	0	Fair	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	75.2	24	.....	E	.....	.....	2	0	9ks	.....	E	0.08	2.	.....	Earl Flint.
Santiago de Cuba, W. I.	30.04	763.0	30.06	763.5	82	27.8	78	Calm	0	0	.....	8cs	0	.....	.....	0	0	Cloudy	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	30.18	766.6	30.23	767.8	38.0	3.3	95	NE	11	4.9	.....	2c	2s	E	E	0	0	Fair	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																			Comm A. J. Errington.
H. M. S. Alert, Thursday Island, Oceanica	29.93	760.2	77.8	25.4	83	SE			2-3		2							D. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Zante, Ionian Islands	29.69	754.1	75.5	24.2	61	S			4-5		0					2	SSE	Misty	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab,																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N 24° 47′, E. 66° 59′	29.59	751.6	85	29.4	87	W			5		1	SW						Blue sky	Comm. G. W. Haud.
H. M. S. Bittern, Constantinople, Turkey			72	22.2		NE			1		3	NE						D. clouds	Capt. E. B. Pusey.
H. M. S. Blanche, N 13° 09′, W. 61° 14′	30.05	763.3	83	28.3	83	ESE			3		2							D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 21° 08′, E. 0° 40′	30.17	766.3	65	18.3	73	Var.			2		4	SSE				4	SSE	Drizzling	Com. F. W. Richards.
H. M. S. Champion, S. 27° 06′, W. 42° 36′	30.25	768.3	74	23.3	85	Calm			0		6	WNW				3	N	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Cheefoo Harbor, China	29.84	757.9	67	19.4	84	S			1		2	SW						D. clouds	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruiser, N. 36° 58′, E. 10° 30′	29.70	754.4	68	20.0		WNW			6		3	WNW				5	WNW	Squally	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, N. 20° 50′, W. 28° 34	30.19	766.8	73	22.8	81	NE			3		8					4	NNE	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.11	764.8	57	13.9		SSW			1-4		10	SSW						Showery	Capt C. Domville.
H. M. S. Dock-Yard, Bermuda, W.I.	30.14	765.5	77	25.0	82	SW			1		1	SW						Blue sky	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 47° 52′, W. 53° 22′	29.79	756.7	45	7.2	84	W			1		4							D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 7° 08′, E. 77° 35′	29.87	758.7	80	26.7		S			1-2		2					1	SE	D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 3° 30′, E. 106° 20′	29.77	756.1	83	28.3		SSW			2		8	SSW				Sm'h		D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, N. 5° 29′, E. 171° 44′	29.82	757.4	82	27.8	87	ENE			1-2		5	ESE				5	E	D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Tamatave, Madagascar	30.14	765.5	71	21.7	80	S			2		6	S				1	SE	Showery	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Ming's Bight, Newfoundland	29.74	755.4	49	9.4		SW			2		3	SW						D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn N. 12° 47′, E. 44° 58′	29.59	751.6	86.5	30.3	79	SSE			2		1							Blue sky	Capt. P. Aldrich.
H. M. S. Flamingo, N. 20° 00′, W. 85° 36′	30.02	762.5	86	30.0	83	ESE			2-3		2	ESE				2	E	D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish, Yokohoma, Japan	29.86	758.4	67	19.4	94	NE			1-2		10					2	E	Foggy	Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	29.58	751.3	52	11.1	86	Calm			0		9	ESE						D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	30.30	769.6	30	— 1.1	89	W			1		4							D. clouds	Capt. L. F. Jones.
H. M. S. Griffin, Nassau, Bahamas	30.07	763.8	85	29.4	71	SE			1		1							Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 45° 10′, W. 14° 30′	30.10	764.5	57	13.9		NNE			1		4	NNE				5	NNE	D. clouds	Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris,																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.00	762.0	61	16.1		Calm			0		7	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.88	758.9	66	18.9		NE			2		10							Raining	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 01′, E. 109° 41′	29.74	755.4	81.9	27.7	76	E			2		1					1	E	Blue sky	Capt. A. Carpenter.
H. M. S. Midge, Wenchow, China	29.85	758.2				SE			2		2	SE						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. N. S. Modeste, S. 19° 10′, E. 74° 20′	30.03	762.7	76	24.4	76	SE			1-2		3	SE				2	SE	D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Tunis, Tunis, Africa	29.73	755.1	72	22.2	71	WNW			5		7	WNW				Slt		D. clouds	Capt. G. C. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, N. 1° 33′, E. 110° 20′			83.5	28.6		E			1		3	E						D. clouds	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	30.06	763.5	50	10.0	40	NW			3		0							Blue sky	Capt. E. B. Drummond.
H. M. S. Orontes, S. 32° 00′, E. 16° 20′	30.10	764.5	59.5	15.3	73	SSW			3		7	SSW				3	S	Showery	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.93	760.2	79	26.1	97	NNW			1		6					1	SE	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, La Guayra, Venezuela, S.A.	29.99	761.7	83	28.3	83	Calm			0		4	NNE				1	NNE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.84	757.9	81	27.2		S			4		5							Raining	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 48° 26′, W. 123° 27′	29.68	753.9	51	10.6		SSE			1		7							Showery	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 5° 02′, E. 39° 35′	30.03	762.7	78.3	25.7	82	SSE			3-4		8					3		D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 7° 36′, E. 62° 40′	29.50	749.3	81	27.2	74	SE			2		2	SE				4	SE	D. clouds	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 32° 37′, W. 16° 51′	30.28	769.1	67	19.4	74	NNE			4		5	NNW				1	NNE	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 15° 50′, W. 148° 16′	29.98	761.5	75	23.9	76	NE			4		3					4	NE	D. clouds	Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coquimbo, Chili, S. A.	29.96	761.0	53	11.7	93	NNW			1-2		10							Foggy	Capt. A. H. Markham.
H. M. S. Turquoise, S. 50° 15′, W. 74° 44′	30.38	771.6	31	— 0.6	100	SSW			1		10							Drizzling	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.			80	26.7		N			1		3							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	29.77	756.1	52	11.1	65	Calm			0		6	S						D. clouds	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Shat el Arab River, Turkey	29.68	753.9	93.5	34.2	60	NNW			2									Misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo, Loando, Africa	30.02	762.4	73.8	23.2	73	NW			3		0					1		Blue sky	Carlos Candido dos Reis, Comd't.
Quanza, N. 14° 00′, W. 21° 29′	30.16	766.1	79.7	26.5	78	N			4		8		N			3	N	D. clouds	Carlos M. da Silva Costa, Comd't
RioLima																			S. C. da Silva Costa, Comd't.
Sado, S. 7° 09′, E. 12° 06′	29.94	760.4	79.7	26.5	84	SSE			3		4			45 minutes		2	SSE	D. clouds	G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.79	756.6	79.7	26.5	80	SE			2		0							Blue sky	P. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga, N. 50° 11′, W. 0° 50′	29.61	752.2	51.4	10.8	78	NNE			3		6							D. clouds	Capt. M. von Krusenstierna.
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.11	764.8	83	28.3	83	S	9	4.0			8		S	0	0			Fair	
N. Yard, Portsmouth, N. H.	30.23	767.8	57	13.9	63	W	2	0.9			1		W	0	0			Clear	
Naval Hospital, Yokahama, Japan	29.73	755.1	65	18.3	97	E			3		10		E	0.60	15.2			Light rain	
Adams Panama, Panama	29.66	753.4	82	27.8	91	N			1		2		S	0	0	Sm'h		Fair	
Alaska, Callao, Peru	29.94	760.5	65	18.3	89	Calm			0		10			0	0	Sm'h		Hazy	
Alert, Port Lloyd, Bonin Id.*	29.88	758.9	82	27.8	79	NW			1		2		NW			Sm'h	ENE	Clear	
Alliance, Norfolk, Va	29.99	761.7	68	20.0	84	ESE			1		2		ESE	0	0			Fair	
Ashuelot, Kobe, Japan	29.87	758.7	69	20.6	95	SE			1		10		Calm					Cloudy	
Colorado, New York, N. Y	30.18	766.6	60	15.6	65	S	5	2.2			2			0	0			Misty	
Constitution, Norfolk, Va	30.08	764.0	66	18.9	84	ESE			4		2							Fair	
Franklin, Norfolk, Va	30.05	763.3	65	18.3	94	SE	8.4	3.8			2		S	0	0			Fair	
Galena, Cadiz, Spain	30.04	763.0	65	18.3	73	NW			4		2					Mod.	NW	Fair	
Independence, N. Yard, Mare I'd, Cal	29.90	759.4	67	19.4	79	SSW	2.4	1.1			2		SSW	0.1	3.			Fair	
Jamestown, Sitka, Alaska	29.81	757.2	50	10.0	93	W			3		10		W	0	0	Sm'h		Foggy	
Kearsarge, Norfolk, Va	30.16	766.1	67	19.4	84	SE			3		5		N			Sm'h		Clear	
Lackawanna, S. 12° 33′, W. 143° 25′...†	30.13	765.3	82	27.8	91	ESE			4		8		E			Mod.	E	Fair	
Marion, Montevideo, Uruguay...*†	30.41	772.4	55	12.8	80	E			4		10			½ h'r	light	Mod.	SE	Rainy	
Michigan, Erie, Pennsylvania	29.79	756.7	58	14.4	94	SE			4		10		NE					Raining	
Minnesota, Newport, R. I	30.23	767.8	58	14.4	82	E			2		8		E			Sm'h		Foggy	
Monocacy, Yokohama, Japan	29.88	758.9	66	18.9	94	N			2		10		Calm					Raining	
New Hampshire, Norfolk, Va	30.13	765.3	67	19.4	89	SE	9	4.0			2		N	0	0			Fair	
Nipsic, N. 36° 41′, W. 9° 38′	30.14	765.5	64	17.8	62	NNW			4		8					Long	NW	D. clouds	
Onward, Callao, Peru†.	29.97	761.2	65	18.3	89	Calm			0		10					Long	W	Cloudy	
Palos, Nagasaki, Japan	29.88	758.9	70	21.1	100	NNW			2		10							Rainy	
Passaic, Washington, D. C	30.16	756.1	63	17.2	89	E			1		8							Cloudy	
Pensacola, Mare Isl'd, Cal	29.90	759.4	58	14.4	88	W			3-5		10			Slight		Sm'h		Rainy	
Portsmouth, Hampton Roads, Va	30.13	765.3	67	19.4	95	SE			4		5?		SE					Clear?	
Powhatan, Norfolk, Va	30.14	765.5	71	21.7	75	ESE			3		2		ESE					Fair	
Quinnebaug, N. 30° 25′, W. 65° 48′	30.19	756 8	76	24.4	68	WSW			1		2		WSW			Sm'h		Clear	
Ranger, N. 21° 30′, W. 105° 27′...*	29.87	758.7	79	26.1	86	NE			1		8		Calm	0	0	Sm'h		Cloudy	
Richmond, Nagasaki, Japan	29.86	758.4	72	22.2	90	NW			1		10		NW	0.86	21.8			Misty	
Saratoga, Hampton Roads, Va	30,10	764.5	66	18.9	94	ESE			3		2		ESE	0	0			Cloudy	
Shenandoah, Montevideo, Uruguay	30.48	774.2	55	12.8	80	E			4		10		E			Mod.	E	Cloudy	
St. Louis, League Island, Pa	29.75	755.9	60	15.6	76	SE	5	2.2			8			0	0			Fair	
Swatara, Shanghai, China...*†	29.86	758.4	72	22.2	85	SSE			3		0							Blue sky	
Tennessee, New York, N. Y	30.21	767.3	64	17.8	78	NW	1	0.4			2		Calm	0	0	Sm'h		Hazy	
Ticonderoga, S. 57° 45′, W. 65° 52′	30.13	765.3	39	3.9	82	SW			5		10		SW	0.145	3.7	Mod.	SW	Cloudy	
Trenton, Barcelona, Spain	29.65	753.1	68	20.0	56	WSW			5		2			16 h'r	s h'vy	Sm'h		Clear	
Vandalia, Navy Yard, N. Y *†	30.40	772.1	53	11.7	?	Calm			0		2		Calm					Fair	
Wabash, Boston, Massachusetts	30.25	758.3	53	11.7	67	NE	2	0.9			2		W	0	0			Clear	
Wachusetts, N. Yard, Mare I'd, Cal	29.87	758.7	58	14.4	88	WSW			4		10		S;W	4 hours				Squally	
Yantic, Progreso, Mexico*	29.89	759.2	80	26.7	87	SE			3		5					Sm'h		Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	Upper.	Lower.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Asturte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire,																			Capt. John Arbuckle.
Barque Belleisle, N. 30° 55′, W. 77° 38′	30.13	765.3	78.5	25.8	82	SSW			2		0							Blue sky	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. N. Youlden.
S. S. Cipero																			Capt. W. N. Lailey.
City of Agra, N. 26° 11′, W. 21° 04′	30.26	768.6	72.0	22.2	74	NE			5		9							D. clouds	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N 46° 59′, W. 9° 05′	29.94	760.5	55.0	12.8	68	NW			5		4							D. clouds	Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 19° 46′, W. 32° 13′	30.25	768.3	75.7	24.3	73	ENE			5		0							Blue sky	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randell.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R.N R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt E. W. Turner.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria, ‡ N. 22° 01′, W. 37° 26′	30.22	767.6	77.9	25.5	69	ENE			5		4							D. clouds	Capt. M. Parry.
Sierra Estrella, N. 37° 32′, W. 17° 16′	30.29	769.4	65.3	18.5	76	NW			3		5							Misty	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 29° 43′, E. 32° 33′	29.84	757.9	85.5	29.7	?	WNW			2		0							Blue sky	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 46° 20′, W. 72° 30′	30.13	765.3				SW			3		2		W			Sm'h		Fair	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Gallia																			Capt. W. H. P. Hahs.
S. S. Scythia, N. 50° 10′, W. 21° 32′	29.96	761.0	57	13.9	100	SSW			5		8		SSW	0	0	Mod.	SW	Fair	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 48° 21′, W. 30° 20′ †	30.22	767.6	60	15.6	88	W			2		Mist					Sm'h		Misty	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 47° 13′, W. 38° 20′ †	30.06	763.5	60	15.6	?	SSW			4		8		WSW	4 hours		Mod.	W	Fair	Capt. Benj. Gleadell.
S. S. Germanic																			Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, ‡ N. 48° 04′, W. 24° 16′	30.18	766.6	59.0	15.0		NNW			5		8		N	3 hours		Mod.	NW	Hazy	
S. S. Köln, N. 49° 27′, W. 16° 56′	30.23	767.8	59.0	15.0	73	Calm			0		10		E	12hrs rain	light	Sm'h	N	Cloudy	Capt. Th. Jüngst.
S. S. Leipzig, N. 40° 43′, W. 54° 13′	30.06	763.5				NW			4		8		NW	5 hours		Mod.	SE; WNW	Clearing	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg, N. 40° 49′, W. 54° 59′	30.03	762.7	62.6	17.0		NNW			5		10		N	0	0	Mod.	N	Cloudy	Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. C. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the last 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, N. 52° 02′, W. 6° 53′	29.77	756.1	53	11.7	86	NNW			3		5		NNW			Sm'h		Fair	Capt. J. W. Shackford.
S. S. Indiana, N. 40° 32′, W. 59° 10′ †	30.09	764.3	59	15.0	53	NW			4		2		NW	0	0	Mod.	NW	Clear	Capt. R. W. Sargent.
S. S. Ohio, N. 43° 24′, W. 42° 40′ *†	30.19	766.8	65	18.3	94	SW			5		Mist		SW	Light		L'ge	SW	Raining	W. Shackford, Chief Off'r
S. S. Pennsylvania, Philadelphia, Pa. †	30.13	765.3	60	15.6	88	NE			4		10		NE					Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 35° 40′, W. 122° 18′ †	29.98	761.5	62	16.7	94	SSW			3		10		SW	Little		Sm'll	W	Cloudy	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, San Francisco, Cal. †	29.93	760.2	55	12.8	80	W			5		10		SW	0	0	Sm'h		Cloudy	Capt. H. Davison.
S. S. Gaelic, Yokohama, Japan *†	29.67	753.6	66	18.9	100	ESE			1		10		NE					Raining	Capt. W. H. Kidley.
S. S. Oceanic, Hong Kong, China	30.05	763.3	81	27.2	70	SE			3		7		SSE					Fine	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, Astoria, Oregon †	29.67	753.6	51.5	10.8	86	NE			3		10		NE					Rainy	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, San Francisco, Cal. †	29.88	758.9	56	13.3	81	W			5		10		W	Light				Cloudy	Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, Tacoma, Wash. Ter. †	29.72	754.9	50	10.0	79	Calm			0		10							Rainy	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, San Francisco, Cal. †	29.82	757.4	57	13.9	87	NW			2		10		S					Misty	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal. †	29.87	758.7	55	12.8	87	W			2		5		W					Foggy	Capt. G. Debney.
S. S. Victoria, Nanaimo, Vancouver Id. †	29.58	751.3	53	11.7	86	NW			2		2					Sm'h		Fair	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 21° 15′, W. 157° 19′	30.08	764.0	74	23.3	90	ENE			4		8		NE			Long	ENE	Cloudy	A. Bannerman, 2d Officer
S. S. City of New York, Sydney, N. S. W. †	29.70	754.4	50	10.0	100	NW			4		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, Panama, Panama †	29.98	761.5	78	25.6	86	NW			2		8			4 hours		Sm'll	NW	Cloudy	Capt. D. S. Austin.
S. S. City of Peking, N. 46° 42′, W. 154° 24′ †	30.28	769.1	48	8.9	100	SW			2		10		SW	0	0	Light	S	Foggy	Capt. G. G. Berry.
S. S. City of Sidney, N. 32° 56′, W. 134° 18′ *†	30.12	765.0	64	17.8	83	WNW			5		8		NW			Mod.	NW	Drizzling	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 36° 48′, E. 155° 07′ †	30.02	762.5	61	16.1	88	E			5		5		E			Mod.	E	Fair	A. L. Ritchie, 2d Officer
S. S. Colima, Acapulco, Mexico †	29.95	760.7	79	26.1	86	S			3		8		S	0.60	15.2			Cloudy	Capt. R. R. Searle.
S. S. Granada, N. 28° 08′, W. 115° 58′ †	29.99	761.7	59	15.0	88	N			5		10		NNW	0	0	Mod.	NW	Cloudy	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. Wales	30.17	766.3	64	17.8	78	WSW			4		2		W					Fair	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, ‡ N. 49° 26′, W. 12° 04′ †	30.17	766.3	55	12.8	?	N			5		5		N	0	0	High Long	NW	Fine	A. Feddersen, 2d Officer.
S. S. Rhynland, New Jersey, N. J. †	30.31	769.9	66	18.9	84	S			1		2		NNW	0.25	6.3			Hazy	Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Fall River, Mass.	30.13	765.3	57	13.9	75	NE					Hz			0	0			Hazy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.																			Capt. L. L. Lewis.
Bark Carrie Heckle ‡																			Capt B. F. Woodbury.
Brigantine George, N. 21° 39′, W. 64° 20′ †	30.14	765.5	83	28.3		E			5		2			0	0	Sm'h		Fair	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Baltimore, Md. †	30.09	764.3	62	16.7	83	SE	1	0.4			10n			0	0			Cloudy	
Bark Sunbeam, Lisbon, Portugal †	30.12	765.0	68	20.0	60	N			6		2		N	0	0			Clear	Capt. Jos. Hand.

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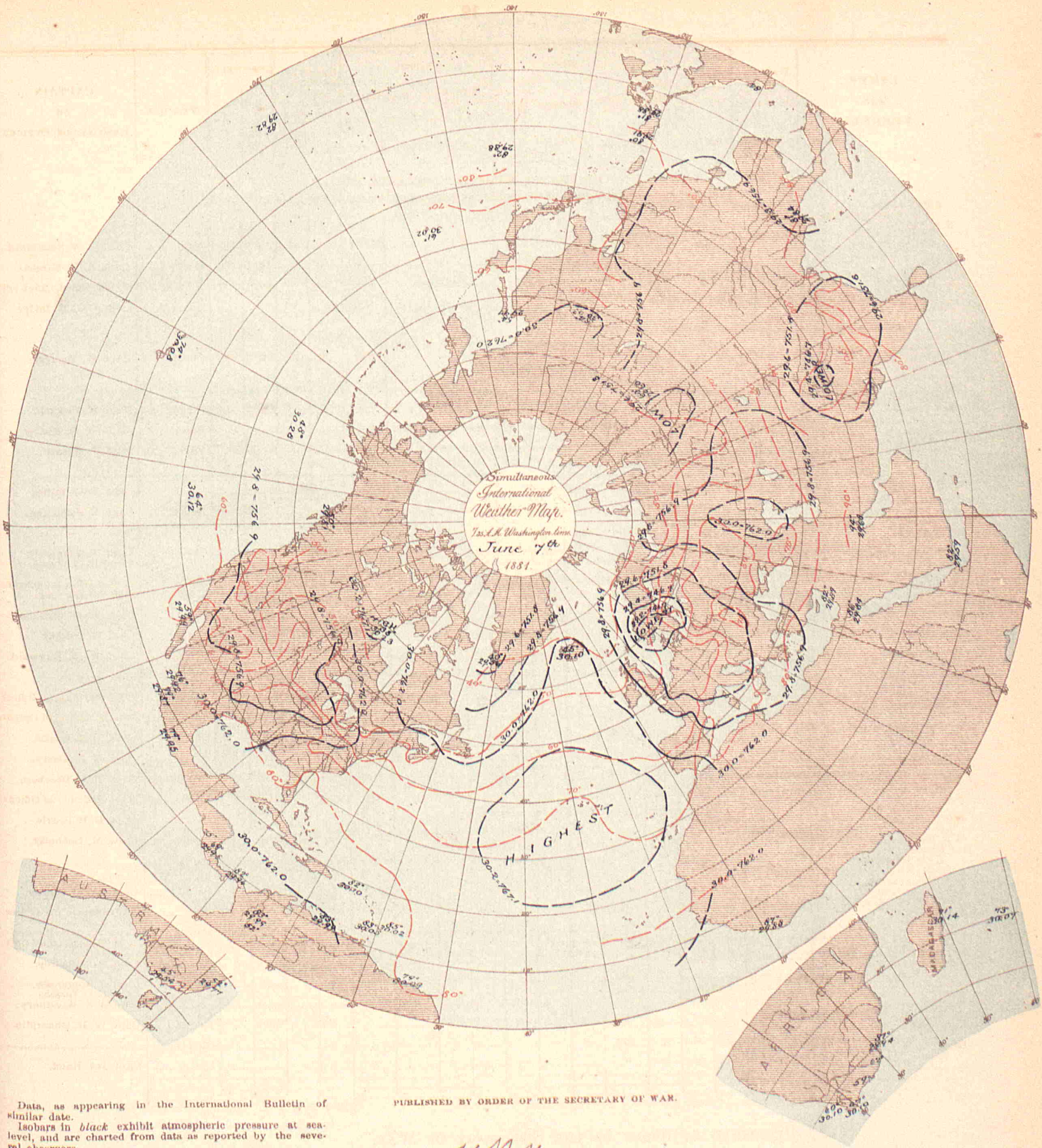
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 8, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours‡			29.97	761.3	75.2	24.0	86	W			3		0			0	0	Clear	Raynard.
Algiers‡			29.94	760.5	68.0	20.0	67	W			3		3			0.126	3.2	Cloudy	Nicolas.
La Calle‡			29.89	759.3	70.9	21.6	91	NW			1		6			0.079	2.0	Cloudy	Fonfrède.
Tunis‡			29.86	758.4															Jacques.
Sfax‡			30.02	762.6															Gau.
Saida‡			30.02	762.4	69.1	20.6	46	NW			3		2			0	0	Fair	Dumas.
Tebessa‡			29.91	759.8	67.6	19.8	27	NW			5		3			0	0	Pretty fair	Watrin.
Geriville‡					64.8	18.2	45	NW			1		0			0	0	Clear	Lonchamp.
Laghouat‡			30.00	761.9	78.1	25.6	29	N			2		0			0	0	Clear	Herbin.
Biskra‡			29.97	761.3	85.6	29.8	55	NW			2		0			0	0	Clear	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.02	762.5	30.11	764.8	45.5	7.5	89	SW	7	3.1			9			0.54	13.7	Dull	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	28.94	735.0	29.47	748.4	66.6	19.2	38	S			6		5			0.051	1.3	Raining	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.61	726.8	29.35	745.4	65.5	18.6	77	W	7.4	3.3			10			0.244	6.2		Dr. Wierzbicki.
Eperies	28.54	725.0	29.38	746.3	65.8	18.8	75	S			2		10ks		N	0.606	15.4		Julius Mikolik.
Gratz‡	28.21	716.5	29.41	747.0	63.1	17.3	64	SW			2		7			0.669	17.0		Andreas Rospini.
Hermannstadt	28.13	714.6	29.50	749.3	65.8	18.8	82	SE			3		8			0.453	11.5		Prof. A Gottschling.
Kremsmunster, Obs'y	28.15	715.0	29.47	748.4	54.0	12.2	72	W			1		9			0.693	17.0		The Staff.
Lemberg	28.47	723.0	29.41	746.9	67.3	19.6	80	SE			2		9			0.252	6.4		Dr. T. Stanecki.
Pola	29.44	747.7	29.55	750.5	56.8	13.8	80	S			4		10			0.118	3.0		I. R. HydrographicOffice.
Szathmar	29.04	737.5	29.48	748.9	61.3	16.3	95	S			5		10			0.476	12.1		Beicht Peter, S. J.
Szegedin	29.20	741.7	29.47	748.4	71.6	22.0	66	S			2		6			0	0		Karl Stancel.
Trieste	29.43	747.5	29.53	750.1	65.7	18.7	52	SW			1		10			0.213	5.4		Socco.
Vienna	28.77	730.7	29.46	748.3	60.4	15.8	64	W			2		8			0	0		I. R. Central Met. Obs'y
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter Printed June 8, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.94	760.5	30.04	763.0	47.6	8.7	40	N	18	8.0	.....	.....	4	.....	.....	0.010	0.3	Blue sky	W. Boswell.
Armagh, Observatory	29.90	759.4	30.13	765.3	50.0	10.0	50	N	6	2.7	.....	.....	4	.....	.....	.....	.....	D. clouds	S. Call.
Bidston, Liverpool Obs'y	.....	.....	30.02	762.5	52.8	11.6	48	NW	15	6.7	.....	.....	1	.....	.....	.....	.....	Blue sky	John Hartnup.
Bolton, Sharples	29.41	747.0	29.94	760.5	48.8	9.3	51	N	6	2.7	.....	.....	8	.....	.....	.....	.....	D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.61	752.1	30.01	762.2	48.8	9.3	55	N	.....	.....	1	.....	4	.....	.....	0.02	0.5	D. clouds	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.94	760.5	29.98	761.5	85	29.4	70	NE	.....	.....	1	.....	3	.....	.....	.....	.....	D. clouds	Corpl. J. Surgener, A.H.C.
Cardington	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John McLaren.
Chatham, School M. E.	29.79	756.7	29.92	760.0	53.1	11.7	55	N	.....	.....	3	.....	6	.....	.....	.....	.....	D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.81	757.2	30.04	763.0	51.1	10.6	50	NNW	.....	.....	5	.....	5	.....	.....	.....	.....	D. clouds	The Staff.
Fort Napier, Natal	27.66	702.6	29.88	758.9	70.1	21.2	100	SE	.....	.....	1	.....	4?	.....	.....	.....	.....	Overcast?	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.88	758.9	86	30.0	84	S	.....	.....	1	.....	4	.....	.....	.....	.....	D. clouds	Sgt. C. E. Keane.
Galway, Queen's College	.....	.....	30.12	765.0	54	12.2	49	N	.....	.....	4	.....	6?	.....	.....	.....	.....	Blue sky?	J. O'Donaghue.
Gibraltar, Mediterranean	29.98	761.5	30.04	763.0	73.2	22.9	87	WSW	.....	.....	5	.....	0	.....	.....	.....	.....	Blue sky	2nd Cpl. C. Baldwin.
Glasgow, Observatory	29.84	757.9	30.05	763.3	51.0	10.6	41	NNE	.....	.....	6	.....	6	.....	.....	.....	.....	D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	29.75	755.6	29.92	760.0	57.2	14.0	45	NNE	.....	.....	3	.....	6	.....	.....	.....	.....	D. clouds	The Staff.
Guernsey	29.70	754.4	29.91	759.7	52.5	11.4	73	NNW	.....	.....	3	.....	5	.....	.....	.....	.....	D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.91	759.7	29.94	760.5	51.8	11.0	55	N	17	7.6	.....	.....	7	.....	.....	.....	.....	D. clouds	The Staff.
Leicester, Museum	29.66	753.4	29.91	759.7	52.1	11.2	54	NE	.....	.....	2	.....	8	.....	.....	.....	.....	D. clouds	J. E. Carryer.
Malta, Mediterranean	29.72	754.9	29.79	756.7	73.8	23.2	60	S	.....	.....	2	.....	6	.....	.....	.....	.....	D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas	30.08	764.0	30.13	765 3	87.2	30.7	72	SE	.....	.....	1	.....	4	.....	.....	.....	.....	D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.46	748.3	29.99	761.7	50.1	10.1	60	NNE	.....	.....	2	.....	6	.....	.....	Blank		D. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	29.75	755.6	29.98	761.5	50.0	10.0	58	N	.....	.....	4	.....	9	.....	.....	.....	.....	Showery	The Staff.
Plymouth	29.90	759.4	29.97	761.2	50.7	10.4	70	NNE	.....	.....	2	.....	10	.....	.....	.....	.....	Showery	John Merrifield.
Sandwick Manse, Orkneys	.....	.....	30.08	764.0	42.6	5.9	80	N	25	11.2	.....	.....	2	.....	.....	.....	.....	Showery	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.49	749.0	29.55	750.6	87.6	30.9	50	SW	.....	.....	1	.....	1	.....	.....	.....	.....	Blue sky	Serg't W. H. Lyne.
Sheffield	29.75	755.6	30.04	763.0	50.0	10.0	80	NE	.....	.....	2	.....	10	.....	.....	Inap.	Inap.	Overcast	W. F. Cooper.
Silloth Rectory	30.03	762.7	30.06	763.5	54.9	12.7	72	NW	.....	.....	2	.....	6	.....	.....	0.030	0.8	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	30.03	762.7	60.0	15.6	69	N	16	7.2	.....	.....	7	.....	.....	.....	.....	D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	29.73	755.1	29.95	760.7	51.6	10.9	64	NE	.....	.....	3	.....	7	.....	.....	.....	.....	Showery	Rev. C. H. Griffiths, F.M.S
Truro, Royal Institution	30.03	762.7	30.03	763.5	55	12.8	62	N	.....	.....	6	.....	5	.....	.....	.....	.....	D. clouds	W. Newcombe.
Valencia, Observatory	30.14	765.5	30.17	766.3	53.7	12.1	59	N	17	7.6	.....	.....	4	.....	.....	Blank		D. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B	.....	.....	.....	.....	58.0	14.4	.....	W	6	2.7	.....	.....	10n	.....	.....	.....	.....	Raining	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.89	759.2	29.94	760.5	54	12.2	71	SW	17	7.6	.....	0	2s	.....	.....	0	0	Fair	H. J. Cundall, C. E.
Chatham, N. B.*	29.78	756.4	29.84	757.9	54	12.2	74	S	11	4.9	.....	8c	0	S	.....	0	0	Fair	G. A. Blair.
Chicontimi, Quebec	.....	.....	.....	.....	59.1	15.1	.....	SE	.....	.....	3	0	0	.....	.....	0	0	Blue sky	Rev. V. A. Huart.
Cornwall, Ontario	29.65	753.1	29.84	757.9	55.0	12.8	85	E	.....	.....	1	3cs	0	.....	.....	0	0	Blue sky	James Smith, M. A
Dalhousie, N. B	29.63	752.6	29.67	753.6	55.0	12.8	.....	Calm	.....	.....	0	0	0	.....	.....	0	0	Blue sky	H. A. Johnson.
Father Point, Quebec*	29.69	754.1	29.71	754.6	57	13.9	63	NW	15	6.7	.....	2cs	0	.....	.....	0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.09	738.9	29.89	759.2	57	13.9	93	E	4	1.8	.....	5k	5n	S	S	0.170	4.3	Fair	James Stewart.
Fredericton, N. B	29.87	758.7	29.94	760.5	57.0	13.9	65	SW	10	4.5	.....	1c	d	.....	.....	0	0	Fair	Prof. Harrison
Granton, Ontario	28.76	730.5	29.85	758.2	53.0	11.7	100	NE	.....	.....	1	.....	10n	.....	.....	0.50	12.7	Cloudy	James Grant.
Halifax, N. S.*	29.95	760.7	30.08	764.0	52	11.1	77	SW	9	4.0	.....	2ck	0	.....	.....	0	0	Fair	A. Allison.
Hamilton, Ontario	29.48	748.8	29.87	758.7	51.6	10.9	92	NE	.....	.....	2	10cs	0	NE	.....	0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.51	749.5	29.84	757.9	55	12.8	87	NE	4	1.8	.....	.....	10s	.....	.....	0	0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S.	29.96	761.0	30.00	762.0	49.5	9.7	68	SW	.....	.....	6	4k	0	SW	.....	0	0	Fair	C. H. Rigby.
Montreal, Quebec*	29.65	753.1	29.85	758.2	58	14.4	76	S	8	3.6	.....	5c	0	.....	.....	0	0	Fair	C. H. McLeod, C. E
Moose Factory, Ontario	30.02	762.5	30.05	763.3	46.8	8.2	55	W	.....	.....	1	10s	0	.....	.....	0	0	Blue sky	J. R. Nason.
Parry Sound, Ontario*	29.20	741.7	29.88	758.9	52	11.1	97	Calm	0	0	.....	.....	10n	.....	SE	0	0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	29.14	740.1	29.88	758.9	53.7	12.1	86	Calm	.....	.....	0	0	6ks	.....	.....	0	0	Fair	J. F. Jeffers, M. A.
Port Dover, Ontario	29.17	740.9	29.86	758.4	51	10.6	93	NE	10	4.5	.....	.....	10n	.....	NE	0.74	18.8	Threatening	H. Morgan.
Port Stanley, Ontario	29.21	741.9	29.85	758.2	53	11.7	96	NE	3	1.3	.....	.....	10n	.....	NE	0.82	20.8	Light rain	M. Payne.
Quebec, Quebec*	29.55	750.6	29.87	758.7	53	11.7	80	W	.....	.....	3	0	Hz	.....	.....	0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.39	746.5	29.85	758.2	47	8.3	89	NW	2	0.9	.....	.....	Fg	.....	.....	0	0	Foggy	W. H. McIntyre.
Saugeen, Ontario*	29.15	740.4	29.86	758.4	55	12.8	92	E	2	0.9	.....	0	Hz	.....	.....	0	0	Hazy	K. Stewart.
St. Andrews, N. B	29.91	759.7	29.96	761.0	51	10.6	77	W	2	0.9	.....	.....	10n	.....	.....	0	0	Cloudy	
St. John, N. B	29.71	754.6	29.88	758.9	53.0	11.7	77	SW	11	4.9	.....	0	7k	.....	.....	0	0	D. clouds	G. Murdock, C. E.
Stratford, Ontario	28.58	725.9	29.85	758.2	51.5	10.8	97	E	2	0.9	.....	.....	10s	.....	.....	0.407	10.3	D. clouds	C. J. Macgregor, M. A.
Sydney, C. B*	29.97	761.2	30.01	762.2	54	12.2	65	SW	11	4.9	.....	5c	0	NW	.....	0	0	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.51	749.5	29.89	759.2	52	11.1	93	NE	3	1.3	.....	.....	10n	.....	NE	0.04	1.0	Cloudy	Magnetic Observatory
Windsor, N. S.	29.91	759.7	30.01	762.2	54.5	12.5	93	.....	.....	.....	.....	0	4ks	.....	.....	0	0	Fair	
Woodstock, Ontario	28.79	731.3	29.85	758.2	50.9	10.5	98	NE	8	3.6	.....	.....	10s	.....	.....	0.52	13.2	D. clouds	Prof. Wolverton.
Yarmouth, N. S.*	29.96	761.0	30.03	762.7	51	10.6	68	S	4	1.8	.....	8k	2s	W	SW	0	0	Cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.92	760.0	30.17	766.3	55	12.8	74	SE	3	1.3	.....	0	0	.....	.....	0	0	.....	John Delany.
St. Pierre, N. F.	.....	.....	29.99	761.7	48.2	9.0	.....	W	.....	.....	3	.....	.....	.....	.....	0	0	.....	N. F. Land, Comd't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	30.24	768.1	.....	.....	54.0	12.2	93	WSW	43.8	19.6	.....	.....	10n	.....	.....	0.075	1.9	Showery	John Duthie.
Cape Town, C. G. H. Obs'y	30.32	770.1	30.36	771.1	49.8	9.9	.....	SSE	13.1	5.9	.....	0	1k	.....	.....	0	0	.....	The Staff, for D. Gill.
Worcester *†.	29.20	741.7	.....	.....	53.2	11.8	68	ESE	.....	.....	1	5	5	.....	.....	0.08	2.0	Dull	C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.82	757.5	29.85	758.1	70.2	21.2	92	SE	4.5	2.0	.....	.....	10k	.....	ESE	0	0	Covered	M. Marc Dechevrens, S J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.28	667.5	30.00	762.0	68.4	20.2	91	SE			1	8cs	0			0	0	Cloudy	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.62	752.4	29.67	753.6	52.5	11.4	59	NNW	18	8			10						Oversergent Fischer.
Fanöe	29.73	755.2	29.75	755.7	52.3	11.3	61	NW			6		7						Overloerer Lauridsen.
Godthaab, Greenland	29.46	748.3	29.50	749.4	39.4	4.1	85	S			2		5						S. Kleinschmidt.
Stykkisholm, Iceland	30.00	762.0	30.04	763.1	59.2	10.1		S			6		0						A. O. Thorlacius.
Thorshavn	30.12	765.1	30.16	765.0	41.4	5.2	51	W	11	5			5						Overloerer Bergh.
Vestervig	29.64	752.9	29.74	755.3	50.7	10.4	66	NW			6		2						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.24	742.6	29.89	759.1	55.8	13.2	47	NW			2	0	nk	NW	NW	0.28	7.		M. Labroue, Director.
Alençon Normal School	29.31	744.5	29.86	758.5	50.7	10.4	97	N			4		10n		NW	0.08	2.	Covered	M. Nicot, Director.
Arras, Engineer School	29.58	751.4	29.84	758.0	46.8	8.2	86	N			3		10		NE			Raining	M. Klein, Commandant.
Avignon, Normal School	29.64	752.8	29.72	754.8	58.5	14.7	57	N			2		5		NNW	0	0	Cloudy	M. Giraud, Director.
Bar-sur-Seine	29.15	740.5	29.71	754.6	52.0	11.1	81	NW			2		10		N	0.071	1.8	Covered	M. Saillard, Director.
Beauvais, Normal School	29.56	750.8	29.82	757.4	52.0	11.1	70	N			2		8		N	0.165	4.2	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	28.82	732.0	29.67	753.5	51.8	11	86	S			1		10n		E	1.10	28.	Raining	M. Gobin, Director.
Bordeaux, Observatory	29.64	752.8	29.90	759.5	57.7	14.3	59	NW			2		8		NW	0.122	3.1	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.23	742 5	29.78	756.4	55.4	13	66	N			3	0	n		N	0.102	2.6		M. Postel, Director.
Brest, Naval Observatory	29.78	756.3	30.02	762.5	52.5	11.4	63	N			2		6		N	0.059	1.5		M. de Kernaree, Dir.
Caen, Normal School	29.77	756.2	29.85	758.1	52.7	11.5	80	N			8		10			0.370	9.4	Covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.40	746.7	29.70	754.4	59.4	15.2	61	SSE			2		8	NE	SE	0.197	5.0	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.21	742.0	29.71	754.7	58.6	14.8	63	E			1					0	0		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.41	721.5	29.76	755.9	52.3	11.3	65	WSW			2		8			0.075	1.9	¾ covered	M. Alluard, Director.
Cluny, Normal School	28.93	734.9	29.70	754.3	55.4	13	71	W			3		10		W	0	0	Covered	M. de Villemontée, Dir.
Commercy, Normal School	28.80	731.6	29.65	753.0	57.9	14.4	55	NW			1	0	8kn	NW	NW	0	0	Very cloudy	Dr. Coulet, Director.
Gap, Normal School	27.02	686.4	29.51	749.6	53.6	12	45	N			6	0	n		N	0	0		M. Jeangirard, Director.
Grénasque, du. Rhone	28.54	725.0	29.69	754.0	50.3	13.5	42	NW			6		8		NW	0	0	¾ covered	M. Kina, Director.
Grenoble, Normal School	28.93	734.7	29.71	754.7	41.9	5.5	91	NW			3		10n			0.083	2.1	Light rain	M. Ablard, Director.
Guéret, Normal School	28.28	718.4	29.84	758.0	45.0	7.2	89	NW			1	0	n		SW	0.343	8.7		M. Rivoire, Director.
Lamballe, Normal School	29.69	754.2	29.97	761.2	49.6	9.8	71	NW			2		10		NW	0.16	4.	Raining	M. Ollitrault, Director.
Lescar, Normal School	29.42	747.2	30.10	764.5	49.6	9.8	64	W			1	0	n			0.67	17.		M. Chauvin, Director.
Lorient, Naval Observatory	29.89	759.2	29.99	761.8	59.0	15.0	48	N			1		2		N	0	0	¼ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.66	728.0	29.72	754.9	48.9	9.4	79	NW			1		10		NW	0.492	12.5	Covered	M. André, Director.
Mans, Normal School	29.54	750.4	29.85	758.2	54.5	12.5	60	N			4		5		N	0.047	1.2	Cloudy	M. Piboen, Director.
Marseille, Observatory	29.37	746.0	29.64	752.8	61.0	16.1	34	NW			4		7		NW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.53	623.1	29.77	756.1	38.1	3.4	67	NW	16.8	7.5			10		W	0.039	1.0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.61	752.1	29.72	754.8	60.8	16	53	NW			4		5	W	W	0	0	Cloudy	M. P. Galzin, Director.
Nancy, Normal School	28.93	734.7	29.70	754 3	47.8	8.8	89	WNW			1		10n			0.059	1.5	Raining	M. Hasse.
Nantes, Observatory	29.70	755 9	29.92	760.0	54.3	12.4	64	NW			2-3	0	8k;kn	NW	NW	0.071	1.8		M. Lacroque, Director.
Nice	29.44	747.8	29.48	748.7	67.3	19.6	33	N			1		10	SW	SW			Light rain	Capt. Boissière, Director.
Perpignan, Observatory	29.69	754.2	29.80	756.8	56.8	13.8	46	N	26.2	11.7			5*		NW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.33	567.2			22.6	—5.2							10		NW	1.669	42.4	Snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.66	728.0	29.73	755.2	49.6	9.8	79	NW			4		5	N	N			Raining	M. Tallieu.
Puy de Dôme Obs'y, Summit	24.84	630.8			30.6	—0.8	100	NW			6		10			0.693	17.6	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	29.88	758.9	29.91	759.7	66.6	19.2	81	NW			2		10			0.003	0.2	½ covered	Lt. E. Decanio, Director.
Roche-sur-Yon, N. School	29.79	754.4	29.92	759.9	48.6	9.2	79	NNE			2		10		NW	0.008	0.2	Raining	M. Monillot, Director.
Rodez, Normal School	27.66	702.6	29.83	757.7	42.8	6	82	NW			3		10						M. Richard, Director.
Rouen, Normal School	29.74	755.4	29.83	757.6	52.9	11.6	71	NE			3		5		N	0.339	8.6	Covered	M. Platrier, Director.
Saint Lô, Normal School	29.79	756.6	29.95	760.6	52.5	11.4	61	NNE			1		5		NE	0.08	2.	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.01	752.1	29.77	756.1	54.0	12.2	63	N			3		10		N	0.83	21.	Cloudy	M. Renou, Director.
Toulouse, Observatory	29.19	741.4	29.91	759.7	55.8	13.2	57	WSW			4		10			0.016	0.4		M. Baillaud, Director.
Tours	29.65	753.0	29.84	758.0	50.7	10.4	84	NW			1		10		N	0.083	2.1	Covered	M. de Tastes.
Versailles, Observatory	29.30	744.1	29.79	756.6	54.7	12.6	68	NE			3					0.394	10.0	Covered	Dr. A. Bérigny, Director.
Sub-Series.																0.189	4.8		
Paris, Montsouris Obs'y	29.50	749.3	29 79	756.7	52.9	11.6	69	NNE			3		9		NNE	0.012	0.3	Rain & hail	M. Marié Dvy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	28.78	731.0	29.53	752.7	50.0	10.0	66	NW			4	0	8k		W	0.138	3.5		Prof. Dr. Hoh.
Berlin	29.41	747.1	29.59	751.5	47.5	8.6	96	NE			3		10			0.323	8.2		Prof. Dr. Arndt.
Breslau	28.91	734.2	29.13	747.4	54.3	12.4	78	NW			2		10			0.724	18.4		Royal University Obs'y.
Carlsruhe	29.20	741.6	29.31	752.1	50.1	13.4	77	N			2		10	NE		0.230	6.0	Thund'r st'm	Albert Senx.
Cassel	28.85	732.9	29.57	751.1	54.7	12.6	52	NNW			5		6	NW		0.008	0.2		Dr. H. Möhl.
Frankfort on the Main	29.35	745.4	29.71	754.6	52.2	11.2	75	NNE			2		10			0.185	4.7		Physical Society.
Friedrichshafen	28.18	715.7	29.00	751.9	49.5	9.7	80	SE			2		10	ESE		0.504	12.8	Raining	Wilhelm, Chief Tel.
Hamburg	29.63	752.5	29.70	754.4	55.4	13.0	57	N			4		10			0	0		Dr. R. Kleeman.
Kiel	29.57	753.7	29.69	754.1	54.0	12.2	56	N			4		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.21	741.9	29.63	752.5	49.6	9.8	79	NNE			3		10	N		0.193	4.9	Rainy	Prof. Dr. Bruhns.
Magdeburg	29.43	747.4	29.61	752.2	52.0	11.1	78	NW			3		10n		NE	0.181	4.6		Dr. Assmann.
Memel	29.37	740.1	29.42	747.2	82.4	28.0	39	SE			5		6s						Reinbrecht & Issermann.
Munich	27.75	701.8	29.58	751.4	46.4	8.0	82	N			2		10	NW		0.890	22.6	Light rain	Central Station.
Neufahrwasser	29.37	745.9	29.38	746.3	52.9	11.6	86	N			2		10			0.815	20.7		A. Lothes.
Neustadt, Palatinate	29.10	739.2	29.03	752.0	54.9	12.7	76	N			4		10	NW		0.12	3.		Dieknether.
Stuttgart	28.67	728.1	29.50	750.7	49.5	9.7	95	N			1		10			0.287	7.3	Raining	Prof. Dr. Schoder.
Thorn																			Dr. O. Canerth.
Weissenburg, Bavaria	28.12	714.2	29.50	750.8	48.4	9.1	80	NW			2		10	NE		0.051	1.3		Prof. Kemlein.
Wustrow	29.62	752.4	29.05	753.1	52.3	11.3	71	N			4		10cs			0	0		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.32	744.8	29.70	754.4	80.8	27.1	.....	S	.....	.....	3.0	.....	0	.....	.....	.....	.....	Clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.52	749.9	29.57	751.2	87.4	30.8	76	WSW	40.0	17.9	.....	.....	0	.....	.....	0	0	Misty	
Deesa	29.02	737.0	29.47	748.5	100.8	38.2	26	WSW	18.5	8.3	.....	.....	8	SW	.....	0	0	D. clouds	
Bombay	29.65	753.1	29.69	754.1	80.5	26.9	80	N	12.0	5.4	.....	.....	10	.....	W	0.17	4.3	Overcast	
Poona, Yarrowda	27.87	707.9	29.71	754.6	81.5	27.5	55	WSW	.....	.....	.....	.....	1	.....	WNW	0	0	D. clouds	
Belgaum	27.16	690.0	29.71	754.6	71.7	22.1	91	WSW	16.0	7.2	.....	.....	9	.....	SW	.....	.....	Drizzling	
Lahore	28.70	728.8	29.40	746.7	100.2	37.9	38	E	4.2	1.9	.....	.....	10	.....	.....	0	0	Misty	
Roorkee	28.64	727.5	29.52	749.9	84.8	29.3	77	E	6.5	2.9	.....	.....	6	.....	.....	1.38	35.0	.....	
Agra	28.90	734.1	29.44	747.8	97.1	36.2	66	E	10.2	4.6	.....	.....	6	.....	E	0	0	.....	
Nagpur	28.42	721.8	29.46	748.2	74.2	23.4	96	W	12.6	5.6	.....	.....	10	.....	W	4.23	107.4	Overcast	
Jubbulpore	28.14	714.6	29.48	748.8	77.6	25.3	93	E	7.3	3.3	.....	.....	10	.....	.....	1.20	30.5	Overcast	
Lucknow	29.14	740.3	29.51	749.6	89.8	32.1	60	ENE	8.0	3.6	.....	.....	1	E	.....	0	0	D. clouds	
Allahabad	29.18	741.2	29.49	749.0	83.7	28.7	84	E	6.8	3.0	.....	.....	10	.....	.....	0.23	5.8	Overcast	
Patna	29.36	745.9	29.54	750.3	89.0	31.7	72	E	8.7	3.9	.....	.....	8	E	E	0.23	5.8	D. clouds	
Hazaribagh	27.60	701.0	29.60	751.8	75.6	24.2	86	SSE	14.9	6.7	.....	.....	10	.....	SE	0.75	19.0	Thnd'r str'm	
Cuttack	29.53	750.1	29.61	752.2	84.0	28.9	79	WSW	2.5	1.1	.....	.....	10	.....	.....	0.07	1.8	Overcast	
Calcutta, Alipore	29.62	752.3	29.64	752.9	82.1	27.8	89	S	4.0	1.8	.....	.....	10	.....	SE	1.23	31.2	Overcast	
Dhubri	29.53	750.0	29.65	753.1	83.7	28.7	78	SSW	1.6	0.7	.....	.....	9	.....	.....	0.22	5.6	Gloomy	
Chittagong	29.65	753.2	29.74	755.5	81.7	27.6	88	Calm	2.5	1.1	.....	.....	6	.....	.....	0	0	Blue sky	
Sibsagar	29.29	744.0	29.62	752.4	86.0	30.0	78	SSW	2.1	0.9	.....	.....	10	W	W	0.02	0.5	D. clouds	
Zanzibar, Africa	.....	.....	30.00	702.0	81.7	27.6	49	SSE	7	3.1	.....	.....	1	.....	.....	0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.10	739.1	29.50	749.2	65.1	18.4	59	SW	5.6	2.5	.....	.....	9	.....	.....	0.283	7.2	.....	Prof. Giovanni Clodig.
Milan	28.94	735.1	29.45	747.9	57.6	14.2	51	NW	9.4	4.2	.....	.....	8	NW	.....	0.508	12.9	.....	Prof. Schiaparelli.
Padua	29.37	746.0	29.47	748.6	64.4	18.0	55	ESE	8.1	3.6	.....	.....	10	NE	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.57	725.6	29.45	748.1	58.3	14.6	62	WSW	3.1	1.4	.....	.....	9	ENE	.....	0.220	5.6	.....	Prof. P. F. Denza.
Genoa	29.30	744.2	29.49	749.0	62.6	17.0	47	SE	10.5	4.7	.....	.....	6	SE	.....	0.004	0.1	.....	Prof. G. M. Garibaldi.
Mondovi	27.59	700.9	29.48	748.8	52.7	11.5	67	W	.....	.....	4	.....	8	.....	.....	0.201	5.1	.....	Prof. D. C. Bruno.
Pesaro	29.53	750.1	29.58	751.3	53.8	12.1	81	S	.....	.....	.....	.....	10	SW	.....	0.453	11.5	.....	Prof. Luigi Guidi.
Florence	29.28	743.6	29.52	749.9	57.7	14.3	72	SE	.....	.....	2	.....	10	W	.....	0	0	.....	Prof. Costantino Pitter.
Leghorn	29.46	748.2	29.54	750.3	61.7	16.5	55	WSW	26.6	11.9	.....	.....	10	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.47	748.5	29.64	752.8	65.7	18.7	47	SW	23.0	10.3	.....	.....	9	.....	.....	0.024	0.6	.....	Prof. P. S. Ferrari.
Lecce	29.46	748.3	29.71	754.5	73.8	23.2	38	SW	28.0	12.5	.....	.....	3	SW	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	28.89	733.9	29.76	756.0	66.9	19.4	70	W	6.3	2.8	.....	.....	10	SW	.....	0.366	9.3	.....	Prof. D. Conti.
Cagliari	29.52	749.9	29.72	754.8	62.6	17.0	65	NW	.....	.....	2	.....	8	W	.....	0.059	1.5	.....	Prof. A. Pacinotti.
Palermo	29.53	750.0	29.77	756.2	72.7	22.6	33	WSW	19.2	8.6	.....	.....	7	WSW	.....	0.028	0.7	.....	Prof. G. Ciaccialore.
Syracuse	29.70	754.4	29.74	755.5	78.1	25.6	47	SW	14.3	6.4	.....	.....	9	SW	.....	0	0	.....	Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.15	740.4	29.66	753.4	61.0	16.1	66	W	14.3	6.4	.....	.....	10	W	.....	0.098	2.5	.....	Prof. F. Brioschi.
Stelvio	21.74	552.3	.....	.....	38.7	3.7	56	E	.....	.....	2	.....	10n	.....	S	0.098	2.5	Covered	Prof. P. F. Denza.
Valdobbia	21.73	552.0	.....	.....	31.3	— 0.4	85	NE	.....	.....	2	.....	10n	.....	.....	0	0	Covered	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.96	761.0	29.98	761.5	70.0	21.1	91	WNW	1.1	0.5	.....	ck	10s	.....	.....	0.226	5.6	Overcast	K. Sasaki.
Kioto	29.83	757.7	30.00	762.0	65.2	18.4	81	NW	0.7	0.3	.....	ck;cs	10s	W	.....	0	0	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.79	756.6	29.98	761.5	69.6	20.9	95	Calm	0	0	.....	.....	10n	.....	.....	0.315	8.0	Light rain	S. Takehayashi.
Tokei Obs'y, Yeddo	29.91	759.7	29.98	761.5	64.7	18.2	93	Calm	0	0	.....	cc;cs;ck	0	NW	.....	0	0	Fair	The Staff.
Wakayama	29.93	760.2	29.98	761.5	69.8	21.0	77	Calm	0	0	.....	.....	10s	.....	.....	0	0	Cloudy	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.90	759.4	30.10	764.4	75.8	24.3	66	WNW	3.5	1.6	.....	0	8	.....	.....	0	0	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanajuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez.
Leon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Leal.
Mazatlan	29.72	754.9	29.98	761.4	77.0	25.0	91	ESE	1.6	0.8	.....	1cs	8n	.....	SE	0	0	Very cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff.
Pabellon, Aguascalientes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. P. Spina.
San Luis Potosi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Barroeta, M. D.
Tlacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.83	757.7	29.83	757.7	54.7	12.6	.....	N	.....	.....	5	.....	.....	.....	.....	0.161	4.1	.....	
Groningen	29.75	755.6	29.80	757.0	54.1	12.3	.....	N	.....	.....	4	.....	.....	.....	.....	0.004	0.1	.....	
Helder	29.82	757.5	29.82	757.5	51.4	10.8	.....	N	.....	.....	4	.....	.....	.....	.....	0.008	0.2	.....	
Hellevoetsluis	29.80	757.0	29.80	757.0	55.8	13.2	73	N	.....	.....	4	.....	.....	.....	.....	0.091	2.3	.....	
Utrecht	29.76	756.0	29.81	757.2	55.9	13.3	57	NNE	.....	.....	4	.....	5	.....	.....	0.209	5.3	Cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. h'r p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.66	753.4	29.72	755.0	47.5	8.6	60	NNW	38.7	17.3			6			1.075	27.3		
Christiania	29.42	747.3	29.56	750.9	59.2	15.1	40	S	9	4			2			0.543	13.8		
Gjæsvær	29.58	751.4	29.61	752.0	36.0	2.2		E			6		10					Snowing	
Lodingen	29.29	744.0	29.34	745.2	49.8	9.9	62	NNE			2		9			0.429	10.9		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.22	767.7	30.24	768.1	67.6	19.8	92	WNW	8.7	3.9			6			0	0		Dr. J. A. Sampaio.
Campo Major	29.06	738.2	30.04	763.1	69.1	20.6	33	NNW	2.5	1.1			0			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.16	766.1	30.25	768.3	68.0	20.0	64	SW	4.3	1.9			10			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.79	756.6	30.15	765.7	63.3	17.4	47	NNW	11.9	5.3			7			Blank			The Staff.
Ponta Delgada, Azores	30.30	769.7	30.37	771.5	75.2	24.0	59	NE	6.9	3.1			4			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.84	732.5	29.86	758.5	77.0	25.0	29	W	18	8		0	4k						Capt. Lasarew.
Archangel	29.84	757.8	29.85	758.3	75.2	24.0	47	ESE	18	8		0	8n						Capt. Sseliwerstow.
Astrakhan	29.99	761.8	29.91	759.7	73.2	22.9	57	E	16	7			10s;n			Blank			Capt. Wisganow.
Barnaul	29.27	743.4	29.74	755.5	69.6	20.9	29	SW	18	8			10						Meteorological Obs'y.
Dorpat	29.40	746.7	29.62	752.4	85.6	29.8	36	S	9	4		4ck	0						Observatory.
Ekaterinburg	29.07	738.4	29.99	761.8	73.9	23.3	24	NW	9	4		4ck	0						Meteorological Obs'y.
Kasan	29.75	755.7	30.01	762.2	80.4	26.9	48	SSW	11	5		0	8k						Observatory.
Kertch	29.73	755.1	29.75	755.6	72.3	22.4	79	Calm	0	0			3						Lagorio & Sastyrez.
Kieff	29.01	736.8	29.60	751.9	77.7	25.4	49	SE	16	7		ck	8s						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.63	752.5	29.82	757.5	72.9	22.7	54	ENE	13	6			10						Meteorological Obs'y.
Moscow	29.41	747.0	29.92	760.0	85.3	29.6	36	S	4	2		0	3ks						Meteorological Obs'y.
Nertchinsk	27.60	701.0	29.86	758.4	50.2	10.1	98	Calm	0	0			10			1.307	33.2		Meteorological Obs'y.
Nikolaiev	29.61	752.1	29.68	753.9	82.2	27.9	57	S	13	6		3ck	0						Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.08	764.0	30.17	766.2	50.5	10.3	58	Calm			0	3ck	0			0	0		Lieut. Iwanow.
Pekin, China	29.61	752.1	29.75	755.7	69.1	20.6	75	Calm	0	0		0	6ks					Thnd'rstorm	Physical Observatory.
St. Petersburg	29.68	753.8	29.09	754.2	83.5	28.6	36	SW	16	7		0	3k						Central Physical Obs'y.
Tashkend, Laboratory	28.09	713.4	29.53	750.1	90.5	32.5	47	Calm	0	0			0						Teich, A. M.
Tiflis	28.38	720.8	29.72	755.0	75.2	24.0	37	NW	9	4			10						Physical Observatory.
Warsaw	28.93	734.8	29.32	744.8	75.2	24.0	50	SE	20	9		ck	8s			Blank			Astronomical Obs'y.
Wilna	29.14	740.1	29.53	750.0	81.7	27.6	38	SE	22	10			5						Berg, Assistant.
Yeniseisk	29.37	746.1	29.05	753.1	65.1	18.4	45	SW	11	5			9						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.09	764.3	45.0	7.2	74	N			2	0	8k			0.04	1.0	Rain & hail	Andrew Gibb.
Monach Lt. House, Hebrides			30.16	766.1	49	9.4	100	N			4	5	3	N		0	0	Cloudy	J. Youngclause.
North Unst, Shetland Isl'ds			29.63	752.6				N			6					Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.69	754.1	29.79	755.7	69.8	21.0	38	WNW	6.0	2.7		0	2k			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.98	701.5	30.04	762.9	60.1	15.6	72	NW	4.0	1.8		1	8	N		0.618	15.7	Raining	Prof. Manuel de Naveras.
Burgos, Met. Obs'y	27.05	687.4			51.8	11.0	61	NE	6.5	2.9			4			0.165	4.2	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.77	705.4	29.97	761.3	62.8	17.1	31	SW	10.5	4.7		2	0			0	0	Light clouds	The Staff.
Murcia, Met. Obs'y	29.80	757.0	29.95	760.7	76.1	24.5	44	NE	3.1	1.4		2	3	W		0	0	Cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.20	741.6	30.08	764.1	60.1	15.6	54	NNE	7.4	3.3			6			0	0	Cloudy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	30.02	762.6	30.09	764.2	79.8	26.6	77	ENE	3.6	1.6		0	0			0	0	Clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.86	758.4	29.91	759.7	82.8	28.2	76	E	5.9	2.7			9kn		E	0.79	20.0	Covered	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.01	762.2	30.11	764.7	66.2	19.0	54	NW	10.6	4.7		0	4		W	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.01	762.2	30.10	764.5	80.2	26.8	92	SE	4.0	1.8		5k	4kn	SE	SE	0.236	6.0	Raining	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.79	756.5	29.93	760.2	78.0	25.6	90	NNW	4.0	1.8			10kn		NW	0.01	0.3	Covered	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.48	748.9	29.52	749.9	48.6	9.2	92	SW			2		10			0	0		
Umea	29.47	748.4	29.52	749.7	55.1	13.4	54	SW			6		1			0.047	1.2		
Hernosand	29.48	748.7	29.53	750.0	55.2	12.9	63	S			4		1			0	0		
Stockholm	29.42	747.3	29.60	751.8	60.3	15.7	58	ENE			2		10			0	0		
Wisby	29.48	748.7	29.54	750.2	47.8	8.8	95	NE			2		10			0.008	0.2	Rainy	
Sub-Series.																			
Upsala	29.38	746.2	29.47	748.4	65.5	18.6	46	S	4.9	2.2			10		S	0.303	7.7		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.26	717.8	29.69	754.2	51.4	10.8	76	SW			2		10			0.125	3.2	Covered	The Observatory.
Zurich	28.01	711.4	29.67	753.5	48.9	9.4	84	W			1		9			0.760	19.3	Raining	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.61	752.0	90.0	32.2	29	W	6	2.5			0			0	0		The Observatory.
Valona			29.85	758.1	75.6	24.2		SW			1		2			0.04	1.	Slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.95	760.7	80.1	26.7	66	W			1		0			0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES SERIES. By authority of the Secretary of War. Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	29.79	756.7	29.87	758.7	57	13.9	87	W	2	0.9			10s;fg		NE	0.23	5.8	Cloudy	
Alpena, Michigan	29.26	743.2	29.91	759.7	45	7.2	76	NW	5	2.2		2ck	2s	W		0	0	Fair	
Atlanta, Georgia	28.90	734.0	30.05	763.3	70.2	21.2	89	SW	8	3.6			10s		Calm	0	0	Cloudy	
Atlantic City, New Jersey	29.84	757.9	29.85	758.2	66	18.9	89	S	9	4.0		5c	0	Calm		0.03	0.8	Fair	
Augusta, Georgia	29.91	759.7	30.09	764.3	72.8	22.7	72	S	2	0.9			10s		SW	0	0	Cloudy	
Baltimore, Maryland	29.82	757.4	29.87	758.7	67	19.4	95	W	4	1.8		2k	Fg	W		0.43	10.9	Fair	
Barnegat, New Jersey	29.82	757.4	29.84	757.9	69	20.6	95	SW	4	1.8			10s;hz		Calm	0.10	2.5	Cloudy	
Bismarck, Dakota	28.02	711.7	29.76	755.9	59	15.0	94	SE	8	3.6			10s		Calm	0.02	0.5	Cloudy	
Boise City, Idaho	27.09	688.1	29.85	758.2	41.0	5.0	75	Calm	0	0		0	0			0.15	3.8	Clear	
Boston, Massachusetts	29.70	754.4	29.85	758.2	52.0	11.1	97	E	10	4.5			10n;fg			0.19	4.8	Light rain	
Bracketville, Texas	28.70	729.0	29.70	754.4	76	24.4	95	E	8	3.6			10s			0	0	Cloudy	
Brownsville, Texas	29.82	757.4	29.86	758.4	83	28.3	78	S	8	3.6		2c	0			0	0	Clear	
Buffalo, New York	29.14	740.1	29.83	757.7	51.5	10.8	97	NE	7	3.1			Fg			0.68	17.3	Dense fog	
Burlington, Vermont	29.57	751.1	29.85	758.2	56.8	13.8	81	S	5	2.2		2k	5ks	S	S	0	0	Fair	
Cairo, Illinois	29.49	749.0	29.88	758.9	77	25.0	82	W	6	2.7			10ks		W	0	0	Threatening	
Campo, California	27.42	696.5	30.00	762.0	41	5.0	82	S	1	0.4		0	0			0	0	Clear	
Camp Thomas, Arizona	27.22	691.4			59	15.0	48	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	29.91	759.7	29.93	760.2	75	23.9	64	SW	19	8.5		5c	0			0	0	Fair	
Cape May, New Jersey	29.83	757.7	29.83	758.4	68	20.0	90	W	6	2.7		8ck	0	SW		0.76	19.3	Cloudy	
Castroville, Texas	29.10	739.1	29.70	755.9	81	27.2	74	SE	5	2.2			10s		S	0	0	Cloudy	
Cedar Keys, Florida	30.10	764.5	30.12	765.0	81	27.2	70	SW	5	2.2		0	0			0	0	Clear	
Champaign, Illinois	29.00	736.6	29.76	755.9	65.4	18.6	100	S	2	0.9			10n		S	0.56	14.2	Light rain	
Charleston, S. Carolina	30.04	763.0	30.10	764.5	81	27.2	78	SW	9	4.0		2c	8ks	Calm	SW	0	0	Cloudy	
Charlotte, N. Carolina	29.16	740.7	30.02	762.5	78.0	25.6	57	SW	10	4.5		5c	0	SW		0	0	Fair	
Chattanooga, Tennessee	29.22	742.2	30.02	762.5	72	22.2	90	S	6	2.7			10ks		SW	0.51	13.0	Cloudy	
Cheyenne, Wyoming	24.03	610.4	29.84	757.9	50	10.0	32	W	6	2.7		0	0			0	0	Clear	
Chicago, Illinois	29.07	738.4	29.75	755.6	52.0	11.1	95	NE	6	2.7			10n			0.83	21.1	Light rain	
Chincoteague, Virginia	29.89	759.2	29.91	759.7	67	19.4	89	SW	19	8.5		1k	Hz	Calm	Calm	0	0	Clear	
Cincinnati, Ohio	29.23	742.4	29.87	758.7	69	20.6	85	W	6	2.7			10n		SW	1.33	33.8	Light rain	
Cleveland, Ohio	29.08	738.6	29.80	756.9	59	15.0	96	NE	5	2.2			10s;fg		NE	1.35	34.3	Cloudy	
Coleman City, Texas	28.08	713.2	29.66	753.4	74	23.3	81	Calm	0	0		0	8s		S	0	0	Cloudy	
Columbus, Ohio	28.99	736.3	29.81	757.2	66	18.9	89	SW	3	1.3			10s		W	0.40	10.2	Cloudy	
Concho, Texas	27.85	707.6	29.74	755.4	73	22.8	95	E	2	0.9			10s			0	0	Cloudy	
Corsicana, Texas	29.45	748.0	29.91	759.7	79	26.1	82	S	8	3.6		0	8ks			0	0	Cloudy	
Davenport, Iowa	29.10	739.1	29.74	755.4	58	14.4	94	N	13	5.8			10s		N	0.49	12.4	Cloudy	
Dayton, Washington T'y	28.13	714.5	29.88	758.9	42	5.6	83	SE	4	1.8		2c	0	Calm		0.07	1.8	Clear	
Deadwood, Dakota	25.30	642.6	29.85	758.2	51	10.6	65	SW	3	1.3		0	0			Inap.	Inap.	Clear	
Decatur, Texas	28.66	728.0	29.70	755.9	78	25.6	69	SE	12	5.4		0	0			0	0	Clear	
Delaware Breakwater, Del.	29.86	758.4	29.88	758.9	69	20.6	90	W	8	3.6		6c;ck	0			0.03	0.8	Fair	
Denison, Texas	29.07	738.4	29.85	758.2	75	23.9	81	SW	8	3.6		c	0			0	0	Clear	
Denver, Colorado	24.76	628.9	29.80	756.9	50.5	10.3	55	S	5	2.2		0	0			0	0	Clear	
Des Moines, Iowa	28.88	733.5	29.76	755.9	62	16.7	88	E	8	3.6			10s		E	0.11	2.8	Cloudy	
Detroit, Michigan	29.12	739.6	29.79	756.7	58.2	14.6	94	NE	8	3.6			10n		Calm	0.96	24.4	Light rain	
Dodge City, Kansas	27.25	692.4	29.75	755.6	61.6	16.4	72	NE	13	5.8		0	0			0	0	Clear	
Dubuque, Iowa	29.06	738.1	29.74	755.4	56.2	13.4	94	NE	6	2.7			10n		Calm	0.26	6.6	Light rain	
Duluth, Minnesota	29.20	741.7	29.88	758.9	48.	8.9	78	NE	1	0.4		5cs	0	NE		0	0	Fair	
Eagle Pass, Texas	29.09	738.9	29.90	759.4	78.2	25.7	82	SE	4	1.8		0	0			0	0	Clear	
Eagle Rock, Idaho	25.17	639.3	29.88	758.9	40	4.4	82	SW	6	2.7			10n			0.16	4.1	Light rain	
Eastport, Maine	29.91	759.7	29.98	761.5	55	12.8	53	SW	10	4.5			10s		SW	0	0	Cloudy	
El Paso, Texas	26.22	666.0	29.87	758.7	64	17.8	21	W	7	3.1		0	0			0	0	Clear	
Erie, Pennsylvania	29.10	739.1	29.81	757.2	52	11.1	100	NE	8	3.6			10n			1.85	47.0	Light rain	
Escanaba, Michigan	29.24	742.7	29.88	758.9	53	11.7	86	N	8	3.6			10s		Calm	0	0	Cloudy	
Florence, Arizona	28.43	722.1	30.03	762.7	59	15.0	13	NE	1	0.4		0	0			0	0	Clear	
Fort Apache, Arizona	25.05	636.3	29.83	757 7	43	6.1	59	E	3	1.3		0	8k		Calm	0	0	Light smoke	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota	28.27	718.0	29.74	755.4	56	13.3	94	W	1	0.4		0	0			0.39	9.9	Clear	
Fort Benton, Montana	27.00	685.8	29.74	755.4	59	15.0	70	NE	5	2.2		5cs	0	E		0	0	Fair	
Fort Buford, Dakota	27.82	706.6	29.74	755.4	56	13.3	87	Calm	0	0		0	0			0.06	1.5	Clear	
Fort Custer, Montana	25.63	675.4	29.72	754.9	56	13.3	69	SE	5	2.2		0	0			0	0	Clear	
Fort Davis, Texas	25.22	640.6	30.18	766.6	54	12.2	49	NE	6	2.7		0	0			0	0	Clear	
Fort Elliott, Texas	27.06	687.3	30.14	765.5	59	15.0	65	N	8	3.6		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.24	742.7	29.77	756.1	74	23.3	68	S	4	1.8		0	0			0	0	Clear	
Fort Grant, Arizona	25.27	641.8	30.07	763.8	61	16.1	35	N	4	1.8		0	0			0	0	Clear	
Fort Griffin, Texas	28.55	725.2	29.74	755.4	76.6	24.8	73	S	10	4.5		0	0			0	0	Clear	
Fort Keogh, Montana	27.33	694.2	29.74	755.4	53	11.7	79	SW	1	0.4		0	0			0	0	Clear	
Fort Macon, North Carolina	30.02	762.5	30.03	762.7	75	23.9	95	SW	18	8.0		Hz	Hz	Calm	Calm	0	0	Light haze	
Fort McKavett, Texas	27.65	702.3	29.47	748.5	75.1	23.9	86	S	8	3.6		8k	0	SW		0	0	Cloudy	
Fort Missoula, Montana	26.60	675.6	29.98	761.5	49	9.4	93	S	3	1.3			10s			0.23	5.8	Cloudy	
Fort St. Michaels	29.73	755.1	29.77	756.1	29	— 1.7	100	N	3	1.3			Fg		N	0	0		
Fort Shaw, Montana	23.22	666.0	29.07	753.6	48	8.9	85	E	3	1.3		5k	0	S		0.03	0.8	Fair	
Fort Sill, Indian Territory	28.56	725.4	29.78	756.4	70	21.1	90	S	8	3.6		0	0			0.19	4.8	Clear	
Fort Stevenson, Dakota	27.97	710.4	29.75	755.6	60	15.6	94	SE	4	1.8			10ks		SE	0.02	0.5	Cloudy	
Fort Verde, Arizona					54	12.2	38	S			2	0	0			0	0	Clear	
Fredericksburg, Texas	28.18	715.8	29.66	753.4	76	24.4	91	S	8	3.6			10s		S	0	0	Cloudy	
Galveston, Texas	29.95	760.7	29.99	761.7	82	27.8	83	S	12	5.4		0	5ks		S	0.02	0.5	Fair	
Grand Haven, Michigan	29.15	740.4	29.80	756.9	58	14.4	94	NE	4	1.8			10s		NE	0.01	0.3	Cloudy	
Hatteras, North Carolina	30.03	762.7	30.05	763.3	75	23.9	90	SW	28	12.5		Hz	Hz			0	0	Dense haze	
Helena, Montana	25.68	652.3	29.88	758.9	55	12.8	62	S	7	3.1		5k	0	Calm		0.23	5.8	Fair	
Henrietta, Texas	28.79	731.3	29.64	752.8	81	27.2	67	S	5	2.2		0	0			0	0	Clear	
Indianapolis, Indiana	29.02	737.1	29.79	756.7	67	19.4	84	SE	4	1.8			10ks			1.10	27.9	Cloudy	
Indianola, Texas	29.91	759.7	29.94	760.5	81.9	27.7	87	S	8	3.6		10k	2s	N	S	0	0	Fair	
Jacksboro, Texas	28.68	728.5	29.74	755.4	78	25.6	78	SW	10	4.5		0	0			0	0	Clear	
Jacksonville, Florida	30.07	763.8	30.09	764.3	81	27.2	70	SW	10	4.5		5ck	2s	SW		0	0	Cloudy	
Keokuk, Iowa	29.09	738.9	29.71	754.6	66.3	19.1	89	SW	4	1.8			10s		SW	0.59	15.0	Cloudy	
Key West, Florida	30.09	764.3	30.12	765.0	83.0	28.3	75	E	5	2.2		5k	0	E		0	0	Fair	
Kittyhawk, North Carolina	30.00	762.0	30.02	762.5	76	24.4	82	SW	21	9.4		0	2s; hz			0	0	Clear	
Knoxville, Tennessee	29.02	737.1	30.02	762.5	69.6	20.9	90	SW	10	4.5			10s		SW	0.06	1.5	Cloudy	
La Crosse, Wisconsin	29.05	737.9	29.75	755.9	60.1	15.6	82	N	4	1.8			10s		NE	0	0	Cloudy	
La Mesilla, New Mexico	26.08	662.4	30.23	767.8	54.0	12.2	32	Calm	0	0		0	0			0	0	Clear	
Laredo, Texas	29.40	746.7	29.73	755.1	81	27.2	67	SE	4	1.8		0	0			0	0	Clear	
Leavenworth, Kansas	28.89	733.8	29.70	755.9	65	18.3	84	S	3	1.3			10s		W	0.68	17.3	Cloudy	
Lewiston, Idaho	29.07	738.4	29.90	759.4	51	10.6	79	NE	1	0.4			10s		Calm	0.09	2.3	Cloudy	
Little Rock, Arkansas	29.56	750.8	29.87	758.7	73	22.8	81	W	2	0.9		0	0			0.05	1.3	Clear	
Los Angeles, California	29.65	753.1	30.02	762.5	60.1	15.6	88	Calm	0	0			9ks		S	0	0	Cloudy	
Louisville, Kentucky	29.29	744 0	29.84	757.9	73.0	22.8	85	S	8	3.6			10s		S	0.01	0.3	Cloudy	
Lynchburg, Virginia	29.27	743.4	29.94	760.5	74	23.3	63	Calm	0	0		4k	0	SW		0	0	Fair	
Madison, Wisconsin	28.79	731.3	29.77	756.1	55	12.8	81	E	4	1.8			10s		E	Inap.	Inap.	Cloudy	
Marquette, Michigan	29.20	741.7	29.91	759.7	51	10.6	65	NW	3	1.3		0	0			0	0	Clear	
Mason, Texas	28.28	718.3	29.94	760.5	80	26.7	78	S	5	2.2			10ks		S	0	0	Cloudy	
Memphis, Tennessee	29.56	750.8	29.89	759.2	76	24.4	86	S	12	5.4			10n		S	0.13	3.3	Light rain	
Milwaukee, Wisconsin	29.09	738.9	29.82	757.4	49	9.4	93	N	3	1.3			10s;fg			0	0	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.96	761.0	30.03	762.7	79	26.1	91	S	6	2.7	.....	3cs;k	o	S;SW	.....	1.18	30.0	Fair	
Montgomery, Alabama	29.84	757.9	30.05	763.5	76	24.4	86	SE	4	1.8	.....	5k	2ks	SW	SW	0.58	14.7	Fair	
Moorhead, Minnesota	28.87	733.3	29.83	757.7	61.2	16.2	82	Calm	0	0	.....	5k	5s	SE	.....	0	0	Cloudy	
Morgantown, W. Virginia	28.80	733.0	29.80	756.9	71	21.7	80	SW	3	1.3	.....	.....	10s	.....	.....	0.05	1.3	Cloudy	
Mt. Washington, N. H.	23.71	602.2	29.74	755.4	41	5.0	91	SW	15	6.7	.....	.....	Fg	.....	SW	0.06	1.5	Light fog	
Nashville, Tennessee	29.40	746.7	29.92	760.0	75.6	24.2	80	SW	4	1.8	.....	.....	10ks	.....	SW	0.02	0.5	Cloudy	
New Haven, Connecticut	29.72	754.9	29.84	757.9	56	13.3	87	NE	7	3.1	.....	.....	10s	.....	.....	0.78	19.8	Cloudy	
New London, Connecticut	29.78	756.4	29.83	757.7	58	14.4	94	SE	3	1.3	.....	.....	10s	.....	Calm	0.48	12.2	Cloudy	
New Orleans, Louisiana	29.98	761.5	30.02	762.5	79.5	26.4	85	S	5	2.2	.....	0	1ks	.....	S	0.12	3.0	Clear	
Newport, Rhode Island	29.77	756.1	29.82	757.4	57.2	14.0	99	E	6	2.7	.....	.....	10n	.....	E	1.25	31.7	Light rain	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	29.79	756.7	29.82	757.4	60.0	15.6	100	SW	7	3.1	.....	.....	Fg	.....	SW	1.40	35.6	Dense fog	
New York, New York	29.69	754.1	29.86	758.4	59	15.0	100	S	6	2.7	.....	.....	10s;fg	.....	.....	1.12	28.4	Cloudy	
Norfolk, Virginia	29.92	760.0	29.94	760.5	75	23.9	72	SW	10	4.5	.....	2c	2s	.....	.....	0	0	Fair	
North Platte, Nebraska	27.02	686.3	29.84	757.9	53	11.7	92	Calm	0	0	.....	0	0	.....	.....	0.59	15.0	Clear	
Olympia, Washington T'y	29.84	757.9	29.88	758.9	43.5	6.4	92	NE	2	0.9	.....	5cs	0	S	.....	0.08	2.0	Fair	
Omaha, Nebraska	28.65	727.7	29.79	756.7	62.2	16.8	96	N	11	4.9	.....	.....	10s;fg	.....	.....	0.07	1.8	Cloudy	
Oswego, New York	29.52	749.8	29.84	757.9	52.9	11.6	89	SE	1	0.4	.....	.....	Fg	.....	.....	0.06	1.5	Dense fog	
Pensacola, Florida	30.02	762.5	30.06	763.5	80	26.7	91	SW	12	5.4	.....	.....	10s	.....	SW	1.51	38.4	Cloudy	
Philadelphia, Pa	29.80	756.9	29.85	758.4	67	19.4	95	W	6	2.7	.....	5k	Fg	W	.....	0.07	1.8	Fair	
Phœnix, Arizona	28.83	732.3	30.61	777.5	61	16.1	50	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.90	454.7	30.11	764.8	29	— 1.7	56	NE	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Pioche, Nevada	23.93	607.8	29.78	756.4	50	10.0	52	S	8	3.6	.....	4k	0	W	.....	0	0	Fair	
Pittsburg, Pennsylvania	29.04	737.6	29.82	757.4	68.5	20.3	87	S	7	3.1	.....	5k	2s	SW	S	1.34	34.0	Fair	
Port Eads, Louisiana	30.06	763.5	30.06	763.5	80.0	26.7	87	S	15	6.7	.....	1k	0	S	.....	Inap.	Inap.	Clear	
Port Huron, Michigan	29.18	741.2	29.84	757.9	50.6	10.3	96	N	3	1.3	.....	.....	10n	.....	Calm	0.56	14.2	Light rain	
Portland, Maine	29.87	758.7	29.92	760.0	55	12.8	87	S	4	1.8	.....	.....	10n	.....	Calm	0.02	0.5	Light rain	
Portland, Oregon	29.80	756.9	29.87	758.7	52.2	11.2	91	Calm	0	0	.....	.....	10s	.....	NW;S	0.09	2.3	Cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	76	24.4	95	SW	25	11.2	.....	5k	0	W	.....	0	0	Fair	
Prescott, Arizona	24.74	628.4	29.81	757.2	54	12.2	43	S	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	30.11	764.8	30.12	765.0	79.5	26.4	72	E	7	3.1	.....	1k	0	Calm	.....	0	0	Clear	
Red Bluff, California	29.65	753.1	29.98	761.5	52.0	11.1	79	SW	4	1.8	.....	0	1s	.....	Calm	0	0	Clear	
Rio Grande City, Texas	29.67	753.6	29.88	758.9	81	27.2	83	SE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Rochester, New York	29.23	742.4	29.85	758.2	49	9.4	93	NW	7	3.1	.....	.....	Fg	.....	.....	0.36	9.1	Dense fog	
Roseburg, Oregon	29.31	744.5	29.87	758.7	48	8.9	78	S	5	2.2	.....	.....	10s	.....	.....	0.06	1.5	Cloudy	
Sacramento, California	29.96	761.0	30.03	762.7	49.6	9.8	79	SE	4	1.8	.....	0	0	.....	.....	0.13	3.3	Clear	
St. Louis, Missouri	29.21	741.9	29.79	756.7	67.0	19.4	92	SE	8	3.6	.....	.....	10s	.....	.....	0.18	4.6	Cloudy	
St. Paul, Minnesota	28.96	735.6	29.80	756.9	64	17.8	83	SE	2	0.9	.....	2ck	2ks	Calm	SE	0	0	Fair	
Salt Lake City, Utah	25.49	647.4	29.69	754.1	60	15.6	34	SE	12	5.4	.....	4k	0	SW	.....	0	0	Fair	
San Antonio, Texas	29.21	741.9	29.90	759.4	79.3	26.3	87	SE	2	0.9	.....	.....	10s	.....	SE	Inap.	Inap.	Cloudy	
San Diego, California	29.91	759.7	29.98	761.5	59.0	15.0	65	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Sandusky, Ohio	29.13	739.9	29.79	756.7	65	18.3	94	SE	5	2.2	.....	.....	10s	.....	.....	1.43	36.3	Cloudy	
Sandy Hook, New Jersey	29.83	757.7	29.86	758.4	62.5	16.9	94	NE	1	0.4	.....	5k	5s	W	.....	1.03	26.2	Cloudy	
San Francisco, California	29.99	761.7	30.05	763.3	53	11.7	83	W	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Santa Fé, New Mexico	23.31	592.1	29.82	757.4	54	12.2	26	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Savannah, Georgia	30.02	762.5	30.11	764.8	80	26.7	66	SW	4	1.8	.....	.....	10s	.....	.....	Inap.	Inap.	Threatening	
Shreveport, Louisiana	29.70	754.4	29.93	760.2	78	25.6	85	S	5	2.2	.....	2k	0	.....	.....	0	0	Fair	
Silver City, New Mexico	24.30	617.2	29.76	755.9	50	10.0	39	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Sitka Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	.....	
Smithville, North Carolina	30.04	763.0	30.07	763.8	77	25.0	91	SW	12	5.4	.....	5k	5ks	SW	SW	0	0	Cloudy	
Spokane Falls, Wash. Ter.	27.89	708.4	29.85	758.2	43	6.1	83	SE	1	0.4	.....	10ck	0	SE	.....	0.05	1.3	Cloudy	
Springfield, Illinois	29.06	738.1	29.72	754.9	67	19.4	95	SE	7	3.1	.....	5c	5s	W	SW	0.25	6.3	Cloudy	
Springfield, Massachusetts	29.72	754.9	29.84	757.9	55.0	12.8	100	N	4	1.8	.....	.....	10n;fg	.....	N	1.33	33.8	Light rain	
Stockton, Texas	26.90	683.2	29.89	759.2	60.2	15.7	77	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	28.99	736.3	29.83	757.7	58	14.4	94	SE	4	1.8	.....	8cs	2s	W	Calm	0	0	Cloudy	
Thatcher's Island, Mass	29.84	757.9	29.90	759.4	50.6	10.3	100	E	13	5.8	.....	.....	10n	.....	E	0.18	4.6	Light rain	
Toledo, Ohio	29.11	739.4	29.79	756.7	62	16.7	100	W	2	0.9	.....	.....	10n;fg	.....	.....	1.32	33.5	Light rain	
Tucson, Arizona	27.52	699.0	29.81	757.2	63	17.2	47	SE	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.55	750.6	29.95	760.7	50.0	10.0	72	SW	2	0.9	.....	0	8s	.....	.....	0.01	0.3	Cloudy	
Uvalde, Texas	28.93	734.8	29.70	754.4	78	25.6	91	SE	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Vicksburg, Mississippi	29.76	755.9	30.01	762.2	78	25.6	86	S	9	4 0	.....	.....	10ks	.....	SW	Inap.	Inap.	Threatening	
Visalia, California	29.64	752.8	29.99	761.7	55	12.8	68	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C.	29.76	755.9	29.87	758.7	69	20.6	90	Calm	0	0	.....	10c	0	.....	.....	0.51	13.0	Cloudy	
Wickenburg, Arizona	.....	.....	.....	.....	55	12.8	50	Calm	.....	.....	0	0	c	.....	.....	0	0	Clear	
Wilmington, N. Carolina	30.00	762 0	30.05	763.5	78	25.6	82	SW	10	4.5	.....	0	8s	.....	SW	0	0	Cloudy	
Winnemucca, Nevada	25.54	648.7	29.75	755.6	36	2.2	61	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Wood's Holl, Mass.	29.77	756.1	29.81	757.2	57	13.9	100	SE	4	1.8	.....	.....	10n	.....	S	0.86	21.8	Light rain	
Yankton, Dakota	28.60	726.4	29.86	758.4	62	16.7	83	NE	4	1 8	.....	.....	10s	.....	.....	0.01	0.3	Cloudy	
Yuma, Arizona	29.76	755.9	29.90	759.4	67.2	19.6	64	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.14	562.3	.....	.....	53.5	11.9	88	Calm	0	0	.....	2k	2ks	.....	.....	0	0	Fair	Thomas Herman
Buff Bay Town, Jamaica	29.81	757.2	30.12	765.0	77	25.0	86	E	.....	.....	.....	2c	2k	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	30.07	763 8	30.12	765.0	85	29.4	58	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	30.01	762.2	30.02	762.5	82.0	27.8	75	Calm	0	0	.....	2ck;cs	0	W	.....	0	0	Fair	Robert Johnstone
Navassa, W. I.	29.84	757.9	29.92	760.0	80	26.7	74	NE	13	5.8	.....	8cs	2k;n	NE	E	0.11	2.8	Cloudy	F. M. Everett.
Paramaribo, S. A.	30.07	763.8	30.07	763.8	76	24.4	100	E	.....	.....	2	.....	10n	E	.....	0.040	1.0	Rainy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.42	747.3	29.98	761.5	82	27.8	68	Calm	0	0	.....	0	8ks	.....	S	0.07	1.8	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	76.1	24.5	.....	NE	.....	.....	1	9ck	0	NE	.....	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	30.03	762.7	30.05	763.3	82	27.8	74	Calm	0	0	.....	2cs	0	.....	.....	0	0	Fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	30.22	767.6	30.27	768.8	46.0	7.8	88	E	14	6.3	.....	3c	2s	E	E	0	0	Threatening	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																			Comm. A. J. Errington.
H. M. S. Alert, Thursday Island, Oceania	29.90	759.4	77	25.0	88	SE			3-4		8							D. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Zante, Ionian Islands	29.89	759.2	73	22.8	71	SW			2-3		3					1	SSW	D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 24° 47′, E. 66° 59′	29.66	753.4	85	29.4	83	SW			4		1	SW						Misty	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			83	28.3		SW			1		0							Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N. 13° 09′, W. 61° 14′	30.03	762.7	81	27.2	91	ESE			2-4		10							Raining	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 19° 12′, E 1° 34′	30.16	766.1	68	20.0	79	ESE			4-5		3	SSE				4	SSE	Squally	Com. F. W. Richards.
H. M. S. Champion, S. 28° 44′, W. 45° 05′	30.14	765.5	68	20.0	90	E			5-6		1?	W				5	E	Showery?	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Chefoo, China	29.85	758.2	64	17.8	89	S			2		1	SW						Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 38° 04′, E. 11° 30′	29.74	755.4	65	18.3		W			6		4	WNW				7	WNW	Squally	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, N. 22° 40′, W. 29° 46′	30.22	767.6	73	22.8	71	NNE			4		2					3	NNE	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.41	772.4	58	14.4		ESE			4		3	ESE						D. clouds	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.17	766.3	78	25.6	82	WNW			1-2		2	WNW						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 48° 10′, W. 53° 50′	29.96	751.0	49.5	9.7	74	SW			2-4		6							Squally	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 7° 31′, E. 75° 58′	29.86	758.4	80	26.7		SE			2-3		3					2	SE	D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, N. 5° 10′, E. 105° 15′	29.79	756.7	83	28.3		SSW			4		8	SSW				3	SSW	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, N. 6° 14′, E. 171° 46′	29.88	758.9	80	26.7	91	NE			1		10							Raining	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Tamatave, Madagascar	30.15	765.8	71	21.7	80	SSW			2-3		9	SSE				1	SE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Bay Verte, Newfoundland	29.72	754.9	52	11.1		S			2-3		5	S						D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn N. 12° 47′, E. 44° 58′	29.62	752.3	88	31.1	75	SSE			3		1							Blue sky	Capt. P. Aldrich.
H. M. S. Flamingo N. 20° 25′, W. 85° 09′	30.07	763.8	86	30.0	83	ESE			2		1	ESE				2	E	Blue sky	Comm. R. N. Custance.
H. M. S. Flying Fish, Yokohama, Japan	29.96	761.0	70	21.1	84	Calm			0		8							Misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd	29.88	758.9	44.5	6.9	92	Calm			0		10							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	30.22	767.6	34	1.1	69	ENE			1		10							Snowing	Capt. L. F. Jones.
H. M. S. Griffon, Nassau, W. I	30.17	766.3	84	28.9	79	SE			1		1							Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber, N. 47° 05′, W. 10° 12′	30.15	765.8	55	12.8		NNE			2		4	NNE				3	NNE	D. clouds	Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Malta, Mediterranean	29.84	757.9	71	21.7	71	SSE			1-2		8					1	SSE	Showery	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.01	762.2	64	17.8		Calm			0		6	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.89	759.2	70	21.1		S			1		1							Blue sky	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	29.77	756.1	82.1	27.8	78	ENE			2		2	N				1	E	D. clouds	Capt. A. Carpenter.
H. M. S. Midge, N. 27° 46′, E. 121° 17′	29.81	757.2				ENE			1		4	NE				2	NE	Misty	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. M. S. Modeste, S. 20° 05′ E. 71° 30′	30.05	753.3	75	23.9	75	E			4-5		2	ESE				3	SE	D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Tunis, Tunis, N. Africa	29.81	757.2	73	22.8	100	WNW			4		8	NNW						D. clouds	Capt. G. Tryon, C. B

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, N. 1° 33′, E. 110° 20′			79.5	26.4		SW			1-2		10	SW						Raining	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	30.04	763.0	52	11.1	65	SSW			2		4	WSW						D. clouds	Capt. E. B Drummond.
H. M. S. Orontes, S. 27° 46′, E. 13° 55′...*†	30.23	767.8	59.5	15.3	73	SE			6		5	SE				5	SSE	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.93	760.2	80	26.7	95	NNW			2		8					2	SE	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, N. 10° 37′, W. 65° 57′	30.01	762.2	80	26.7	82	W			1		3	NNE				1	NNE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A.C.Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.79	756.7	82	27.8		S			1		3							D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 48° 26′, W. 123° 27′	29.88	758.9	44	6.7		Calm			0		8	S						D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 5° 56′, E. 39° 10′	29.99	761.7	79.3	26.3	78	SW			2		1							Blue sky	Capt. C. E. Foot.
H. M. S. Salamis.																			Capt. A. Fitz George.
H. M. S. Sea Gull, S. 8° 08′, E. 60° 56′	29.49	749.0	80	26.7	95	SSE			3		1					3	SSE	Blue sky	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 34° 23′, W. 15° 23′	30.27	768.8	66	18.9	87	NNW			2		8	NNW				2	NNW	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 17° 38′, W. 150° 36′	29.98	761.5	75	23.9	?	NE			5		3					4	NE	D. clouds	Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, S. 28° 26′, W. 71° 31′	29.96	761.0	58	14.4	81	N			2-3		10	N				4	N	Overcast	Capt. A. H. Markham.
H. M. S. Turquoise, S. 51° 00′, W. 74° 12′	30.19	766.8	25	— 3.9	100	Calm			0		10							Foggy	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.			81	27.2		NNE			1		2							D. clouds	Com. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	29.84	757.9	51	10.6	78	SW			2		9	N						Raining	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, Shat el Arab River, Turkey	29.71	754.6	90.5	32.5	61	NW			3-4									Squally	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candid dos Reis, Comd't.
Quanza, Santiago, Cape Verd Id's	30.14	765.5	80.6	27 0	73	N			2		3	N				2	N	D. clouds	Carlos M. de Silva Costa, Comd't
Rio Lima																			S. C da Silva Costa, Comd't.
Sado, St, Paulde Lonado, Benguela	30.03	762.8	71.6	22.0	82	NNW			2		5		NW			1		D. clouds	G. A de Brito Capello, Comd't.
Tamega, Macao, China	29.82	757.3	79.7	26.5	84	SE			2		6		ESE					D. clouds	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga N. 49° 30′, W. 4° 33′	30.02	762.5	50.5	10.3	80	NNE			4		9							Raining	Capt. M. von Krusenstierna.
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

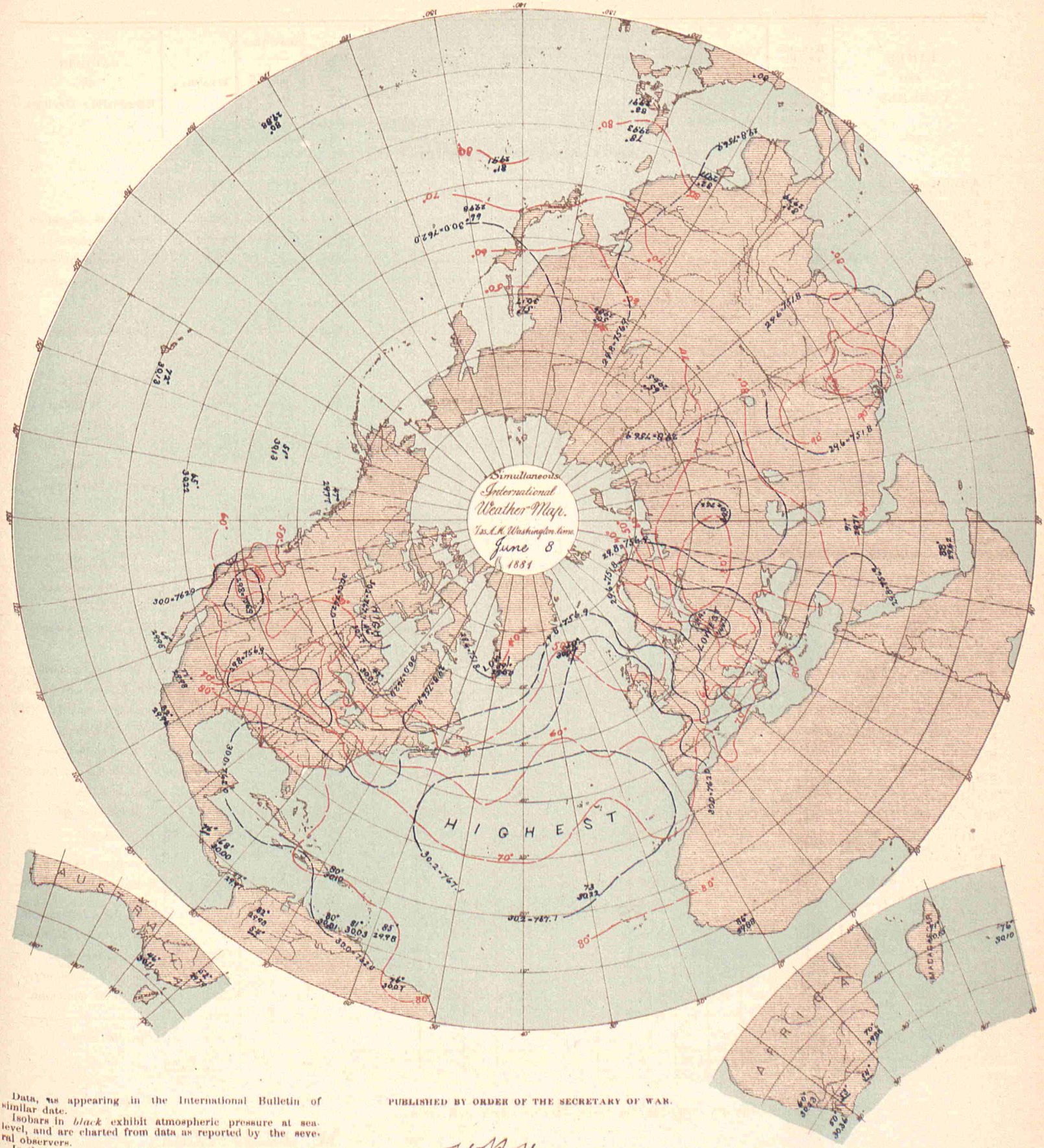
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.11	764.8	80	26.7	91	SW	12	5.4			8		SW	1.14	29.0			Fair	
N. Yard, Portsmouth, N. H.	29.91	759.7	52	11.1	93	E	9	4.0		10c	0	E		0	0			Clear	
Naval Hospital, Yokahama, Japan	29.81	757.2	67.5	19.7	92	Calm			0		2		W	0.09	2.3			Hazy	
Adams Panama, Panama	29.74	755.4	80	26.7	91	NW			1		5		W			Sm'h		Fair	
Alaska, Callao, Peru	29.92	760.0	66	18.9	94	Calm			0		8			0	0	Sm'h		Cloudy	
Alert, N. 27° 12′, E. 142° 08′	29.91	759.7	81	27.2	83	NW			4		10		NW			Mod.	WNW	Overcast	
Alliance, Norfolk, Va	29.84	757.9	74	23.3	76	S			1		0			0	0			Clear	
Ashuelot, Kobe, Japan	29.98	761.5	69	20.6	85	Calm			0		10		Calm					Cloudy	
Colorado, New York, N. Y	29.83	757.7	60	15.6	100	Calm			0		10			0.05	1.3			Overcast	
Constitution, Off Norfolk, Va	29.90	759.4	73	22.8	72	SW			6		5		W					Fair	
Franklin, Norfolk, Va	29.89	759.2	74	23.3	76	WSW	16	7.2			2		SW	0	0			Fair	
Galena, Cadiz, Spain	30.07	763.8	66	18.9	68	NW			3		5					Mod.	NW	Fair	
Independence, N. Yard, Mare I'd, Cal	29.94	760.5	70	21.1	80	WSW	2.4	1.1			2		WSW	0	0			Fair	
Jamestown, Sitka, Alaska	29.77	756.1	47	8.3	92	WNW			3		10		NW	0	0			Cloudy	
Kearsarge, Norfolk, Va	29.98	761.5	74	23.3	72	SW			2		5		NW			Sm'h		Fair	
Lackawanna, S. 15° 05′, W. 145° 24′	30.15	765.8	79	26.1	?	ENE			3		10		NE			Sm'h	NE	Fair	
Marion, Montevideo, Uruguay	30.26	768.6	58	14.4	94	E			5		10		E	Light		Mod	E	Rainy	
Michigan, Erie, Pennsylvania	29.75	755.9	53	11.7	93	NE			3		10		NE					Raining	
Minnesota, Newport, R. I	29.83	757.7	59	15.0	94	S			3		10		S			Sm'h		Rainy	
Monocacy, Yokohama, Japan	29.97	761.2	70	21.1	80	Calm			0		10							Hazy	
New Hampshire, Norfolk, Va	29.97	761.2	74	23.3	72	SW	8	3.6			2		SW	0	0			Fair	
Nipsic, N. 38° 22′, W. 10° 01′	30.12	765.0	64	17.8	62	N			3		8					Long	NNW	D. clouds	
Onward, Callao, Peru	29.99	761.7	67	19.4	84	Calm			0		10					Long	W	Cloudy	
Palos, Nagasaki, Japan	29.97	761.2	70	21.1	100	SW			1		10							Rainy	
Passaic, Washington, D. C	29.86	758.4	67	19.4	89	SW			3		8		SW					Cloudy	
Pensacola, Mare Isl'd, Cal	30.04	763.0	55	12.8	93	WNW			1		0			0	0	Sm'h		Clear	
Portsmouth, N. 38° —′, W. 73° —′	29.88	758.9	64	17.8	89	SW			4		5							Fair	
Powhatan, Hampton Roads, Va	29.95	760.7				S			3		2		SSW					Fair	
Quinnebaug, N. 32° 40′, W. 68° 21′	30.18	766.6	75	23.9	81	W			3		5		W			Sm'h		Fair	
Ranger, N. 23° 00′, W. 106° 22′	29.78	756.4	85	29.4	68	W			1		2		Calm	0	0	Sm'h		Fair	
Richmond, Nagasaki, Japan	29.98	761.5	73	22.8	90	Calm			0		10			0.21	5.3			Foggy	
Saratoga, N. 38° 25′, W. 74° 00′	29.88	758.9	60	15.6	100	SSW			4		1		S	0	0	Mod.	SE	Clear	
Shenandoah, Montevideo, Uruguay	30.27	768.8	57	13.9	94	ENE			4		10					Mod	E	Drizzling	
St. Louis, League Island, Pa	29.43	747.5	71	21.7	85	WSW	5	2.2			8		WSW	0.13	3.3			Fair	
Swatara, Shanghai, China	29.82	757.4	73	22.8	85	SSE			3		10		Calm					Overcast	
Tennessee, New York, N. Y	29.84	757.9	62	16.7	94	NE	1	0.4			10		Calm	0.205	5.2	Sm'h		Foggy	
Ticonderoga, S. 56° 32′, W. 60° 53′	30.09	764.3	40	4.4	82	W			4		8		W	0.03	0.8	Mod.	W	Cloudy	
Trenton, Barcelona, Spain	29.74	755.4	70	21.1	65	NW			3		8			0	0	Sm'h		Fair	
Vandalia, Navy Yard, N. Y	30.13	765.3	62	16.7	94	S			2		Fg							Foggy	
Wabash, Boston, Massachusetts	29.88	758.9	56	13.3	94	E	11	4.9			10		Calm	0.27	6.9			Light rain	
Wachusetts, N. Yard, Mare I'd, Cal	30.00	762.0	55	12.8	80	W			2		0			0	0			Clear	
Yantic, Progreso, Mexico	29.95	760.7	80	26.7	87	E			3-4		2		E			Light	ENE	Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 32° 00′, W. 76° 00′	30.15	765.8	77.5	25.3	78	SW			4		2							D. clouds	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero																			Capt. W. N. Lailey.
City of Agra, N. 23° 24′, W. 21° 15′	30.17	766.3	72.3	22.4	83	NE			5		5							D. clouds	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 45° 07′, W. 12° 08′	30.17	766.3	60.8	16.0	61	NW			2		9							D. clouds	Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee ‡																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Meriola																			Capt. E. W. Turner.
Naiad, ‡ N. 53° 55′, E. 4° 15′	29.86	758.4	48.3	9.1	85	N			5		4							Showery	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 24° 16, W. 38° 09′	30.23	767.8	76	24.4	68	ENE			5	3ck	0	N						D. clouds	Capt. M. Parry.
Sierra Estrella, N. 35° 51′, W. 18° 25′	30.28	769.1	66.2	19.0	90	NW			3		9							Misty	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ Suez Canal						NNW			2		0							Blue sky	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 45° 31′, W. 73° 33′	29.86	758.4				WSW			2		2		WNW			Sm'h		Fair	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Algeria																			Capt. W. Watson.
S. S. Scythia, N. 48° 59′, W. 28° 57′	29.98	761.5	61	16.1	94	SW			4		8		WSW	Sho	wers	Mod.	W	Fair	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 49° 43,′ W. 21° 31′ †	30.14	765.5	58	14.4	88	N			2		Hz					Sm'h		Hazy	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 45° 19′, W. 45° 07′ †	30.18	766.6	52	11.1	100	WSW			4		0			0	0	Sm'h		Clear	Capt. Benj. Gleadell.
S. S. Germanic																			Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			Capt. H. Baur.
S. S. Hermann																			
S. S. Hohenzollern, ‡ N. 46° 28′, W. 30° 09′	30.30	769.6	61.2	16.2		SW			4		8		W	0	0	Mod.	W	Hazy	
S. S. Köln, N. 49° 41′, W. 10° 41′	30.23	767.8	60.0	15.6	65	NE			3		5		ENE	0	0	Sm'h	NE	Fair	Capt. Th. Jüngst
S. S. Leipzig, N. 40° 36′, W. 59° 49′	30.19	766.8				SE			3		8		S	0	0	Mod.	SSE	Fair	Capt. F. Pfeiffer.
S. S. Ohio																			Capt. G. Meyer.
S. S. Strassburg, N. 41° 49′, W. 49° 28′	30.32	770.1	53.6	12.0		NE			2		0			0	0	Sm'h	ENE	Clear	Capt. C. Helmbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England	30.00	762.0	53	11.7	80	NNW			5		5		NNW					Fair	Capt. J. W. Shackford.
S. S. Indiana, N. 40° 11′, W. 55° 21′ †	30.03	762.7	66	18.9	75	SSE			5		8		SE	Hea	vy	Mod.	SE	Rainy	Capt. R. W. Sargent.
S. S. Ohio, N. 41° 15′, W. 47° 42′ *†	30.40	772.1	57	13.9	94	NE			2		0			Hea	vy	Sm'll	SW	Fair	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, Philadelphia, Pa †	29.81	757.2	68	20.0	90	W			3		2		W					Fair	Capt. Geo H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 32° 21′, W. 119° 54′ †	30.04	763.0	61	16.1	100	NE			1		10		NW	Lit	tle	G'tl	WNW	Misty	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, San Francisco, Cal †	30.10	764.5	53	11.7	80	W			3		0			0	0	Sm'h		Clear	Capt. H. Davison.
S. S. Gaelic, Yokohama, Japan *†	30.17	766.3	73	22.8	95	Calm			0		10							Fair	Capt. W. H. Kidley.
S. S. Oceanic, Hong Kong, China	30.07	763.8	81	27.2	70	ESE			4		6		SSE					Cloudy	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Rollet.
S. S. Oregon, Portland, Oregon †	29.84	757.9	55.0	12.8	?	Calm			0		8		SSE					Rainy	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, N. 35° 50′, W. 121° 25′ †	30.00	762.0	53	11.7	86	E			1		0			0	0	Mod.	W	Clear	Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, Seattle, Wash. Ter †	29.84	757.9	45	7.2	92	Calm			0		0							Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, San Francisco, Cal †	30.10	764.5	52	11.1	86	NW			1		0							Clear	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal †	30.02	762.5	50	10.0	93	W			2		5		W					Foggy	Capt. G. Debney.
S. S. Victoria, Nanaimo, Vancouver I'd †	29.84	758.0	50	10.0	86	ESE			1		8					Sm'h		Cloudy	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 23° 50′ W. 153° 35′	30.13	765.3	72	22.2	80	ENE			4		8		NE			Long	ENE	Showery	A. Bannerman, 2d Officer.
S. S. City of New York, Sydney, N. S. W. †	29.79	756.7	52	11.1	100	SW			1		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, Panama, Panama †	29.97	761.2	77	25.0	95	N			2	0	k			0	0				Capt. D. S. Austin.
S. S. City of Peking, N. 45° 38′, W. 147° 54′ †	30.13	765.3	51	10.6	93	S			4		10		S	0	0	Light	S	Misty	Capt. G. G. Berry.
S. S. City of Sidney, N. 30° 37′, W. 139° 11′ *†	30.22	767.6	65	18.3	73	NE			4		5		NE	0	0	Mod.	NE	Fair	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 35° 22′, E. 149° 26′ †	29.98	761.5	66	18.9	83	SE			4		10		SE			Mod.	E	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 17° 37′, W. 102° 20′ †	29.96	761.0	82	27.8	79	NW			3		5		Calm	0.73	18.5	H'vy	S	Fair	Capt. R. R. Searle.
S. S. Granada, N. 24° 50′, W. 112° 34′ †	29.95	760.7	64	17.8	83	Calm			0		0			0	0	Light	WNW	Clear	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. W	30.17	766.3	62	16.7	100	WSW			2		2		W					Fair	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, N. 49° 32′, W. 180° 57′ †	30.19	766.8	55	12.8	?	NW			4		8		NW	0	0	Sm'h		Misty	A. Feddersen, 2d Officer.
S. S. Rhyniand, Jersey City, N. J †	30.04	763.0	63	17.2	88	SW			4		10			0	0			Overcast	Capt. Wm. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, Fall River, Mass	29.79	756.7	64	17.8	83	ESE					Fog			0.73	18.5			Foggy	Capt J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, N. 19° 40′, W. 64° 28′ †	30.13	765.3	84	28.9		ENE			5		10			Lig	ht	Sm'h		Cloudy	Capt. W H. Champlin.
U. S. F. C. S. Fish Hawk, Potomac River †	29.94	760.5	73	22.8	85	NW	2	0.9		2c	2k			0.06	1.5			Clear	
Bark Sunbeam, Lisbon, Portugal †	30.12	765.0	68	20.0	68	N			6		0			0	0			Clear	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

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

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

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

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

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W. B. Hazen

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

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 9, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
‡Nemours			30.04	763.0	75.2	24.0	88	N			1		0			0	0	Clear	Raynard.
‡Algiers			30.05	763.3	67.(	19.8	80	W			3		0			0	0	Clear	Nicolas.
‡La Calle			30.01	762.2	70.5	21.4	72	NW			3		4			0	0	Cloudy	Fonfrède.
‡Tunis			29.97	761.3															Jacques.
‡Sfax			30.10	764.4															Gau.
‡Saida			30.08	763.9	69.4	20.8	47	N			2		2			0	0	Cloudy	Dumas.
‡Tebessa			30.00	762.1	70.9	21.6	22	WNW			3		5			0	0	Cloudy	Watrin.
‡Geriville					75.9	24.4	25	NW			1		0			0	0	Clear	Lonchamp.
‡Laghouat			30.07	763.7	78.1	25.6	28	E			1		1			0	0	Very fair	Herbin.
‡Biskra			30.05	763.2	82.0	27.8	46	NW			3		0			0	0	Clear	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.19	766.8	30.28	769.1	42.7	5.9	90	SSE	2	0.9			1			0	0	Fine	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.11	739.4	29.65	753.1	56.8	13.8	62	N			3		10			0.016	0.4	Raining	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.85	732.7	29.60	751.9	55.2	12.9	63	W	4.9	2.2			10			0	0		Dr. Wierzbicki.
Eperies	28.69	728.7	29.55	750.6	55.4	13.0	72	N			2		10ks		S	0.047	1.2		Julius Mikolik.
‡Gratz	28.45	722.5	29.68	753.8	50.7	13.7	69	NW			4		7			0.449	11.4		Andreas Rospini.
Hermannstadt	28.09	713.4	29.46	748.3	64.4	18.0	75	NNE			2		10			0.472	12.0		Prof. A Gottschling.
Kremsmunster, Obs'y	28.47	723.2	29.83	757.7	43.9	6.6	94	SSW			2		10			0.472	12.0		The Staff.
Lemberg	28.53	724.6	29.49	749.0	59.0	15.0	69	NE			3		10			0.020	0.5		Dr. T. Stanecki.
Pola	29.58	751.2	29.69	754.0	62.6	17.0	69	W			1		6			0.102	2.6		I. R. HydrographicOffice.
Szathmar	29.02	737.2	29.47	748.5	66.0	18.9	69	SW			1		8			0.539	13.7		Beicht Peter, S. J.
Szegedin	29.26	743.1	29.52	749.9	64.4	18.0	76	SW			1		8			0.157	4.0		Karl Stancel.
Trieste	29.63	752.5	29.73	755.1	56 7	13.7	66	Calm			0		10			0.110	2.8	Raining	Secco.
Vienna	29.01	736.9	29.73	755.1	48.6	9.2	89	W			3		10			0.429	10.9	Raining	I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter Printed June 9, 1881.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	30.15	765.8	30.25	768.3	44.4	6.9	71	NNE	18	8.0	.....	.....	7	.....	.....	0	0	Squally.....	W. Boswell.
Armagh, Observatory	30.09	764.3	30.33	770.4	54.0	12.2	55	N	5	2.2	.....	.....	7	.....	.....	.....	.....	D. clouds.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	30.25	768.3	52.9	11.6	55	WNW	11	4.9	.....	.....	1	.....	.....	.....	.....	Blue sky.....	John Hartnup.
Bolton, Sharples	29.69	754.1	30.23	767.8	49.6	9.8	54	NNW	1	0.4	.....	.....	9	.....	.....	.....	.....	D. clouds.....	Thomas Mackereth.
Bradford, Yorkshire	29.82	757.4	30.21	767.3	49.7	9.8	53	NE	.....	.....	2	.....	9	.....	.....	0.01	0.3	Overcast.....	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.92	760.0	29.95	760.7	85	29.4	70	NE	.....	.....	1	.....	3	.....	.....	.....	.....	D. clouds.....	Corpl. J. Surgener, A.H.C.
Cardington	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John McLaren.
Chatham, School M. E.	30.07	763.8	30.21	767.3	45.1	7.3	86	N	.....	.....	2	.....	8	.....	.....	.....	.....	Gloomy	Corpl. W. Beck, R. E.
Falmouth, Observatory	30.10	764.5	30.33	770.4	54.0	12.2	45	NNW	.....	.....	3	.....	5	.....	.....	.....	.....	D. clouds.....	The Staff.
Fort Napier, Natal	27.88	708.1	30.09	764.3	57.1	13.9	52	Calm	.....	.....	0	.....	5?	.....	.....	.....	.....	Overcast? ...	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.88	758.9	87	30.6	84	W	.....	.....	1	.....	.....	.....	.....	.....	.....	Raining	Sgt. C. E. Keane.
Galway, Queen's College	.....	.....	30.32	770.1	55	12.8	56	NW	.....	.....	2	.....	10	.....	.....	.....	.....	Overcast.....	J. O'Donaghue.
Gibraltar, Mediterranean	30.05	763.3	30.10	764.5	73.8	23.2	83	W	.....	.....	4	.....	0	.....	.....	.....	.....	Blue sky.....	2nd Cpl. C. Baldwin.
Glasgow, Observatory	30.05	763.3	30.25	768.6	51.0	10.6	44	NE	.....	.....	4	.....	7	.....	.....	.....	.....	D. clouds.....	Harry Urquhart.
Greenwich, Royal Obs'y	30.03	762.7	30.21	767.3	54.5	12.5	54	N	.....	.....	3	.....	7	.....	.....	.....	.....	D. clouds..	The Staff.
Guernsey	29.95	760.7	30.16	766.1	54	12.2	58	NNW	.....	.....	3	.....	0	.....	.....	.....	.....	Blue sky.....	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.18	766.6	30.22	767.6	52.2	11.2	53	N	14	6.3	.....	.....	7	.....	.....	.....	.....	D. clouds.....	The Staff.
Leicester, Museum	29.95	761.0	30.22	767.6	52.0	11.1	41	NE	.....	.....	4	.....	10	.....	.....	.....	.....	Overcast.....	J. E. Carryer.
Malta, Mediterranean	29.85	758.2	29.92	760.0	72.2	22.3	56	NW	.....	.....	2	.....	0	.....	.....	.....	.....	Blue sky.....	F. S. Vine, A. H. C.
Nassau, Bahamas	30.00	762.0	30.05	763.3	88.0	31.1	71	E	.....	.....	1	.....	4	.....	.....	.....	.....	D. clouds.....	C. S. Duncombe.
Oscott, St. Mary's College	29.71	754.6	30.24	768.1	53.0	11.7	53	NNE	.....	.....	2	.....	8	.....	.....	Blank		D. clouds.....	John Mac Email.
Oxford, Radcliffe Obs'y	29.99	761.7	30.22	767.6	52.0	11.1	41	NNW	.....	.....	4	.....	7	.....	.....	.....	.....	D. clouds.....	The Staff.
Plymouth	30.21	767.3	30.28	769.1	58.6	14.8	56	NW	.....	.....	3	.....	5	.....	.....	.....	.....	D. clouds.....	John Merrifield.
Sandwick Manse, Orkneys	.....	.....	30.28	769.1	46.1	7.8	63	N	15	6.7	.....	.....	10	.....	.....	.....	.....	Misty.....	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.60	751.8	29.66	753.4	80.6	27.0	50	SW	.....	.....	2	.....	1	.....	.....	.....	.....	Blue sky.....	Serg't W. H. Lyne.
Sheffield	29.95	761.0	30.25	768.3	52.9	11.6	73	NE	.....	.....	2	.....	10	.....	.....	0	0	Overcast.....	W. F. Cooper.
Silloth Rectory	30.24	768.1	30.27	768.8	55.0	12.8	56	NW	.....	.....	2	.....	4	.....	.....	0	0	D. clouds.....	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	30.25	768.6	50.0	10.0	52	NE	8	3.6	.....	.....	6	.....	.....	.....	.....	D. clouds.....	Rev. S. J. Perry.
Stratfield Turgiss	30.00	762.0	30.22	767.6	52.5	11.4	47	NE	.....	.....	1	.....	5	.....	.....	.....	.....	D. clouds.....	Rev. C. H. Griffiths, F.M.S
Truro, Royal Institution	30.32	770.1	30.35	770.9	58	14.4	53	NW	.....	.....	6	.....	3	.....	.....	.....	.....	D. clouds.....	W. Newcombe.
Valencia, Observatory	30.36	771.1	30.39	771.9	56.8	13.8	62	W	10	4.5	.....	.....	8	.....	.....	.....	.....	D. clouds.....	The Met'g'l Office.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
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CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B	.....	.....	.....	.....	51.0	10.6	.....	N	5	2.2	.....	3cs	0	.....	.....	0	0	Blue sky.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.83	757.7	29.88	758.9	50	10.0	59	NW	15	6.7	.....	0	8s	.....	.....	0	0	Fair.....	H. J. Cundall, C. E.
Chatham, N. B.*	29.89	759.2	29.95	760.7	50	10.0	62	N	16	7.2	.....	0	0	.....	.....	0.01	0.3	Clear.....	G. A. Blair.
Chicontimi, Quebec	.....	.....	.....	.....	47.3	8.5	.....	NW	.....	.....	2	0	1k	.....	.....	0	0	Blue sky.....	Rev. V. A. Huart.
Cornwall, Ontario	29.84	757 9	30.03	762.7	49.7	9.8	60	E	.....	.....	3	10cs	0	.....	.....	0	0	D. clouds.....	James Smith, M. A
Dalhousie, N. B	29.95	761.0	29.99	761.7	50.5	10.3	.....	W	.....	.....	1	0	0	.....	.....	Inap.	Inap.	Blue sky.....	H. A. Johnson.
Father Point, Quebec*	30.04	763.0	30.05	763.5	45	7.2	66	N	18	8.0	.....	0	0	.....	.....	0.03	0.8	Clear.....	J. McWilliams.
Fort Garry, Manitoba*	28.99	736.3	29.79	750.7	60	15.6	91	S	5	2.2	.....	2c	5ks	SW	SW	0.090	2.3	Fair.....	James Stewart.
Fredericton, N. B	29.93	760.2	29.99	761.7	53.0	11.7	52	W	4	1.8	.....	1c	0	.....	.....	0	0	Clear.....	Prof. Harrison.
Granton, Ontario	28.85	733 0	29.95	760.7	54.0	12.2	80	NE	.....	.....	2	.....	10n	.....	.....	0	0	Cloudy..	James Grant.
Halifax, N. S.*	29.75	755.6	29.88	758.9	54	12.2	90	NW	10	4.5	.....	.....	10n	.....	N	Inap.	Inap.	Cloudy.....	A. Allison.
Hamilton, Ontario	29.60	751.8	29.99	761.7	54.1	12.3	67	N	.....	.....	3	10cs	0	.....	.....	0	0	Cloudy.....	Geo. Dickson, B. A.
Kingston, Ontario*	29.65	753.1	29.99	761.7	52	11.1	60	N	12	5.4	.....	Hz	0	.....	.....	0	0	Clear.....	S. Woods, M. A.
Little Glace Bay, N. S	29.71	754.6	29.75	755.6	50.2	10.2	70	SW	.....	.....	4	0	8ks	.....	.....	0	0	Cloudy.....	C. H. Rigby.
Montreal, Quebec*	29.88	758.9	30.08	764.0	51	10.6	50	NE	18	8.0	.....	2c	Sk	.....	.....	0	0	Fair	C. H. McLeod, C. E
Moose Factory, Ontario	30.14	765.5	30.18	766.6	48.0	8.9	62	SW	.....	.....	3	0	0	.....	.....	0.02	0.5	Blue sky.....	J. R. Nason.
Parry Sound, Ontario*	29.39	746.5	30.08	764.0	50	10.0	58	SE	7	3.1	.....	5cs	0	SW	.....	0	0	Fair.....	Rev. R. Moseley.
Peterboro, Ontario	29.49?	749.0?	30.24?	768.1?	51.0	10.6	62	NE	.....	.....	3	.....	10ks	.....	.....	0	0	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.24	742.7	29.93	760.2	54	12.2	93	NE	13	5.8	.....	.....	10n	.....	.....	0	0	Cloudy.....	H. Morgan.
Port Stanley, Ontario	29.25	742.9	29.88	758.9	57	13.9	81	NE	13	5.8	.....	.....	10n	.....	NE	0.13	3.3	Cloudy	M. Payne.
Quebec, Quebec*	29.77	756.1	30.09	764.3	49	9.4	50	NE	.....	.....	5	0	0	.....	.....	0	0	Clear.....	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.09	754.1	30.15	765.8	46	7.8	58	NE	5	2.2	.....	0	0	.....	.....	0	0	Clear.....	W. H. McIntyre.
Saugeen, Ontario*	29.29	744.0	30.00	762.0	53	11.7	60	NE	12	5.4	.....	8cs	0	.....	.....	0	0	Cloudy.....	K. Stewart.
St. Andrews, N. B	29.89	759.2	29.94	760.5	52	11.1	61	N	8	3.6	.....	0	0	.....	.....	0	0	Clear.....	
St. John, N. B	29.69	754.1	29.86	758.4	55.0	12.8	56	N	14	6.3	.....	3ck	0	.....	.....	0	0	Blue sky.....	G. Murdock, C. E.
Stratford, Ontario	28.69	728.7	29.95	761.0	53.1	11.7	72	E	10	4.5	.....	.....	10s	.....	.....	0	0	D. clouds.....	C. J. Macgregor, M. A.
Sydney, C. B*	29.71	754.6	29.75	755.6	52	11.1	68	N	6	2.7	.....	8k	0	NW	.....	0	0	Fair.....	T. C. Hill, C. E.
Toronto, Ontario*	29.64	752.8	30.02	702.5	54	12.2	53	NE	10	4.5	.....	.....	10n	.....	.....	0	0	Cloudy.....	Magnetic Observatory
Windsor, N. S	29.78	756.4	29.88	758.9	52.0	11.1	86	W	.....	.....	.....	0	8ks	.....	.....	0	0	Fair.....	
Woodstock, Ontario	28.89	733.8	29.94	760.5	53.5	11.9	60	NE	24	10.7	.....	.....	10s	.....	.....	0	0	D. clouds.....	Prof. Wolverton.
Yarmouth, N. S.*	29.85	758.2	29.92	760.0	46	7.8	98	NW	3	1.3	.....	Fg	Fg	.....	.....	0.10	2.5	Foggy	Lt. F. E. Wilmot, R. N
SUB-SERIES.																			
St. Johns, Newfoundland	29.66	753.4	29.91	759.7	42	5.6	100	SE	3	1.3	.....	.....	10n	.....	.....	0.75	19.0	Rainy...	John Delany.
St. Pierre, N. F	.....	.....	29.48	748.8	46.4	8.0	.....	NE	.....	.....	3	.....	.....	.....	.....	0.08	2.0	.....	N. F. Land, Comd't.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
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Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

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

Cape St. Francis Lt. House	30.46	773.7	..	.....	.....	.....	.....	W	23.2	10.4	.....	0	7n	.....	.....	0.680	17.3	Showery. ...	John Duthie.
Cape Town, C. G. H. Obs'y	30.36	771.1	30.40	772.1	37.0	2.8	.....	SSW	14.3	6.4	.....	0	0	.....	.....	0	0	.....	The Staff, for D. Gill.
Worcester*†	29.32	744.7	.....	.....	57	13.9	57	SSE	.....	.....	1	0	0	.....	.....	0	0	Clear.....	C. Stokes.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

CHINESE SERIES.

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

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.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
SUB-SERIES.																			
Zi-Ka-Wei, near Shanghai	29.82	757.4	29.84	758.0	72.1	22.3	97	E	3.8	1.7	.....	0	3k	.....	ESE	0	0	Cloudy.....	M. Marc Dechevrens, S.J.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Tempera-ture of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direc-tion. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction,. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.19	665.2	29.91	759.7	68.0	20.0	93					9cs	1d			0	0	Cloudy	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.61	752.1	29.66	753.3	50.4	10.2	73	NNW	18	8			10						Oversergent Fischer.
Fanöe	29.76	756.0	29.78	759.5	54.3	12.4	74	NW			6		10						Overloerer Lauridsen.
Godthaab, Greenland	29.53	750.1	29.58	751.2	35.1	2.3	85	SW			3		9						S. Kleinschmidt.
Stykkisholm, Iceland	29.77	756.2	29.82	757.3	52.3	11.3		S			7		10					Raining	A. O. Thorlacius.
Thorshavn	30.26	768.7	30.30	769.6	48.2	9.0	60	E	16	7			0						Overloerer Bergh.
Vestervig	29.71	754.5	29.80	756.9	54.0	12.2	65	NNE			2		9						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.48	748.9	30.15	765.7	49.6	9.8	81	N			2	o	n;nk		NW	0.083	2.1		M. Labroue, Director.
Alençon Normal School	29.66	753.3	30.21	767.3	48.9	9.4	84	N			4		o			0.177	4.5	Clear	M. Nicot, Director.
Arras, Engineer School	29.87	758.7	30.13	765.3	51.1	10.6	54	N			4	o	k		N				M. Klein, Commandant.
Avignon, Normal School	29.72	754.8	29.80	756.8	63.5	17.5	49	N			6		2		N	o	o	Slightly cl'dy	M. Giraud, Director.
Bar-sur-Seine	29.52	749.7	30.08	764.0	52.9	11.6	56	NE			1	o	8kn		NE	0.532	13.5	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.89	759.1	30.16	766.0	52.7	11.5	55	N			3		8		N	o	o	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.10	739.2	29.96	760.9	54.0	12.2	63	SW			2	o	kn		SW	0.965	24.5		M. Gobin, Director.
Bordeaux, Observatory	29.91	759.6	30.16	766.1	60.3	15.7	45	NNE			2		8		N	0.004	0.1	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.55	750.5	30.10	764.4	53.6	12	65	NNE			2	o	n		NNE	0.16	4.		M. Postel, Director.
Brest, Naval Observatory	30.08	763 9	30.32	770.1	54.0	12.2	56	N			2		6		N	0.047	1.2		M. de Kermarec, Dir.
Caen, Normal School	30.12	765.0	30.19	766.9	53.6	12	76	N			4		5		N	0.110	2.8	Cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.76	756.0	30.08	764.1	56.8	13.8	93	ESE			1		8		NW	0.201	5.1	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.59	751.6	30.09	764.3	53.6	12	75	W			1					0.12	3.		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.67	728.2	30.04	762.9	50.0	10.0	68	NNW			3		8		N	0.339	8.6	¾ cover d	M. Alluard, Director.
Cluny, Normal School	29.24	742.7	30.01	762.2	56.5	13.6	59	N			2		10		N	o	o	Covered	M. de Villemontée, Dir.
Commercy, Normal School	29.16	740.6	30.02	762.6	52.7	11.5	50	WNW			3	o	5kn	WNW	WNW	0.102	2.6	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.17	690.1	29.63	752.7	60.6	15.9	45	N			4	o	k		W	o	o		M. Jeangirard, Director.
Gréoasque, du. Rhone	28.03	727.1	29.77	756.1	64.8	18.2	37	NW			3		2		NW	o	o	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.08	738.6	29.84	757.8	57.2	14	47	NNW			1	ck	o			0.260	6.6		M. Ablard, Director.
Guéret, Normal School	28.58	725.0	30.18	766.6	45.5	7.5	85	W			1	o	n		SE	0.862	21.9		M. Rivoire, Director.
Lamballe, Normal School	30.04	762.9	30.31	769 9	56.5	13.6	60	NW			2				NW	0.122	3.1		M. Ollitrault, Director.
Lescar, Normal School	29.58	751.2	30.25	768.3	57.2	14	78	W			1	o	k		W	o	o		M. Chauvin, Director.
Lorient, Naval Observatory	30.28	769.1	30.30	769.7	60.1	15.6	62	N			1		8		N	o	o	¼ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.90	734.0	29.95	760.8	54.5	12.5	55	N			4		8		N	0.071	1.8	Very cloudy	M. André, Director.
Mans, Normal School	29.90	759.4	30.21	767.3	53.1	11.7	48	NE			4		5		N	0.091	2.3	Cloudy	M. Piboon, Director.
Marseille, Observatory	29.43	747.6	29.70	754.4	66.4	19.1	36	NW			3		2		NE	o	o		M. Stephan, Director.
Montlouis l'Instituteur	24.77	629.2	30.01	762.2	42.3	5.7	49	SW	13.0	5.8			8		SW	o	o		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.74	755.3	29.84	758.0	65.1	18.4	44	N			4		5	NW	N	o	o	Cloudy	M. P. Galzin, Director.
Nancy, Normal School	29.26	743.2	30.02	762.6	54.7	12.6	48	NW			1	o	5kn		NW	0.138	3.5	Cloudy	M. Hasse.
Nantes, Observatory	30.09	764.2	30.25	768.4	55.0	12.8	48	NNW			2-3	o	8n		W	0.071	1.8	Raining	M. Larocque, Director.
Nice	29.67	753.5	29.70	754.3	66.6	19.2	60	S			2		5	SW	SW	0.063	1.6	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.87	758.8	29.98	761.4	57.2	14.0	51	N	33.6	15.0			8	NW	NW	o	o		Dr. Fines.
Pic-du-Midi, Plantade	22.48	571.0			25.2	—3.8							10		NW	1.819	46.2	Snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.84	732.6	29.90	759.5	56.8	13.8	47	NW			4	o	5k	NW	NW	o	o	Cloudy	M. Taillen.
Puy de Dôme Obs'y, Summit	25.09	637.1			31.5	—0.3	100	N			6		10			0.862	22.4	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	30.17	769.4	30.21	767.2	57.9	14.4	91	NNW			2		8	NE	NNW	0.004	0.1	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.00	762.0	30.22	767.5	57.6	14.2	55	NNE			1		8		N			Raining	M. Mouillot, Director.
Rodez, Normal School	27.82	706.7	30.00	761.9	45.3	7.4	91	NW			2		10			o	o	Covered	M. Richard, Director.
Rouen, Normal School	30.09	764.3	30.18	766.5	55.4	13	51	NNW			2		2		NW	0.059	1.5	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	30.10	764.0	30.26	768.6	52.5	11.4	52	NW			1		5		N	0.35	9.	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.97	751.2	30.13	765.4	54.7	12.6	56	N			2		7		N	0.055	1.4		M. Renou, Director.
Toulouse, Observatory	29.42	747.3	30.15	765.7	52.7	11.5	78	NW			4		10			0.114	2.9	Covered	M. Bailland, Director.
Tours	30.01	762.2	30.21	767.2	53.6	12.0	69	NNW			2		8		NNE	0.075	1.9	¾ covered	M. de Tastes.
Versailles, Observatory	29.66	753.3	30.15	765.8	52.2	11.2	57	N			2					0.024	0.6		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.86	758.4	30.15	765.8	51.3	10.7	53	NW			3		9		NW	Inap.	Inap.		M. Marié Dvy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.02	737.1	29.88	758.9	54.1	12.3	40	NW			3	o	6k		W	0.012	0.3		Prof. Dr. Hoh.
Berlin	29.57	751.1	29.74	755.4	59.0	15.0	35	NW			7		5			0.028	0.7		Prof. Dr. Arndt.
Breslau	29.20	741.7	29.72	755.0	54.5	12.5	53	NW			3		9			o	o		Royal University Obs'y.
Carlsruhe	29.54	750.3	29.97	761.2	55.0	12.8	65	NW			1		9	N		o	o		Albert Senz.
Cassel	29.19	741.3	29.90	759.5	52.2	11.2	50	NNW			5		7	NW		0.012	0.3		Dr. H. Möhl.
Frankfort on the Main	29.60	751.7	29.95	760.9	58.3	14.6	31	NNW			2		7			0.012	0.3		Physical Society.
Friedrichshafen	28.49	723.7	29.94	760.4	48.9	9.4	86	SW			4		10	N				Light rain	Wilhelm, Chief Tel.
Hamburg	29.74	755.3	29.81	757.1	54.7	12.6	65	NW			6		9			o	o		Dr. R. Kleeman.
Kiel	29.71	754.5	29.72	754.9	55.8	13.8	64	WNW			4		10			o	o		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.41	747.1	29.84	757.8	54.0	12.2	50	NW			5		8	NW		0.008	0.2		Prof. Dr. Bruhns.
Magdeburg	29.63	752.5	29.81	757.2	54.9	12.7	51	W			5	o	7ks		W	0.0.7	1.7		Dr. Assmann.
Memel	29.53	750.1	29.58	751.3	56.8	13.8	93	W			4		10n						Reinbrecht & Issermann.
Munich	28.60	712.8	29.92	759.9	47.1	8.4	67	N			2		10	NE		0.083	2.1	Heavy rain	Central Station.
Neufahrwasser	29.57	751.0	29.58	751.4	54.7	12.6	77	W			2		10			0.013	0.4	Light rain	A. Lothes.
Neustadt, Palatinate	29.43	747.6	29.95	760.9	56.1	13.4	46	W			1		5	N		o	o		Dickmether.
Stuttgart	29.07	738.4	29.97	761.2	52.7	11.5	55	N			5		8	N		o	o		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.41	721.6	29.86	758.5	50.7	10.4	53	NE			4		10	NW		o	o		Prof. Kemlein.
Wustrow	29.68	753.8	29.70	754.4	53.1	11.7	84	NNW			5		10s			o	o		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.44	747.7	29.82	757.3	78.6	25.9	.....	S	.....	.....	3.0	.....	0	.....	.....	.....	.....	Clear	Schmidt & Wourlisch.
INDIAN SERIES.																			
Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.46	748.4	29.51	749.6	87.9	31.1	76	SW	40.0	17.9	.....	.....	0	.....	.....	0	0	Misty	
Deesa	28.99	736.4	29.45	747.9	97.6	36.4	31	WSW	20.5	9.2	.....	.....	4	.....	NW	0	0	D. clouds	
Bombay	29.65	753.0	29.68	754.0	78.5	25.8	91	WSW	7.0	3.1	.....	.....	10	.....	WSW	1.60	40.6	Raining	
Poona, Yarrowda	27.85	707.3	29.68	754.0	81.0	27.2	56	WSW	.....	.....	.....	.....	2	.....	W	0.17	4.3	D. clouds	
Belgaum	27.19	690.6	29.73	755.2	73.0	22.8	77	WSW	13.0	5.8	.....	.....	10	.....	SW	0.03	0.8	Drizzling	
Lahore	28.69	728.8	29.41	747.0	93.9	34.4	49	E	9.2	4.1	.....	.....	0	.....	.....	0	0	.....	
Roorkee	28.54	725.0	29.41	747.0	90.8	32.7	63	E	3.3	1.5	.....	.....	6	.....	.....	0	0	.....	
Agra	28.86	732.9	29.40	746.8	88.2	31.2	64	E	9.1	4.1	.....	.....	9	.....	E	0	0	.....	
Nagpur	28.47	723.2	29.51	749.6	75.4	24.1	87	SW	12.2	5.4	.....	.....	10	.....	W	0.44	11.2	Overcast	
Jubbulpore	28.12	714.3	29.46	748.3	79.2	26.2	74	S	6.3	2.8	.....	.....	10	.....	.....	0	0	Overcast	
Lucknow	29.10	739.0	29.46	748.4	87.1	30.6	64	WSW	8.2	3.7	.....	.....	3	NE	.....	0	0	D. clouds	
Allahabad	29.10	739.3	29.40	746.9	93.7	34.3	49	ESE	3.5	1.6	.....	.....	8	.....	.....	0	0	D. clouds	
Patna	29.32	744.8	29.50	749.4	79.9	26.6	98	ENE	4.6	2.1	.....	.....	10	ENE	ENE	2.54	64.5	Overcast	
Hazaribagh	27.55	699.7	29.53	750.1	79.8	26.6	82	SE	10.9	4.9	.....	.....	10	.....	.....	0.35	8.9	Th'derstorm	
Cuttack	29.46	748.4	29.54	750.4	85.0	29.4	77	S	2.0	0.9	.....	.....	6	.....	.....	0.27	6.9	D. clouds	
Calcutta, Alipore	29.55	750.5	29.57	751.1	81.4	27.4	89	SSW	4.0	1.8	.....	.....	10	.....	.....	1.10	27.9	Overcast	
Dhubri	29.44	747.9	29.56	750.9	82.0	27.8	91	SW	1.3	0.6	.....	.....	7	.....	W	0.21	5.3	Gloomy	
Chittagong	29.56	750.9	29.66	753.2	81.7	27.6	88	Calm	1.7	0.8	.....	.....	6	.....	.....	0	0	Blue sky	
Sibsagar	29.24	742.7	29.57	751.1	83.3	28.5	86	NE	2.6	1.2	.....	.....	10	W	W	0.95	24.1	Overcast	
Zanzibar, Africa	.....	.....	29.98	761.5	83.7	28.7	48	S	7	3.1	.....	.....	0	.....	.....	0	0	Blue sky	
ITALIAN SERIES.																			
By authority of the Minister of Agriculture, Industry and Commerce.																			
Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.28	743.8	29.68	753.9	61.0	16.1	66	SW	2.5	1.1	.....	.....	10	.....	.....	0.480	12.2	.....	Prof. Giovanni Cloding.
Milan	29.17	741.0	29.68	753.8	63.7	17.6	58	SE	4.3	1.9	.....	.....	10	.....	.....	0.016	0.4	.....	Prof. Schiaparelli.
Padua	29.63	752.6	29.73	755.2	58.1	14.5	56	NNE	8.1	3.6	.....	.....	10	.....	.....	0.374	9.5	.....	Prof. Dott. Lorenzoni.
Moncalieri	28.78	731.1	29.67	753.6	64.0	17.8	49	ENE	6.3	2.8	.....	.....	8	W	.....	0.020	0.5	.....	Prof. P. F. Denza.
Genoa	29.48	748.7	29.67	753.5	64.4	18.0	39	W	7.4	3.3	.....	.....	10	N	.....	0.004	0.1	.....	Prof. G. M. Garibaldi.
Mondovi	27.80	706.1	29.67	753.6	61.2	16.2	35	NE	.....	.....	4	.....	3	.....	.....	0.165	4.2	.....	Prof. D. C. Bruno.
Pesaro	29.63	752.6	29.68	753.8	57.4	14.1	66	N	.....	.....	.....	.....	8	SW	.....	0.059	1.5	.....	Prof. Luigi Guidi.
Florence	29.41	746.9	29.61	752.2	60.4	15.8	59	NW	.....	.....	2	.....	8	NW	.....	0.327	8.3	.....	Prof. Costantino Pitter.
Leghorn	29.59	751.5	29.67	753.6	60.3	15.7	76	W	9.8	4.4	.....	.....	9	.....	.....	1.146	29.1	.....	Prof. P. Monte.
Rome	29.58	751.4	29.75	755.7	57.6	14.2	76	SSW	9.4	4.2	.....	.....	10	.....	.....	0.476	12.1	.....	Prof. P. S. Ferrari.
Lecce	29.54	750.3	29.78	756.5	70.6	21.1	35	WNW	22.4	10.0	.....	.....	3	W	.....	0.020	0.5	.....	Prof. C. de Giorgi.
Cosenza	28.96	735.6	29.84	757.7	65.5	18.6	69	SW	9.8	4.4	.....	.....	7	W	.....	0.354	9.0	.....	Prof. D. Conti.
Cagliari	29.63	752.7	29.83	757.6	63.1	17.3	43	NW	.....	.....	4	.....	7	W	.....	0.039	1.0	.....	Prof. A. Pacinotti.
Palermo	29.65	753.2	29.90	759.4	67.3	19.6	42	SW	15.4	6.9	.....	.....	8	WSW	.....	0.024	0.6	.....	Prof. G. Cincciatore.
Syracuse	29.81	757.2	29.85	758.3	72.5	22.5	51	SW	11.2	5.0	.....	.....	3	W	.....	0	0	.....	Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. E	29.26	743.2	29.77	756.2	63.1	17.3	56	WNW	14.3	6.4	.....	.....	8	W	.....	0.322	8.2	.....	Prof. F. Brioschi.
Stelvio	21.94	557.3	.....	.....	25.6	— 3.0	78	NE	.....	.....	4	.....	10n	.....	N	0.039	1.0	Covered	Prof. P. F. Denza.
Valdobbia	21.96	557.7	.....	.....	35.1	1.7	72	E	.....	.....	2	0	8kn	.....	E	0	0	Cloudy	Prof. P. F. Denza.
JAPANESE SERIES.																			
Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y †	29.95	760.7	29.97	761.2	68.6	20.3	97	WNW	2.6	1.2	.....	.....	10n	.....	.....	0.567	14.4	Raining	K. Sasaki.
Kioto	29.87	758.7	30.04	763.0	68.0	20.0	96	NW	1.4	0.6	.....	.....	10n	.....	.....	2.140	54.4	Raining	M. Tojima.
Nagasaki, I. M. Obs'y	29.79	756.6	29.99	761.7	69.4	20.8	93	SSE	3.4	1.5	.....	.....	10n;s	.....	.....	1.640	41.6	Raining	S. Takehayashi.
Tokei Obs'y, Yeddo	30.07	763.8	30.14	765.5	63.2	17.3	88	E	4.9	2.2	.....	.....	10s	.....	.....	0.130	3.3	Covered	The Staff.
Wakayama	29.98	761.5	30.03	762.7	71.3	21.8	93	W	0.9	0.4	.....	.....	10n	.....	.....	0.932	23.7	Cloudy	Y. Kuwamuca.
MAURITIUS SERIES.																			
Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.89	759.2	30.08	763.9	75.2	24.3	63	WSW	5.0	2.2	.....	0.	2	.....	SSE	0	0	Fine	A. N. Figon.
MEXICAN SERIES.																			
By authority of the Secretary of Public Works.																			
Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanajuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez.
Leon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Leal.
Mazatlan	29.68	754.0	29.94	760.5	77.0	25.0	95	ESE	0.9	0.4	.....	2cs	6n	WSW	SSE	0	0	Cloudy	F. Quijano, U. E.
Mexico, Central Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff.
Pabellon, Aguascalientes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. P. Spina.
San Luis Potosi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Barroeta, M. D.
Tlacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. A. Bonilla, M. E.
NETHERLANDS SERIES.																			
Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.12	765.0	30.12	765.0	53.8	12.1	.....	NNW	.....	.....	4	.....	.....	.....	.....	0.008	0.2	.....	
Groningen	29.91	759.6	29.96	761.0	50.5	10.3	.....	NNW	.....	.....	5	.....	.....	.....	.....	0.016	0.4	.....	
Helder	30.02	762.4	30.02	762.4	49.5	9.7	.....	NNW	.....	.....	5	.....	.....	.....	.....	0.039	1.0	.....	
Hellevoetsluis	30.07	763.8	29.07	763.8	51.6	10.9	74	NW	.....	.....	4	.....	.....	.....	.....	0.039	1.0	.....	
Utrecht	30.00	761.9	30.04	763.1	54.9	12.7	55	NNW	.....	.....	4	.....	5	.....	.....	0.020	0.5	Cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Barometer. Reduced to sea-level.		Tempera-ture of the Air.		Rel. Hum.	Wind. Direc-tion.	Wind. Velocity.		Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.80	756.8	29.86	758.4	48.9	9.4	51	NNW	43.6	19.5	.....	.....	0	.....	.....	0	0	.....	
Christiania	29.64	752.9	29.79	756.6	46.8	8.0	60	NNE	18	8	.....	.....	10	.....	.....	.....	.....	Raining	
Gjæsvær	30.03	762.7	30.05	763.3	34.0	1.1	.....	W	.....	.....	6	.....	10	.....	.....	.....	.....	.....	
Lodingen	30.01	762.3	30.02	762.5	41.9	5.5	65	NE	.....	.....	4	.....	8	.....	.....	0	0	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.25	768.4	30.27	758.8	66.2	19.0	90	SE	12.5	5.6	.....	.....	4	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.08	738.6	30.05	763.3	74.1	23.4	25	ENE	3.1	1.4	.....	.....	0	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.13	765.3	30.22	767.5	69.1	20.6	71	SW	4.3	1.9	.....	.....	10	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.78	756.5	30.14	765.6	67.1	19.5	37	N	14.3	6.4	.....	.....	1	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.35	770.9	30.42	772.7	70.5	21.4	78	NE	3.8	1.7	.....	.....	3	.....	.....	0	0	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.93	734.7	29.99	761.7	59.7	15.4	27	N	31	14	.....	0	0	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	29.78	756.4	29.80	756.9	73.8	26.0	56	Calm	0	0	.....	0	5ks	.....	.....	.....	.....	.....	Capt. Sselliwerstow.
Astrakhan	29.92	759.9	29.84	757.8	75.4	24.1	54	NNE	2	1	.....	.....	10s	.....	.....	.....	.....	Light clouds	Capt. Wisganow.
Barnaul ‡	29.26	743.2	29.75	755.7	54.0	12.2	43	NW	9	4	.....	.....	10	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	29.39	746.5	29.61	752.2	82.4	28.0	40	E	9	4	.....	0	6k	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	29.23	742.5	30.16	766.0	74.5	23.6	28	SE	4	2	.....	1c	0	.....	.....	.....	.....	Light clouds	Meteorological Obs'y.
Kasan	29.75	755.6	30.00	762.1	81.0	27.2	54	Calm	0	0	.....	.....	9kn	.....	.....	.....	.....	.....	Observatory.
Kertch	29.67	753.5	29.69	754.0	74.1	23.4	80	SE	7	3	.....	.....	3	.....	.....	.....	.....	.....	Lagorio & Sastyrex.
Kieff	28.81	731.7	29.41	747.0	66.2	19.0	84	SE	9	4	.....	ck	10s	.....	.....	.....	.....	.....	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.53	750.0	29.72	755.0	80.8	27.1	31	SE	45	20	.....	.....	6	.....	.....	.....	.....	.....	Meteorological Obs'y.
Moscow	29.34	745.2	29.86	758.4	75.0	23.9	47	S	7.8	3.5	.....	0	7ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.59	698.5	29.75	755.6	51.1	10.6	97	Calm	0	0	.....	.....	10	.....	.....	1.846	46.9	.....	Meteorological Obs'y.
Nikolaiev	29.48	748.8	29.55	750.6	74.7	23.7	67	S	31	14	.....	cs	9k	.....	.....	.....	.....	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	30.08	763.9	30.16	766.1	53.8	12.1	58	Calm	.....	.....	0	30k	0	.....	.....	0	0	.....	Lieut. Iwanow.
Pekin, China	29.57	751.1	29.71	754.7	74.1	23.4	70	S	7	3	.....	0	6ks	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	29.72	754.9	29.74	755.3	71.6	22.0	61	S	7	3	.....	cs	9n;ks	.....	.....	.....	.....	Raining	Central Physical Obs'y.
Tashkend, Laboratory	27.92	709.2	29.36	745.8	88.3	31.3	65	Calm	0	0	.....	.....	6	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.33	719.5	29.65	753.0	87.1	30.6	23	WNW	9	4	.....	.....	0	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	29.10	740.7	29.58	751.3	54.0	12.2	68	NW	11	5	.....	.....	10ks	.....	.....	Blank		.....	Astronomical Obs'y.
Wilna	29.08	738.5	29.47	748.5	76.3	24.6	51	SE	4	2	.....	.....	8	.....	.....	.....	.....	Heavy cld's	Berg, Assistant.
Yeniseisk	29.36	745.7	29.64	752.8	52.0	11.1	75	N	4	2	.....	.....	6	.....	.....	.....	.....	.....	M. O. Marks.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	30.27	768.8	50.1	10.1	56	N	.....	.....	2	.....	10k	.....	.....	0	0	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	30.28	769.1	59	15.0	94	S	.....	.....	2	3	0	S	.....	0	0	Clear	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	30.20	767.1	.....	.....	.....	N	.....	.....	6	.....	Hz	.....	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.83	757.6	29.93	760.3	71.6	22.	29	W	2.7	1.2	.....	.....	1	.....	.....	0	0	.....	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.21	767.3	30.27	768.8	59.4	15.2	68	N	3.8	1.7	.....	3	7	N	.....	0.449	11.4	Covered	Prof. Manuel de Naverar.
Burgos, Met. Obs'y	27.25	692.4	.....	.....	48.6	9.2	67	NE	9.8	4.4	.....	.....	8	.....	.....	0	0	Cloudy.	Domingo Martin.
Madrid, Royal Obs'y	27.89	708.5	30.10	764.6	62.1	16.7	31	NE	23.0	10.3	.....	0	0	.....	.....	0	0	Clear	The Staff.
Murcia, Met. Obs'y ‡	29.85	758.2	30.00	761.9	74.8	23.8	31	NW	4.5	2.0	.....	0	1	.....	.....	0	0	Almost clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.34	745.2	30.23	767.8	59.2	15.1	45	NE	17.4	7.8	.....	.....	4	.....	.....	0	0	Cloudy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.96	760.9	30.02	762.6	81.7	27.6	77	E	1.8	0.8	.....	0	0	.....	.....	0	0	Clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.83	757.7	29.88	759.0	85.0	29.4	81	S	4.4	2.0	.....	0	7k	.....	E	0.08	2.0	Very cloudy	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.97	701.3	30.07	763.8	70.5	21.4	55	WSW	8.2	3.7	.....	0	1	.....	W	0	0	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.94	760.5	30.03	762.8	77.4	25.2	100	NE	0	0	.....	.....	10kn	.....	NE	0.079	2.0	Overcast	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.81	757.2	29.90	760.9	79.1	26.6	85	N	0	0	.....	.....	10n	.....	NNW	0.15	3.8	Cloudy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.74	755.4	29.78	756.4	55.4	13.0	62	N	.....	.....	4	.....	10	.....	.....	0	0	.....	
Umea	29.75	755.6	29.80	756.9	50.7	10.4	70	NE	.....	.....	6	.....	9	.....	.....	0.264	6.7	.....	
Hernosand	29.74	755.4	29.79	756.7	42.6	5.9	87	N	.....	.....	6	.....	10	.....	.....	0.193	4.9	.....	
Stockholm	29.40	746.8	29.58	751.3	51.8	11.0	90	NNE	.....	.....	6	.....	10	.....	.....	0.250	6.5	.....	
Wisby	29.39	746.5	29.45	748.0	55.4	13.0	91	WNW	.....	.....	2	.....	10	.....	.....	0.402	10.2	Raining	
Sub-Series.																			
Upsala	29.43	747.6	29.52	749.8	44.6	7.0	81	NNE	16.1	7.2	.....	.....	10	.....	.....	0	0	.....	S. G. Fineman.
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.50	723.8	29.93	760.1	53.6	12.0	55	N	.....	.....	3	.....	7	.....	.....	0.134	3.4	Cloudy	The Observatory.
Zurich ‡	28.31	719.0	29.95	760.8	52.0	11.1	72	W	.....	.....	5	.....	8	.....	.....	0.185	4.7	Raining	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	29.51	749.5	81.9	27.7	43	SW	6	2.5	.....	.....	0	.....	.....	0	0	.....	The Observatory.
Valona	.....	.....	29.93	760.1	71.4	21.9	.....	SW	.....	.....	2	.....	2	.....	.....	0	0	Slightly cld'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.87	758.8	84.9	29.4	48	N	.....	.....	1	.....	0	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	BAROMETER. Corrected for instrum'tal error and temperature. Mill.	BAROMETER. Reduced to sea-level. Inch.	BAROMETER. Reduced to sea-level. Mill.	TEMPERATURE OF THE AIR. Fah.	TEMPERATURE OF THE AIR. Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	WIND. Velocity. Miles p. h'r	WIND. Velocity. Mtrs p. sec	WIND. Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	CLOUDS. Amount and kind. Lo'er 0—10	CLOUDS. Direction. Upper. From.	CLOUDS. Direction. Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.89	759.2	29.97	761.2	58.5	14.7	64	N	7	3.1			10s;hz			Inap.	Inap.	Cloudy.	
Alpena, Michigan	29.46	748.3	30.11	764.8	49.5	9.7	64	E	10	4.5		2c	2k	W		0	0	Fair	
Atlanta, Georgia	28 77	730.7	29.92	760.0	67.0	19.4	90	W	5	2.2			10k		Calm	0.87	22.1	Cloudy	
Atlantic City, New Jersey	29.87	758.7	29.88	758.9	59	15.0	100	N	12	5.4			Fg		Calm	0.05	1.3	Dense fog	
Augusta, Georgia	29.73	755.1	29.91	759.7	72.3	22.4	80	SW	6	2.7		5ck	2s	SW		0.16	4.1	Fair	
Baltimore, Maryland	29.77	756.1	29.82	757.4	68	20.0	95	NE	5	2.2			10s		E	0.70	17.8	Cloudy	
Barnegat, New Jersey	29.85	758.4	29.88	758.9	59	15.0	94	NE	14	6.3			10s		NE	0.04	1.0	Cloudy	
Bismarck, Dakota	27.99	710.9	29.73	755.1	64	17.8	83	SE	8	3.6			10ks		SW	0	0	Threatening	
Boise City, Idaho	27.20	690.9	29.98	761.0	48.2	9.0	78	NW	6	2.7			10s		W	0	0	Cloudy	
Boston, Massachusetts	29.81	757.2	29.96	761.0	60.1	15.6	82	NW	1	0.4			10s		W	0.07	1.8	Cloudy	
Brackettville, Texas	28.73	729.7	29.73	755.1	78	25.6	86	E	10	4.5		0	2s		E	0	0	Fair	
Brownsville, Texas	29.66	758.4	29.90	759.4	83	28.3	83	SE	8	3.6		5k	0	SE		0	0	Fair	
Buffalo, New York	29.24	742.7	29.93	760.2	53.2	11.8	99	NE	20	8.9			10s;fog		NE	Inap.	Inap.	Cloudy	
Burlington, Vermont	29.74	755.4	30.02	762.5	51.5	10.8	57	N	14	6.3		Hz	Hz			0	0	Dense haze	
Cairo, Illinois	29.57	751.1	29.96	761.0	75	23.9	77	N	4	1.8		0	1s		Calm	0.11	2.8	Clear	
Campo, California	27.38	695.4	29.95	760.7	40	4.4	77	NW	2	0.9		0	0			0	0	Clear	
Camp Thomas, Arizona	27.19	690.6			55	12.8	39	NW			1	0	0			0	0	Clear	
Cape Henry, Virginia	29.79	756.7	29.81	757.2	73	22.8	85	S	11	4.9		8k	0	SW		0.25	6.3	Fair	
Cape May, New Jersey	29.79	756.7	29.82	757.4	63	17.2	100	NE	15	6.7			Fg			0.10	2.5	Dense fog	
Castroville, Texas	29.14	740.1	29.81	757.2	81	27.2	74	S	5	2.2			10s		S	0	0	Cloudy	
Cedar Keys, Florida	30.02	762.5	30.04	763.0	80	26.7	78	SW	13	5.8		5c	2ks		SW	0	0	Fair	
Champaign, Illinois	29.13	739.9	29.91	759.7	59.6	15.3	82	N	12	5.4			10s		N	0.01	0.3	Cloudy	
Charleston, S. Carolina	29.90	759.4	29.96	761.0	75.5	24.2	81	SW	9	4.0		0	8ks		SW	0.06	1.5	Cloudy	
Charlotte, N. Carolina	29.00	736.6	29.86	758.4	73	22.8	72	S	5	2.2		2k	8s	SW	SW	Inap.	Inap.	Cloudy	
Chattanooga, Tennessee	29.11	739.4	29.91	759.7	67	19.4	84	SW	10	4.5		2cs	8ks	Calm	SW	2.13	54.1	Cloudy	
Cheyenne, Wyoming	24.02	010.1	29.83	757.7	48	8.9	56	NW	4	1.8		0	0			0.18	4.6	Clear	
Chicago, Illinois	29.28	743.7	29.90	761.0	52.8	11.6	70	N	8	3.6		0	0			0.06	1.5	Clear	
Chincoteague, Virginia	29.79	750.7	29.81	757.2	67	19.4	95	S	19	8.5		8k	2ks	S	SW	0.04	1.0	Threatening	
Cincinnati, Ohio	29.21	741.9	29.85	758.2	65	18.3	84	N	6	2.7			10s		N	0.02	0.5	Cloudy	
Cleveland, Ohio	29.10	739.1	29.82	757.4	55	12.8	85	NE	10	4.5			10n		E	1.47	37.3	Light rain	
Coleman City, Texas	28.10	713.7	29.69	754.1	73	22.8	81	SW	3	1.3			0			0	0	Clear	
Columbus, Ohio	28.94	735.1	29.70	755.9	61	16.1	88	SW	10	4.5			10s		W	0.19	4.8	Threatening	
Concho, Texas	28.00	711.2	29.88	758.9	73	22.8	90	Calm	0	0		0	0			0.26	6.6	Clear	
Corsicana, Texas	29.48	748.8	29.94	760.5	78	25.6	86	S	4	1.8			10s			0	0	Cloudy	
Davenport, Iowa	29.36	745.7	30.00	762.0	57	13.9	75	NE	2	0.9		2cs	0	Calm		0.04	1.0	Clear	
Dayton, Washington T'y	28.20	717.8	30.01	762.2	47	8.3	85	S	8	3.6			10n		Calm	0.02	0.5	Light rain	
Deadwood, Dakota	25.29	642.4	29.84	757.9	59	15.0	70	SW	3	1.3		5cs	0			0	0	Fair	
Decatur, Texas	28.71	729.2	29.82	757.4	76	24.4	73	S	12	5.4		0	0			0	0	Clear	
Delaware Breakwater, Del.	29.80	756.9	29.82	757.4	63	17.2	94	NE	19	8.5			Fg			0.13	3.3	Dense fog	
Denison, Texas	29.10	739.1	29.88	758.9	80	26.7	78	S	8	3.6		0	0			0	0	Clear	
Denver, Colorado	24.75	628.6	29.79	756.7	52.0	11.1	51	SE	6	2.7		0	0			0	0	Clear	
Des Moines, Iowa	29.13	739.9	30.01	762.2	51	16.1	88	NE	2	0.9		0	Hz			0	0	Clear	
Detroit, Michigan	29.21	741.9	29.88	758.9	55.5	13.1	87	N	15	6.7		6c;cs	0	W		0.76	19.3	Fair	
Dodge City, Kansas	27.25	692.1	29.74	755.4	69	20.6	90	SE	16	7.2			10ks		SE	0	0	Threatening	
Dubuque, Iowa	29.34	745.2	30.02	762.5	54	12.2	67	E	1	0.4		0	0			0.01	0.3	Clear	
Duluth, Minnesota	29.38	746.2	30.06	763.5	47	8.3	77	NE	4	1.8		0	0			0	0	Clear	
Eagle Pass, Texas	29.12	739.6	29.93	760.2	79.2	26.2	87	SE	7	3.1		0	5s		Calm	0	0	Fair	
Eagle Rock, Idaho	25.25	641.3	29.90	761.0	40	4.4	73	NW	2	0.9			10s		W	0.19	4.8	Cloudy	
Eastport, Maine	29.89	759.2	29.96	761.0	53	11.7	61	N	12	5.4		5c	0	NW		0	0	Fair	
El Paso, Texas	25.18	665.0	29.84	757.9	61	16.1	31	SW	3	1.3		0	0			0	0	Clear	
Erie, Pennsylvania	29.16	740.7	29.80	758.4	52	11.1	93	NE	13	5.8			10n			0.49	12.4	Light rain	
Escanaba, Michigan	29.43	747.5	30.07	763.8	52	11.1	79	NE	6	2.7			10s		Calm	0	0	Cloudy	
Florence, Arizona	28.38	720.8	29.98	761.5	64	17.8	34	NE	1	0.4		0	0			0	0	Clear	
Fort Apache, Arizona	25.03	635.8	29.81	757.2	46	7.8	54	NE	3	1.3		0	Sk		Calm	0	0	Light smoke	
Fort Assinnaboine, Montana	27.14	689.3	29.83	757.7	60	15.6	55	SW	14	6.3		0	0			0	0	Clear	
Fort Bennett, Dakota	28.18	715.8	29.65	753.1	68	20.0	60	SE	16	7.2			10u		W	Inap.	Inap.	Light rain	
Fort Benton, Montana	27.02	686.3	29.70	755.9	56	13.3	69	Calm	0	0		0	5ks		Calm	0.50	12.7	Fair	
Fort Buford, Dakota	27.81	706.4	29.73	755.1	59	15.0	94	N	8	3.6		5cs	0	SW		0.30	7.6	Fair	
Fort Custer, Montana	26.77	679.9	29.80	758.4	53	11.7	73	S	3	1.3		0	0			0	0	Clear	
Fort Davis, Texas	25.20	640.1	30.16	766.1	66	18.9	69	Calm	0	0		0	0			0	0	Clear	
Fort Elliott, Texas	27.11	688.6	30.18	766.6	53	11.7	67	NE	14	6.3		5c	0	NE		0	0	Fair	
Fort Gibson, Indian T'y	29.31	744.5	29.84	757.9	81	27.2	78	E	5	2.2		c	0			0	0	Clear	
Fort Grant, Arizona	25.26	641.6	30.06	763.5	62	16.7	32	N	4	1.8		0	0			0	0	Clear	
Fort Griffin, Texas	28.59	726.2	29.79	756.7	78.2	25.7	78	Calm	0	0		0	0			0	0	Clear	
Fort Keogh, Montana	27.33	694.2	29.74	755.4	55	12.8	79	NW	6	2.7		0	0			0	0	Clear	
Fort Macon, North Carolina	29.87	758.7	29.88	758.9	75	23.9	86	SW	13	5.8		5ck	2s	Calm	Calm	0	0	Cloudy	
Fort McKavett, Texas	27.60	702.6	29.48	748.8	74.2	23.4	90	S	6	2.7		7cs	0	S		Inap.	Inap.	Cloudy	
Fort Missoula, Montana	26.08	677.7	30.06	763.5	48	8.9	85	S	2	0.9			10ks	S		0.27	6.9	Cloudy	
Fort St. Michaels	29.62	752.3	29.65	753.1	32	0.0	100	SW	9	4.0			Fg		SW	0	0		
Fort Shaw, Montana	26.29	667.8	29.74	755.4	46	7.8	69	W	1	0.4		5cs	0	SW		0	0	Fair	
Fort Sill, Indian Territory	28.03	727.2	29.84	757.9	74	23.3	86	S	4	1.8		5c	0	W		0	0	Fair	
Fort Stevenson, Dakota	28.00	711.2	29.78	756.4	60	15.6	94	W	28	12.5			10n		W	0.05	1.3	Thund'r st'm	
Fort Verde, Arizona					55.1	12.8	56	SW			2	0	0			0	0	Clear	
Fredericksburg, Texas	28.21	716.5	29.69	754.1	75	23.9	90	SW	10	4 5			10s			0	0	Cloudy	
Galveston, Texas	29.93	760.2	29.97	761.2	81	27.2	87	SW	10	4.5		0	5ks		S	Inap.	Inap.	Fair	
Grand Haven, Michigan	29.33	745.0	29.98	761.5	57	13.9	69	NE	3	1.3		0	0			0.08	2.0	Clear	
Hatteras, North Carolina	29.80	758.4	29.88	758.9	74	23.3	90	SW	20	8.9		10k	0			0	0	Cloudy	
Helena, Montana	25.75	654.0	29.95	760.7	57	13.9	52	N	1	0.4		0	0			0	0	Clear	
Henrietta, Texas	28.82	732.3	29.68	753.9	83	28.3	71	SE	6	2.7		0	0			0	0	Clear	
Indianapolis, Indiana	29.08	738.0	29.85	758.2	63	17.2	83	NE	6	2.7			10s		NE	0.75	19.0	Cloudy	
Indianola, Texas	29.93	760.2	29.90	761.0	80.7	27.1	87	S	8	3.6		3k;cs	1ks	S	Calm	0	0	Fair	
Jacksboro, Texas	28.71	729.2	29.78	756.4	77	25.0	82	S	2	0.9		0	c			0	0	Clear	
Jacksonville, Florida	29.98	761.5	30.00	762.0	80	26.7	74	SW	12	5.4		5cs	0	SW		0.83	21.1	Fair	
Keokuk, Iowa	29.33	745.0	29.96	761.0	64.8	18.2	78	NE	5	2.2		0	Hz		Calm	0	0	Clear	
Key West, Florida	30.02	762.5	30.05	763.3	83.3	28.5	74	E	4	1.8		2k	1ks	E		0	0	Fair	
Kittyhawk, North Carolina	29.86	758.4	29.88	758.9	77	25.0	77	SW	21	9.4		2cs; c	1ks	W		0	0	Fair	
Knoxville, Tennessee	28.92	734.6	29.92	760.0	65	18.3	92	SW	9	4.0			10s		SW	0.90	22.9	Cloudy	
La Crosse, Wisconsin	29.27	743.4	29.99	761.7	63	17.2	72	Calm	0	0			0			0	0	Clear	
La Mesilla, New Mexico	26.07	662.2	30.22	767.6	55.3	12.9	23	Calm	0	0			0			0	0	Clear	
Laredo, Texas	29.43	747.5	29.75	755.6	83	28.3	83	SE	3	1.3			0			0	0	Clear	
Leavenworth, Kansas	29.09	738.9	29.96	761.0	68	20.0	74	SE	6	2.7			0			0	0	Clear	
Lewiston, Idaho	29.20	741.7	30.02	762.5	48	8.9	100	NE	1	0.4			10n		Calm	0.32	8.1	Light rain	
Little Rock, Arkansas	29.59	751.6	29.90	759.4	77	25.0	91	Calm	0	0			0			0	0	Clear	
Los Angeles, California	29.01	752.1	29.98	761.5	51.2	10.7	86	N	4	1.8			0			0	0	Clear	
Louisville, Kentucky	29.31	744.5	29.86	758.4	64.5	18.1	89	NW	9	4.0			10s			1.13	28.7	Cloudy	
Lynchburg, Virginia	29.11	739.4	29.78	756.4	73	22.8	76	Calm	0	0		7k	0	NW		0.01	0.3	Fair	
Madison, Wisconsin	29.00	736.6	29.98	761.5	51	10.6	86	N	7	3.1		1c	0	N		0	0	Clear	
Marquette, Michigan	29.36	745.7	30.07	763.8	52	11.1	66	Calm	0	0		0	Sk			0	0	Clear	
Mason, Texas	28.30	718.8	29.96	761.0	80	26.7	74	S	8	3.6			10s		S	0	0	Cloudy	
Memphis, Tennessee	29.01	752.1	29.94	760.5	75	23.9	86	E	2	0.9		Hz	5s	Calm	W	0.03	0.8	Fair	
Milwaukee, Wisconsin	29.29	744.0	30.02	762.5	51	10.6	72	N	6	2.7		0	0			0.19	4.8	Clear	

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
UNITED STATES SERIES—CONTINUED.																			
Mobile, Alabama	29.94	760.5	30.00	762.0	78	25.6	91	W	1	0.4		5ck	Hz	NW		0.68	17.3	Fair	
Montgomery, Alabama	29.75	755.6	29.97	761.2	70	21.1	95	SW	2	0.9			10n		SW	0.51	13.0	Light rain	
Moorhead, Minnesota	28.92	734.6	29.88	758.9	62.1	16.7	88	SE	10	4.5		5c	o	S		0	0	Fair	
Morgantown, W. Virginia	28.80	731.5	29.74	755.4	68	20.0	84	Calm	0	0			10s			0.07	1.8	Cloudy	
Mt. Washington, N. H.	23.82	605.0	29.85	758.2	40	4.4	64	N	13	5.8		8c	2s;sk	Calm	N	0	0	Fair	
Nashville, Tennessee	29.37	746.0	29.89	759.2	70.7	21.5	81	SW	4	1.8		2ck	o	SW		0.66	16.8	Clear	
New Haven, Connecticut	29.81	757.2	29.92	760.0	60	15.6	88	Calm	0	0			10s			0.16	4.1	Cloudy	
New London, Connecticut	29.90	759.4	29.95	760.7	57	13.9	100	S	2	0.9			10n		Calm	0.08	2.0	Light rain	
New Orleans, Louisiana	29.94	760.5	29.99	761.7	80.7	27.1	85	SW	4	1.8		o	1ks		SW	Inap.	Inap.	Clear	
Newport, Rhode Island	29.89	759.2	29.94	760.5	57.8	14.3	93	E	2	0.9			10n		Calm	0.05	1.3	Light rain	
New River, N. Carolina					73	22.8	90	SW			1	8k	o	SW				Cloudy	
New Shoreham, Rhode I'd	29.91	759.7	29.94	760.5	54.0	12.2	100	Calm	0	0			10n		N	0.17	4.3	Heavy rain	
New York, New York	29.75	755.6	29.92	760.0	60	15.6	94	E	12	5.4			10s;fg			0.02	0.5	Cloudy	
Norfolk, Virginia	29.79	756.7	29.83	757.7	74	23.3	81	SW	9	4.0		8ck	o	W		0.05	1.3	Fair	
North Platte, Nebraska	27.02	686.3	29.84	757.9	65.3	18.5	90	SE	15	6.7			10s		SE	0	0	Cloudy	
Olympia, Washington T'y	29.96	761.0	30.00	762.0	50.5	10.3	96	S	2	0.9			10s		SW	0.73	18.5	Cloudy	
Omaha, Nebraska	28.84	732.5	29.98	761.5	65.5	18.6	86	SE	4	1.8		1cs	o			0	0	Clear	
Oswego, New York	29.65	753.1	29.97	761.2	50.3	10.2	71	NE	10	4.5			10s			0	0	Cloudy	
Pensacola, Florida	29.98	761.5	30.00	762.0	78	25.6	95	SW	7	3.1			10n		SW	0.13	3.3	Light rain	
Philadelphia, Pa	29.84	757.9	29.90	759.4	62	16.7	91	E	11	4.9			10s			0.04	1.0	Cloudy	
Phœnix, Arizona	28.74	730.0	30.51	774.9	63	17.2	57	E	2	0.9		o	o			0	0	Clear	
Pike's Peak, Colorado	17.92	455.2	30.13	765.3	31	— 0.6	38	SW	36	16.1		o	o			0	0	Clear	
Ploche, Nevada	23.90	608.6	29.82	757.4	48	8.9	36	S	3	1.3		1k	o	Calm		0	0	Clear	
Pittsburg, Pennsylvania	28.97	735 8	29.75	755.9	67.5	19.7	92	NE	1	0.4			Fg		Calm	1.20	30.5	Dense fog	
Port Eads, Louisiana	30.02	762.5	30.03	762.7	80.0	26.7	87	SW	14	6.3		o	Hz		Calm	0	0	Clear	
Port Huron, Michigan	29.27	743.4	29.93	760.2	49.8	9.9	86	N	14	6.3			10s		Calm	0.05	1.3	Cloudy	
Portland, Maine	29.91	759.7	29.95	761.0	57	13.9	75	NE	11	4.9		2cs	2s	NW	Calm	0.03	0.8	Clear	
Portland, Oregon	29.98	761.5	30.06	763.5	52.3	11.3	88	E	3	1.3			10s		SW	Inap.	Inap.	Cloudy	
Portsmouth, N. Carolina					75	24.4	95	SW	18	8.0		5k	5s	W	Calm	0	0	Cloudy	
Prescott, Arizona	24.70	628.9	29.83	757.7	46	7.8	33	S	1	0.4		o	o			0	0	Clear	
Punta Rassa, Florida	30.02	762.5	30.03	762.7	81	27.2	70	SE	2	0.9		1c	o			0.01	0.3	Clear	
Red Bluff, California	29.64	752.8	29.97	761.2	54.5	12.5	74	NW	3	1.3		o	o			0	0	Clear	
Rio Grande City, Texas	29.70	754.4	29.91	759.7	81	27.2	83	SE	12	5.4		o	2ks		SE	0	0	Clear	
Rochester, New York	29.30	745.7	29.98	761.5	50	10.0	65	E	18	8.0			10s;fg		E	0	0	Cloudy	
Roseburg, Oregon	29.52	749.8	30.08	764.0	50	10.0	93	NE	1	0.4		5k	o	SW		0.05	1.3	Fair	
Sacramento, California	29.93	760.2	30.00	762.0	52.5	11.4	80	SE	6	2.7		o	o			0	0	Clear	
St. Louis, Missouri	29.37	746.0	29.95	760.7	66.0	18.9	89	NE	6	2.7		8c;ck	o	W;N		0	0	Fair	
St. Paul, Minnesota	29.14	740.1	29.98	761.5	60	15.6	77	Calm	0	0		o	o			0	0	Clear	
Salt Lake City, Utah	25.60	650.2	29.80	756.9	53	11.7	54	SE	9	4.0		o	o			0	0	Clear	
San Antonio, Texas	29.35	745.5	30.04	763.0	80.7	27.1	74	SE	4	1.8			10s		SE	0	0	Cloudy	
San Diego, California	29.80	758.4	29.93	760.2	58.0	14.4	70	Calm	0	0			10s			0	0	Cloudy	
Sandusky, Ohio	29.16	740.7	29.82	757.4	55	12.8	100	NE	45	20.1			10n		NE	3.27	83.1	Light rain	
Sandy Hook, New Jersey	29.87	758.7	29.90	759.4	61.0	16.1	97	E	12	5.4			10s			0.22	5.6	Cloudy	
San Francisco, California	29.94	760.5	30.01	762.2	54	12.2	87	SW	5	2.2		o	1s		Calm	0	0	Clear	
Santa Fé, New Mexico	23.33	592.6	29.84	757.9	49	9.4	37	SE	1	0.4		o	o			0	0	Clear	
Savannah, Georgia	29.88	758.9	29.98	761.5	75	24.4	74	SW	10	4.5		2c	5ks		SW	0.23	5.8	Fair	
Shreveport, Louisiana	29.73	755.1	29.96	761.0	79	26.1	87	S	3	1.3		o	7s			Inap.	Inap.	Fair	
Silver City, New Mexico	24.30	617.2	29.76	755.9	53	11.7	36	N	1	0.4		o	o			0	0	Clear	
Sitka Alaska																0	0		
Smithville, North Carolina	29.87	758.7	29.90	759.4	75	23.9	86	SW	14	6.3		8k	2ks	SW	SW	Inap	Inap.	Cloudy	
Spokane Falls, Wash. Ter.	27.90	710.2	29.92	760.0	46	7.8	76	S	12	5.4			10s		S	0.02	0.5	Cloudy	
Springfield, Illinois	29.30	744.2	29.96	761.0	64	17.8	80	NE	6	2.7		o	1s		NE	0	0	Clear	
Springfield, Massachusetts	29.81	757 2	29.93	760.2	60.0	15.6	87	N	4	1.8			10s;fg		N	0.06	1.5	Cloudy	
Stockton, Texas	29.90	683.2	29.88	758.9	68.8	20.4	85	S	4	1.8		o	o			0	0	Clear	
St. Vincent, Minnesota	29.00	730.6	29.84	757.9	64	17.8	89	S	12	5.4		o	8s		Calm	Inap.	Inap.	Fair	
Thatcher's Island, Mass.	29.94	760.5	29.99	761.7	58.6	14.8	76	W	5	2.2		o	o			0.03	0.8	Clear	
Toledo, Ohio	29.19	741.4	29.87	758.7	56	13.3	94	NE	16	7.2			10ks		NE	0.87	22.1	Threatening	
Tucson, Arizona	27.50	698.5	29.79	756.7	63	17.2	42	SE	2	0.9		o	o			0	0	Clear	
Umatilla, Oregon	29.08	753.9	30.08	764.0	54.5	12.5	62	SW	17	7.6			10s		SW	Inap.	Inap.	Cloudy	
Uvalde, Texas	28.95	735.3	29.73	755.1	79	26.1	91	SE	4	1.8			10s		Calm	0	0	Cloudy	
Vicksburg, Mississippi	29.73	755.1	29.98	761.5	78	25.6	91	SW	8	3.6			10s		SW	1.19	30.2	Cloudy	
Visalia, California	29.57	751.1	29.92	760.0	54	12.2	74	N	5	2.2		o	o			0	0	Clear	
Washington, D. C.	29.08	753.9	29.79	756.7	67	19.4	100	NE	6	2.7			10s;fg		NE	Inap.	Inap.	Cloudy	
Wickenburg, Arizona					60	15.6	44	Calm			0	o	o			0	0	Clear	
Wilmington, N. Carolina	29.83	757.7	29.88	758.9	73	22.8	85	W	5	2.2		5c	2s	Calm	SW	0.24	6.1	Fair	
Winnemucca, Nevada	25.59	650.0	29.80	756.9	42	5.6	66	SW	3	1.3		o	o			0	0	Clear	
Wood's Holl, Mass.	29.90	759.4	29.94	760.5	58	14.4	88	Calm	0	0			10s		Calm	0.08	2.0	Cloudy	
Yankton, Dakota	28.71	729.2	29.97	761.2	64	17.8	78	SE	6	2.7		10k	o			0	0	Cloudy	
Yuma, Arizona	29.08	753.9	29.82	757.4	67.2	19.6	84	Calm	0	0		o	o			0	0	Clear	
SUB-SERIES.																			
Bogota, U. S. Columbia	22.10	561.3			53.5	11.9	79	Calm	0	0		5c	o			0	0	Fair	Thomas Herman.
Bull Bay Town, Jamaica	29.77	756.1	30.08	764.0	78	25.6	82	E				o	2k						
Havana, Cuba, W. I.	30.02	762.5	30.07	763.8	84	28.9	67	Calm	0	0		o	o			0	0	Clear	A. Van Cuneghem, Ass't.
Kingston, Jamaica, W. I.	29.96	761.0	29.97	761.2	79.8	26.6	75	Calm	0	0		10cs	o			0.03	0.8		Robert Johnstone.
Navassa, W. I.	29.87	758.7	29.95	760.7	81	27.2	79	E	8	3.6		2s	8n;k	NE	E	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.04	763.0	79	26.1	87	E			2	4ck	5k	E		0.010	0.3	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.40	748.3	30.02	762.5	82	27.8	68	Calm	0	0		0	8ks		Calm	0.14	3.6	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					75.1	24.5		NE			3	0	o			0	0		Earl Flint.
Santiago de Cuba, W. I.	29.97	761.2	30.00	762.0	81	27.2	70	N	3.6	1.6		2cs	o			0	0	Fair	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York-Factory, B. A.	30.00	762.0	30.05	763.3	44.0	6.7	96	SE	10	4.5		5k	5s	S	S	0.70	17.8	Raining	J. Fortescue & W Wood.

BRITISH NAVAL SERIES.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																			Comm A. J. Errington.
H. M. S. Alert, Thursday Island, Oceanica	29.95	760.7	77	25.0	84	SE			3-5		1							Squally	Capt. J. P. Maclear.
H. M. S. Alexandra, N. 37° 58′, E. 20° 46′	29.90	759.4	72	22.2	75	W			3.		5	WNW				2	WSW	D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab, N. 12° 52′, E. 45° 45′	29.69	754.1	86	30.0	83	SE			1		0					5	Cross	Blue sky	Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N 24° 47′, E. 66° 59′	29.56	750.8	84	28.9	91	SW			4		2	SW						D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			80	26.7		SW			2-3		0					1	SW	Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N 13° 09′, W. 61° 14′	29.98	761.5	83	28.3	79	ENE			3-4		3							Squally	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 17° 29′, W. 3° 54′	30.12	765.0	67	19.4	68	ESE			4		2	ESE				3	SSE	D. clouds	Com. F. W. Richards.
H. M. S. Champion, S. 30° 25′, W. 47° 53′	30.14	765.5	69	20.6	90	ENE			5		5	NE				5	E	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerrell.
H. M. S. Comus, Cheefoo Harbor, China	29.80	756.9	67	19.4	90	S			1		2	S						D. clouds	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruiser, N 39° 30′, E. 11° 23′	29.84	757.9	64	17.8		WSW			6		4	WSW				5	WSW	Squally	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, N. 24° 11′, W. 30° 35	30.23	767.8	73.5	23.1	78	NNE			3		3					3	NNE	Showery	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.43	772.9	59	15.0		SE			2		1	ESE						Blue sky	Capt C. Domville.
H. M. S. Dock-Yard, Bermuda, W.I.	30.12	765.0	78	25.6	82	SSW			2-3		2	SSW						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 48° 10′, W. 53° 38′	29.66	753.4	45.5	7.5	96	NE			1-2		10					1	NE	Rain & fog	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 7° 28′, E. 73° 44′	29.87	758.7	80	26.7		SE			1-2		5					1	SE	D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 6° 00′, E. 105° 30′	29.82	757.4	85	29.4		SW			4		4	SSW				2	SW	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, N. 6° 43′, E. 171° 53′	29.91	759.7	80	26.7	91	E			3-6		10	ENE				6	E	Raining	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Tamatave, Madagascar	30.16	766.1	74	23.3	72	SSW			2-3		6	SSW				1	SE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Fleur de Lis, Newfoundland	29.64	752.8	42	5.6		NNW			2		9							Rain & fog	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo, N. 20° 39′, W. 84° 54′	29.98	751.5	86	30.0	79	NE			1-2		2	NE				2	E	D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish, Yokohoma, Japan	30.06	763.5	67	19.4	90	E			3		7					3	E	Misty	Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	29.95	760.7	55	12.8	71	NNE			1-2		8							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.89	759.2	39	3.9	90	Calm			0		10							Drizzling	Capt. L. F. Jones.
H. M. S. Griffin, Nassau, Bahamas	30.10	764.5	84	28.9	75	ESE			1										Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber,																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Malta, Mediterranean	29.95	760.7	74	23.3	56	WNW			2		1					1	WNW	Blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.02	762.5	63	17.2		SSE			2		8	N						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	30.02	762.5	65	18.3		NE			1		10							Raining	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	29.75	755.9	82.5	28.1	76	SE			2		1					1	E	Blue sky	Capt. A. Carpenter.
H. M. S. Midge, N. 26° 20′, E. 120° 48′	29.83	757.7				NNE			1		7	NE				3	NE	Misty	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. N. S. Modeste, S. 21° 10′, E. 68° 45′	30.06	763.5	76	24.4	76	ENE			3		2	ENE				3	ENE	D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Tunis, Tunis, Africa	29.90	759.4	72	22.2	95	NNW			4		3	NNW						D. clouds	Capt. G. C. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, N. 10° 33′, E. 110° 20′			81.5	27.5		SW			1–2		4	SW				3	SW	D. clouds	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.80	756.9	53	11.7	82	NNW			3		10	NNW						Overcast	Capt. E. B. Drummond.
H. M. S. Orontes, S. 23° 33′, E. 11° 44′ *†	30.06	763.5	65.5	19.2	77	SSE			3–4		0					4	SSE	Misty	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.84	757.9	79.5	26.4	97	NW			2		7					1	Con.	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Puget.
H. M. S. Phœnix, N. 11° 45′, W. 68° 18′	29.91	759.7	81	27.2	82	E			2–3		6	E				1	E	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A.C.Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.79	756.7	80	26.7		SW			3		10							D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 48° 26′, W. 123° 27′	29.98	761.5	50	10.0		Calm			0		8	S						D. clouds	Capt. V. B. Oriebar.
H. M. S. Ruby, S. 6° 27′, E. 39° 33′	29.99	761.7	79.3	26.3	78	SW			2		1					Sm'h		Blue sky	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, N. 8° 08′, E. 59° 50′	29.47	748.5	80	26.7	82	ESE			4		1					4	SSE	Blue sky	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 36° 11′, W. 14° 18′	30.29	769.4	66.5	19.2	90	N			1		10					2	NNW	Drizzling	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 19° 20′, W. 152° 21′	30.06	763.5	74	23.3	85	NE			5		9					3	NE	Showery	Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, S. 27° 05′, W. 70° 57′	30.04	763.0	62	16.7	94	NNE			2		10	NE				3	N	Overcast	Capt. A. H. Markham.
H. M. S. Turquoise, S. 51° 00′, W. 74° 12′	29.95	760.7	25	— 3.9	100	NE			1		10							Overcast	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.			80	26.7		N			1		4							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	30.02	762.5	55	12.8	87	S			3–5		9	SE						Showery	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Shat el Arab River, Turkey	29.59	751.6	90.5	32.5	70	NNW			4–5									Squally	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candido dos Reis, Comd't.
Quanza, Santiago, Cape Verd I'ds.	30.12	765.0	81.1	27.3	69	NE			3		3		NE			3	NE	D. clouds.	Carlos M. da Silva Costa, Com d't
Rio Lima																			S. C. da Silva Costa, Comd't.
Sado, Loando, Africa	30.02	762.6	72.9	22.7	78	NNW			2		6					1		D. clouds	G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.81	757.2	79.9	26.6	85	SSE			3		5		SSE					D. clouds	P. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga, N. 47° 14′, W. 8° 21′	30.38	771.6	59.9	15.5	59	NE			3		4							D. clouds	Capt. M. von Krusenstierna.
H. M. Frigate Vanadis																			Ccm. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.06	753.5	80	26.7	91	SW	14	6.3			10			0.26	6.6			Cloudy	
N. Yard, Portsmouth, N. H	29.95	760.7	50	10.0	?	Calm	0	0		10c	0			0.1	3.			Rainy	
Naval Hospital, Yokahama, Japan	29.92	760.0	63.5	17.5	97	E			2		10		E	0.04	1.0			Drizzling	
Adams Panama, Panama	29.70	754.4	80	26.7	91	WNW			3		8		NW			Sm'h		Cloudy	
Alaska, Callao, Peru	29.91	759.7	65	18.3	94	Calm			0		10		SE	0	0	Sm'h		Hazy	
Alert, N. 29° 44′, E. 141° 05′	29.98	761.5	74	23.3	75	NNE			3		2		NNE			Long	NNE	Clear	
Alliance, Norfolk, Va	29.69	754.1	73	22.8	90	SW			1		10		WSW	He	avy			Cloudy	
Ashuelot, Kobe, Japan	30.02	762.5	70	21.1	100	SW			1		10		Calm					Threatening	
Colorado, New York, N. Y	29.93	760.2	61	16.1	94	N	2	0.9			10			0.01	0.3			Hazy	
Constitution, N. 36° 59′, W. 76° 10	29.78	756.4	72	22.2	80	SSW			6		8		SW					Cloudy	
Franklin, Norfolk, Va	29.76	755.9	74	23.3	86	SSW	12	5.4			8		SW	0.9	2.3			Fair	
Galena, Cadiz, Spain	30.03	762.7	68	20.0	74	WNW			2		2					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	30.06	763.5	69	20.6	80	SW	1.2	0.5			5		SW	0	0			Fair	
Jamestown, Sitka, Alaska	29.73	755.1	49	9.4	93	SSW			2		10			0	0			Cloudy	
Kearsarge, Norfolk, Va	29.85	758.2	73	22.8	85	SSW			2		5		SSW			Sm'h		Fair	
Lackawanna, S. 16° 44′, W. 147° 54′	30.21	767.3	80	26.7	96	SSE			4-5		8		NE			Sm'h	E	Fair	
Marion, Montevideo, Uruguay	30.03	762.7	61	16.1	94	ENE			3		10		Calm			Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	29.82	757.4	52	11.1	93	NE			3		10		NE					Raining	
Minnesota, Newport, R. I	29.94	760.5	61	16.1	94	Calm			0		10					Sm'h		Threatening	
Monocacy, Yokohama, Japan	30.14	765.5	65	18.3	89	E			1		10		Calm					Drizzling	
New Hampshire, Norfolk, Va	29.92	760.0	73	22.8	85	S	7	3.1			8		SW	0.22	5.6			Cloudy	
Nipsic, N. 39° 05′, W. 12° 22′	30.24	768.1	63	17.2	67	ENE			5		2		NE			Long	NE	Squally	
Onward, Callao, Peru	29.97	761.2	65	18.3	94	SE			3		10		NW			Long	W	Misty	
Palos, Nagasaki, Japan	30.00	762.0	72	22.2	100	SE			1		10							Rainy	
Passaic, Washington, D. C	29.93	760.2	58	14.4	94	NE			2		10							Cloudy	
Pensacola, Mare Isl'd, Cal	30.04	763.0	55	12.8	87	Calm			0		0			0	0	Sm'h		Clear	
Portsmouth, N. 39° —′, W. 73° —′	29.90	759.4	55	12.8	100	NE			4		10		NE			Mod.	E		
Powhatan, Hampton Roads, Va	29.87	758.7	74	23.3	68	SSE			3		2		S					Fair	
Quinnebaug, N. 34° 53′, W. 70° 53′	30.00	762.0	75	23.9	86	WSW			5		5		WSW			H'vy	W	Fair	
Ranger, Mazatlan, Mexico	29.86	758.4	80	26.7	87	E			1		5		Calm	0	0	Sm'h		Fair	
Richmond, Nagasaki, Japan	29.98	761.5	72	22.2	95	SW			1		10			0.37	9.4			Raining	
Saratoga, N. 39° 40′, W. 73° 13′	29.84	757.9	59	15.0	100	NE			3		10			Li	ght	Mod.	SW	Overcast	
Shenandoah, Montevideo, Uruguay	30.19	766.8	61	16.1	94	NE			3		10					Sm'h		Cloudy	
St. Louis, League Island, Pa	29.45	748.0	64	17.8	83	NE	13	5.8			10		NE	0.08	2.0			Cloudy	
Swatara, Shangbai, China	29.84	757.9	76	24.4	86	E			2		2		E					D. clouds	
Tennessee, New York, N. Y	29.91	759.7	63	17.2	89	E	9	4.0			10		E	0.46	11.7	Sm'h		Foggy	
Ticonderoga, S. 54° 27′, W. 56° 10′	30.07	763.8	40	4.4	91	WNW			5		10		WNW	0	0	Mod.	WNW	Cloudy	
Trenton, N. 42° 19′, E. 4° 16′	29.81	757.2	60	15.6	71	NW			7-9		5			0	0	R'gh	NW	Squally	
Vandalia, Navy Yard, N. Y	29.84	757.9	62	16.7	94	NNE			1		10		Calm					Cloudy	
Wabash, Boston, Massachusetts	29.99	761.7	67	19.4	74	N	7	3.1			10		SW	0.04	1.0			Hazy	
Wachusetts, N. Yard, Mare I'd, Cal	30.02	762.5	58	14.4	82	WSW			2		0			0	0			Clear	
Yantic, N. 21° 30′, W. 88° 00′	29.85	758.2	80	26.7	95	E			3		5		ESE			Sm'h		Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 34° 17′, W. 74° 46′	29.97	761.2	77.5	25.3	65	W			6		10							Thunder-storm	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero																			W. N. Lailey.
City of Agra, N. 19° 59′, W. 21° 16′	30.12	765.0	71.5	21.9	85	NE			6		10							Misty	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 43° 48′, W. 13° 30′	30.40	772.1	61.8	16.6	66	ENE			4		3							Blue sky	Capt. Jas. Buchan.
Denbighshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 14° 40′, W. 33° 35′	30.12	765.0	78.0	25.6		E			4		3							D. clouds	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Eryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R. N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Naiad, N. 50° 59′, E. 1° 04′	30.20	767.1	49.5	9.7	86	NNW			6		10							Showery	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 26° 26′, W. 39° 10′	30.28	769.1	76.1	24.5	68	NE			4		5							Showery	Capt. M. Parry.
Sierra Estrella, N. 33° 27′, W. 19° 30′	30.28	769.1	65.0	18.9	85	NNE			4		7							Misty	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 31° 30′, E. 31° 47′	29.80	756.9	75.5	24.2	91	N			3		0							Blue sky	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, Montreal, Canada	30.13	765.3				NNE			3		10		N			Sm'h		Cloudy	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia, ‡ N. 40° 30′, W. 69° 13′	29.96	761.0	51	10.6		E			3		10			Continuous		Mod.	SE	Rainy	Capt. W. H. P. Hains.
S. S. Scythia, N. 47° 22′, W. 35° 43′	30.10	764.5	58	14.4	76	W			3		1		W	0	0	Long	W	Clear	Capt. M. Murphy.
WHITE STAR LINE. *Jemay, Imrie & Co.*																			
S. S. Adriatic, N. 51° 00′, W. 12° 44′ †	30.33	770.4	55	12.8	100	Var.			2		5		S			Sm'h		Cloudy	Capt. J. W. Jennings.
S. S. Baltic, ‡ N. 51° 24′, W. 9° 32′	30.36	771.1	57	13.9	63	Var.			1-2		4		W	0	0	Sm'h		D. clouds	Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 43° 24′, W. 52° 14′ †	29.56?	750.8?	48	8.9	?	SSE			6		10		SW	4h'rs	mod.	H'vy	SW	Overcast	Capt. Benj. Gleadell.
S. S. Germanic																			Capt. Ch. W. Kennedy
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann, N. 52° 34′, E. 3° 36′	30.02	762.5	55.4	13.0		N			6		5			0	0	H'vy	N	Fine	Capt. H. Baur.
S. S. Hohenzollern, ‡ N. 44° 42′, W. 35° 53′	30.35	770.9	63.5	17.5		SE			3		2		S	0	0	Mod.	wsw	Fair	
S. S. Köln, N. 49° 58′, W. 4° 28′	30.33	770.4	61.0	16.1	63	NNE			4		5		NE	0	0	Sm'h	NE	Fair	Capt. Th. Jüngst.
S. S. Leipzig, N. 39° 55′, W. 65° 34′	29.91	759.7				NW			3		10		NW	4 hours		Mod.	SW	Light rain	Capt. F. Pfeiffer.
S. S. Strassburg, N. 44° 03′, W. 44° 15′	30.24	768.1	60.8	16.0		S			4		8		S	0	0	Sm'h	S	Cloudy	Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper.	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England	30.23	767.8	53	11.7	93	WNW			3		2		WNW					Clear	Capt. J. W. Shackford
S. S. Indiana, N. 39° 35′, W. 71° 54′ †	29.83	757.7	54	12.2	93	ENE			2		8		E	Light		Mod.	E	Foggy	Capt. R. W. Sargent.
S. S. Ohio, N. 39° 54′, W. 54° 00′ *†	30.11	764.8	71	21.7	95	SW			6		5		SW	0	0	L'ge	SW	Cloudy	W. Shackford, Chief C
S. S. Pennsylvania, Philadelphia, Pa *†	29.83	757.7	65	18.3	94	E			5		10		E					Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 29° 21′, W. 116° 51′ †	30.00	762.0	64	17.8	83	NNW			2		0			0	0	G'tl	WNW	Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO, *Leland Stanford, President.*																			
S. S. Belgic, San Francisco, Cal †	30.05	763.3	54	12.2	87	W			2		2			0	0	Sm'h		Clear	Capt. H. Davison.
S. S. Gaelic, Yokohama, Japan *†	29.93	760.2	68	20.0	90	E			1		10							Raining	Capt. W. H. Kidley.
S. S. Oceanic, Hong Kong, China	30.07	763.8	81	27.2	70	E			4		5		SSE					Fine	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon †	30.03	762.7	53.0	11.7	?	E			1		10		SSW					Rainy	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, N. 33° 42′, W. 118° 47′ †	29.94	760.5	56	13.3	81	E			1		0			0	0	Sm'h		Clear	Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, Port Townsend, Wash. T. †	30.02	762.5	52	11.1	86	Calm			0		10							Cloudy	C. E. Lyons, 1st Offic
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, N. 35° 36′, W. 121° 12′ †	29.98	761.5	52	11.1	93	E			2		10		NW			Mod.	WNW	Hazy	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal †	29.99	761.7	51	10.6	93	Calm			0		5		W					Foggy	Capt. G. Debney.
S. S. Victoria, Nanaimo, Vancouver Id. †	29.91	759.7	50	10.0	100	SW			2		8					Sm'h		Light rain	Capt. H. M. Haywa
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 26° 29′, W. 149° 38′	30.21	767.3	69	20.6	80	NE			3		8		NE			Mod.	ENE	Showery	A. Bannerman, 2d Off
S. S. City of New York, Sydney, N. S. W †	29.99	761.7	56	13.3	100	SW			6		0							Clear	Wm. H. Hawes, 2d Off
S. S. City of Panama, Panama, Panama †	29.69	754.1	79	25.1	91	NW			3	0	8		NE	4 hours		Sm'h		Cloudy	Capt. D. S. Austin.
S. S. City of Peking, N. 44° 12′, W. 140° 45′ †	29.94	760.5	55	12.8	93	WSW			5		10		SW	0	0	Sm'll	SW	Misty	Capt. G. G. Berry.
S. S. City of Sidney, N. 28° 23′, W. 144° 06′ *†	30.26	768.6	66	18.9	64	ENE			4		5		NE	0	0	Mod.	ENE	Fair	Capt. H. C. Dearborn
S. S. City of Tokio, N. 35° 20′, E. 143° 49′ †	30.19	766.8	69	20.6	79	N			2		2		NW			Mod.	E	Clear	A. L. Ritchie, 2d Off
S. S. Colima, N. 20° 11′, W. 105° 46′ †	29.95	760.7	80	26.7	91	NNW			3		2		NW	0.02	0.5	H'vy	S	Fair	Capt. R. R. Searle.
S. S. Granada, N. 22° 55′, W. 108° 45′ †	29.92	760.0	79	26 1	82	Calm			0		2		Calm	0	0	H'vy	SSE	Clear	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. Wales	30.22	767.6	66	18.9	68	S			6		10		S					Cloudy	
RED STAR LINE. *Jas. A. Wright, President.*																			Capt. Sam'l Jackson
S. S. Belgenland																			
S. S. Nederland, ‡ N. 49° 09′, W. 25° 38′ †	30.32	770.1	61	16.1	94	Calm			0		10			0	0	Sm'h		Foggy	A. Fedderson, 2d Off
S. S. Rhyniand, New Jersey, N. J †	30.03	762.7	63	17.2	95	NE			4		10		NE	0.1	3.			Misty	Capt. W. Geo. Rand
S. S. Vaderland																			T. H. Tobson, Chief C
MISCELLANEOUS.																			Capt. A. Mehaffey.
Sch'r Abby K. Bentley																			
Sch'r Addie Fuller, Fall River, Mass	29.89	759.2	60	15.6	88	Calm	0	0			10n							Light rain	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle ‡																			Capt B. F. Woodbur
Brigantine George, Arroyo, Porto Rica †	30.06	763.5	83	28.3		E			5		10			Heavy		Sm'h		Cloudy	Capt. W. H. Champl
U. S. F. C. S. Fish Hawk, Washington, D. C †	29.83	757.7	69	20.6	95	NE	2	0.9			10n			0.10	2.5			Cloudy	
Bark Sunbeam, Lisbon, Portugal †	30.12	765.0	75	23.9	87	N			6		0			0	0			Clear	Capt. Jos. Hand.

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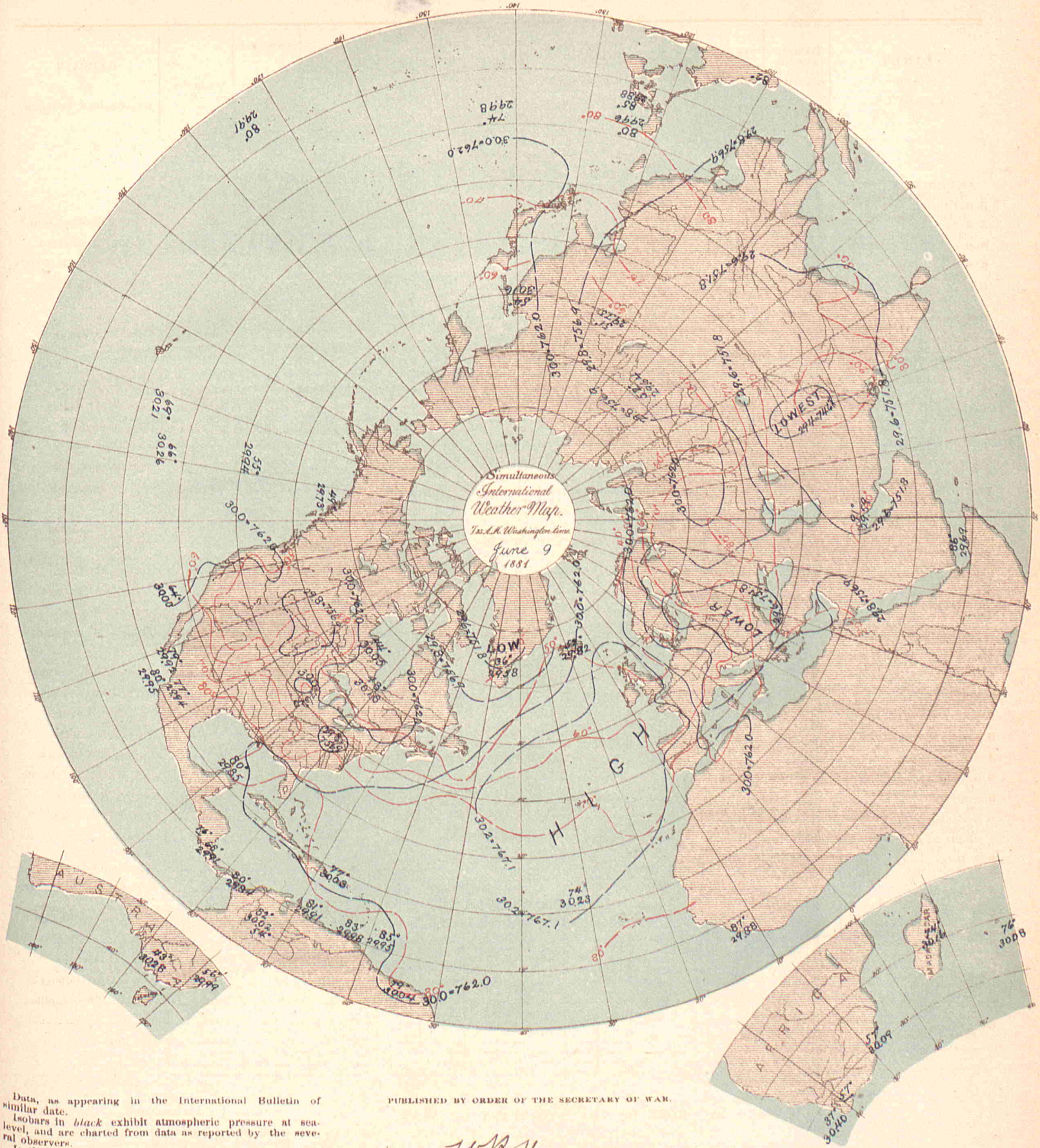
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 10, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER.				TEMPERATURE OF THE AIR.		REL. HUM.	WIND.				CLOUDS.				RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Corrected for instrum'tal error and temperature.		Reduced to sea-level.					Direction.	Velocity.		Force	Amount and kind.		Direction.					
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours‡			30.06	763.5	71.1	21.7	84	E			5		0			0	0	Clear	Raynard.
Algiers‡			30.16	766.0	67.6	19.8	44	WNW			4		3			0	0	Pretty fair.	Nicolas.
La Calle‡			30.12	765.1	62.2	16.8	72	NW			4		6			0.472	12.0	Cloudy	Fonfréde.
Tunis‡			30.08	764.0															Jacques.
Sfax‡			30.14	765.5															Gau.
Saida‡			30.13	765.2	70.2	21.2	40	N			5		2			0	0	Fair	Dumas.
Tebessa‡			30.11	764.8	66.2	19.0	26	W			4		7			0	0	Cloudy	Watrin.
Geriville‡					69.8	21.0	37	N			1		0			0	0	Clear	Lonchamp.
Laghouat‡			30.12	765.1	74.5	23.6	38	N			4		0			0	0	Clear	Herbin.
Biskra‡			30.15	765.7	80.2	26.8	69	NW			2		0			0	0	Clear	Baudassé.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.22	767.6	30.31	769.9	45.6	7.6	95	ESE	2	0.9			0			0	0	Fine	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.34	745.2	29.88	759.0	60.6	15.9	76	E			3		8			0.146	3.7	Raining	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.97	735.8	29.73	755.2	51.1	10.6	72	W	15.0	6.7			10			0.063	1.6	Raining	Dr. Wierzbicki.
Eperies	28.80	731.4	29.66	753.3	57.6	14.2	54	N			3		10ks		S	0	0		Julius Mikolik.
Gratz‡	28.67	728.1	29.91	759.6	56.5	13.6	60	WSW			4		8			0	0		Andreas Rospini.
Hermannstadt	28.27	718.1	29.67	753.6	59.5	15.3	59	NW			4		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.63	727.2	29.98	761.6	48.4	9.1	66	W			3		10			0.130	3.3		The Staff.
Lemberg	28.63	727.2	29.60	751.8	54.7	12.6	70	NW			3		10			0.012	0.3		Dr. T. Stanecki.
Pola	29.77	756.1	29.88	758.9	64.6	18.1	51	ENE			2		5			0	0		I. R. Hydrographic Office.
Szathmar	29.32	744.8	29.78	756.5	56.1	13.4	75	SW			2		10			0.217	5.5		Beicht Peter, S. J.
Szegedin	29.51	749.6	29.79	756.7	55.4	13.0	80	NW			3		10			0.083	2.1		Karl Stancel.
Trieste	29.80	756.8	29.90	759.4	63.7	17.6	43	NW			1		7			0.091	2.3		Secco.
Vienna	29.19	741.5	29.91	759.7	52.5	11.4	52	NW			4		9			0.008	0.2		I. R. Central Met. Obs'y.
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter Printed June 9, 1882.

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

BRITISH SERIES.

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

Aberdeen	30.02	762.5	30.12	765.0	47.4	8.6	64	ESE	15	6.7			6			0	0	D. clouds	W. Boswell.
Armagh, Observatory	29.81	757.2	30.05	763.3	50.8	10.4	95	S	3	1.3			10					Drizzling	S. Call.
Bidston, Liverpool Obs'y			30.12	765.0	51.9	11.1	56	SE	8	3.6			10					Overcast	John Hartnup.
Bolton, Sharples	29.59	751.6	30.13	765.3	49.3	9.6	62	SW	6	2.7			10					Gloomy	Thomas Mackereth.
Bradford, Yorkshire	29.73	755.1	30.12	765.0	51.3	10.7	65	SW			1		9			0	0	Overcast	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.94	760.5	29.97	761.2	84	28.9	71	NE			2		3					D. clouds	Corpl. J. Surgener, A.H.C.
Cardington																			John McLaren.
Chatham, School M. E.	30.10	764.5	30.23	767.8	54.1	12.3	56	N			3		6					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.98	761.5	30.21	767.3	52.2	11.2	93	SSW			2		10					Raining	The Staff.
Fort Napier, Natal	28.06	712.7	30.27	768.8	58.1	14.5	37	SE			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.88	758.9	86	30.0	84	W			1		2					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			30.00	762.0	58	14.4	82	NW			2		10					Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.10	764.5	30.15	765.8	71.0	21.7	85	E			4		4					D. clouds	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.87	758.7	30.08	764.0	51.3	10.7	69	SE			2		10					Overcast	Harry Urquhart.
Greenwich, Royal Obs'y	30.02	762.5	30.19	766.8	55.3	12.9	50	N			1		9					D. clouds	The Staff.
Guernsey	30.00	762.0	30.22	767.6	53.5	11.9	64	WSW			2		8					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.16	766.1	30.19	766.8	55.0	12.8	38	NNW	6	2.7			6					D. clouds	The Staff.
Leicester, Museum	29.90	759.4	30.16	766.1	54.0	12.2	42	NW			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.90	759.4	29.98	761.5	69	20.6	56	NW			3		7					D. clouds	F. S. Vine, A. H. C.
Nassau, Bahamas	29.98	761.5	30.02	762.5	87.8	31.0	71	E			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.64	752.8	30.17	766.3	53.0	11.7	62	SW			2		10					Overcast	John Mac Email.
Oxford, Radcliffe Obs'y	29.96	761.0	30.19	766.8	54.2	12.3	43	W			1		10					Overcast	The Staff.
Plymouth	30.14	765.5	30.21	767.3	53.1	11.7	88	SW			2		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			30.15	765.8	46	7.8	65	NNE	15	6.7			9					D. clouds	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.69	754.1	29.75	755.6	79.6	26.4	56	SW			1		1					Hazy	Serg't W. H. Lyne.
Sheffield	29.87	758.7	30.15	765.8	58.0	14.4	69	W			1		7			0.07	1.8	Overcast	W. F. Cooper.
Silloth Rectory	30.06	763.5	30.10	764.5	55.4	13.0	62	Calm			0		9			0.077	2.0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.14	765.5	52.0	11.1	60	S	6	2.7			10					Overcast	Rev. S. J. Perry.
Stratfield Turgiss	29.96	761.0	30.18	766.6	54.9	12.7	43	SW			2		10					D. clouds	Rev. C. H. Griffiths, F. M. S
Truro, Royal Institution	30.13	765.3	30.16	766.1	56	13.3	94	W			5		10					Raining	W. Newcombe.
Valencia, Observatory	30.12	765.0	30.15	765.8	55.3	12.9	93	NW	19	8.5			10					Raining	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B					58.0	14.4		S	3	1.3		4cs	0			0	0	D. clouds	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.28	769.1	30.33	770.4	53	11.7	61	SW	4	1.8		2cs	0			0	0	Fair	H. J. Cundall, C. E.
Chatham, N. B.*	30.25	768.3	30.32	770.1	51	10.6	72	SE	4	1.8		0	0			0	0	Clear	G. A. Blair.
Chicontimi, Quebec					48.5	9.2						0	0			0	0	Blue sky	Rev. V. A. Huart.
Cornwall, Ontario	29.94	760.5	30.13	765.3	52.1	11.2	80	E			1	0	0			0	0	Blue sky	James Smith, M. A
Dalhousie, N. B	30.24	768.1	30.28	769.1	50.3	10.2		W			1	0	0			0	0	Blue sky	H. A. Johnson.
Father Point, Quebec*	30.22	767.6	30.25	768.3	55	12.8	74	NW	2	0.9		0	Hz			0	0	Hazy	J. McWilliams.
Fort Garry, Manitoba*	28.96	735.6	29.75	755.6	64	17.8	94	SW	6	2.7		2cs	2s	SW	SW	0.310	7.9	Fair	James Stewart.
Fredericton, N. B	30.28	769.1	30.34	770.6	50.0	10.0	72	W	1	0.4		0	Sk			0	0	Clear	Prof. Harrison.
Granton, Ontario	29.06	738.1	30.17	766.3	50.0	10.0	86	Calm			0	0	0			0	0	Clear	James Grant.
Halifax, N. S.*	30.22	767.6	30.35	770.9	51	10.6	72	E	3	1.3		2cs	0			0	0	Fair	A. Allison.
Hamilton, Ontario	29.74	755.4	30.13	765.3	56.9	13.8	74	N			2	2ck	0			0	0	Clear	Geo. Dickson, B. A.
Kingston, Ontario*	29.78	756.4	30.12	765.0	57	13.9	71	N	7	3.1		5c	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S	30.28	769.1	30.32	770.1	58.0	14.4	42	S			2	3ck	0	S		0	0	Fair	C. H. Rigby.
Montreal, Quebec*	29.98	761.5	30.18	766.6	55	12.8	63	E	4	1.8		5c	0			0	0	Fair	C. H. McLeod, C. E.
Moose Factory, Ontario	29.98	761.5	30.02	762.5	57.5	14.2	60	SW			1		10n			0	0	Raining	J. R. Nuson.
Parry Sound, Ontario*	29.50	749.3	30.19	766.8	57	13.9	63	N	2	0.9		0	0			0	0	Clear	Rev. R. Moseley.
Peterboro, Ontario	29.40	746.7	30.15	765.8	56.4	13.6	71	E			1	0	0			0	0	Hazy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.42	747.3	30.11	764.8	54	12.2	80	NE	12	5.4		5c	0	N		0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.46	748.3	30.11	764.8	51	10.6	74	N	8	3.6		2ck	0	W		0	0	Fair	M. Payne.
Quebec, Quebec*	29.94	760.5	30.27	768.8	54	12.2	67	NE			1	0	2s		NE	0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.74	755.4	30.21	767.3	47	8.3	77	NW	2	0.9		0	0			0	0	Clear	W. H. McIntyre.
Saugeen, Ontario*	29.46	748.3	30.17	766.3	52	11.1	72	NE	1	0.4		0	Hz			0	0	Hazy	K. Stewart.
St. Andrews, N. B	30.26	768.6	30.31	769.9	52	11.1	73	SE	1	0.4		0	Hz			0	0	Clear	
St. John, N. B	30.17	766.3	30.33	770.4	56.0	13.3	63	SE	1	0.4		4cs	0			0	0	Blue sky	G. Murdock, C. E.
Stratford, Ontario	28.86	733.0	30.14	765.5	50.7	10.4	68	Calm	0	0		0	0			0	0	Blue sky	C. J. Macgregor, M. A.
Sydney, C. B*	30.29	769.4	30.33	770.4	58	14.4	56	SW	6	2.7		2c	0	W		0	0	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.77	756.1	30.15	765.8	55	12.8	61	N	6	2.7		2cs	Hz			0	0	Fair	Magnetic Observatory
Windsor, N. S	30.22	767.5	30.32	770.1	48.5	9.2	74					0	7ks			0	0	Fair	
Woodstock, Ontario	29.07	738.4	30.12	765.0	56.0	13.3	62	N	6	2.7		0	0			0	0	Blue sky	Prof. Wolverton.
Yarmouth, N. S.*	30.21	767.3	30.28	769.1	49	9.4	66	E	6	2.7		8k	2s	W	SE	0	0	Cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	30.04	763.0	30.29	769.4	58	14.4	70	SW	3	1.3		0	0			0.49	12.4	Fair	John Delany.
St. Pierre, N. F			30.19	766.8	46.4	8.0		NW			3					0	0		N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Cape St. Francis Lt. House	30.44	773.2			61.2	16.2	66	NNE	10.6	4.7			0			0.080	2.0	Blue sky	John Duthie.
Cape Town, C. G. H. Obs'y	30.31	769.9	30.35	770.9	36.2	2.3		SW	1.9	0.8		0	0			0	0		The Staff, for D. Gill.
Worcester*†	29.33	745.0			63.3	17.4	45	ESE			1	0	0			0	0	Fine	C. Stokes.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.63	752.6	29.65	753.2	75.2	24.0	86	SSE	8.1	3.6		7c	0			0	0	Very cloudy	M. Marc Dechevrens, S.J.

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

COSTA RICA SERIES.

By authority of the MINISTER OF FOREIGN AFFAIRS.

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

San José	26.17	664.7	29.99	751.7	68.4	20.2	93	NE			2	9s	1d			Inap.	Inap.	Cloudy	Amand Maison.

DANISH SERIES.

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

Copenhagen	29.68	753.8	29.72	755.0	49.1	9.5	85	NW	22	10			10						Oversergent Fischer.
Fanöe	29.84	758.0	29.86	758.5	50.4	10.2	71	NW			6		10						Overloerer Lauridsen.
Godthaab, Greenland	29.49	749.1	29.56	750.9	37.8	3.2	80	SW			4		9						S. Kleinschmidt.
Stykkisholm, Iceland	29.93	760.3	29.98	761.4	50.7	10.4		S			7		10					Raining	A. O. Thorlacius.
Thorshavn	30.23	767.9	30.27	768.8	45.9	7.7	60	E	11	5			3						Overloerer Bergh.
Vestervig	29.73	755.1	29.82	757.5	49.3	9.6	64	NW			6		3						Loearer Oesterbol.

FRENCH SERIES.

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

Agen, Normal School	29.65	753.1	30.30	769.7	56.8	13.8	42	NNW			2	o	nk		NE	0.028	0.7		M. Labroue, Director.
Alençon Normal School	29.69	754.2	30.24	768.2	58.6	14.8	82	SW			2		10kn		W	c	o	Covered	M. Nicot, Director.
Arras, Engineer School	29.92	759.9	30.18	766.5	53.2	11.8	43	NW			2		9k						M. Klein, Commandant.
Avignon, Normal School	29.95	760.7	30.03	762.7	64.0	17.8	33	N			6		o			o	o	Clear.	M. Giraud, Director.
Bar-sur-Seine	29.66	753.4	30.22	767.7	52.9	11.6	56	NE			2	o	8kn		NNE	o	o	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.91	759.6	30.17	766.4	53.4	11.9	62	W			1		8		NW	0.071	1.8	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.29	744.0	30.14	765.5	53.6	12	54	S			1	o	kn		S	o	o		M. Gobin, Director.
Bordeaux, Observatory	30.04	763.0	30.30	769.6	60.6	15.9	28	NE			3		5	NW	WSW	o	o	Cloudy	M. Rayet, Director.
Bourges, Normal School	29.80	756.8	30.35	770.9	51.8	11	63	W			1	o	kn		W	0.004	0.1		M. Postel, Director.
Brest, Naval Observatory	30.06	763.5	30.39	769.7	60.4	15.8	66	SW			1		10		SW			Raining	M. de Rermaree, Dir.
Caen, Normal School	30.10	764.6	30.18	766.5	58.1	14.5	82	W			1		8		NW	0.055	1.4	Very cloudy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.90	759.4	30.21	767.2	56.3	13.5	75	N			1		8		E	o	o	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.65	753.0	30.15	765.9	54.7	12.6	52	SSW			1					o	o		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.83	732.3	30.21	767.2	50.7	10.4	48	N			2		8			0.106	2.7	¾ covered	M. Allnard, Director.
Cluny, Normal School	29.31	744.5	30.16	766.1	56.1	13.4	63	N			2		10		N	o	o	Covered	M. de Villemontée, Dir.
Commercy, Normal School	29.31	744.4	30.18	766.6	48.9	9.4	64	W			3		8kn	W	W	o	o	Very cloudy	Dr. Coulet, Director.
Gap, Normal School	27.48	698.0	29.97	761.1	59.9	15.5	29	W			4	o	k		N	o	o		M. Jeangirard, Director.
Grénsque, du. Rhone	28.87	733.2	30.01	762.2	63.9	17.7	32	NW			3		2		SW	o	o	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.30	744.2	30.08	763.9	52.7	11.5	62	NNW			4		10kn			0.04	1.	Sprinkling	M. Ablard, Director.
Guéret, Normal School	28.67	728.2	30.30	769.6	42.8	6	80	N			1	o	n		S	0.579	14.7		M. Rivoire, Director.
Lamballe, Normal School	30.02	762.5	30.30	769.5	54.7	12.6	67	NNW			1				NNW	o	o		M. Ollitrault, Director.
Lescar, Normal School	29.70	754.3	30.37	771.5	57.6	14.2	45	NW			3	o	s		E	1.18	30.		M. Chauvin, Director.
Lorient, Naval Observatory	30.24	768.0	30.34	770.6	59.0	15.0	73	WNW			3		10	Calm	WNW	0.236	6.0	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.11	739.3	30.17	766.4	54.5	12.5	50	N			2		8		N	o	o	Very cloudy	M. André, Director.
Mans, Normal School	30.02	762.6	30.34	770.5	55.0	12.8	61	W			1		8		W	o	o	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.66	753.4	29.93	760.2	67.3	19.6	28	NW			4		3		NNE;NW	0.008	0.2		M. Stephan, Director.
Montlouis l'Instituteur	24.90	632.4	30.13	765.1	30.3	2.4	61	N	9.4	4.2			6		NW	0.295	7.5	Snowing	M. Cave, for Dr. Fines.
Montpellier, Normal School	29.98	761.4	30.08	764.0	63.3	17.4	49	N			6		5		N	o	o	Cloudy	M. P. Galzin, Director.
Nancy, Normal School	29.41	747.0	30.19	766.7	50.0	10	37	W			3	ck	5n		NW	o	o	Cloudy	M. Hasse.
Nantes, Observatory	30.14	765.5	30.30	769.6	59.0	15	47	WSW			1-2		9kn	NW	NW	o	o		M. Larocque, Director.
Nice	29.88	758.9	29.91	759.8	62.6	17.0	61	W			3		5	W	W	0.020	0.5	Light rain	Capt. Boissière, Director.
Perpignan, Observatory	30.05	763.2	30.15	765.8	58.3	14.6	30	N	29.8	13.3			1		NW	o	o		Dr. Fines.
Pic-du-Midi, Plantade	22.58	573.5			25.0	—3.9							10		NW	2.236	56.8	Snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.03	737.3	30.10	764.4	57.2	14	34	NE			4		1	NE	NE	o	o	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.24	641.1			30.2	—1.0	100	NNW			4		10			0.094	2.4	Snowing	M. Allnard, Director.
Rochefort, Naval Obs'y	30.30	769.5	30.33	770.3	64.6	18.1	90	NW			4		8	NNE	N	0.024	0.6	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.08	763.9	30.29	769.3	62.2	16.8	50	N			2		0			o	o	Clear	M. Mouillot, Director.
Rodez, Normal School	28.00	711.2	30.18	766.5	48.4	9.1	83	NW			1		0			0.067	1.7	Covered	M. Richard, Director.
Rouen, Normal School	30.14	765.5	30.12	767.7	52.2	11.2	73	SSE			3		10			o	o	Covered	M. Platrier, Director.
Saint Lô, Normal School	30.10	764.4	30.25	768.4	52.2	11.2	68	W			1		10		N	o	o	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.07	763.7	30.23	767.9	55.0	12.8	46	W			1		5		SW	o	o		M. Renou, Director.
Toulouse, Observatory	29.58	751.4	30.31	769.9	55.4	13.0	57	NW			1		5		NW	o	o		M. Ballland, Director.
Tours	30.06	763.6	30.26	768.6	54.0	12.2	69	W			3		10			o	o	Covered	M. de Tastes.
Versailles, Observatory	29.73	755.2	30.22	767.7	52.9	11.6	54	NW			1		10		NNW	0.031	0.8	Covered	Dr. A. Bérigny, Director.
SUB-SERIES.																o	o		
Paris, Montsouris Obs'y	29.95	760.8	30.24	768.2	54.9	12.7	50	NW			2		9		WNW	Inap.	Inap.		M. Marié Dvy, Director.

GERMAN SERIES.

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

Bamberg	29.16	740.6	30.02	762.5	52.2	11.2	54	NW			4	o	7k		NW	o	o		Prof. Dr. Hoh.
Berlin	29.66	753.3	29.83	757.7	53.1	11.7	50	NW			7		10			0.083	2.1		Prof. Dr. Arndt.
Breslau	29.27	743.5	29.80	756.9	49.3	9.6	76	WNW			4		10			0.016	0.4	Raining	Royal University Obs'y.
Carlsruhe	29.69	754.1	30.12	765.1	54.0	12.2	67	NW			1		10		N	o	o		Albert Senz.
Cassel	29.27	743.4	29.98	761.5	51.1	10.6	67	W			5		6	NW		0.010	0.3		Dr. H. Möhl.
Frankfort on the Main	29.73	755.2	30.10	764.4	56.3	13.5	33	NW			1		8			0.004	0.1		Physical Society.
Friedrichshafen	28.65	727.7	30.09	764.3	52.9	11.6	64	SSW			3		7	NW		o	o		Wilhelm, Chief Tel.
Hamburg	29.84	757.8	29.91	759.6	51.1	10.6	71	WNW			6		10			0.055	1.4		Dr. R. Kleeman.
Kiel	29.83	757.7	29.85	758.1	53.2	11.8	67	W			5		10			Inap.	Inap.		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.52	749.8	29.94	760.5	52.9	11.6	48	WNW			3		9	W		0.035	0.9		Prof. Dr. Bruhns.
Magdeburg	29.71	754.6	29.90	759.4	53.6	12.0	51	WNW			7		9ks		WNW	0.031	0.8		Dr. Assmann.
Memel	29.37	746.0	29.41	747.1	64.4	18.0	74	NW			3		9k						Reinbrecht & Issermann.
Munich	28.22	716.9	30.09	764.3	50.4	10.2	48	NW			2		6	N		0.118	3.0		Central Station.
Neufahrwasser	29.49	749.0	29.50	749.4	48.9	9.4	87	NW			4		10			0.382	9.7	Heavy rain	A. Lothes.
Neustadt, Palatinate	29.56	750.8	30.09	764.2	54.9	12.7	45	W			2		10	W		o	o		Dicknether.
Stuttgart	29.14	740.2	30.04	763.1	52.7	11.5	41	W			2		9	W		0	o		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.58	725.8	30.04	762.9	47.3	8.5	53	NW			2		10	W		o	o		Prof. Kemlein.
Wustrow	29.75	755.6	29.77	756.2	51.3	10.7	66	NW			5		10ks			o	o		Brandes & Reimer.

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

GREEK SERIES.

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

Athens	29.52	749.8	29.90	759.5	78.4	25.8		SW			2.0		0			0	0	Clear	Schmidt & Wourlisch.

INDIAN SERIES.

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

Kurrachee	29.43	747.5	29.48	748.8	89.0	31.7	77	S	32.0	14.3			3		W	0	0	D. clouds	
Deesa	28.96	735.6	29.41	747.0	100.3	37.9	32	W	16.9	7.6			5	WNW	WNW	0	0	D. clouds	
Bombay	29.62	752.4	29.66	753.4	78.2	25.7	95	S	5.0	2.2			10		SSW	2.08	52.8	Raining	
Poona, Yarrowda	27.84	707.1	29.68	753.7	82.0	27.8	58	W					2		W	0	0	D. clouds	
Belgaum	27.21	691.0	29.76	755.8	71.6	22.0	89	SW	7.0	3.1			9		SW	0.04	1.0	Drizzling	
Lahore	28.70	729.0	29.42	747.3	89.7	32.1	50	E	5.7	2.6			0			Inap	Inap.	D. clouds	
Roorkee	28.57	725.6	29.43	747.6	92.8	33.8	49	NE	4.7	2.1			8			0	0		
Agra	28.88	733.6	29.44	747.7	83.2	28.4	79	Calm	5.7	2.6			10		E	0	0		
Nagpur	28.52	724.3	29.55	750.6	78.7	25.9	81	SW	11.6	5.2			9		SW	0.35	8.9	Gloomy	
Jubbulpore	28.14	714.7	29.48	748.9	76.8	24.9	95	S	7.3	3.3			10			0.52	13.2	Overcast	
Lucknow	29.06	738.2	29.43	747.4	93.0	34.1	48	ENE	7.2	3.2			2	NE		0	0	D. clouds	
Allahabad	29.12	739.7	29.42	747.2	95.7	35.4	42	SE	3.8	1.7			5		E	0	0	D. clouds	
Patna	29.33	745.0	29.51	749.5	85.0	29.4	79	ESE	3.5	1.6			8	ESE	ESE	0.42	10.7	Drizzling	
Hazaribagh	27.54	699.5	29.50	749.3	85.6	29.8	61	SW	9.9	4.4			10			0	0		
Cuttack	29.47	748.6	29.55	750.7	87.4	30.8	76	Calm	0.4	0.2			6			0	0	D. clouds	
Calcutta, Alipore	29.54	750.2	29.56	750.8	83.2	28.4	87	S	0.5	0.2			9	E		0	0	D. clouds	
Dhubri	29.49	749.0	29.61	752.0	78.3	25.7	95	S	3.8	1.7			10			0.17	4.3	Raining	
Chittagong	29.54	750.3	29.63	752.6	84.0	28.9	83	SW	3.8	1.7			5			0	0	Blue sky	
Sibsagar	29.30	744.3	29.64	752.8	80.1	26.7	91	NE	3.2	1.4			10	SW	SW	2 02	51.3	D. clouds	
Zanzibar, Africa			30.04	763.0	81.0	27.2	64	SSW	9	4.0			6		SSW	0	0	D. clouds	

ITALIAN SERIES.

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

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

Udine	29.48	748.8	29.88	758.9	64.0	17.8	30	W	0.7	0.3			8			0.063	1.6		Prof. Giovanni Clodig.
Milan	29.36	745.8	29.87	758.6	66.0	18.9	28	SW	4.3	1.9			4			0	0		Prof. Schiaparelli.
Padua	29.82	757.5	29.93	760.1	59.7	15.4	56	SSE	10.5	4.7			10			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.00	736.6	29.89	759.1	63.0	17.2	31	NW	2.5	1.1			4	WNW		0	0		Prof. P. F. Denza.
Genoa	29.70	754.3	29.89	759.1	64.9	18.3	38	N	5.6	2.5			8	N		0	0		Prof. G. M. Garibaldi.
Mondovi	28.04	712.3	29.91	759.8	60.8	16.0	30	WNW			6		2			0	0		Prof. D. C. Bruno.
Pesaro	29.84	757.9	29.89	759.1	59.7	15.4	63	N					6	NNE		0	0		Prof. Luigi Guidi.
Florence	29.60	751.8	29.85	758.1	63.9	17.7	41	NE			4		8	N		0	0		Prof. Costantino Pitter.
Leghorn	29.78	756.3	29.86	758.4	64.0	17.8	88	NE	8.7	3.9			6			0	0		Prof. P. Monte.
Rome	29.67	753.6	29.84	757.9	63.0	17.2	55	WSW	5.6	2.5			10			0.134	3.4		Prof. P. S. Ferrari.
Lecce	29.61	752.0	29.85	758.2	67.6	19.8	50	NW	30.4	13.6			4	W		0.102	2.6		Prof. C. de Giorgi.
Cosenza	29.00	736.5	29.87	758.6	61.9	16.6	70	WSW	6.9	3.1			10	SW		0.780	19.8		Prof. D. Conti.
Cagliari																			Prof. A. Pacinotti.
Palermo	29.71	754.6	29.95	760.8	68.0	20.0	37	W	19.9	8.9			2	W		0.020	0.5		Prof. G. Ciaccatore.
Syracuse	29.87	758.8	29.92	759.9	69.8	21.0	39	SW	17.4	7.8			10	SW		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.33	744.9	29.85	758.1	57.2	14.0	83	W	0.7	0.3			10		SW	0.327	8.3		Prof. F. Brioschi.
Stelvio	22.08	560.9			28.8	— 1.8	62	NE			2	9cs	0	N		0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.09	561.0			38.8	3.8	59	E			2		8kn		NE	0	0	Misty	Prof. P. F. Denza.

JAPANESE SERIES.

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

Hiroshima, I. M. Obs'y †..	29.93	760.2	29.95	760.7	73.2	22.9	90	Calm	0	0		cs;ck	7s		W	0.050	1.3	Cloudy	K. Sasaki.
Kioto	29.82	757.4	29.99	761.7	73.6	23.1	87	S	1.0	0.4		ck	10ks;s		W	0.020	0.5	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.76	755.9	29.96	761.0	73.0	22.8	94	S	6.1	2.7			10n			0.550	14.0	Light rain	S. Takehayashi.
Tokei Obs'y, Yeddo	29.94	760.5	30.01	762.2	66.5	19.2	96	N	3.0	1.3			10n			0.135	3.4	Raining	The Staff.
Wakayama	29.94	760.5	29.99	761.7	75.3	24.1	78	S	3.9	1.7			10s			0	0	Cloudy	Y. Kuwamuca.

MAURITIUS SERIES.

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

Mauritius Obs'y, Mauritius	29.89	759.2	30.08	764.0	74.5	23.6	70	ESE	7.0	3.1			0	4	E	0.02	0.5	Fine	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

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

Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.66	753.4	29.92	759.9	78.3	25.7	84	NW	1.6	0.8		8ck	0	SW		0	0	Cloudy	F. Quijano, C. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.

NETHERLANDS SERIES.

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

Flushing	30.18	766.5	30.18	766.5	53.6	12.0		WNW			4					0.016	0.4		
Groningen	29.97	761.1	30.02	762.5	50.5	10.3		NW			5					0.079	2.0		
Helder	30.07	763.7	30.07	763.7	49.3	9.6		NW			4					0.028	0.7		
Hellevoetsluis	30.13	765.2	30.13	765.2	52.7	11.5	70	WNW			4					0.118	3.0		
Utrecht	30.06	763.6	30.11	764.8	56.5	13.6	60	WNW			4		5			0.028	0.7	Cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.71	754.7	29.78	756.3	53.2	11.8	45	WSW	8.5	3.8			3			0	0		
Christiania	29.61	752.2	29.76	755.9	48.7	9.3	79	NNE	11	5			10			0.057	1.7	Raining	
Gjæsvær	30.22	767.7	30.25	768.3	33.4	0.8		Calm			0		10						
Lodingen	30.12	765.0	30.17	766.2	39.9	4.4	53	NE			6		0			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.30	769.5	30.31	769.9	65.8	18.8	83	SE	6.9	3.1			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.23	742.5	30.21	767.2	74.8	23.8	16	ENE	2.5	1.1			0			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.15	765.7	30.23	767.9	70.2	21.2	65	SSW	3.1	1.4			6			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.91	759.6	30.26	768.6	71.8	22.1	23	NE	16.8	7.5			0			0	0		The Staff.
Ponta Delgada, Azores	30.39	771.9	30.46	773.7	68.0	20.0	71	SSE	6.9	3.1			3			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.96	735.6	30.02	762.4	63.1	17.3	26	NE	9	4			0						Capt. Lasarew.
Archangel	29.71	754.6	29.73	755.1	69.8	21.0	56	SSW	9	4			10					Light clouds	Capt. Seeliwerstow.
Astrakhan	29.94	760.5	29.86	758.4	85.1	29.5	35	ENE	2	1		0	8s					Light clouds	Capt. Wisganow.
Barnaul ‡	29.45	748.0	29.95	760.7	50.2	10.1	48	NW	9	4			6						Meteorological Obs'y.
Dorpat	29.22	742.3	29.45	748.1	71.6	22.0	56	ENE	11	5			10n					Thund'r st'm	Observatory.
Ekaterinburg	29.03	737.4	29.93	760.2	86.7	30.4	28	WSW	9	4		0	6k;ks						Meteorological Obs'y.
Kasan	29.67	753.6	29.92	759.9	84.0	28.9	22	SSE	13	6			0						Observatory.
Kertch	29.80	757.0	29.82	757.5	76.3	24.6	37	SE	2	1			0						Lagorio & Sastyrez.
Kieff	28.78	731.3	29.40	746.8	62.4	16.9	63	NW	11	5		ck	10s						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.47	748.4	29.66	753.4	76.1	24.5	26	WSW	45	20			2			Bla	nk		Meteorological Obs'y.
Moscow	29.08	738.7	29.61	752.2	63.5	17.5	91	S	7.8	3.5		0	8ks						Meteorological Obs'y.
Nertchinsk	27.45	697.1	29.67	753.5	55.9	13.3	90	Calm	0	0			9			0.126	3.2		Meteorological Obs'y.
Nikolaiev	29.61	752.2	29.69	754.0	63.3	17.4	67	WSW	22	10			10n						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.78	756.5	29.88	758.7	59.2	15.1	72	SE			2		10s			0	0		Lieut. Iwanow.
Pekin, China	29.27	743.5	29.41	747.1	56.5	13.6	97	NW	13	6			10n					Thund'r st'm	Physical Observatory.
St. Petersburg	29.55	750.5	29.56	750.9	77.9	25.5	42	SSE	16	7		0	7ks;kn						Central Physical Obs'y.
Tashkend, Laboratory	28.17	715.5	29.68	753.9	69.8	21.	89	Calm	0	0			10			Bla	nk		Teich, A. M.
Tiflis	28.45	722.5	29.77	756.1	90.3	32.4	25	NW	9	4		0	1k						Physical Observatory.
Warsaw	29.13	740.0	29.56	750.7	49.6	9.8	83	W	18	8			10ks			Bla	nk		Astronomical Obs'y.
Wilna	28.95	735.4	29.35	745.5	66.9	19.4	81	Calm	0	0			10					Raining	Berg, Assistant.
Yeniseisk	29.57	751.1	29.85	758.3	54.5	12.5	47	N	11	5			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.11	764.8	51.2	10.7	70	E			3	10cs	0	W		0	0	Overcast	Andrew Gibb.
Monach Lt. House, Hebrides			30.06	763.5	49	9.4	94	SSE			6		10					Raining	J. Youngclause.
North Unst, Shetland Isl'ds			30.14	765.5				N			7		Fg						Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.03	762.8	30.13	765.4	65.5	18.6	45	ESE	5.4	2.4		0	k			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.30	769.5	30.35	770.9	65.8	18.8	51	NW	1.6	0.7		3	5	NE		0.106	2.7	Almost cov'd	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.37	695.2			48.2	9.0	74	N	7.6	3.4			10			0	0	Covered	Domingo Martin.
Madrid, Royal Obs'y	28.00	712.0	30.25	768.3	63.0	17.2	31	N	12.8	5.7		0	0			0	0	Clear	The Staff.
Murcia, Met. Obs'y ‡	30.03	762.8	30.18	766.6	73.9	23.3	33	NW	4.0	1.8		0	0			0	0	Clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.40	746.7	30.28	769.1	63.0	17.2	44	NE	8.7	3.9			0			0	0	Clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.93	760.3	30.00	761.9	81.5	27.5	74	ENE	4.5	2.0		0	0			0	0	Clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.87	758.6	29.92	759.9	82.4	28.0	83	NE	0	0			10		E	0.41	10.5	Raining	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.95	761.0	30.06	763.5	75.6	24.8	34	ENE	11.0	4.9		0	0			0	0		Capt. C. Pujalon, R. N., Dir.
San Juan de Porto Rico, W. I	29.92	760.0	30.01	762.3	81.3	27.4	91	SE	0	0		48	0	SE		0.394	10.0		Enrique Gades, Chief Engineer.
Tuguegarao, Philippine Ids	29.79	756.7	29.94	760.4	80.2	25.8	90	ESE	0	0			9ks		ESE	0.16	4.0	Covered	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.92	759.9	29.95	760.9	42.8	6.0	74	NE			6		10			0	0		
Umea	29.86	758.4	29.91	759.7	42.1	5.6	82	NE			7		10			0	0		
Hernosand	29.87	758.8	29.93	760.1	43.0	6.1	84	NE			4		10			0.205	5.2		
Stockholm	29.42	747.3	29.60	751.8	44.6	7.0	89	NNE			7		10			0.024	0.6		
Wisby	29.41	747.1	29.47	748.6	45.3	7.4	100	NNE			4		10			0.122	3.1	Rainy	
Sub-Series.																			
Upsala	29.48	748.8	29.57	751.0	38.7	3.7	96	N	20.8	9.3			10			0.038	9.8		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.68	728.5	30.10	764.6	54.9	12.7	45	NE			2		6			0.039	1.0	Cloudy	The Observatory.
Zurich ‡	28.48	723.3	30.12	765.1	52.0	11.1	71	NE			2		8			0.031	0.8	Cloudy	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.80	757.0	82.8	28.2	33	SW	6	2.5			0			0	0		The Observatory.
Valona			29.94	760.5	66.4	19.1		SW			2		10			1.81	46.	Covered	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.92	760.0	81.0	27.2	68	NE			1		0			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.01	762.2	30.09	764.3	58.5	14.7	64	N	4	1.8			10n			0.01	0.3	Light rain	
Alpena, Michigan	29.57	751.1	30.22	767.6	45.5	7.5	76	NW	5	2.2		0	0			0	0	Clear	
Atlanta, Georgia	28.81	731.8	29.96	761.0	71.2	21.8	79	NW	8	3.6		5c	0	Calm		0	0	Fair	
Atlantic City, New Jersey	29.83	757.7	29.84	757.9	55	12.8	93	NE	26	11.6			10s		Calm	1.12	28.4	Cloudy	
Augusta, Georgia	29.75	755.6	29.93	760.2	75.0	23.9	77	Calm	0	0		5cs	0			0	0	Fair	
Baltimore, Maryland	29.89	759.-	29.94	760.5	58	14.4	88	N	8	3.6			10s		NE	2.08	52.8	Threatening	
Barnegat, New Jersey	29.82	757.4	29.84	757.9	55	12.8	100	NE	29	13.0			10n		NE	1.89	48.0	Light rain	
Bismarck, Dakota	27.94	709.7	29.68	753.9	64	17.8	89	SE	10	4.5		2k	5s	Calm	S	0.38	9.7	Cloudy	
Boise City, Idaho	27.12	688.8	29.88	758.9	43.1	6.2	75	SW	4	1.8		2cs	0	Calm		0	0	Fair	
Boston, Massachusetts	29.92	760.0	30.08	764.0	50.0	10.0	96	NE	24	10.7			10n		NE	0.40	10.2	Light rain	
Bracketville, Texas	28.73	729.7	29.73	755.1	76	24.4	86	E	12	5.4			10s		E	0	0	Cloudy	
Brownsville, Texas	29.86	758.4	29.90	759.4	82	27.8	83	SE	8	3.6		0	0			0	0	Clear	
Buffalo, New York	29.40	746.7	30.09	764.3	52.2	11.2	74	NE	9	4.0		2ck	8s;sk	NE	NE	Inap.	Inap.	Cloudy	
Burlington, Vermont	29.87	758.7	30.15	765.8	54.5	12.5	74	N	4	1.8		8cs	0			0	0	Fair	
Cairo, Illinois	29.69	754.1	30.08	764.0	66	18.9	84	SE	6	2.7		10c	0	NW		0	0	Cloudy	
Campo, California	27.41	696.2	29.98	761.5	42.4	5.8	70	SW	2	0.9		0	0			0	0	Clear	
Camp Thomas, Arizona	27.16	689.9			61	16.1	40	Calm			0	0	2s			0	0	Clear	
Cape Henry, Virginia	29.84	757.9	29.86	758.4	64.0	17.8	89	NW	16	7.2			10s			0.09	2.3	Cloudy	
Cape May, New Jersey	29.81	757.2	29.84	757.9	56	13.3	93	N	3	1.3			10n		N	1.38	35.1	Light rain	
Castroville, Texas	29.13	739.9	29.80	756.9	80	26.7	74	S	5	2.2			10s		S	0	0	Cloudy	
Cedar Keys, Florida	29.99	761.7	30.01	762.2	80	26.7	82	W	10	4.5		0	5ks		W	0	0	Fair	
Champaign, Illinois	29.28	743.7	30.07	763.8	59.9	15.5	82	SE	8	3.6		8s	0	SE		0	0	Fair	
Charleston, S. Carolina	29.87	758.7	29.93	760.2	79	26.1	74	W	9	4.0		5c	0	W		0	0	Fair	
Charlotte, N. Carolina	29.08	738.6	29.94	760.5	76.4	24.7	52	NE	2	0.9		2c	0	W		0	0	Fair	
Chattanooga, Tennessee	29.22	742.2	30.02	762.5	66	18.9	89	Calm	0	0		5cs	Fg	W		0	0	Fair	
Cheyenne, Wyoming	23.97	608.8	29.78	756.4	57	13.9	87	S	12	5.4			10s		S	0.03	0.8	Cloudy	
Chicago, Illinois	29.42	747.3	30.10	764.5	52.1	11.2	85	NE	4	1.8		8c	0	W		0	0	Fair	
Chincoteague, Virginia	29.84	757.9	29.86	758.4	60	15.6	94	NW	13	5.8		10k	0	NW		0.31	7.9	Cloudy	
Cincinnati, Ohio	29.44	747.8	30.08	764.0	58	14.4	70	N	6	2.7		1cs	0	NW		Inap.	Inap.	Clear	
Cleveland, Ohio	29.38	746.2	30.10	764.5	54.5	12.5	67	NE	14	6.3		2k	0	NE		1.60	40.6	Clear	
Coleman City, Texas	28.11	714.0	29.69	754.1	74	23.3	76	SE	6	2.7		1cs	0	SW		0	0	Clear	
Columbus, Ohio	29.20	741.7	30.02	762.5	56	13.3	75	N	8	3.6		1ck	0	N		0.02	0.5	Clear	
Concho, Texas	27.98	710.7	29.86	758.4	73	22.8	90	S	6	2.7		5ck	0	S		0	0	Fair	
Corsicana, Texas	29.48	748.8	29.94	760.5	77	25.0	82	S	10	4.5		0	5ks			0	0	Fair	
Davenport, Iowa	29.42	747.3	30.06	763.5	58	14.4	76	E	6	2.7		1ck	0	W		0	0	Clear	
Dayton, Washington T'y	28.14	714.7	29.89	759.2	44	6.7	67	S	1	0.4		0	8ks		S	Inap.	Inap.	Fair	
Deadwood, Dakota	25.20	640.1	29.75	755.6	62	16.7	67	SW	5	2.2		2cs	2ks	SW	SW	Inap	Inap.	Fair	
Decatur, Texas	28.73	729.7	29.83	757.7	80	26.7	78	S	14	6.3		0	0			0.01	0.3	Clear	
Delaware Breakwater, Del.	29.84	757.9	29.86	758.4	57	13.9	100	N	18	8.0			10n;fg		N	0.99	25.1	Light rain	
Denison, Texas	29.13	739.9	29.91	759.7	78	25.6	86	S	8	3.6		0	0			0	0	Clear	
Denver, Colorado	24.69	627.1	29.73	755.1	50.5	10.3	62	S	4	1.8		0	0			0	0	Clear	
Des Moines, Iowa	29.11	739.4	29.99	761.7	63	17.2	78	SE	6	2.7		0	0			0	0	Clear	
Detroit, Michigan	29.43	747.5	30.10	764.5	51.9	11.1	79	N	11	4.9		0	0			0	0	Clear	
Dodge City, Kansas	27.27	692.6	29.76	755.9	66	18.9	84	SE	12	5.4		8cs	0			0	0	Cloudy	
Dubuque, Iowa	29.39	746.5	30.07	763.8	56.2	13.4	75	E	3	1.3		5c	Hz	NE	Calm	0	0	Fair	
Duluth, Minnesota	29.36	745.7	30.04	763.0	51	10.6	86	NW	1	0.4		0	2s		Calm	0	0	Clear	
Eagle Pass, Texas	29.13	739.9	29.94	760.5	78.4	25.8	82	SE	8	3.6		5c	5s	Calm	SE	0	0	Cloudy	
Eagle Rock, Idaho	25.22	640.6	29.93	760.2	45	7.2	68	N	16	7.2		0	0			0.11	2.8	Clear	
Eastport, Maine	30.24	768.1	30.31	769.9	51.5	10.8	57	SE	6	2.7		8c	0	SW		0	0	Fair	
El Paso, Texas	26.15	664.2	29.80	756.9	68	20.0	30	SW	2	0.9		0	8s			0	0	Cloudy	
Erie, Pennsylvania	29.37	746.0	30.09	764.3	50	10.0	86	NE	10	4.5		5c	0			0.68	17.3	Fair	
Escanaba, Michigan	29.49	749.0	30.13	765.3	56	13.3	75	N	4	1.8		0	0			0	0	Clear	
Florence, Arizona	28.36	720.3	29.96	761.0	62	16.7	41	Calm	0	0		0	0			0	0	Clear	
Fort Apache, Arizona	25.00	635.0	29.78	756.4	46	7.8	40	NE	3	1.3		0	Sk		Calm	0	0	Dense smoke	
Fort Assinnaboine, Montana					60	15.6		SW	12	5.4		10k	0	Calm		0	0	Cloudy	
Fort Bennett, Dakota	28.18	715.8	29.66	753.4	65	18.3	84	SE	8	3.6		10cs	0	SE		Inap.	Inap.	Cloudy	
Fort Benton, Montana	26.95	684.5	29.69	754.1	57	13.9	52	SW	20	8.9		0	0			0.25	6.3	Clear	
Fort Buford, Dakota	27.74	704.6	29.66	753.4	55	12.8	87	NE	8	3.6		5cs	0	W		0.41	10.4	Fair	
Fort Custer, Montana	26.65	676.9	29.74	755.4	55	12.8	87	SW	4	1.8		0	5ks		S	Inap.	Inap.	Fair	
Fort Davis, Texas	25.18	639.6	30.14	765.5	67	19.4	69	SE	8	3.6			10s		W	0	0	Cloudy	
Fort Elliott, Texas	27.17	690.1	30.24	768.1	69	20.6	52	S	14	6.3		2c	0	S		0	0	Clear	
Fort Gibson, Indian T'y	29.36	745.7	29.89	759.2	73	22.8	85	SE	2	0.9		0	0			0.44	11.2	Clear	
Fort Grant, Arizona	25.22	640.6	30.02	762.5	61	16.1	26	N	7	3.1		0	2s			0	0	Clear	
Fort Griffin, Texas	28.62	726.9	29.83	757.7	73.1	22.8	76	Calm	0	0		0	0			0	0	Clear	
Fort Keogh, Montana	27.24	691.9	29.64	752.8	53	11.7	79	NW	10	4.5		5cs	0	NW		0.02	0.5	Fair	
Fort Macon, North Carolina	29.83	757.7	29.84	757.9	76	24.4	91	W	7	3.1		5k	Hz	SW	Calm	0	0	Fair	
Fort McKavett, Texas	27.64	702.0	29.46	748.3	72.2	22.3	90	S	10	4.5			9ks		S	0	0	Cloudy	
Fort Missoula, Montana	26.57	674.9	29.95	760.7	48	8.9	63	SE	1	0.4		2k	0	SE		0	0	Fair	
Fort St. Michaels	29.62	752.3	29.66	753.4	34	1.1	100	SE	3	1.3			10n		SE	0	0		
Fort Shaw, Montana	26.22	666.0	29.56	753.4	46	7.8	69	SW	8	3.6		5cs	0	SW		0.08	2.0	Fair	
Fort Sill, Indian Territory	28.65	727.7	29.86	758.4	72	22.2	80	S	5	2.2		0	0			0	0	Clear	
Fort Stevenson, Dakota	27.90	708.6	29.68	753.9	62	16.7	94	N	14	6.3		0	5ks		S	0.55	14.0	Fair	
Fort Verde, Arizona					57	13.9	31	S			2	0	0			0	0	Clear	
Fredericksburg, Texas	28.21	716.5	29.70	754.4	73	22.8	85	SW	10	4.5			10s		SW	0	0	Cloudy	
Galveston, Texas	29.95	760.7	29.99	761.7	82	27.8	87	S	7	3.1		2c	5ks		S	0	0	Fair	
Grand Haven, Michigan	29.49	749.0	30.14	765.5	55	12.8	68	E	4	1.8		5cs	5s	W	W	0	0	Cloudy	
Hatteras, North Carolina	29.84	757.9	29.86	758.4	75	23.9	90	N	13	5.8		0	2ks		W	0.02	0.5	Fair	
Helena, Montana	25.66	651.8	29.86	758.4	50	10.0	65	N	1	0.4		0	8s		Calm	0.55	14.0	Cloudy	
Henrietta, Texas																			
Indianapolis, Indiana	29.30	744.2	30.08	764.0	59.5	15.3	71	E	1	0.4		4c;hz	0	W;C		0	0	Fair	
Indianola, Texas	29.92	760.0	29.95	760.7	82.1	27.8	87	S	11	4.9		2k	0	S		0	0	Fair	
Jacksboro, Texas	28.75	730.2	29.82	757.4	75	23.9	86	S	5	2.2		1c	0	S		0.04	1.0	Clear	
Jacksonville, Florida	29.96	761.0	29.98	761.5	80	26.7	78	SW	10	4.5		5cs	0	SW		0.12	3.0	Fair	
Keokuk, Iowa	29.39	746.5	30.02	762.5	64	17.8	83	E	6	2.7		0	0			0	0	Clear	
Key West, Florida	29.99	761.7	30.02	762.5	82.3	27.9	75	E	5	2.2		0	1ks			0.95	24.1	Clear	
Kittyhawk, North Carolina	29.87	758.7	29.89	759.2	66	18.9	100	NE	13	5.8			10s		NE	1.16	29.5	Cloudy	
Knoxville, Tennessee	29.02	737.1	30.02	762.5	65.8	18.8	77	N	5	2.2		8c	0	Calm		Inap.	Inap.	Fair	
La Crosse, Wisconsin	29.30	744.2	30.02	762.5	64	17.8	58	SE	9	4.0		0	0			0	0	Clear	
La Mesilla, New Mexico	26.03	661.2	30.18	766.6	71.0	21.7	18	Calm	0	0		0	8s		SW	0	0	Cloudy	
Laredo, Texas	29.44	747.8	29.76	755.9	82	27.8	79	SE	2	0.9		8ck	0	SE		0	0	Fair	
Leavenworth, Kansas	29.09	738.9	29.96	761.0	67	19.4	79	SE	6	2.7		0	0			0.66	16.8	Clear	
Lewiston, Idaho	29.06	738.1	29.88	758.9	48	8.9	71	E	1	0.4		0	5s		E	0.10	2.5	Fair	
Little Rock, Arkansas	29.69	754.1	30.00	762.0	73	22.8	85	N	4	1.8		2ck	5s			3.25	82.5	Fair	
Los Angeles, California	29.63	752.6	30.00	762.0	53.2	11.8	86	NE	5	2.2		0	1s		Calm	0	0	Clear	
Louisville, Kentucky	29.50	749.3	30.05	763.3	59.5	15.3	76	N	9	4.0		8c	0			0	0	Fair	
Lynchburg, Virginia	29.26	743.2	29.93	760.2	69	20.6	70	E	1	0.4			10s		NW	0	0	Cloudy	
Madison, Wisconsin	29.09	738.9	30.07	763.8	56	13.3	75	E	4	1.8		10c	0	W		0	0	Cloudy	
Marquette, Michigan	29.39	746.5	30.10	764.5	65	18.3	53	SW	4	1.8		2c	Hz	Calm		0	0	Clear	
Mason, Texas	28.31	719.1	29.99	761.7	77	25.0	73	S	5	2.2			10ks		S	0	0	Cloudy	
Memphis, Tennessee	29.74	755.4	30.07	763.8	72	22.2	85	NW	1	0.4			10n		NW	Inap.	Inap.	Light rain	
Milwaukee, Wisconsin	29.39	746.5	30.12	765.0	50	10.0	79	Calm	0	0		10ck	0	SW		0	0	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
United States Series—Continued.																			
Mobile, Alabama	29.93	760.2	30.00	762.0	78	25.6	82	W	2	0.9	.....	5cs	Hz	W	.....	0	0	Fair	
Montgomery, Alabama	29.76	755.9	29.98	761.5	76	24.4	86	W	3	1.3	.....	5c;k	0	W	.....	0.02	0.5	Fair	
Moorhead, Minnesota	28.88	733.5	29.84	757.9	65	18.3	84	SE	22	9.8	.....	5k	0	S	.....	0	0	Fair	
Morgantown, W. Virginia	28.95	735.3	29.91	759.7	61	16.1	82	S	3	1.3	.....	.....	1on	.....	S	0.43	10.9	Light rain	
Mt. Washington, N. H.	23.88	606.5	29.91	759.7	33	0.6	85	E	72	32.2	.....	.....	Fg	.....	E	0	0	Light fog	
Nashville, Tennessee	29.51	749.5	30.03	762.7	66.6	19.2	82	NE	4	1.8	.....	2ck	0	NW	.....	0	0	Clear	
New Haven, Connecticut	29.81	757.2	29.93	760.2	50	10.0	93	NE	23	10.3	.....	.....	1on	.....	NE	0.84	21.3	Heavy rain	
New London, Connecticut	29.89	759.2	29.94	760.5	53	11.7	100	E	11	4.9	.....	.....	1on	.....	E	0.56	14.2	Heavy rain	
New Orleans, Louisiana	29.94	760.5	29.99	761.7	79.0	26.1	82	W	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Newport, Rhode Island	29.91	759.7	29.96	761.0	52.0	11.1	100	NE	11	4.9	.....	.....	1on	.....	NE	0.98	24.9	Heavy rain	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	29.89	759.2	29.92	760.0	52.0	11.1	100	NE	36	16.1	.....	.....	1on	.....	NE	3.23	82.0	Heavy rain	
New York, New York	29.73	755.1	29.90	759.4	51	10.6	93	N	16	7.2	.....	.....	1on;fg	.....	NE	2.52	64.0	Light rain	
Norfolk, Virginia	29.85	758.2	29.89	759.2	65	18.3	84	N	9	4.0	.....	.....	1os	.....	.....	0.12	3.0	Cloudy	
North Platte, Nebraska	26.98	685.3	29.80	756.9	64	17.8	89	SE	10	4.5	.....	.....	1os	.....	SE	Inap.	Inap.	Cloudy	
Olympia, Washington T'y	29.80	756.9	29.84	757.9	52.5	11.4	96	Calm	0	0	.....	.....	1on	.....	SW	0.09	2.3	Light rain	
Omaha, Nebraska	28.80	731.5	29.94	760.5	67	19.4	81	SE	7	3.1	.....	1cs	0	.....	.....	0.02	0.5	Clear	
Oswego, New York	29.78	756.4	30.10	764.5	54.0	12.2	80	NE	3	1.3	.....	Hz	5s	.....	E	0	0	Fair	
Pensacola, Florida	29.96	761.0	29.99	761.7	80	26.7	87	SW	2	0.9	.....	1cs	0	Calm	.....	0.81	20.6	Clear	
Philadelphia, Pa	29.86	758.4	29.92	760.0	53	11.7	86	NE	18	8.0	.....	.....	10ks;sk	.....	E	0.98	24.9	Cloudy	
Phœnix, Arizona	28.71	729.2	30.48	774.2	62	16.7	51	E	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.86	453.6	30.07	763.8	33	0.6	51	SW	24	10.7	.....	0	0	.....	.....	0	0	Clear	
Ploche, Nevada	23.95	608.3	29.80	756.9	48	8.9	63	S	6	2.7	.....	.....	10ks	.....	SW	0.03	0.8	Cloudy	
Pittsburg, Pennsylvania	29.20	741.7	29.99	761.7	58.2	14.6	96	NE	5	2.2	.....	.....	1on	.....	NE	1.79	45.5	Light rain	
Port Eads, Louisiana	30.02	762.5	30.03	762.7	78.5	25.8	91	SW	8	3.6	.....	0	Hz	.....	Calm	0	0	Clear	
Port Huron, Michigan	29.47	748.5	30.13	765.3	47.4	8.6	88	N	9	4.0	.....	8cs	Fg	Calm	Calm	0	0	Fair	
Portland, Maine	30.17	766.3	30.22	767.6	53	11.7	67	NE	13	5.8	.....	.....	1os	.....	Calm	0	0	Cloudy	
Portland, Oregon	29.84	757.9	29.91	759.7	53.4	11.9	89	S	4	1.8	.....	.....	1on	.....	S	0.07	1.8	Light rain	
Portsmouth, N. Carolina	.....	.....	.....	.....	73	22.8	90	NE	12	5.4	.....	5k	Fg	N	Calm	0	0	Fair	
Prescott, Arizona	24.69	627.1	29.76	755.9	50	10.0	39	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	29.99	761.7	30.00	762.0	78.5	25.8	76	E	4	1.8	.....	1k	0	Calm	.....	0	0	Clear	
Red Bluff, California	29.54	750.3	29.87	758.7	61.5	16.4	56	S	8	3.6	.....	.....	1os	.....	SW	0	0	Cloudy	
Rio Grande City, Texas	29.70	754.4	29.91	759.7	81	27.2	83	SE	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Rochester, New York	29.49	749.0	30.11	764.8	50	10.0	86	N	1	0.4	.....	5ck	Hz	N	.....	0	0	Fair	
Roseburg, Oregon	29.37	746.0	29.93	760.2	50.7	10.4	96	Calm	0	0	.....	.....	1on	.....	.....	0.13	3.3	Light rain	
Sacramento, California	29.89	759.2	29.96	761.0	54.4	12.4	80	S	12	5.4	.....	.....	8s	.....	.....	0	0	Cloudy	
St. Louis, Missouri	29.48	748.8	30.06	763.5	63.6	17.6	91	E	6	2.7	.....	.....	1os	.....	.....	0	0	Cloudy	
St. Paul, Minnesota	29.17	740.9	30.01	762.2	62	16.7	77	SE	10	4.5	.....	5ck	0	SE	.....	0	0	Fair	
Salt Lake City, Utah	25.55	649 0	29.75	755.6	53	11.7	61	N	4	1.8	.....	2c	0	Calm	.....	0.09	2.3	Clear	
San Antonio, Texas	29.34	745.2	30.03	762.7	79.8	26.6	91	SE	4	1.8	.....	.....	1os	.....	SE	0	0	Cloudy	
San Diego, California	29.90	759.4	29.97	761.2	55.5	13.1	68	Calm	0	0	.....	0	5s	.....	.....	0	0	Fair	
Sandusky, Ohio	29.42	747.3	30.08	764.0	58	14.4	70	NE	20	8.9	.....	0	Fg	.....	.....	0.09	2.3	Clear	
Sandy Hook, New Jersey	29.87	758.7	29.90	759.4	54.0	12.2	100	SE	31	13.9	.....	.....	1on	.....	SE	2.57	65.3	Light rain	
San Francisco, California	29.95	760.7	30.02	762.5	54	12.2	77	W	10	4.5	.....	1ck	8s	W	W	0	0	Cloudy	
Santa Fé, New Mexico	23.27	591.0	29.78	756.4	55	12.8	33	SE	3	1.3	.....	.....	1os	.....	SE	0	0	Cloudy	
Savannah, Georgia	29.86	758.4	29.95	760.7	79	26.1	74	W	7	3.1	.....	8cs	1ks	.....	W	0.04	1.0	Fair	
Shreveport, Louisiana	29.75	755.6	29.98	761.5	79.2	26.2	87	S	4	1.8	.....	5cs	0	.....	.....	0	0	Fair	
Silver City, New Mexico	24.27	616.4	29.73	755.1	53	11.7	36	NW	1	0.4	.....	5c	0	NW	.....	0	0	Fair	
Sitka Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	.....	
Smithville, North Carolina	29.84	757.9	29.87	758.7	78	25.6	78	SW	6	2.7	.....	0	Hz	.....	.....	0	0	Clear	
Spokane Falls, Wash. Ter.	27.83	706.9	29.79	756.7	43	6.1	91	Calm	0	0	.....	.....	1os	.....	.....	0.08	2.0	Cloudy	
Springfield, Illinois	29.40	746.7	30.06	763.5	63	17.2	89	E	6	2.7	.....	0	1s	.....	W	0	0	Clear	
Springfield, Massachusetts	29.92	760.0	30.05	763.3	49.8	9.9	97	N	7	3.1	.....	.....	1on;fg	.....	N	0.48	12.2	Light rain	
Stockton, Texas	26.86	682.2	29.85	758.2	72.8	22.7	72	S	8	3.6	.....	0	0	.....	.....	0.37	9.4	Clear	
St. Vincent, Minnesota	28.96	735.6	29.80	756.9	64	17.8	89	S	12	5.4	.....	10cs	0	Calm	.....	0.03	0.8	Cloudy	
Thatcher's Island, Mass	30.06	763.5	30.11	764.8	50	10.0	100	E	23	10.3	.....	.....	1on	.....	.....	0.96	24.4	Heavy rain	
Toledo, Ohio	29.39	746.5	30.07	763.8	54	12.2	74	N	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Tucson, Arizona	27.46	697.5	29.75	755.6	63	17.2	33	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.54	750.3	29.94	760.5	53.3	11.8	77	E	5	2.2	.....	.....	1os	.....	SW	0	0	Cloudy	
Uvalde, Texas	28.96	735.6	29.74	755.4	77	25.0	91	SE	5	2.2	.....	.....	1os	.....	S	0	0	Cloudy	
Vicksburg, Mississippi	29.76	755.9	30.01	762.2	78	25.6	91	S	1	0.4	.....	2cs	0	.....	.....	Inap.	Inap.	Fair	
Visalia, California	29.55	750.6	29.90	759.4	57	13.9	69	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C.	29.85	758.2	29.96	761.0	57	13.9	87	NW	6	2.7	.....	.....	10ks	.....	N	0.69	17.5	Cloudy	
Wickenburg, Arizona	.....	.....	.....	.....	60	15.6	34	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	29.82	757.4	29.87	758.7	77	25.0	82	NW	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Winnemucca, Nevada	25.53	648.5	29.74	755.4	41	5.0	74	NE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Wood's Holl, Mass	29.89	759.2	29.93	760.2	54	12.2	93	E	25	11.2	.....	.....	1on	.....	E	1.56	39.6	Heavy rain	
Yankton, Dakota	28.67	728.2	29.93	760.2	64	17.8	78	SE	8	3.6	.....	2c	0	W	.....	0.01	0.3	Fair	
Yuma, Arizona	29.71	754.6	29.85	758.2	65.3	18.5	49	NW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.09	561.1	.....	.....	52.5	11.4	82	Calm	0	0	.....	2c	0	.....	.....	0	0	Fair	Thomas Herran.
Buff Bay Town, Jamaica.‡	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.99	761.7	30.04	763.0	83	28.3	67	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	A. Van Caneghem, Ass't.
Kingston, Jamaica, W. I.	29.93	760.2	29.94	760.5	79.8	26.6	74	Calm	0	0	.....	2cs	0	.....	.....	0.09	2.3	.....	Robert Johnstone.
Navassa, W. I.	29.85	758.2	29.93	760.2	81	27.2	78	E	12	5.4	.....	2s	8;in	SE	E	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.04	763.0	80	26.7	87	E	.....	.....	2	.....	8ks	E	.....	0.200	5.1	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.35	745.5	29.90	759.4	78	25.6	84	Calm	0	0	.....	.....	10ks	.....	N	3.70	94.0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	77.0	25	.....	NE	.....	.....	2	0	0	.....	.....	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	29.94	760.5	29.97	761.2	80	26.7	74	W	3.6	1.6	.....	2c	0	.....	.....	0.70	17.8	Fair	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.89	759.2	29.94	760.5	62.0	16.7	86	S	6	2.7	.....	4k	3s	S	S	0.20	5.1	Cloudy	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H M. S. Alert, Thursday Island, Oceania	29.95	760.7	77	25.0	82	SE			4		4							D. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Argostoli, Ionian Islands	29.94	760.5	70	21.1	73	SSW			1		6	SSW						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab, N. 13° 32′, E. 48° 10′	29.66	753.4	87	30.6	79	SW			4		0					4	SW	Blue sky	Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 24° 47′, E. 66° 59′	29.46	748.3	85	29.4	91	WSW			4		2	SW						Misty	Comm. G. W. Hand.
H. M. S. Bittern, Constantinople, Turkey			82	27.8		SW			2							1	SW	Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N. 13° 09′, W. 61° 14′	29.99	761.7	79	26.1	90	NE			2-5		10							Raining	Capt. C. G. F. Knowles.
H. M. S. Boadicea, St. Helena Island, Africa	30.08	764.0	73	22.8	63	SSE			2		1	ESE				3	SSE	Blue sky	Com. F. W. Richards.
H. M. S. Champion, S. 32° 57′, W. 50° 20′	30.14	765.5	67	19.4	90	N			5		7	Calm				6	N	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Chefoo, China	29.48	748.8	69	20.6	95	S			6-7		8	SSE						Squally	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 39° 47′, E. 10° 55′	29.85	758.2	64	17.8		WNW			4		5	WNW				4	WNW	Squally	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, N. 26° 37′, W. 30° 30′	30.27	768.8	72	22.2	80	NE			3		3					2	NE	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.36	771.1	69	20.6		Calm			0		0							Blue sky	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.16	766.1	78	25.6	82	SE			3-4		2	SE						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 48° 22′, W. 53° 22′	30.12	765.0	49	9.4	64	WSW			1		2							D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 7° 13′, E. 72° 23′	29.84	757.9	81	27.2		SE			1-2		5							D. clouds	Capt. E. St. J. Garforth.
H M. S. Egeria N. 6° 40′, E. 104° 50′	29.81	757.2	81	27.2		SSW			3		10	SSW				4	SE, SW	Gloomy	Comm. C. Johnstone.
H. M. S. Emerald, N. 6° 58′, E. 171° 42′	29.88	758.9	83.5	28.6	81	E			1		8	E						D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Tamatave, Madagascar	30.08	764.0	74	23.3	68	SSE			1-2		4	SSW				1	SSE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Western Arm, Newfoundla'd	30.02	762.5	48	8.9		W			1-2		3	W						D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn N. 12° 47′, E. 44° 58′	29.54	750.3	87	30.6	86	SSE			1		1							Blue sky	Capt. P. Aldrich.
H. M. S. Flamingo N. 20° 36′, W. 84° 33′	30.01	762.2	86	30.0	79	ENE			1-2		2	ENE				2	ENE	D. clouds	Comm. R. N. Custance.
H M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd	29.82	757.4	53.5	11.9	83	Calm			0		1							Blue sky	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.54	750.3	40	4.4	82	Calm			0		10							Overcast	Capt. L. F. Jones.
H. M. S. Griffon, New Providence, Bahamas	30.07	763.8	84	28.9	75	ESE			2									D. clouds	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Malta, Mediterranean	30.01	762.2	70	21.1	90	WNW			1		8	W				1	WNW	D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.00	762.0	62	16.7		Calm			0		4	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.89	759.2	67	19.4		NNW			1		10							Overcast	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 15′, E. 110° 15′	29.70	754.4	84.2	29.0	82	SSE			2-3		3	NE				1	SE	Squally	Capt. A. Carpenter.
H. M. S. Midge, N. 25° 05′, E. 119° 42′	29.80	756.9				S			2		Fg					2	NE		Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. M. S. Modeste, S. 21° 55′ E. 67° 25′	30.04	763.0	76	24.4	77	ESE			2-3		9					3	ESE	D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Tunis, Tunis, N. Africa	30.03	762.7	67	19.4	90	NW			4		4	NNW						D. clouds	Capt. G. Tryon, C. B

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, N. 1° 33′, E. 110° 20′			79.5	26.4		SW			2		10	SW						Raining	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	30.26	768.6	51	10.6	72	Calm			0		8							D. clouds	Capt. E. B Drummond.
H. M. S. Orontes, S. 19° 28′, E. 9° 35′.....*†	29.98	761.5	69.5	20.8	77	N			1		7	N				2	SSE	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.84	757.9	79	26.1	95	NW			1		10							Overcast	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, N. 12° 06′, W. 68° 53′	29.85	758.2	83	28.3	79	ESE			4		4	ESE						D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′.	29.71	754.6	81	27.2		S			2-5		6							Raining	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 48° 26′, W. 123° 27′	29.84	757.9	52	11.1		Calm			0		9							Raining	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 4° 05′, E. 39° 42′	30.00	762.0	79.3	26.3	78	SSW			5		2					5		Squally	Capt. C. E. Foot.
H. M. S. Salamis.																			Capt. A. Fitz George.
H. M. S. Sea Gull, S. 8° 54′, E. 54° 30′	29.53	750.0	80	26.7	82	SSE			5-6		3	SE				5	SSE	D. clouds	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 37° 36′, W. 13° 37′	30.33	770.4	65	18.3	73	N			4		0					4	N	Blue sky	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 20° 44′, W. 155° 31′	30.08	764.0	75	23.9	85	ENE			3		5					3	NE	D. clouds	Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Caldera, Chili, S. A.	30.08	764.0	56	13.3	80	NNW			1-2		0							Blue sky	Capt. A. H. Markham.
H. M. S. Turquoise, S. 51° 19′, W. 74° 04′	29.52	749.8	41	5.0	100	NNE			2		10							Drizzling	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.			81	27.2		N			1		1							Blue sky	Com. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	30.24	768.1	57	13.9	87	ESE			1-3		8	SW						Showery	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, Off Bassorah, Asia	29.53	750.0	94.5	34.7	64	NW			3-4									Squally	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candid dos Reis, Comd't.
Quanza, Santiago, Cape Verd Id's	30.08	764.1	84.9	29.4	49	NE			3		8	NE		10 minutes		2	NE	Drizzling	Carlos M. da Silva Costa, Comd't
Rio Lima																			S. C da Silva Costa, Comd't.
Sado., St, Paulde Lonado, Benguela	30.04	763.1	74.1	23.4	77	WNW			2		10					1		Overcast	G. A de Brito Capello, Comd't.
Tamega, Macao, China	29.78	756.5	81.5	27.5	80	SSE			3		5		S					D. clouds	P. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga N. 45° 44′, W. 9° 28′	30.39	772.0	61.2	16.2	66	WNW			2		4							D. clouds	Capt. M. von Krusenstierna.
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.07	763.8	79	26.1	86	SW	3	1.3			8		S	0.46	11.7			Fair	
N. Yard, Portsmouth, N. H.	30.12	765.0	49	9.4	100	NE	18	8.0		10c	0	NE		0.2	5.			Cloudy	
Naval Hospital, Yokahama, Japan	29.88	758.9	66	18.9	100	NNW			1		10		W	0.43	10.9			Sprinkling	
Adams Panama, Panama	29.67	753.6	79	26.1	95	NNW			2		8		W			Sm'h		Cloudy	
Alaska, Callao, Peru	29.86	758.4	64	17.8	89	SE			1		10			0	0	Sm'h		Cloudy	
Alert, N. 33° 16′, E. 139° 57′ *	29.92	760.0	75	23.9	90	W			2		8		W			Sm'h		Cloudy	
Alliance, Norfolk, Va	29.76	755.9	65	18.3	89	N			2		10		NNW	Light				Cloudy	
Ashuelot, Kobe, Japan	30.00	762.0	73	22.8	90	WNW			2		10		NW					Cloudy	
Colorado, New York, N. Y	29.91	759.7	51	10.6	100	NE	14	6.8			10		Calm	0.15	3.8			Raining	
Constitution, N. 38° 36′, W. 74° 06	29.77	756.1	58	14.4	94	NW			7		10					Long		Foggy	
Franklin, Norfolk, Va	29.82	757.4	65	18.3	89	N	10.8	4.8			10		N	0.1	3.			Cloudy	
Galena, Cadiz, Spain	30.15	765.8	69	20.6	75	N			1		2					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	30.00	762.0	70	21.1	70	SW	3.6	1.6			2		SW	0	0			Fair	
Jamestown, Sitka, Alaska *	29.44	747.8	49	9.4	93	W			1		10			0.15	3.8			Rainy	
Kearsarge. Norfolk, Va	29.91	759.7	68	20.0	84	WNW			2		10		WNW			Sm'h		Cloudy	
Lackawanna. Papati, Tahiti I'd, Oceania †	30.22	767.6	77	25.0	91	SE			0-1		2		SE					Fair	
Marion, Montevideo, Uruguay * †	29.97	761.2	62	16.7	94	N			3		10		Calm			Sm'h		Cloudy	
Michigan, Erie, Pennsylvania	30.01	762.2	51	10.6	93	NE			3		10		NE					Cloudy	
Minnesota, Newport, R. I	29.97	761.2	56	13.3	94	NE			4-5		10					Mod.	NE	Raining	
Monocacy, Yokohama, Japan	30.02	762.5	68	20.0	95	NW			1		10		Calm					Misty	
New Hampshire. Norfolk, Va	29.88	758.9	65	18.9	89	N	9	4.0			10		N	0.20	5.1			Overcast	
Nipsic. N. 40° 01′, W. 13° 29′	30.36	771.1	63	17.2	67	NE			5		2		NE			Long	NE	D. clouds	
Onward, Callao, Peru †	29.95	760.7	64	17.8	94	SE			2		10					Long	W	Misty	
Palos, Nagasaki, Japan	29.94	760.5	74	23.3	100	S			1		8							Fair	
Passaic, Washington, D. C	29.91	759.7	57	13.9	94	NE			2		10							Misty	
Pensacola, Mare Isl'd, Cal	30.03	762.7	54	12.2	87	SW			3		0			0	0	Sm'h		Clear	
Portsmouth, N. 39° —′, W. 72° —′	29.78	756.4	53	11.7	93	NE			6		10					R'gh		Rainy	
Powhatan, N. 38° 11′, W. 74° 17′	29.82	757.4				NW			3		10		NW					Foggy	
Quinnebaug, N. 37° 27′, W. 73° 24′	29.81	757.2	66	18.9	94	W			3		10		W			Mod.	SW	Cloudy	
Ranger, Mazatlan, Mexico *	29.84	757.9	81	27.2	78	W			2		8		Calm	0	0	Long	S	Fair	
Richmond, Nagasaki, Japan	29.95	760.7	77	25.0	100	S			1		8		S	0.43	10.9			Cloudy	
Saratoga, N. 39° 15′, W. 72° 50′	29.78	756.4	53	11.7	100	NE			5		10			Heavy		Mod.	NE	Hazy	
Shenandoah, Montevideo, Uruguay *	30.17	766.3	61	16.1	94	NNE			2		10					Sm'h		Cloudy	
St. Louis, League Island, Pa	29.50	749.3	53	11.7	100	NE	15	6.7			10		NE	0.80	20.3			Cloudy	
Swatara, Shangbai, China * †	29.66	753.4	78	25.6	82	SSE			4		5		Calm					D. clouds	
Tennessee, New York, N. Y	29.92	760.0	57	13.9	94	NE	30	13.4			10		NE	2.11	53.6	Sm'h		Rainy	
Ticonderoga, S. 53° 23′, W. 53° 25′	29.61	752.1	39	3.9	100	ENE			1		10		E	0.13	3.3	Mod. Cross	SW; NNW	Cloudy	
Trenton, Marseilles, France *	29.91	759.7	67	19.4	42	N			6		2			0	0	R'gh	NW	Squally	
Vandalia. Navy Yard, N. Y	29.89	759.2	56	13.3	87	NE			5		10		NE					Heavy rain	
Wabash, Boston, Massachusetts	30.13	765.3	53	11.7	100	NE	21	9.4			10		NE	0.40	10.2			Light rain	
Wachusetts, N. Yard, Mare I'd, Cal	29.98	761.5	55	12.8	87	WSW			3		5		W	0	0			Fair	
Yantic, N. 23° 25′, W. 85° 45′ *	29.93	760.2	81	27.2	83	ENE			3		2		ENE			Light		Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire,																			Capt. John Arbuckle.
Barque Belleisle, N. 36° 25′, W. 73° 40′	29.86	758.4	73.3	22.9	90	SW			6		10							Showery	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. N. Youlden.
S. S. Cipero																			Capt. W. N. Lailey.
City of Agra, N. 16° 48′, W. 21° 17′	30.06	763.5	72.5	22.5	83	NNE			5		10							Misty	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N 42° 04′, W. 14° 50′	30.45	773.4	61.8	16.6	66	NE			3		1							Blue sky	Capt. Jas. Buchan.
Denbighshire																			Capt. H. Y. Murdoch.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 12° 35′, W. 34° 45′	30.14	765.5	80.2	26.8	78	ESE			4		2							D. clouds	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randell.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R.N R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt E. W. Turner.
Naiad, N. 50° 27′, W. 1° 01′	30.23	767.8	51.7	10.9	88	SSE			3		10							Overcast	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria, ‡ N. 28° 12′, W. 40° 12′	30.34	770.6	76	24.4	73	NE			3		3							D. clouds	Capt. M. Parry.
Sierra Estrella, N. 30° 55′, W. 20° 58′	30.28	769.1	69.6	20.9	82	NNE			4		4							Misty	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 32° 46′, E. 27° 38′	29.88	758.9	75	23.9	85	N			2		3							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, Montreal, Canada	30.22	767.6				ENE			2		2		W			Sm'h		Clear	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Gallia, ‡ N. 41° 12′, W. 61° 22′	30.16	766.1	67	19.4		ENE			4		10			Continuous		Mod.	SE	Rainy	Capt. W. H. P. Hains.
S. S. Scythia, N. 45° 42′, W. 41° 46′	29.88	758.9	57	13.9	87	W			6		5		WNW	Rain		R'gh	NW	Fair	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			Capt. J. W. Jennings.
S. S. Adriatic																			
S. S. Baltic, ‡ N. 50° 41′, W. 18° 34′	30.23	767.8	59	15.0	88	WSW			2		7		WNW	0	0	R'gh	WNW	D. clouds	Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 42° 12′, W. 59° 22′ †	30.26	768.6	59	15.0	98	SE			2-3		10		ESE	0	0	Sm'h		Cloudy	Capt. Benj. Gleadell.
S. S. Germanic																			Capt. Ch. W. Kennedy.
S. S. Republic, N. 40° 19′, W. 70° 00′ †	29.94	760.5	52	11.1	93	ESE			5		10			24h'rs	mod.	Mod.	E	Foggy	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Hermann, N. 50° 16′, W. 3° 22′	30.22	767.6	53.6	12.0		N			2		10		NW	7 hours		Mod.	NW; W	Cloudy	Capt. H. Baur.
S. S. Hohenzollern, ‡ N. 42° 53′, W. 41° 34′	30.24	768.1	60.1	15.6		NNW			4		8		N	1 hour		Mod.		Cloudy	
S. S. Köln, N. 51° 13′, E. 1° 37′	30.26	768.6	56.0	13.3	78	NNE			3		5		N	2hrs	light	Sm'h	NE	Fair	Capt. Th. Jüngst.
S. S. Leipzig, N. 38° 34′, W. 70° 35′	29.81	757.2				SSW			3		10		SW	5 hours		Mod.	SSW	Cloudy	Capt. F. Pfeiffer.
S. S. Strassburg, N. 46° 01′, W. 38° 54′	30.03	762.7	59.9	15.5		WSW			5		8		WNW	5 hours		R'gh	SW	Cloudy	Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. C. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. Liverpool, England	29.92	760.0	56	13.3	94	SE			3		5		SE					Fair	Capt. J. W. Shackford.
S. S. Indiana, N. 38° 48′, W. 74° 36′ †	29.76	755.9	60	15.6	88	NE			3		8		NE	Light		Mod.	NE	Foggy	Capt. R. W. Sargent.
S. S. Ohio, N. 37° 42′, W. 59° 31′ *†	30.33	770.4	83?	28.3?	96	SE			3		5		SW	Heavy		Sm'll	SW	Raining	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, Philadelphia, Pa †	29.73	755.1	67	19.4	100	E			4		10		E					Cloudy	Capt. Geo H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 26° 21′, W. 113° 47′ †	30.00	762.0	61	16.1	82	NW			2		8		NW	0	0	G'tl	SSE	Cloudy	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, San Francisco, Cal. †	30.06	763.5	54	12.2	80	SW			3		10		W	0	0	Sm'h		Cloudy	Capt. H. Davison.
S. S. Gaelic, Yokohama, Japan *†	30.14	765.5	69	20.6	95	S			1		10							Cloudy	Capt. W. H. Kidley.
S. S. Oceanic, Hong Kong, China	30.03	762.7	84	28.9	71	E			4		5		S					Fine	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon †	29.89	759.2	53.0	11.7	93	SE			1		10		SE					Rainy	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, N. 33° 21′, W. 117° 15′ †	30.00	762.0	59	15.0	100	Calm			0		0			0	0	Sm'h		Clear	Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, Esquimalt, Vancouver Isl'd †	29.84	757.9	53	11.7	80	Calm			0		10							Rainy	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, N. 34° 15′, W. 119° 19′ †	29.96	761.0	56	13.3	87	E			2		0					Sm'h		Clear	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal †	30.00	762.0	53	11.7	80	S			2		10		SW					Overcast	Capt. G. Debney.
S. S. Victoria, Victoria, Vancouvers Id. †	29.83	757.7	46	7.8	85	Calm			0		2					Sm'h		Fair	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 29° 02′ W. 145° 21′	30.32	770.1	66	18.9	68	NE			2		10		NE			Sm'h	ENE	Hazy	A. Bannerman, 2d Officer.
S. S. City of New York, Sydney, N. S. W †	30.23	767.8	89	31.7	100	SE			4		10		SE					Raining	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, Panama, Panama †	29.95	760.7	78	25.6	82	NW			2	0	n		NW	0	0	Sm'h		Cloudy	Capt. D. S. Austin.
S. S. City of Peking, N. 42° 13′, W. 134° 40′ †	30.06	763.5	55	12.8	68	NW			4		8		NW	0	0	Mod.	W	Cloudy	Capt. G. G. Berry.
S. S. City of Sidney, N. 26° 01′, W. 148° 57′ *†	30.27	768.8	73	22.8	63	ENE			4		8		ENE	0	0	H'vy	NE	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 35° 15′, E. 139° 44′ †	30.10	764.5	66	18.9	83	N			1		2		NW			Mod.	E	Clear	A. L. Ritchie, 2d Officer.
S. S. Colima																			Capt. R. R. Searle.
S. S. Granada, Mazatlan, Mexico †	29.92	760.0	82	27.8	83	SSE			3		8		SSE	0	0	H'vy	SSW	Fair	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. W	30.29	769.4	68	20.0	56	SSE			4		5?		SE					Cloudy?	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, N. 47° 52′, W. 31° 48′ †	30.19	766.8	58	14.4	?	W			5		10		W	2 hours		Con.	SW	Rainy	A. Feddersen, 2d Officer.
S. S. Rhynland, Jersey City, N. J †	29.98	761.5	57	13.9	93	NE			6		10		NE	0.2	5.			Rainy	Capt. Wm. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, Fall River, Mass	29.96	761.0	53	11.7	100	ENE					10n		NE	0.72	18.3			Raining	Capt J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, Arroyo, Porto Rica †	30.13	765.3	81	27.2		Var.			5		8			Heavy		Sm'h		Squally	Capt. W H. Champlin.
U. S. F. C. S. Fish Hawk, Washington, D. C †	29.91	759.7	58	14.4	94	NE	3	1.3			10n			0.06	1.5			Cloudy	
Bark Sunbeam, Lisbon, Portugal †	30.22	767.6	80	26.7	74	NE			3		0			0	0			Clear	Capt. Jos. Hand.

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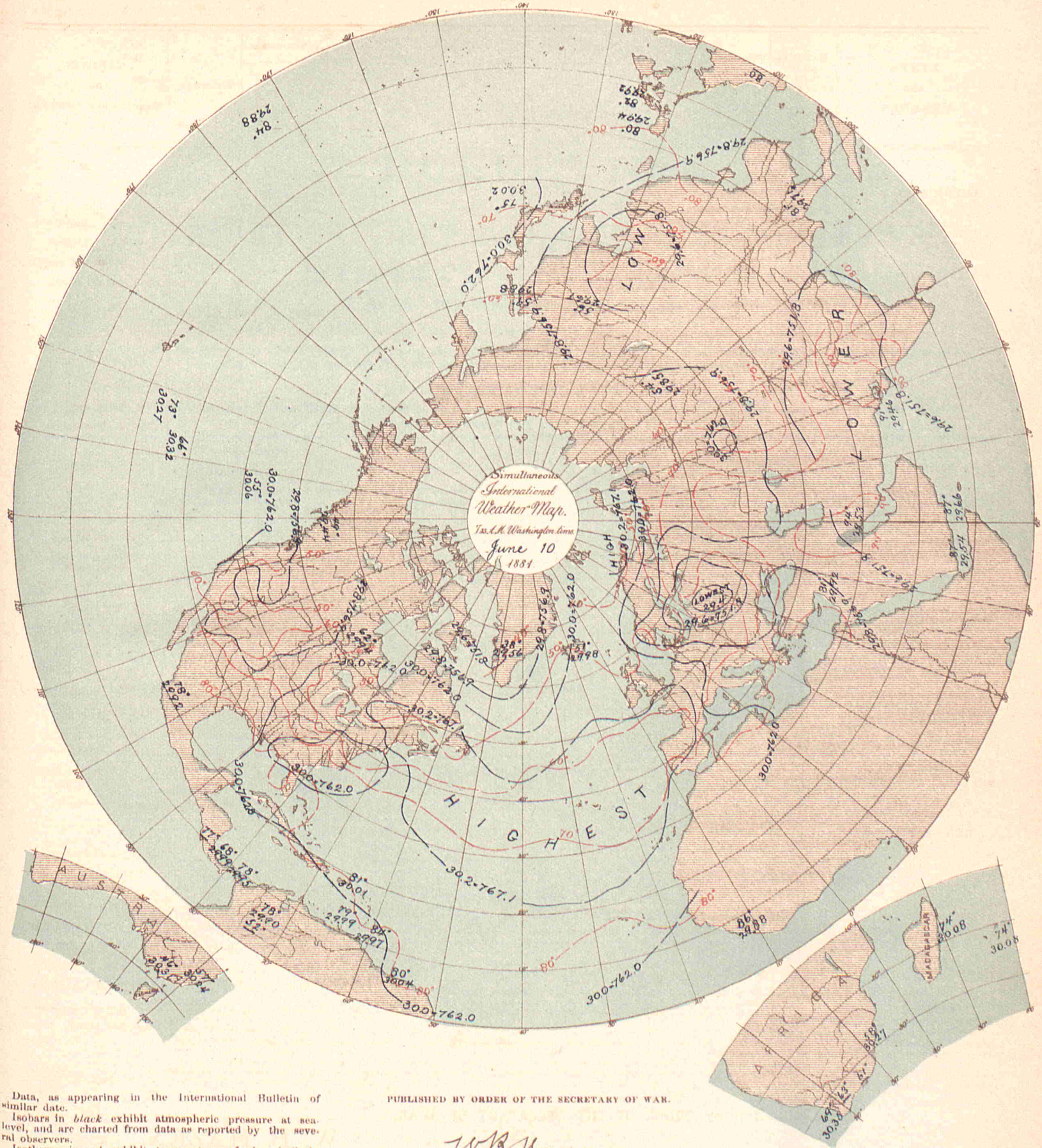
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



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

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

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

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

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

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

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

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 11, 1881,

7 A. M., Washington Mean Time.

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

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

STATIONS.	BAROMETER. Corrected for instru-m'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From	Lower From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.04	763.1	72.1	22.3	86	E			4	2				0	0	Fair	Raynard.
Algiers			30.18	766.5	68.4	20.2	76	NNE			2	0				0	0	Clear	Nicolas.
La Calle			30.16	766.0	69.1	20.6	63	NNW			3	4				0.039	1.0	Cloudy	Fonfréde.
Tunis			30.13	765.3															Jacques.
Sfax			30.11	764.9															Gau.
Saida			30.13	765.3	74.3	23.5	12	NE			2	4				0.012	0.3	Cloudy	Dumas.
Tebessa			30.13	765.2	59.4	15.2	43	Calm			0	1				0	0	Very fair	Watrin.
Geriville					79.2	26.2	11	NE			1	0				0	0	Clear	Lonchamp.
Laghouat			30.10	764.5	75.9	24.4	14	N			2	0				0	0	Clear	Herbin.
Biskra			30.17	766.3	78.4	25.8	60	SE			2	0				0	0	Clear	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.20	767.1	30.29	769.3	42.8	6.0	92	WSW	3	1.3		10				0	0	Dense fog	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agrám	29.39	746.5	29.93	760.3	60.1	15.6	50	SE			3	8				0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.00	736.7	29.78	756.3	47.5	8.6	68	W	13.0	5.8		10				0.118	3.0		Dr. Wierzbicki.
Eperies	28.85	733.0	29.72	755.0	57.2	14.0	57	NW			2	10ks		S		0	0		Julius Mikolik.
Gratz ‡	28.70	728.9	29.94	760.4	57.7	14.3	55	SW			4	9				0	0		Andreas Rospini.
Hermannstadt	28.35	720.0	29.76	756.0	55.8	13.2	50	NW			5	3				0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.63	727.3	29.99	761.8	46.8	8.2	70	WSW			3	10				0	0		The Staff.
Lemberg	28.71	729.2	29.69	754.0	54.3	12.4	63	NW			2	10				0	0		Dr. T. Stanecki.
Pola	29.86	758.4	29.97	761.2	67.1	19.5	40	S			1	8				0	0		I. R. HydrographicOffice.
Szathmar	29.31	744.4	29.77	756.1	56.8	13.8	78	NW			1	8				0.063	1.6		Belcht Petér, S. J.
Szegedin	29.58	751.3	29.85	758.3	57.6	14.2	67	NW			4	8				0	0		Karl Stancel.
Trieste	29.89	759.3	30.00	761.9	64.0	17.8	39	E			1	3				0.059	1.5		Secco.
Vienna	29.22	742.2	29.94	760.5	50.7	10.4	60	W			2	10				0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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

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

BRITISH SERIES.

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

Aberdeen	29.92	760.0	30.02	762.5	48.6	9.2	54	NW	21	9.4			7			0.020	0.5	D. clouds	W. Boswell.
Armagh, Observatory	29.82	757.4	30.05	763.3	54.7	12.6	82	SE	7	3.1			10					Overcast	S. Call.
Bidston, Liverpool Obs'y			30.00	762.0	55.2	12.9	79	E	8	3.6			10					Misty	John Hartnup.
Bolton, Sharples	29.47	748.5	30.01	762.2	51.7	10.9	76	ESE	6	2.7			10					Gloomy	Thomas Mackereth.
Bradford, Yorkshire	29.61	752.1	30.01	762.2	58.6	14.8	67	E			1		7			0	0	D. clouds	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.94	760.5	29.96	761.0	85	29.4	72	NE			4		8					Overcast	Corpl. J. Surgener, A.H.C.
Cardington																			John McLaren.
Chatham, School M. E.	29.90	759.4	30.03	762.7	60.4	15.8	57	NE			1		5					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.81	757.2	30.04	763.0	57.7	14.3	63	NNW			4		5					D. clouds	The Staff.
Fort Napier, Natal	28.09	713.5	30.31	769.9	65.3	18.5	68	NE			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.88	758.9	87	30.6	84	W			1							Raining	Sgt. C. E. Keane.
Galway, Queen's College			29.95	760.7	58	14.4	76	SW			2		10					Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.07	763.8	30.13	765.3	71.6	22.0	88	E			3		4					D. clouds	2nd Cpl. C. Baldwin.
Glasgow, Observatory	29.80	756.9	30.00	762.0	55.2	12.9	54	WNW			3		5			Blank		D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	29.84	757.9	30.01	762.2	61.4	16.3	57	SE			1		5					D. clouds	The Staff.
Guernsey	29.76	755.9	29.97	761.2	55	12.8	90	NNW			1		7			Blank		D. clouds	Dr. S. E. Hoskins, F.R.S.
Kew, Observatory	29.99	761.7	30.03	762.7	60.1	15.6	57	SSW	5	2.2			7					D. clouds	The Staff.
Leicester, Museum	29.76	755.9	30.01	762.2	55.0	12.8	78	SW			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.96	761.0	30.04	763.0	69.8	21.0	58	W			2		3					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.94	760.5	29.98	761.5	84.0	28.9	80	NE			1		3					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.50	749.3	30.03	762.7	50.8	10.4	95	SSE			0–1		10			Blank		Overcast	John Mac Email.
Oxford, Radcliffe Obs'y	29.79	756.7	30.02	762.5	56.8	13.8	69	S			3		10					Overcast	The Staff.
Plymouth	29.94	760.5	30.01	762.2	59.8	15.4	76	N			2		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			30.03	762.7	46	7.8	69	N	25	11.2			10					Misty	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.61	752.1	29.67	753.6	65.4	18.6	73	W			1		10					Showery	Serg't W. H. Lyne.
Sheffield	29.80	756.9	30.08	764.0	54.0	12.2	86	Calm			0		10			0.03	0.8	Overcast	W. F. Cooper.
Silloth Rectory	29.98	761.5	30.01	762.2	57.7	14.3	65	E			*1		7			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.04	763.0	54.8	12.7	63	NE	5	2.2			10					Misty	Rev. S. J. Perry.
Strathfield Turgiss	29.78	756.4	29.99	761.7	58.3	14.6	69	SW			1		7					D. clouds	Rev. C. H. Griffiths, F.M.S
Truro, Royal Institution	30.06	763.5	30.08	764.0	61	16.1	61	NW			6		3					D. clouds	W. Newcombe.
Valencia, Observatory	30.08	764.0	30.10	764.5	54.7	12.6	63	WNW	10	4.5			8					D. clouds	The Met'g'l Office.

CANADIAN SERIES.

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

Bathurst, N. B					63.0	17.2		S	2	0.9		1k	0			0	0	Blue sky	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.02	762.5	30.06	763.5	51	10.6	80	NE	3	1.3			10n			0	0	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	30.03	762.7	30.09	764.3	51	10.6	76	Calm	0	0		8ck	0	SE		0	0	Fair	G. A. Blair.
Chicontimi, Quebec					50.9	10.5						0	0			0	0	Blue sky	Rev. V. A. Huart.
Cornwall, Ontario	29.87	758.7	30.06	763.5	51.1	10.6	94	N			1	0	0			0	0	Blue sky	James Smith, M. A
Dalhousie, N. B	30.03	762.7	30.06	763.5	55.0	12.8		W			1	0	0			0	0	Blue sky	H. A. Johnson.
Father Point, Quebec*	30.00	762.0	30.02	762.5	55	12.8	74	NW	2	0.9		5k	0			0	0	Smoky	J. McWilliams.
Fort Garry, Manitoba*	28.77	730.7	29.56	750.8	62	16.7	91	SW	8	3.6		5k	5ks	W	W	0.420	10.7	Fair	James Stewart.
Fredericton, N. B	30.01	762.2	30.08	764.0	58.0	14.4	49	NW	1	0.4		7c	0			0	0	Fair	Prof. Harrison.
Granton, Ontario	29.04	737.6	30.14	765.5	52.0	11.1	79	Calm			0	0	0			0	0	Clear	James Grant.
Halifax, N. S.*	29.82	757.4	29.94	760.5	55	12.8	99	NE	10	4.5			10n			1.017	25.8	Light rain	A. Allison.
Hamilton, Ontario	29.75	755.6	30.14	765.5	56.8	13.8	86	E			1	0	0			0	0	Clear	Geo. Dickson, B. A.
Kingston, Ontario*	29.74	755.4	30.07	763.8	62	16.7	73	N	3	1.3		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S	30.02	762.5	30.06	763.5	45.0	7.2	92	S			1		10n			Inap.	Inap.	Raining	C. H. Rigby.
Montreal, Quebec*	29.88	758.9	30.07	763.8	60	15.6	60	W	4	1.8		0	8k			0	0	Smoky	C. H. McLeod, C. E.
Moose Factory, Ontario	29.82	757.4	29.86	758.4	68.0	20.0	60	SW			3	0	0			0.11	2.8	Blue sky	J. R. Nason.
Parry Sound, Ontario*	29.45	748.0	30.14	765.5	57	13.9	72	Calm	0	0		0	0			0	0	Clear	Rev. R. Moseley.
Peterboro, Ontario	29.38	746.2	30.12	765.0	59.7	15.4	85	E			1	0	0			0	0	Hazy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.46	748.3	30.15	765.8	54	12.2	87	Calm	0	0		0	0			0	0	Clear	H. Morgan.
Port Stanley, Ontario	29.51	749.5	30.16	766.1	53	11.7	80	NW	3	1.3		0	0			0	0	Clear	M. Payne.
Quebec, Quebec*	29.75	755.9	30.08	764.0	51	10.6	79	NE			1		Hz			0	0	Hazy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.65	753.1	30.11	764.8	51	10.6	75	NW	1	0.4		10c	0	S		0	0	Fair	W. H. McIntyre.
Saugeen, Ontario*	29.43	747.5	30.14	765.5	55	12.8	70	S	5	2.2		Hz	Hz			0	0	Hazy	K. Stewart.
St. Andrews, N. B	29.96	761.0	30.01	762.2	55	12.8	58	N	3	1.3			10n			0	0	Cloudy	
St. John, N. B	29.87	758.7	30.04	763.0	54.0	12.2	61	N	11	4.9			10ks			0	0	D. clouds	G. Murdock, C. E.
Stratford, Ontario	28.86	733.0	30.15	765.8	50.0	10.0	93	Calm	0	0		0	0			0	0	Blue sky	C. J. Macgregor, M. A.
Sydney, C. B*	30.08	764.0	30.12	765.0	47	8.3	95	E	3	1.3			10n			0.09	2.3	Light rain	T. C. Hill, C. E.
Toronto, Ontario*	29.76	755.9	30.14	765.5	58	14.4	68	NW	4	1.8		Hz	0			0	0	Hazy	Magnetic Observatory
Windsor, N. S	29.85	758.2	29.94	760.5	52.5	11.4	87	N					10n			0.38	9.7	Cloudy	
Woodstock, Ontario	29.10	739.1	30.15	765.8	56.3	13.5	74	W	5	2.2		0	0			0	0	Blue sky	Prof. Wolverton.
Yarmouth, N. S.*	29.88	758.9	29.94	760.5	56	13.3	90	E	4	1.8		10k	0	SE		0.30	7.6	Cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	30.08	764.0	30.33	770.4	57	13.9	74	SE	1	0.4		0	0			0	0	Fair	John Delany.
St. Pierre, N. F			30.16	766.1	45.7	7.5		S			1					0.59	15.0		N. F. Land, Comd't.

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

CAPE COLONY SERIES.

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

Cape St. Francis Lt. House	30.35	770.9			66.5	19.2	78	Calm	7.8	3.5			0			0	0	Hazy	John Duthie.
Cape Town, C. G. H. Obs'y.	30.23	767.8	30.27	768.8	60.2	15.7		NW	3.5	1.6		0	0			0	0		The Staff, for D. Gill.
Worcester*†	29.30	744.2			66.7	19.3	46	E			1	0	0			0	0	Fine	C. Stokes.

CHINESE SERIES.

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

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.74	755.4	29.76	756.0	75.9	24.4	90	SE	0.9	0.4		10c	0			0.008	0.2	Covered	M. Marc Dechevrens, S.J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.16	664.5	29.88	758.9	68.0	20.0	97					10ks;s	0			0	0	Cloudy	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.66	753.3	29.71	754.5	50.5	10.3	86	NNW	16	7			10					Raining	Oversergent Fischer.
Fanöe	29.82	757.5	29.84	758.0	51.8	11.0	70	WNW			6		2						Overloerer Lauridsen.
Godthaab, Greenland	29.22	742.1	29.26	743.2	41.5	5.3	62	Calm			0		6						S. Kleinschmidt.
Stykkisholm, Iceland	29.65	753.1	29.69	754.2	51.3	10.7		S			7		10					Raining	A. O. Thorlacius.
Thorshavn	30.13	765.2	30.16	766.1	46.8	8.2	62	ENE	11	5			0						Overloerer Bergh.
Vestervig	29.73	755.1	29.82	757.5	49.8	9.9	84	NW			4		10						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.48	748.9	30.13	765.4	55.0	12.8	77	WSW			1	0	8n		W			Light rain	M. Labroue, Director.
Alençon Normal School	29.49	749.0	30.04	763.0	57.6	14.2	93	SE			1		10kn		S	0.307	7.8	Covered	M. Nicot, Director.
Arras, Engineer School	29.77	756.2	30.03	762.7	60.4	15.8	46	SE			1	0	k		W				M. Klein, Commandaut.
Avignon, Normal School	29.98	761.5	30.06	763.5	66.6	19.2	29	N			4		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.50	749.2	30.05	763.2	61.3	16.3	43	SW			1	0	8kn		SW	0	0	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.78	756.4	30.04	763.0	63.9	17.7	52	SW			1		1c		S	0	0	Covered	M. Frère Eugene Marie.
Besançon, Normal School	29.27	742.0	30.05	763.2	58.1	14.5	47	ENE			1	0	kn		SE	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.83	757.7	30.09	764.3	56.1	13.4	97	WNW			1		10			0.189	4.8	Raining	M. Rayet, Director.
Bourges, Normal School	29.49	749.1	30.04	763.1	56.3	13.5	57	W			1	0	kn		W	0	0		M. Postel, Director.
Brest, Naval Observatory	29.85	758.2	30.10	764.4	59.0	15.0	70	NNW			2		10		NNW	0.354	9.0		M. de Rermaree, Dir.
Caen, Normal School	29.85	758.3	29.93	760.2	56.3	13.5	93	S			3		8			0.213	5.4	Very cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.75	755.7	30.07	763.8	63.9	17.7	56	N			1		8		ENE	0	0	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.53	750.1	30.04	763.0	62.2	16.8	85	NW			1					0	0		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.70	729.0	30.05	763.3	57.2	14.0	55	S			1		10			0.004	0.1	Covered	M. Alluard, Director.
Cluny, Normal School	29.30	744.2	30.14	765.6	66.2	19	63	S			3		10		S	0	0	Covered	M. de Villemontée, Dir.
Commercy, Normal School	29.19	741.4	30.17	766.4	59.4	15.2	55	W			3		5kn	W	W	0	0	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.47	697.7	29.94	760.4	64.4	18	56	N			1	0	n		N	0	0		M. Joangirard, Director.
Grénoble, du. Rhone	28.96	735.5	30.10	764.5	64.4	18.0	29	NW			3		2		NW	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.29	744.0	30.01	762.3	60.8	16	48	NW			1	0	2k			0	0	Slightly cl'dy	M. Ablard, Director.
Guéret, Normal School	28.48	723.3	30.09	764.2	54.5	12.5	86	SW			1	0	n		NE	0.012	0.3		M. Rivoire, Director.
Lamballe, Normal School	29.86	758.4	30.13	765.3	58.3	14.6	82	SSW			2				SSW	0.650	16.5		M. Ollitrault, Director.
Lescar, Normal School	29.73	755.1	30.41	772.4	53.6	12	59	W			1	0	kn			0.386	9.8		M. Chauvin, Director.
Lorient, Naval Observatory	29.98	761.5	30.08	764.1	62.6	17.0	57	NW			3		10	W	NW	0.004	0.1	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.03	737.3	30.08	764.1	59.5	15.3	38	NNE			1		5			0	0	Cloudy	M. André, Director.
Mans, Normal School	29.70	754.4	30.01	762.3	54.0	12.2	95	S			3		10			0.169	4.3	Covered	M. Piboeu, Director.
Marseille, Observatory	29.75	755.7	30.02	762.5	66.0	18.9	23	WNW			4		1		NW	0	0		M. Stephan, Director.
Montlouis l'instituteur	24.89	632.3	30.13	765.3	45.0	7.2	72	NW	7.4	3.3			9			0.028	0.7	Raining	M. Cave, for Dr. Fines.
Montpellier, Normal School	29.97	761.2	30.08	763.9	65.7	18.7	60	W			3		5	N	W	0	0	Cloudy	M. P. Galzin, Director.
Nancy, Normal School	29.30	744.2	30.06	763.6	57.2	14	44	W			1	0	8kn			0	0	Very cloudy	M. Hasse.
Nantes, Observatory	29.85	758.3	30.02	762.4	65.5	18.6	74	NW			1-2		8kn	WSW	W	0.650	16.5		M. Larocque, Director.
Nice	29.93	760.3	29.97	761.2	66.9	19.4	61	SW			4		1	SW	SW	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	30.02	762.5	30.12	765.1	59.9	15.5	63	SW	11.2	5.0			10		NW	0.024	0.6	Raining	Dr. Fines.
Pic-du-Midi, Plantade	22.58	573.5			31.5	—0.3							10		WNW	0.693	17.6	Snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.02	737.1	30.07	763.7	64.4	18	36	N			4		0			0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.15	638.9			34.0	1.1	100	WSW			2		10			0.063	1.6	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	30.04	763.1	30.08	763.9	65.5	18.6	78	W			2		8		W	0.012	0.3	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.82	757.3	30.03	762.7	60.8	16.0	87	NNW			2		10					Raining	M. Mouillot, Director.
Rodez, Normal School	27.95	709.8	30.12	765.1	48.0	8.9	95	NW			3		5			0.098	2.5	Cloudy	M. Richard, Director.
Rouen, Normal School	29.94	760.4	30.02	762.6	58.3	14.6	69	SSE			1		10		SE	0	0	Covered	M. Platrier, Director.
Saint Lô, Normal School	29.83	757.6	29.98	761.6	55.0	12.8	87	S			1		10			0.20	5.	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.88	759.0	30.05	763.2	57.6	14.2	57	S			1		10		SW	0.004	0.1		M. Renou, Director.
Toulouse, Observatory	29.48	748.8	30.21	767.3	55.4	13.0	88	WNW			3		10			0.669	17.0	Covered	M. Bailland, Director.
Tours	29.80	757.0	30.00	762.0	55.8	13.2	90	SSW			1		10			0.280	7.1	Rainy	M. de Tastes.
Versailles, Observatory	29.55	750.5	30.04	763.0	55.8	13.2	62	SW			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.77	756.1	30.06	763.5	56.7	13.7	67	S			1		10		S	0	0		M. Marié Dvy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.17	740.8	30.03	762.7	52.0	11.1	55	NW			4	0	8k		WNW	0.016	0.4		Prof. Dr. Hoh.
Berlin	29.64	752.9	29.82	757.3	45.9	7.7	90	W			6		10			0.669	17.0		Prof. Dr. Arndt.
Breslau	29.28	743.8	29.81	757.2	45.7	7.6	74	W			4		10			0.063	1.6	Raining	Royal University Obs'y.
Carlsruhe	29.65	753.0	30.08	764.0	54.3	12.4	65	W			1		10	W		0	0		Albert Senz.
Cassel	29.25	743.0	29.97	761.2	50.7	10.4	57	W			5		8	NW		0	0		Dr. H. Möhl.
Frankfort on the Main	29.71	754.7	30.08	763.9	58.8	14.9	44	WNW			1		9			0	0		Physical Society.
Friedrichshafen	28.62	727.0	30.03	763.3	56.3	13.5	81	SW			3		8	WSW		0	0		Wilhelm, Chief Tel.
Hamburg	29.82	757.3	29.89	759.1	48.6	9.2	83	WNW			5		10			0.020	0.5		Dr. R. Kleeman.
Kiel	29.81	757.1	29.82	757.5	49.8	9.9	72	W			6		10			0.075	1.9		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.51	749.6	29.94	760.4	46.6	8.1	72	NW			3		10	W				Raining	Prof. Dr. Bruhns.
Magdeburg	29.70	754.4	29.89	759.2	46.9	8.3	78	WNW			6		10ks		NW	0.031	0.8		Dr. Assmann.
Memel	29.35	745.6	29.40	746.8	55.6	13.1	87	NNW			5	0	8k						Reinbrecht & Issermann.
Munich	28.22	716.9	30.09	764.3	50.9	10.5	39	NW			4		10	W		0.004	0.1		Central Station.
Neufahrwasser	29.50	749.3	29.52	749.7	50.0	10.0	82	NW			2		10			0.240	6.1	Light rain	A. Lothes.
Neustadt, Palatinate	29.52	749.8	30.05	763.3	56.3	13.5	53	W			2		10			0	0		Dicknether.
Stuttgart	29.10	739.0	29.99	761.8	54.5	12.5	44	NW			2		10			0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.54	724.9	30.00	762.0	50.5	10.3	45	W			6		10	NW		0	0		Prof. Kemlein.
Wustrow	29.71	754.5	29.73	755.2	48.4	9.1	98	NNW			7		10s			0.827	21.0		Brandes & Reimer.

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

GREEK SERIES.

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

Athens	29.44	747.8	29.83	757.6	73.0	22.8		SW			2.0		5					½ clear	Schmidt & Wourlisch.

INDIAN SERIES.

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

Kurrachee	29.46	748.8	29.50	749.4	88.0	31.1	84	SSW	32.0	14.3			8		WSW	0	0	D. clouds	
Deesa	29.00	736.6	29.45	748.0	101.3	38.5	28	WSW	17.6	7.9			1		SW	0	0	D. clouds	
Bombay	29.63	752.7	29.67	753.6	79.5	26.4	94	SW	6.0	2.7			10		WSW	3.66	93.0	Raining	
Poona, Yarrowda	27.82	706.6	29.65	753.1	82.8	28.2	54	W					1		W	0.21	5.3	D. clouds	
Belgaum	27.20	690.8	29.73	755.1	75.4	24.1	77	SW	13.0	5.8			6	SW	SW	0.06	1.5	Drizzling	
Lahore	28.78	731.0	29.51	749.5	83.0	28.3	79	NE	1.3	0.6			8			0.12	3.0		
Roorkee	28.57	725.6	29.45	748.0	82.8	28.2	79	E	3.4	1.5			8			1.19	30.2	Misty	
Agra	28.88	733.7	29.44	747.8	79.2	26.2	91	NW	4.7	2.1			10		N	0	0		
Nagpur	28.52	724.5	29.55	750.6	81.7	27.6	79	Calm	6.9	3.1			9		W	0.03	0.8	Gloomy	
Jubbulpore	28.18	715.7	29.52	749.9	77.4	25.2	86	Calm	4.3	1.9			10			0.23	5.8	Overcast	
Lucknow	29.06	738.1	29.43	747.4	86.1	30.1	74	Calm	7.3	3.3			10			0.32	8.1	Overcast	
Allahabad	29.12	739.5	29.42	747.1	93.9	34.4	52	Calm	4.6	2.1			8		S	0	0	D. clouds	
Patna	29.31	744.5	29.49	749.0	85.0	29.4	86	E	5.2	2.3			6	E	E	0	0	D. clouds	
Hazaribagh	27.54	699.5	29.50	749.2	86.8	30.4	58	SW	7.7	3.4			7	S	N	0.03	0.8	Thnd'r str'm	
Cuttack	29.50	749.2	29.58	751.2	81.8	27.7	84	Calm	0.3	0.1			9			0.18	4.6	D. clouds	
Calcutta, Alipore	29.54	750.3	29.56	750.9	84.6	29.2	83	SSE	2.0	0.9			7	SSW	SSW	0	0	D. clouds	
Dhubri	29.43	747.5	29.55	750.5	83.2	28.4	84	Calm	3.1	1.4			1		W	0.83	21.1	D. clouds	
Chittagong	29.52	749.7	29.61	752.0	83.7	28.7	82	S	3.7	1.6			5			0	0	Blue sky	
Sibsagar	29.21	741.9	29.54	750.2	86.6	30.3	78	S	2.2	1.0			8	W	W	0	0	D. clouds	
Zanzibar, Africa			30.06	763.3	82.2	27.9	51	S	12	5.4			2			0	0	D. clouds	

ITALIAN SERIES.

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

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

Udine	29.56	750.9	29.96	761.1	61.9	16.6	48	W	1.3	0.6			9			0	0		Prof. Giovanni Clodig.
Milan	29.42	747.3	29.92	760.0	66.7	19.3	21	WSW	6.3	2.8			6	WNW		0	0		Prof. Schiaparelli.
Padua	29.84	758.0	29.95	760.7	66.2	19.0	40	SW	3.8	1.7			4	W		0.016	0.4		Prof. Dott. Lorenzoni.
Monculieri	29.03	737.3	29.91	759.7	66.7	19.3	30	ENE	3.8	1.7			2	NE		0	0		Prof. P. F. Denza.
Genoa	29.80	756.8	29.99	761.7	65.3	18.5	54	SE	6.9	3.1			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.04	712.2	29.89	759.2	63.0	17.2	31	NW			4		0			0	0		Prof. D. C. Bruno.
Pesaro	29.92	760.0	29.97	761.2	61.9	16.6	55	N	12.5	5.6			2			0.252	6.4		Prof. Luigi Guidi.
Florence	29.70	754.3	29.95	760.7	68.0	20.0	30	W			2		1			0	0		Prof. Costantino Pitter.
Leghorn	29.91	759.6	29.99	761.7	67.3	19.6	59	WSW	1.8	0.8			4			0.039	1.0		Prof. P. Monte.
Rome	29.80	756.9	29.97	761.3	68.9	20.5	45	WSW	5.6	2.5			2			0.043	1.1		Prof. P. S. Ferrari.
Lecce	29.67	753.7	29.92	760.0	66.0	18.9	47	NNE	18.6	8.3			5			0.035	0.9		Prof. C. de Giorgi.
Cosenza	29.08	738.6	29.95	760.7	65.5	18.6	71	SE	3.1	1.4			7	SSE		0.386	9.8		Prof. D. Conti.
Cagliari	29.87	758.7	30.06	763.5	63.9	17.7	37	NW			6		5	NW		0.059	1.5		Prof. A. Pacinotti.
Palermo	29.85	758.2	30.10	764.5	66.2	19.0	46	NNE	3.4	1.5			10			0.079	2.0		Prof. G. Ciacciatore.
Syracuse	29.92	760.0	29.97	761.1	68.9	20.5	48	E	12.5	5.6			6			0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.42	747.3	29.94	760.5	63.9	17.7	69	NW	1.3	0.6			10	S		0.476	12.1		Prof. F. Brioschi.
Stelvio	22.08	560.9			37.0	2.8	83	SW			1	8cs	0	N		0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.14	562.3			36.9	2.7	60	N			6	0	2k		N	0	0	Misty	Prof. P. F. Denza.

JAPANESE SERIES.

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

Hiroshima, I. M. Obs'y	29.93	760.2	29.95	760.7	73.7	23.2	95	Calm	0	0		ck	10n			0.140	3.6	Light rain	K. Sasaki.
Kioto	29.81	757.2	29.98	761.5	78.1	25.6	79	S	3.0	1.3		ck	10s		SW	0	0	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.78	756.4	29.97	761.2	76.9	24.9	75	SSW	15.9	7.1			10s			0.170	4.3	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	30.00	762.0	30.05	763.5	68.9	20.5	87	ESE	9.7	4.3		ck	10s		SE	0.015	0.4	Cloudy	The Staff.
Wakayama	29.94	760.5	29.99	761.7	77.2	25.1	79	SSW	9.5	4.2		ck	9ks		SSW	0	0	Cloudy	Y. Kuwamuca.

MAURITIUS SERIES.

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

Mauritius Obs'y, Mauritius	29.85	758.2	30.04	763.0	76.0	24.4	69	E	6.5	2.9		0	1			0.07	1.8	Fine	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

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

Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.62	752.4	29.88	758.9	77.5	25.3	82	E	0.9	0.4		7cs	0	SW		0	0	Cloudy	F. Quijano, U. E.
Mexico, Central Obs'y																			The Staff.
Fabellon, Aguascallentes																			M. V. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Chazaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.

NETHERLANDS SERIES.

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

Flushing	30.07	763.8	30.07	763.8	59.0	15.0		W			2					0	0		
Groningen	29.94	760.5	30.00	761.9	53.1	11.7		NW			4					0	0		
Helder	30.02	762.6	30.02	762.6	51.8	11.0		WNW			2					0	0		
Hellevoetsluis	30.04	763.1	30.04	763.1	56.8	13.8	66	WSW			4					0	0		
Utrecht	29.99	761.8	30.04	763.0	59.0	15.0	60	WNW			2		5			0	0	Cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrumental error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.75	755.7	29.82	757.3	52.9	11.6	71	Calm	0	0			5			0.051	1.3		
Christiania	29.66	753.3	29.80	757.0	52.7	11.5	69	NE	7	3			10			0.043	1.1		
Gjæsvær	30.22	767.6	30.24	768.2	36.0	2.2		E			2		10						
Lodingen	30.00	762.1	30.05	763.3	45.9	7.7	36	NE			4		2			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.25	768.4	30.27	768.8	65.8	18.8	83	SE	4.9	2.2			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.19	741.5	30.17	766.3	73.6	23.1	13	SW	4.9	2.2			0			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.17	766.3	30.26	768.6	68.7	20.4	61	SW	3.8	1.7			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.84	757.9	30.19	766.9	72.9	22.7	37	N	11.2	5.0			0			0	0		The Staff.
Ponta Delgada, Azores	30.35	771.0	30.43	772.8	66.6	19.2	73	Calm	0	0			10			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.92	734.5	29.95	760.6	77.7	25.4	33	SW	9	4		1c	0						Capt. Lasarew.
Archangel	29.69	754.0	29.71	754.5	43.0	6.1	87	NNE	18	8			10					Raining	Capt. Sselliwerstow.
Astrakhan	30.01	762.3	29.93	760.2	86.4	30.2	22	SE	7	3			0						Capt. Wisganow.
Barnaul ‡	29.45	748.1	29.94	760.4	63.9	17.7	50	SW	9	4			10						Meteorological Obs'y.
Dorpat	29.03	737.4	29.26	743.3	66.2	19.0	67	N	9	4			10k						Observatory.
Ekaterinburg	28.98	736.1	29.88	758.9	85.6	29.8	25	SW	22	10		10k	0						Meteorological Obs'y.
Kasan	29.56	750.8	29.81	757.2	78.1	25.6	48	W	7	3			9						Observatory.
Kertch	29.76	755.8	29.78	756.3	75.9	24.4	69	SSE	4	2			0						Lagorio & Sastyrex.
Kieff	28.99	736.4	29.60	751.9	64.2	17.9	43	SW	13	6		ck	8ks						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.58	751.2	29.77	756.2	78.3	25.7	34	SSW	13	6			7					Blank	Meteorological Obs'y.
Moscow	29.01	736.9	29.54	750.4	59.2	15.1	61	S	10.1	4.5		0	8ks						Meteorological Obs'y.
Nertchinsk	27.29	693.1	29.48	748.9	58.3	14.6	84	Calm	0	0			6			0.114	2.9		Meteorological Obs'y.
Nikolaiev	29.66	753.4	29.73	755.2	72.9	22.7	63	SSW	13	6			9kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.57	751.0	29.65	753.2	55.6	13.1	85	SE			4	0	1k			0	0		Lieut. Iwanow.
Pekin, China	29.35	745.6	29.50	749.2	69.6	20.9	73	Calm	0	0		0	3k						Physical Observatory.
St. Petersburg	29.29	744.0	29.31	744.4	50.7	10.4	93	NE	18	8			10n						Central Physical Obs'y.
Tashkend, Laboratory	28.15	715.0	29.62	752.3	82.0	27.8	47	Calm	0	0			0					Blank	Teich, A. M.
Tiflis	28.44	722.4	29.76	755.8	96.3	35.7	23	Calm	0	0		0	1k						Physical Observatory.
Warsaw	29.16	740.6	29.58	751.4	46.0	7.8	92	W	25	11			10n					Blank	Astronomical Obs'y.
Wilna	28.92	734.5	29.33	744.9	54.5	12.5	89	WSW	4	2			10					Raining	Berg, Assistant.
Yeniseisk	29.43	747.5	29.71	754.7	48.6	9.2	92	SW	9	4			6					Raining	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.04	763.0	53.0	11.7	61	E			2	6	0			0	0	Fine	Andrew Gibb.
Monach Lt. House, Hebrides			30.07	763.8	51	10.6	93	NE			4	5	5	NE		0.2	5.	Cloudy	J. Youngclause.
North Unst, Shetland Isl'ds			29.95	760.7				N			7		Hz						Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.03	762.8	30.13	765.4	64.8	18.2	57	S	5.1	2.3			10			0.024	0.6		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.15	765.9	30.21	767.3	67.6	19.8	55	E	2.0	0.9		2	4	SW		0.016	0.4	Cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.24	691.8			64.4	18.0	47	N	3.8	1.7			8			0	0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.95	709.8	30.12	765.1	70.2	21.2	35	SE	4.0	1.8		0	2			0	0	Lightly cl'dy	The Staff.
Murcia, Met. Obs'y ‡	30.00	762.1	30.15	765.8	75.2	24.0	43	SSE	1.6	0.7		2	5	E		0	0	Cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.30	744.3	30.18	766.5	65.5	18.6	55	N	9.8	4.4			7			0	0	Cloudy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.91	759.7	29.98	761.4	80.2	26.8	77	E	1.8	0.8		0	0			0	0	Clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.85	758.1	29.90	759.4	81.3	27.3	86	SSW	15.4	7.0			10		E	1.85	47.0	Raining	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.05	763.2	30.14	765.6	76.8	24.9	23	ESE	15.5	6.9		0	0			0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.91	759.6	30.00	761.9	79.5	26.4	97	SE	0	0		2k	1kn	SE	SE	0.520	13.2		Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.80	756.8	29.94	760.5	80.0	26.7	89	SSE	0.1	0.04		0	7k		SE	0.02	0.4	Partly cl'dy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.97	761.1	30.00	762.1	48.6	9.2	44	NE			6		0			0	0		
Umea	29.86	758.4	29.91	759.7	43.2	6.2	77	NE			6		10			0	0		
Hernosand	29.84	757.9	29.89	759.2	43.0	6.1	69	NNE			6		10			0.012	0.3		
Stockholm	29.49	749.0	29.67	753.5	39.2	4.0	90	N			7		10			0.063	1.6		
Wisby	29.47	748.5	29.53	750.0	41.4	5.2	94	NNE			6		10			0.236	6.0		
Sub-Series.																			
Upsala	29.53	750.1	29.62	752.3	38.1	3.4	85	N	23.3	10.4			10		NNE	0	0		S. G. Fineman.
SWISS SERIES. Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.65	727.7	30.07	763.7	56.8	13.8	29	N			1		1			0	0	Clear	The Observatory.
Zurich ‡	28.45	722.6	30.08	764.1	55.8	13.2	52	W			3		5			0	0	Cloudy	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.71	754.7	68.7	20.4	76	NW	13	6.0			10		SW	0.252	6.4	Raining	The Observatory.
Valona			29.99	761.8	63.1	17.3		SW			2		2			0.35	9.	Slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.86	758.4	82.2	27.9	67	N			1		0			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

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

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.94	760.5	30.02	762.5	58	14.4	70	N	8	3.6	.....	.....	10n	.....	.....	0.62	15.7	Light rain	
Alpena, Michigan	29.45	748.0	30.10	764.5	49.8	9.9	78	Calm	0	0	.....	0	Fg	.....	.....	0	0	Clear.	
Atlanta, Georgia	28.88	733.5	30.03	762.7	65.0	18.3	68	NE	9	4.0	.....	2c	0	Calm	.....	0	0	Clear	
Atlantic City, New Jersey	30.02	762.5	30.03	762.7	53	11.7	86	N	3	1.3	.....	.....	10s	.....	Calm	0.17	4.3	Cloudy	
Augusta, Georgia	29.84	757.9	30.02	762.5	72.2	22.3	62	N	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Baltimore, Maryland	30.04	763.0	30.09	764.3	61	16.1	82	W	4	1.8	.....	7cs;k	Hz	N	.....	0.05	1.3	Fair	
Barnegat, New Jersey	30.00	762.0	30.02	762.5	52	11.1	93	NW	8	3.6	.....	2k	8s	N	N	0.18	4.6	Cloudy	
Bismarck, Dakota	27.90	708.6	29.64	752.8	54	12.2	93	W	6	2.7	.....	10c	0	SE	.....	0.19	4.8	Cloudy	
Boise City, Idaho	27.11	688.6	29.87	758.7	41.3	5.2	78	Calm	0	0	.....	.....	10s	.....	W	0.02	0.5	Cloudy	
Boston, Massachusetts	29.82	757.4	29.97	761.2	48.3	9.1	100	NE	15	6.7	.....	.....	10n	.....	NE	4.27	108.5	Light rain	
Brackettville, Texas	28.68	728.5	29.68	753.9	75	23.9	86	E	12	5.4	.....	.....	10s	.....	E	0	0	Cloudy	
Brownsville, Texas	29.81	757.2	29.85	758.2	83	28.3	79	S	10	4.5	.....	2c	0	.....	.....	0	0	Clear	
Buffalo, New York	29.45	748.0	30.14	765.5	52	11.1	86	SW	6	2.7	.....	0	Hz	.....	.....	0	0	Clear.	
Burlington, Vermont	29.77	756.1	30.05	763.3	56.0	13.3	76	N	6	2.7	.....	2cs	0	E	.....	0	0	Fair	
Cairo, Illinois	29.65	753.1	30.04	763.0	67	19.4	74	SE	11	4.9	.....	.....	10s	.....	Calm	0	0	Cloudy	
Campo, California	27.37	695.2	29.94	760.5	37.4	3.0	71	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Camp Thomas, Arizona	27.17	690.1	.....	.....	51	10.6	53	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Cape Henry, Virginia	30.05	763.3	30.07	763.8	63	17.2	72	NW	12	5.4	.....	8k	0	NW	.....	0	0	Fair	
Cape May, New Jersey	30.00	762.0	30.03	762.7	56	13.3	81	NW	15	6.7	.....	.....	10ks	.....	NW	0.16	4.1	Cloudy	
Castroville, Texas	29.11	739.4	29.78	756.4	80	26.7	70	S	6	2.7	.....	.....	10s	.....	S	0	0	Cloudy	
Cedar Keys, Florida	29.95	760.7	29.97	761.2	80	26.7	78	W	6	2.7	.....	5cs	0	.....	.....	0	0	Fair	
Champaign, Illinois	29.20	741.7	29.97	761.2	62.8	17.1	83	SE	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Charleston, S. Carolina	29.91	759.7	29.97	761.2	80	26.7	78	NE	6	2.7	.....	0	2ks	.....	NE	Inap.	Inap.	Clear	
Charlotte, N. Carolina	29.22	742.2	30.08	764.0	69.0	20.6	65	E	8	3.6	.....	2c	Hz	.....	.....	0	0	Fair.	
Chattanooga, Tennessee	29.26	743.2	30.06	763.5	65	18.3	73	NE	4	1.8	.....	5cs	0	N	.....	0	0	Fair.	
Cheyenne, Wyoming	23.90	607.0	29.71	754.6	45.3	7.4	76	NW	8	3.6	.....	10c	0	.....	.....	0	0	Cloudy	
Chicago, Illinois	29.32	744.7	30.00	762.0	60.2	15.7	82	S	9	4.0	.....	8c	0	.....	.....	0	0	Fair	
Chincoteague, Virginia	30.03	762.7	30.05	763.3	59	15.0	88	N	12	5.4	.....	.....	10n	.....	N	Inap.	Inap.	Light rain	
Cincinnati, Ohio	29.47	748.5	30.11	764.8	63	17.2	78	E	4	1.8	.....	2c	0	NW	.....	0	0	Clear.	
Cleveland, Ohio	29.46	748.3	30.18	766.6	57	13.9	87	N	2	0.9	.....	0	Fg	.....	.....	0	0	Clear.	
Coleman City, Texas	28.09	713.5	29.66	753.4	75	23.9	81	SE	12	5.4	.....	8k	2s	W	S	0	0	Cloudy	
Columbus, Ohio	29.29	744.0	30.11	764.8	60	15.6	77	NE	6	2.7	.....	2cs	0	.....	.....	0	0	Clear	
Concho, Texas	27.99	710.9	29.87	758.7	75	23.9	77	SE	12	5.4	.....	.....	10s	.....	.....	0	0	Cloudy	
Corsicana, Texas	29.48	748.8	29.94	760.5	77	25.0	82	S	4	1.8	.....	5cs	0	.....	.....	0	0	Fair	
Davenport, Iowa	29.30	744.2	29.94	760.5	66	18.9	74	SE	6	2.7	.....	.....	10ks	.....	W	0	0	Cloudy	
Dayton, Washington T'y	28.15	715.0	29.90	759.4	50.2	10.1	71	S	8	3.6	.....	10k	0	S	.....	0.03	0.8	Cloudy	
Deadwood, Dakota	25.20	640.1	29.75	755.6	51	10.6	72	SW	2	0.9	.....	.....	10ks	.....	SW	Inap.	Inap.	Cloudy	
Decatur, Texas	28.68	728.5	29.78	756.4	75	23.9	86	SE	20	8.9	.....	0	0	.....	.....	0	0	Clear	
Delaware Breakwater, Del.	30.02	762.5	30.04	763.0	57	13.9	87	NW	15	6.7	.....	.....	10ks	.....	NW	0.23	5.8	Cloudy	
Denison, Texas	29.07	738.4	29.85	758.2	77	25.0	86	S	12	5.4	.....	0	8ks	.....	S	0	0	Fair	
Denver, Colorado	24.65	626.1	29.69	754.1	54.5	12.5	71	S	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Des Moines, Iowa	28.95	735.3	29.83	757.7	68	20.0	84	S	6	2.7	.....	.....	10s	.....	.....	0.08	2.0	Cloudy	
Detroit, Michigan	29.44	747.8	30.10	764.5	57.8	14.3	70	NE	5	2.2	.....	c	Hz	.....	.....	0	0	Clear	
Dodge City, Kansas	27.14	689.3	29.62	752.3	66.2	19.0	74	S	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Dubuque, Iowa	29.21	741.9	29.89	759.2	65.5	18.6	63	SE	11	4.9	.....	7c;k	2s	SW;C	Calm	0	0	Cloudy	
Duluth, Minnesota	29.11	739.4	29.79	756.7	50	10.0	93	NE	2	0.9	.....	.....	10s	.....	Calm	0.10	2.5	Cloudy	
Eagle Pass, Texas	29.06	738.1	29.87	758.7	81.2	27.3	70	SE	11	4.9	.....	.....	10s	.....	SE	0	0	Cloudy	
Eagle Rock, Idaho	25.17	639.3	29.88	758.9	44	6.7	76	SW	16	7.2	.....	0	0	.....	.....	0	0	Clear	
Eastport, Maine	29.95	760.7	30.02	762.5	50.5	10.3	86	N	8	3.6	.....	.....	10s;fg	.....	N	0.03	0.8	Cloudy	
El Paso, Texas	26.17	664.7	29.82	757.4	61	16.1	26	NW	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Erie, Pennsylvania	29.44	747.8	30.15	765.8	57	13.9	87	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Escanaba, Michigan	29.37	746.0	30.01	762.2	60	15.6	71	S	6	2.7	.....	2c	Sk	Calm	Calm	0	0	Clear	
Florence, Arizona	28.38	720.8	29.98	761.5	58	14.4	27	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Apache, Arizona	25.01	635.2	29.79	756.7	44	6.7	37	E	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Fort Assinnaboine, Montana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Bennett, Dakota	28.05	712.5	29.52	749.8	60	15.6	88	NW	4	1.8	.....	5cs	0	SW	.....	0.01	0.3	Fair	
Fort Benton, Montana	26.90	683.2	29.64	752.8	59	15.0	54	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Fort Buford, Dakota	27.73	704.3	29.65	753.1	51	10.6	86	Calm	0	0	.....	0	0	.....	.....	0.40	10.2	Clear	
Fort Custer, Montana	26.59	675.4	29.68	753.9	51	10.6	65	NE	3	1.3	.....	5k	0	Calm	.....	0.05	1.3	Fair	
Fort Davis, Texas	25.15	638.8	30.11	764.8	70	21.1	57	W	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Fort Elliott, Texas	27.08	687.8	30.15	765.8	68	20.0	65	S	16	7.2	.....	0	0	.....	.....	0	0	Clear	
Fort Gibson, Indian T'y	29.27	743.4	29.80	756.9	77	25.0	77	S	12	5.4	.....	.....	10s	.....	S	0.08	2.0	Cloudy	
Fort Grant, Arizona	25.21	640.3	30.01	762.2	60	15.6	34	N	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Fort Griffin, Texas	28.57	725.7	29.77	756.1	76	24.4	77	E	4	1.8	.....	.....	10s	.....	.....	0.09	2.3	Cloudy	
Fort Keogh, Montana	27.23	691.6	29.64	752.8	47	8.3	85	SE	6	2.7	.....	5c	0	.....	.....	0.11	2.8	Fair	
Fort Macon, North Carolina	30.03	762.7	30.04	763.0	67	19.4	74	N	14	6.3	.....	10k	0	Calm	.....	0.52	13.2	Cloudy	
Fort McKavett, Texas	27.66	702.6	29.47	748.5	74.7	23.7	76	SE	9	4.0	.....	.....	10ks	.....	SE	0	0	Cloudy	
Fort Missoula, Montana	26.53	673.8	29.91	759.7	60	15.6	65	SW	3	1.3	.....	.....	10s	.....	.....	0	0	Cloudy	
Fort St. Michaels	29.66	753.4	29.70	754.4	36	2.2	100	SW	4	1.8	.....	.....	10n	.....	SW	.....	.....	.....	
Fort Shaw, Montana	26.13	663.7	29.58	751.3	51	10.6	53	SW	18	8.0	.....	8k	0	SW	.....	0	0	Cloudy	
Fort Sill, Indian Territory	28.56	725.4	29.78	756.4	74	23.3	81	S	4	1.8	.....	5cs	0	S	.....	0	0	Fair	
Fort Stevenson, Dakota	27.86	707.6	29.64	752.8	53	11.7	93	W	6	2.7	.....	0	0	.....	.....	1.80	45.7	Clear	
Fort Verde, Arizona	.....	.....	.....	.....	52	11.1	29	SW	.....	.....	1	0	0	.....	.....	0	0	Clear	
Fredericksburg, Texas	28.18	715.8	29.68	753.9	72	22.2	90	SW	6	2.7	.....	4k	0	SW	.....	0	0	Fair	
Galveston, Texas	29.91	759.7	29.96	761.0	81	27.2	78	SW	10	4.5	.....	5c;k	0	N;SW	.....	0	0	Fair	
Grand Haven, Michigan	29.41	747.0	30.06	763.5	60	15.6	77	SE	3	1.3	.....	0	5s	.....	Calm	0	0	Fair	
Hatteras, North Carolina	30.03	762.7	30.05	763.3	67	19.4	79	NE	13	5.8	.....	8k	0	S	.....	0.01	0.3	Fair	
Helena, Montana	25.62	650.7	29.82	757.4	55	12.8	56	S	4	1.8	.....	5k	0	Calm	.....	0	0	Fair	
Henrietta, Texas	28.79	731.3	29.64	752.8	79	26.1	74	SE	16	7.2	.....	2cs	5s	SW	S	0	0	Fair	
Indianapolis, Indiana	29.30	744.2	30.07	763.8	67	19.4	69	SE	2	0.9	.....	4c;hz	0	W;C	.....	0	0	Fair	
Indianola, Texas	29.90	759.4	29.93	760.2	79.9	26.6	82	S	14	6.3	.....	2c	2s	N	Calm	0	0	Fair	
Jacksboro, Texas	28.69	728.7	29.75	755.6	78	25.6	78	SE	14	6.3	.....	0	8s	.....	Calm	0	0	Cloudy	
Jacksonville, Florida	29.92	760.0	29.94	760.5	80	26.7	74	SW	7	3.1	.....	2k	0	SW	.....	0.07	1.8	Clear	
Keokuk, Iowa	29.24	742.7	29.86	758.4	66.5	19.2	76	SE	8	3.6	.....	.....	10s	.....	SE	0	0	Cloudy	
Key West, Florida	29.97	761.2	30.00	762.0	83	28.3	72	E	2	0.9	.....	5k	0	E	.....	0.50	12.7	Fair	
Kittyhawk, North Carolina	30.07	763.8	30.09	764.3	64	17.8	78	N	10	4.5	.....	2k	0	NW	.....	0	0	Fair	
Knoxville, Tennessee	29.08	738.6	30.08	764.0	64	17.8	78	NE	4	1.8	.....	5c	0	Calm	.....	0	0	Fair	
La Crosse, Wisconsin	29.08	738.6	29.79	756.7	70	21.1	61	SE	16	7.2	.....	0	5s	S	.....	0	0	Fair	
La Mesilla, New Mexico	26.04	661.4	30.19	766.8	52.3	11.3	35	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Laredo, Texas	29.41	747.0	29.73	755.1	82	27.8	79	SE	4	1.8	.....	2ck	1s	Calm	S	0	0	Fair	
Leavenworth, Kansas	28.94	735.1	29.80	756.9	71	21.7	75	SE	6	2.7	.....	.....	10s	.....	S	0.50	12.7	Cloudy	
Lewiston, Idaho	29.03	737.3	29.86	758.4	55	12.8	79	SW	1	0.4	.....	.....	10ks	.....	Calm	0.17	4.3	Cloudy	
Little Rock, Arkansas	29.61	752.1	29.92	760.0	78	25.6	91	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Los Angeles, California	29.61	752.1	29.98	761.5	52.1	11.2	86	N	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Louisville, Kentucky	29.51	749.5	30.06	763.5	62.5	16.9	88	E	.....	.....	1	8cs	0	.....	.....	0	0	Fair	
Lynchburg, Virginia	29.43	747.5	30.10	764.5	66	18.9	74	Calm	0	0	.....	.....	10s	.....	.....	0.01	0.3	Cloudy	
Madison, Wisconsin	28.95	735.3	29.93	760.2	62	16.7	83	SE	9	4.0	.....	8c	2s	W	SE	0	0	Cloudy	
Marquette, Michigan	29.28	743.7	29.99	761.7	59	15.0	65	S	6	2.7	.....	8c;cs	0	W	.....	0	0	Fair	
Mason, Texas	28.28	718.3	29.95	760.7	77.3	25.2	73	SE	8	3.6	.....	.....	10ks	.....	SE	0	0	Cloudy	
Memphis, Tennessee	29.65	753.1	29.98	761.5	77	25.0	69	E	5	2.2	.....	9cs	0	W	.....	0.02	0.5	Fair	
Milwaukee, Wisconsin	29.30	744.2	30.03	762.7	56	13.3	81	SE	8	3.6	.....	5ck	Hz	W	.....	0	0	Fair	

JUNE 11, 1881.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
UNITED STATES SERIES—CONTINUED.																			
Mobile, Alabama	29.92	760.0	29.99	761.7	75	23.9	81	N	4	1.8		8cs	0	W		0	0	Fair	
Montgomery, Alabama	29.79	756.7	30.01	762.2	73	22.8	81	NE	2	0.9		8c	0	NW		0	0	Fair	
Moorhead, Minnesota	28.71	729.2	29.67	753.6	61.2	16.2	94	S	3	1.3			10s		S	0.53	13.5	Cloudy	
Morgantown, W. Virginia	29.15	740.4	30.11	764.8	69	20.6	80	NE	1	0.4		Hz	Hz			0.09	2.3	Light haze	
Mt. Washington, N. H.	23.83	605.3	29.86	758.4	40	4.4	91	NE	45	20.1			10s;sk		NE	0.05	1.3	Cloudy	
Nashville, Tennessee	29.52	749.8	30.04	763.0	68.0	20.0	70	NE	2	0.9		5cs	0	NW		0	0	Fair	
New Haven, Connecticut	29.86	758.4	29.98	761.5	51	10.6	93	N	7	3.1			10s		N	0.27	6.9	Cloudy	
New London, Connecticut	29.92	760.0	29.97	761.2	52	11.1	93	NE	3	1.3			10n		NE	0.42	10.7	Light rain	
New Orleans, Louisiana	29.92	760.0	29.97	761.2	79.8	26.6	82	NW	1	0.4		0	1ks		NW	0	0	Clear	
Newport, Rhode Island	29.87	758.7	29.92	760.0	49.2	9.6	99	N	10	4.5			10n;fg		N	2.13	54.1	Light rain	
New River, N. Carolina																			
New Shoreham, Rhode I'd	29.91	759.7	29.94	760.5	49.0	9.4	100	N	22	9.8			10n		N	3.04	77.2	Light rain	
New York, New York	29.85	758.2	30.02	762.5	54	12.2	93	NW	4	1.8			10s;ks		N	0.44	11.2	Cloudy	
Norfolk, Virginia	30.04	763.0	30.08	764.0	66	18.9	69	N	4	1.8		5k	0	N		0	0	Fair	
North Platte, Nebraska	26.80	680.7	29.62	752.3	63	17.2	67	NW	12	5.4		5k	2ks	W		0	0	Fair	
Olympia, Washington T'y	29.87	758.7	29.91	759.7	52.0	11.1	76	SW	5	2.2			10s		SW	0.08	2.0	Cloudy	
Omaha, Nebraska	28.58	725.9	29.72	754.9	71	21.7	73	S	14	6.3			10n		SW	0.19	4.8	Light rain	
Oswego, New York	29.77	756.1	30.09	764.3	51.5	10.8	84	NW	2	0.9		0	Hz			0	0	Clear	
Pensacola, Florida	29.95	760.7	29.98	761.5	74	23.3	90	W	3	1.3			10s		W	0.75	19.0	Cloudy	
Philadelphia, Pa	29.99	761.7	30.05	763.3	55	12.8	87	N	4	1.8			10ks;fg		N	0.03	0.8	Cloudy	
Phœnix, Arizona	28.74	730.0	30.54	775.7	55	12.8	50	E	1	0.4		0	0			0	0	Clear	
Pike's Peak, Colorado	17.75	450.8	29.96	761.0	24	— 4.4	61	SW	28	12.5		0	0			0	0	Clear	
Pioche, Nevada	23.97	608.8	29.82	757.4	48	8.9	43	S	2	0.9		10cs	0	Calm		0	0	Cloudy	
Pittsburg, Pennsylvania	29.35	745.5	30.14	765.5	59	15.0	94	W	3	1.3		0	Fg		Calm	0.02	0.5	Clear	
Port Eads, Louisiana	29.99	761.7	30.00	762.0	79.5	26.4	95	W	4	1.8		2k	Hz	W	Calm	0	0	Fair	
Port Huron, Michigan	29.46	748.3	30.12	765.0	57.4	14.1	72	W	1	0.4		0	Sk		Calm	0	0	Clear	
Portland, Maine	29.96	761.0	30.01	762.2	53	11.7	80	NE	13	5.8			10s		NE	0.26	6.6	Cloudy	
Portland, Oregon	29.91	759.7	29.98	761.5	54.1	12.3	75	SW	7	3.1			10s		W;SW	0.48	12.2	Cloudy	
Portsmouth, N. Carolina					69	20.6	85	NE	12	5.4			10s		Calm	0.26	6.6	Cloudy	
Prescott, Arizona	24.72	627.9	29.79	756.7	41	5.0	41	S	2	0.9		0	0			0	0	Clear	
Punta Rassa, Florida	29.96	761.0	29.97	761.2	81	27.2	78	N	4	1.8		2k	0	W		0	0	Fair	
Red Bluff, California	29.62	752.3	29.95	760.7	59.0	15.0	70	S	2	0.9		0	2s		W	0	0	Clear	
Rio Grande City, Texas	29.67	753.6	29.87	758.7	79	26.1	82	SE	4	1.8		0	2s		Calm	0	0	Clear	
Rochester, New York	29.50	749.3	30.12	765.0	57	13.9	75	NW	7	3.1		0	Hz			0	0	Clear	
Roseburg, Oregon	29.50	749.3	30.06	763.5	53.2	11.8	83	SW	1	0.4			10ks		SW	0.13	3.3	Cloudy	
Sacramento, California	29.92	760.0	29.99	761.7	55.6	13.1	87	SE	6	2.7		0	5s			0	0	Fair	
St. Louis, Missouri	29.40	746.7	29.98	761.5	64.0	17.8	86	S	18	8.0			10ks;n		W	0.25	6.3	Light rain	
St. Paul, Minnesota	28.92	734.6	29.76	755.9	65	18.3	84	E	12	5.4			10s		E	0.05	1.3	Cloudy	
Salt Lake City, Utah	25.58	649.7	29.78	756.4	50	10.0	58	Calm	0	0		4k	0	W		0.06	1.5	Fair	
San Antonio, Texas	29.22	742.2	29.91	759.7	78.0	25.6	86	SE	3	1.3			9ks		SE	0	0	Cloudy	
San Diego, California	29.86	758.4	29.93	760.2	62.5	16.9	72	SW	4	1.8			10s			0	0	Cloudy	
Sandusky, Ohio	29.46	748.3	30.12	765.0	60	15.6	82	NE	4	1.8		0	Hz			0	0	Clear	
Sandy Hook, New Jersey	29.98	761.5	30.01	762.2	53.5	11.9	93	NE	11	4.9			10n		NE	0.13	3.3	Light rain	
San Francisco, California	29.95	760.7	30.02	762.5	55	12.8	93	W	9	4.0			Fg		W	Inap.	Inap.	Dense fog	
Santa Fé, New Mexico	23.26	590.8	29.77	756.1	46	7.8	40	Calm	0	0		0	0			0	0	Clear	
Savannah, Georgia	29.87	758.7	29.96	761.0	79.5	26.4	78	N	2	0.9			10ks		SW	0	0	Cloudy	
Shreveport, Louisiana	29.74	755.4	29.97	761.2	78.8	26.0	87	Calm	0	0		0	9s			0	0	Fair	
Silver City, New Mexico	24.25	615.9	29.71	754.6	48	8.9	43	NW	2	0.9		0	0			0	0	Clear	
Sitka Alaska																0.14	3.6		
Smithville, North Carolina	30.00	762.0	30.03	762.7	70	21.1	90	NE	12	5.4			10s			0	0	Cloudy	
Spokane Falls, Wash. Ter.	27.81	706.4	29.77	756.1	50	10.0	86	SW	9	4.0			10s			0.02	0.5	Cloudy	
Springfield, Illinois	29.33	745.0	29.99	761.7	67	19.4	74	SE	11	4.9			10ks;s		W	0	0	Cloudy	
Springfield, Massachusetts	29.87	758.7	30.00	762.0	51.8	11.0	100	W	6	2.7			10n;fg		N	1.59	40.4	Light rain	
Stockton, Texas	26.84	681.7	29.83	757.7	73.0	22.8	81	SW	4	1.8		2cs	5s	Calm	Calm	0.03	0.8	Fair	
St. Vincent, Minnesota	28.76	730.5	29.60	751.8	63	17.2	94	SW	12	5.4			10s		Calm	1.02	25.9	Cloudy	
Thatcher's Island, Mass	29.91	759.7	29.96	761.0	46.0	7.8	100	E	33	14.8			10n		E	3.26	82.8	Heavy rain	
Toledo, Ohio	29.43	747.5	30.11	764.8	61.5	16.4	80	NE	4	1.8		0	Sk			0	0	Clear	
Tucson, Arizona	27.46	697.5	29.76	755.9	59	15.0	38	SE	2	0.9		0	0			0	0	Clear	
Umatilla, Oregon	29.54	750.3	29.94	760.5	58.5	14.7	70	SW	9	4.0		2cs	8s		NW	0	0	Cloudy	
Uvalde, Texas	28.91	734.3	29.69	754.1	76	24.4	91	SE	6	2.7			10s		S	0	0	Cloudy	
Vicksburg, Mississippi	29.74	755.4	29.99	761.7	74	23.3	90	SE	3	1.3		0	0			0	0	Clear	
Visalia, California	29.57	751.1	29.92	760.0	57.5	14.2	79	NW	2	0.9		0	0			0	0	Clear	
Washington, D. C.	30.00	762.0	30.11	764.8	61	16.1	82	NW	3	1.3		8k	0	NE		0.05	1.3	Fair	
Wickenburg, Arizona					52	11.1	23	Calm			0	0	0			0	0	Clear	
Wilmington, N. Carolina	29.99	761.7	30.04	763.0	68	20.0	79	NE	8	3.6			10s		Calm	0.18	4.6	Cloudy	
Winnemucca, Nevada	25.58	649.7	29.79	756.7	49	9.4	64	SW	6	2.7		0	5ks		SW	0	0	Fair	
Wood's Holl, Mass	29.85	758.2	29.89	759.2	52	11.1	93	NE	11	4.9			10s		NE	1.63	41.4	Cloudy	
Yankton, Dakota	28.32	719.3	29.58	751.3	75	23.5	77	S	1	0.4		0	0			0	0	Clear	
Yuma, Arizona	29.69	754.1	29.83	757.7	65.5	18.6	73	Calm	0	0		0	0			0	0	Clear	
SUB-SERIES.																			
Bogota, U. S. Columbia	22.05	560.1			55.0	12.8	74	Calm	0	0		2k	0			0.07	1.8	Fair	Thomas Herman
Buff Bay Town, Jamaica.‡	29.72	754.9	30.02	762.5	77	25.0	82	E				2c	2k						
Havana, Cuba, W. I.	29.98	761.5	30.03	762.7	82	27.8	70	Calm	0	0		0	0			0	0	Clear	A. Van Cuneghem, Ass't.
Kingston, Jamaica, W. I.	29.92	760.0	29.93	760.2	79.7	26.5	75	Calm	0	0		10cs	0			0	0	Cloudy	Robert Johnstone.
Navassa, W. I.	29.83	757.7	29.91	759.7	81	27.2	75	E	6	2.7		2s	8k;n	NE	E	0.35	8.9	Fair	F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.04	763.0	79	26.1	87	E			3	3c	5k	E		0.920	23.4	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.43	747.5	29.99	761.7	78	25.6	89	Calm	0	0		0	8ks		Calm	0.63	16.0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					77.9	25.5		NE			2		10ks		NE	0	0		Earl Flint.
Santiago de Cuba, W. I.	29.92	760.0	29.95	760.7	81	27.2	74	Calm	0	0		8c	2s		NE	0	0	Cloudy	Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.62	752.3	29.67	753.6	64.0	17.8	86	S	10	4.5		3k	2s	S	S	0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross																			Comm A. J.Errington.
H. M. S. Alert, Thursday Island, Oceanica	29.92	760.0	78	25.6	80	SE			5		2							D. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Argostoli, Ionian Islands	29.93	760.2	65	18.3	68	NW			3		5	WNW						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab, N. 14° 40′, E. 49° 15′	29.60	751.8	85	29.4	79	SW			5		2	SW				6	SW	D. clouds	Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N 24° 47′, E. 66° 59′	29.49	749.0	85	29.4	87	SW			4		1	SW						Misty	Comm. G. W. Haud.
H. M. S. Bittern, N. 42° 00′, E. 28° 43′			64	17.8		N			2-4		10					3	N	Raining	Capt. E. B. Pusey.
H. M. S. Blanche, N 13° 09′, W. 61° 14′	29.97	761.2	82	27.8	87	ENE			2-5		10							Raining	Capt. C. G. F. Knowles.
H. M. S. Boadicea, St. Helena, Africa	30.01	762.2	74	23.3	72	NNE			2		3	ENE						D. clouds	Com. F. W. Richards.
H. M. S. Champion, S. 34° 28′, W. 52° 50′	29.93	760.2	62	16.7	88	NW			1-2		8					2	N	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 37° 55′, E. 121° 35′	29.56	750.8	62	16.7	83	W			2									Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruiser, N. 38° 58′, E. 9° 45′	30.03	762.7	65	18.3		WNW			6		7	WNW				4	WNW	Squally	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.32	770.1	71	21.7		Calm			0		0							Blue sky	Capt C. Domville.
H. M. S. Dock-Yard, Bermuda, W.I.	30.16	766.1	79	26.1	90	SE			2-3		4	ESE						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 49° 48′, W. 54° 20′	30.05	763.3	46	7.8	92	SW			1-2		3					1	N	D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 7° 13′, E. 72° 23′	29.94	760.5	80.5	26.9		SE			1-2		3							D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 7° 40′, E. 103° 50′	29.80	756.9	81	27.2		SE			4		6	S				4	SE	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, N. 7° 05′, E. 171° 46′	29.93	760.2	84	28.9	79	E			1		5	E						Showery	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Tamatave, Madagascar	30.08	764.0	76	24.4	64	SSE			1-2		4	SSW				1	SE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, WesternArm, Newfoundla'd	30.07	763.8	60	15.6		NW			1		2	NW						D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn, N. 12° 47′, E. 44° 58	29.61	752.1	87.5	30.8	80	S			1		2							D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo, N. 20° 17′, W. 84° 08′	29.99	761.7	85	29.4	83	ENE			1-2		2	NE				2	ENE	D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	29.85	758.2	49	9.4	71	WNW			2-5		10							Raining	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.86	758.4	44	6.7	75	Calm			0		4							D. clouds	Capt. L. F. Jones.
H. M. S. Griffin, N. 24° 38′, W. 77° 35′	30.08	764.0	85	29.4	68	ESE			2										Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber,																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C.P. Fitzgerald.
H. M. S. Iris, Malta, Mediterranean	30.05	763.3	70	21.1	90	NW			3-4		2					2	WNW	D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.97	761.2	62	16.7		Calm			0		6	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.96	761.0	72	22.2		Calm			0		0							Blue sky	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 15′, E. 110° 15′	29.71	754.6	84.9	29.4	79	SSE			3-4		7	NW				1	SE	Squally	Capt. A. Carpenter.
H. M. S. Midge, N. 24° 19′, E. 118° 20′	29.84	757.9				SE			2		6	SW				2	SW	D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. N. S. Modeste, S. 22° 30′, E. 65° 32′	30.13	765.3	77	25.0	86	NE			2-3		2					2	ESE	D. clouds	Capt. J. G. Mead.
H. M. S Monarch, Tunis, Tunis, Africa	30.13	765.3	67	19.4	94	NW			5		3	NNW						D. clouds	Capt. G. C. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, N. 3° 20′, E. 111° 44′			76.5	24.7		SW			1		9	SW				6	SW	Overcast	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.92	760.0	56	13.3	93	E			2		10							Misty	Capt. E. B. Drummond.
H. M. S. Orontes, S. 15° 26′, E. 7° 44′ *†	29.98	761.5	69	20.6	75	NNW			1-2		0					1	SSE	Misty	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S Pelican, N. 8° 55′, W. 79° 30′	29.83	757.7	79	26.1	95	WNW			1		6							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, N. 12° 06′, W. 68° 53′	29.85	758.2	81	27.2	91	E			4		9							D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A.C.Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.72	754.9	79	26.1		S			1		10							Raining	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 48° 26′, W. 123° 27′	29.77	756.1	47	8.3		WSW			1		2							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 5° 02′, E. 39° 37′	30.01	762.2	79.3	26.3	78	S			5-6		10					5		Squally	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, S. 9° 40′, E. 51° 40′	29.55	750.6	78	25.6	82	SSE			3-4		1	SE				3	SSE	Blue sky	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 39° 00′, W. 12° 46′	30.35	770 9	64	17.8	73	N			4		2	N				4	N	Blue sky	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Coldera, Chili, S. A	30.04	763.0	59	15.0	81	ESE			2		9	Calm						D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise, S. 52° 09′, W. 73° 76′	29.86	758.4	43	6.1	91	NNE			3		10							Drizzling	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I			79	26.1		N			1		7							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	30.26	768.6	55	12.8	93	SW			1		6	W						D. clouds	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Mohammera, Persia	29.49	749.0	50.5	32.5	61	NNW			2-3									Misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
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Bengo																			Carlos Candido dos Rios, Co md't
Quanza, Santiago, Cape Verd I'ds.	30.04	763.1	84.9	29.4	48	NE			3		0					2	NE	Blue sky	Carlos M. da Silva Costa, Comd t
RioLima																			S. C. da Silva Costa, Comd't.
Sado, Loando, Africa	30.04	763.0	71.2	21.8	77	NNW			3		4					1		D. clouds	G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.81	757.1	77.0	25.0	83	SSE			3		4		S					D. clouds	P. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga, N. 43° 56′, W. 10° 47′	30.28	769.1	64.6	18.1	81	N			3		8							Overcast	Capt. M. von Krusenstierna
H. M Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

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

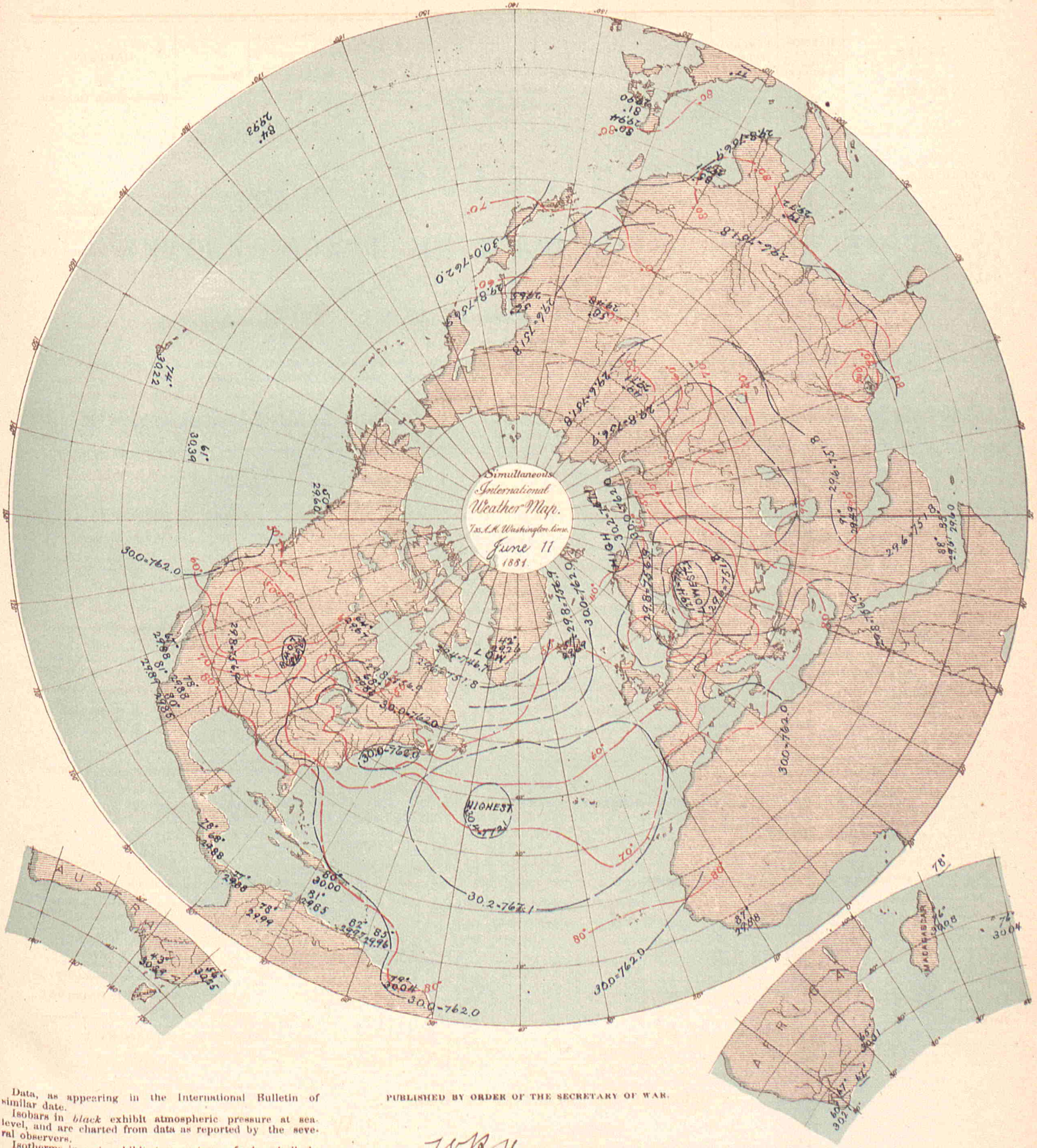
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.03	762.7	75	23.9	86	SW	2	0.9			8		SW	0.11	2.8			Fair	
N. Yard, Portsmouth, N. H	29.96	761.0	52	11.1	86	NE	16	7.2		10c	0	NE		0.7	1.8			Cloudy	
Naval Hospital, Yokahama, Japan	29.86	758.4	69.5	20.8	92	SSW			1		10		SW	0	0			Cloudy	
Adams Panama, Panama	29.66	753.4	79	26.1	95	WNW			1		5		S			Sm'h		Fair	
Alaska, Callao, Peru	29.91	759.7	64	17.8	94	Calm			0		10			0	0	Sm'h		Cloudy	
Alert, Yokohama, Japan *	29.90	759.4	72	22.2	85	S			1		8		S			Sm'h		Cloudy	
Alliance, Norfolk, Va	29.93	760.2	64	17.8	83	NW			1		8			0	0			Cloudy	
Ashuelot, Kobe, Japan	29.98	761.5	75	23.9	90	W			1		8		Calm					Cloudy	
Colorado, New York, N. Y	30.00	762.0	55	12.8	87	N	3	1.3			10		Calm	0.01	0.3			Overcast	
Constitution, N. 39° 28′, W. 72° 53	29.96	761.0	51	10.6	93	NNW			6		10					Sm'h		Drizzling	
Franklin, Norfolk, Va	29.97	761.2	64	17.8	78	NNW	7	3.1			5		NNW	0	0			Fair	
Galena, Cadiz, Spain	30.11	764.8	71	21.7	49	SSE			3		3					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	30.05	763.3	62	16.7	77	SW	2.4	1.1			10		SW	0	0			Cloudy	
Jamestown, Sitka, Alaska *	29.60	751.8	50	10.0	93	Calm			0		10			0.01	0.3			Cloudy	
Kearsarge, Norfolk, Va	30.08	764.0	65	18.3	78	N			1		5		N			Sm'h		Fair	
Lackawanna, Papati, Tahiti I'd, Oceania †	30.20	767.1	76	24.4	86	SSE			1		2		SE					Fair	
Marion, Montevideo, Uruguay *†	29.85	758.2	59	15.0	94	SE			1		10			Light		Sm'h		Drizzling	
Michigan, Erie, Pennsylvania	30.07	763.8	56	13.3	94	W			2		0							Clear	
Minnesota, Newport, R. I	29.93	760.2	53	11.7	93	NNE			5		10					Mod	NE	Drizzling	
Monocacy, Yokohama, Japan	30.06	763.5	71	21.7	90	SSW			1		8		Calm					Cloudy	
New Hampshire, Norfolk, Va	30.07	763.8	65	18.3	78	N	4	1.8			8		N	0	0			Fair	
Nipsic, N. 40° 43′, W. 14° 16′	30.37	771.4	62	16.7	77	NNE			1		8		NE			Sm'h		D. clouds	
Onward, Callao, Peru †	29.95	760.7	64	17.8	94	S			1		10		NW			Long	W	Cloudy	
Palos, Nagasaki, Japan	29.97	761.2	76	24.4	95	SSW			3		10		S;W					Rainy	
Passaic, Washington, D. C	30.08	764.0	60	15.6	94	NW			1		2?		NW					Cloudy?	
Pensacola, Mare Isl'd, Cal	30.05	763.3	57	13.9	94	WNW			2		0			0	0	Sm'h		Clear	
Portsmouth, N. 40° —′, W. 71° —′	29.95	760.7	53	11.7	100	NW			5		10								
Powhatan, N. 39° 33′, W. 72° 54′	30.02	762.5	54	12.2	93	WNW			2		8		NW					Misty	
Quinnebaug, N. 40° 07′, W. 75° 50′	29.99	761.7	54	12.2	87	NNW			2		10		NNW			Mod.	NNW	Cloudy	
Ranger, Mazatlan, Mexico *	29.80	756.9	80	26.7	78	E			3		5		Calm	0	0	Mod.	SE	Fair	
Richmond, Nagasaki, Japan	29.99	761.7	76	24.4	91	S			2		10		S	0.52	13.2			Threatening	
Saratoga, N. 39° 50′, W. 71° 45′	29.90	759.4	53	11.7	100	WNW			2-3		8			Rain			WNW	Cloudy	
Shenandoah, Montevideo, Uruguay *	30.01	762.2	60	15.6	94	SE			2		10					Sm'h		Rainy	
St. Louis, League Island, Pa	29.61	752.1	56	13.3	87	N	3	1.3			10			0	0			Cloudy	
Swatara, Shanghai, China *†	29.76	755.9	80	26.7	82	SSW			3		2		Calm					D. clouds	
Tennessee, New York, N. Y	30.01	762.2	55	12.8	93	NNW	6	2.7			10		NNE	0.53	13.5	Sm'h		Clearing	
Ticonderoga, S. 52° 34′, W. 52° 20′	29.70	754.4	41	5.0	91	Calm			0		10		Calm	0.02	0.5	Sm'h	NNE	Misty	
Trenton, Marseilles, France *	30.01	762.2	65	18.3	44	WNW			4		0			0	0	Sm'h		Clear	
Vandalia, Navy Yard, N. Y	29.98	761.5	56	13.3	94	NNW			1		10		Calm					Misty	
Wabash, Boston, Massachusetts	30.00	762.0	51	10.6	93	NNE	11	4.9			10		NNE	4.72	119.9			Raining	
Wachusett, N. Yard, Mare I'd, Cal	30.03	762.7	58	14.4	94	W			2		8		W	0	0			Cloudy	
Yantic, Off Key West, Florida *	29.91	759.7	80	26.7	82	E			1		2					Light		Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 37° 20′, W. 72° 27′	30.01	762.2	63.5	17.5	78	W			5		10							Overcast.	Capt. A. J. Brown.
British Merchant																			Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero																			Capt. W. N. Lailey.
City of Agra, N. 13° 41′, W. 22° 35′	30.04	763.0	77.0	25.0	86	N			6		0					High	NE	Blue sky	Capt. T. Young.
Barque Commewyne, N. 40° 40′, W. 15° 44′	30.38	771.6	63.8	17.7	78	NNW			4		3							Blue sky	Capt. W. Scott.
Barque Coppename																			Capt. A. Buchan.
Denbigshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee ‡																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Naiad, N. 50° 16′, W. 3° 27′	30.03	762.7	53.3	11.8	98	ENE			1		10							Overcast	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 29° 47′, W. 41° 33′	30.38	771.6	74.5	23.6	76	NE			4		2							Blue sky	Capt. M. Parry.
Sierra Estrella, N. 28° 15′, W. 21° 44′	30.27	768.8	67.4	19.7	84	NE			4		9							Drizzling	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 35° 51′, E. 23° 39′	29.90	759.4	68.5	20.3		NW			6		6							D. clouds	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, Montreal, Canada	30.14	765.5				NE			2		0					Sm'h		Clear	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Gallia, ‡ N. 41° 53′, W. 54° 03′	30.28	769.1	62	16.7		E			4		10			He	avy	Sm'h		Rainy	Capt. W. H. P. Hains.
S. S. Algeria																			Capt. W. Watson.
S. S. Scythia, N. 43° 44′, W. 47° 44′	30.09	764.3	56	13.3	87	SE			3		1		S	0	0	Mod.	S	Clear	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic, ‡ N. 49° 36′, W. 27° 18′	30.09	764.3	51	10.6	86	WNW			4		7		NW	0	0	Very R'gh	NW	D. clouds	Capt. H. Parsell.
S. S. Britannic, N. 51° 15′, W. 15° 25′ †	30.15	765.8	57	13.9	100	WSW			4		2		W			Mod.	W	Misty	Capt. H. Perry.
S. S. Celtic, N. 40° 55′, W. 66° 46′ †	29.86	758.4	60	15.6	88	S			4		10		SW	10h'rs	mod.	Long	SW	Dense fog	Capt. Benj. Gleadell.
S. S. Germanic																			Capt. Ch. W. Kennedy.
S. S. Republic, N. 41° 06′, W. 62° 37′ †	30.18	766.6	73	22.8	90	SSW			4		5		S	6h'rs	h'vy	Mod.	WSW	Fair	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—OF BREMEN. *A. Schumacher & Co.*																			
S. S. Braunschweig, N. 37° 04′, W. 72° 49′	29.94	760.5	64.0	17.8	86	W			3		5		WSW			Mod.	W	Fair	Capt. C Phole.
S. S. Hermann, N. 49° 49′, W. 10° 18′	30.12	765.0	57.2	14.0		NNW			2		5?		W	2 ho	urs	Mod.	N	Overcast?	Capt. H. Baur.
S. S. Hohenzollern, ‡ N. 41° 14′, W. 46° 58′	30.46	773.7	63.5	17.5		SE			2		5		S	0	0	Mod.	E;SE	Fair	
S. S. Köln, N. 53° 49′, E. 6° 26′	30.00	762.0	53.0	11.7	83	NW			4-5		8		NW	0	0	Mod.	NW	Fair	Capt. Th. Jüngst
S. S. Strassburg, N. 47° 19′, W. 32° 50′	30.24	768.1	55.4	13.0		WNW			4		10		NW	0	0	Long	WNW	Cloudy	Capt. C. Helmbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO																			
H. B. Welsh, President.																			
S. S. Illinois, Liverpool, England	29.95	760.7	52	11.1	93	SE			2		8		SE					Fair	Capt. J. W. Shackford.
S. S. Indiana, Delaware River, Del.†	29.88	758.9	60	15.6	88	N			4		8		N	Lig	ht	Sm'h		Cloudy	Capt. R. W. Sargent.
S. S. Ohio, N. 39° 32′, W. 66° 05′...*†	30.06	763.5	63	17.2	100	SW			6		10		SW	Rain	squalls	L'ge	SW	Rain & fog	W. Shackford, Chief Off'r
S. S. Pennsylvania, Philadelphia, Pa.†	30.08	764.0	69	20.6	100	SE			3		10		E					Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO.																			
J. Birmingham.																			
S. S. Newbern, N. 23° 51′, W. 111° 14′....†	29.88	758.9	67	19.4	84	NW			3		5?		NW	0	0	G'tl	SSE	Clear?	Capt W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO.																			
Leland Stanford, President.																			
S. S. Belgic, San Francisco, Cal.†	30.07	763.8	53	11.7	80	W			1		10		W	0	0	Sm'h		Cloudy	Capt. H. Davison.
S. S. Gaelic, N. 35° 38′, E. 141° 11′....*†	30.24	768.1	67	19.4	95	NNE			2		8		NNE			Sl't	NE	Misty	Capt. W. H. Kidley.
S. S. Oceanic, Hong Kong, China	30.09	764.3	86	30.0	65	SE			3		7		SE					Fine	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO.																			
K. Van Oterendorp.																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon.†	29.95	760.7	54.0	12.2	93	S			2		10		S					Rainy	Capt. E. Polemann.
PACIFIC COAST S.S. CO.																			
Goodall, Perkins & Co																			
S. S. Ancon, N. 33° 49′, W. 118° 12′...†	29.94	760.5	57	13.9	87	Calm			0		2		E	0	0	Sm'h		Clear	Capt. J. N. Ingalls.
S. S. Dakota, N. 40° 30′, W. 124° 45′..†	30.03	762.7	56	13.3	87	WNW			3		8		N	0	0	Mod.	NW	Hazy	Capt. H. G. Morse.
S. S. Idaho, N. 47° 13′, W. 124° 53′....†	29.92	760.0	51	10.6	79	W			2		10		W			H'vy	W	Cloudy	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, N. 34° 58′, W. 120° 48′....†	30.00	762.0	51	10.6	93	NW			3		10		NW			Long	W	Hazy	Capt. Thos. Wallace.
S. S. State of California, N. 40° 46,′ W. 124° 24′... †	30.05	763.3	53	11.7	86	NW			3		10		SW			Sm'h	W	Overcast	Capt. G. Debney.
S. S. Victoria, N. 45° 50′, W. 124° 50′....†	30.00	762.0	52	11.1	79	SW			2		8					Light	SW	Cloudy	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO.																			
J. B. Houston, President.																			
S. S. Australia, N. 31° 21′, W. 140° 40′....	30.39	771.9	61	16.1	100	NE			2		10		NE			Sm'h		Showery	A. Bannerman, 2d Officer
S. S. City of New York, Sydney, N. S. W.†	30.25	768.3	56	13.3	100	W			1		10		SW					Raining	Wm.H.Hawes,2d Officer.
S. S. City of Panama, Panama, Panama.†	29.88	758.9	77	25.0	95	NW			1	0	8ks		SE	1 ho	ur	Sm'h		Fair	Capt. D. S. Austin.
S. S. City of Peking, N. 39° 57′, W. 129° 12′.....†	30.15	765.8	57	13.9	81	SW			2		8		SW	0	0	Light	W	Cloudy	Capt. G. G. Berry.
S. S. City of Sidney, N. 23° 42′, W. 153° 41′...*†	30.22	767.6	74	23.3	63	E			5		8		ENE	0	0	Mod.	ENE	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio, Yokohama, Japan.†	30.14	765.5	72	22.2	85	SW			1		5		SW					Fair	A. L. Ritchie, 2d Officer
S. S. Colima, N. 23° 00′, W. 108° 06′....†	29.89	759.2	81	27.2	74	WSW			4		2		SW	0	0	Mod.	S	Clear	Capt. R. R. Searle.
S. S. Granada, N. 20° 04′, W. 105° 46′...†	29.85	758.2	80	26.7	70	Calm			0		0			0	0	Long	SSE	Clear	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. Wales	30.31	769.9	69	20.6	56	SE			3		5		SE					Fair	
RED STAR LINE.																			
Jas. A. Wright, President.																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, ‡ N. 46° 13′, W. 36° 20′.....†	30.47	773.9	56	13.3	?	NNW			4		2		NW	0	0	High long	NW	Clear	A. Feddersen, 2d Officer.
S. S. Rhynland, Jersey City, N. J.†	30.14	765.5	60	15.6	88	N			3		10		N	0.15	3.8			Dull	Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Fall River, Mass.	29.89	759.2	51	10.6	93	NNE					10n		NE	3.93	99.8			Light rain	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.																			Capt. L. L. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, Arroyo, Porto Rica.†	30.05	763.3	85	29.4		ENE			6		8			Sho	wers	Sm'h		Squally	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Washington, D. C.†	30.04	763.0	64	17.8	83	NW	1	0.4		3 c;ck	0			0.05	1.3			Cloudy	
Bark Sunbeam, Lisbon, Portugal.†	30.20	767.1	80	26.7	65	NNE			2		0			0	0			Clear	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

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



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

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 12, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours	‡		30.04	763.0	72.0	22.2	87	N			1		0			0	0	Clear.	Raynard.
Algiers	‡		30.17	766.2	69.8	21.0	68	NE			2		0			0	0	Clear.	Nicolas.
La Calle	‡		30.17	766.3	74.5	23.6	54	NNW			2		2			0	0	Fair.	Fonfrède.
Tunis	‡		30.17	766.2															Jacques.
Sfax	‡		30.16	766.0															Gau.
Saida	‡		30.13	765.4	63.3	17.4	67	N			3		0			0	0	Clear.	Dumas.
Tebessa	‡		30.12	765.0	69.4	20.8	31	E			1		6			Inap.	Inap.	Cloudy.	Watrin.
Geriville	‡				78.1	25.6	23	W			1		0			0	0	Clear.	Lonchamp.
Laghouat	‡		30.09	764.3	81.3	27.4	25	N			1		0			0	0	Clear.	Herbin.
Biskra	‡		30.18	766.5	83.1	28.4	48	SE			1		0			0	0	Clear.	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.12	765.0	30.21	767.3	46.0	7.8	89						6			0	0	Fine	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.33	745.0	29.87	758.6	64.9	18.3	41	W			1		8			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	28.92	734.5	29.69	754.0	47.1	8.4	94	W	12.5	5.6			10			1.248	31.7	Raining	Dr. Wierzbicki.
Eperies	28.78	731.1	29.66	753.3	50.0	10.0	89	Calm			0		10n			0.449	11.4		Julius Mikolik.
Gratz	‡ 28.66	727.9	29.89	759.3	59.0	15.0	63	NW			3		10			0	0		Andreas Rospini.
Hermannstadt	28.35	720.0	29.77	756.2	52.2	11.2	59	NW			5		10			0.189	4.8		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.63	727.2	29.97	761.3	51.6	10.9	99	WSW			4		10			0.055	1.4		The Staff.
Lemberg	28.58	725.9	29.56	750.8	47.5	8.6	81	NW			4		10			0.622	15.8		Dr. T. Stanecki.
Pola	29.84	757.9	29.95	760.7	68.0	20.0	60	WSW			1		5			0	0		I. R. HydrographicOffice.
Szathmar	29.26	743.3	29.73	755.1	48.6	9.2	87	SW			5		10			0.445	11.3		Beicht Peter, S. J.
Szegedin	29.56	750.8	29.84	758.0	51.4	10.8	98	W			2		10			0.339	8.6		Karl Stancel.
Trieste	29.86	758.5	29.97	761.1	68.0	20.0	53	E			1		3			0	0		Secco.
Vienna	29.17	741.0	29.89	759.2	52.2	11.2	72	W			4		10			0.114	2.9	Raining	I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.90	759.4	30.00	762.0	51.5	10.8	78	NW	16	7.2			9			0.010	0.3	Overcast	W. Boswell.
Armagh, Observatory	29.86	758.4	30.10	764.5	55.0	12.8	76	NNE	1	0.4									S. Call.
Bidston, Liverpool Obs'y			30.05	763.3	61.4	16.3	59	WNW	13	5.8			7					D. clouds	John Hartnup.
Bolton, Sharples	29.50	749.3	30.03	762.7	58.8	14.9	67	W	12	5.4			8					D. clouds	Thomas Mackereth.
Bradford, Yorkshire																0	0		J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.94	760.5	29.97	761.2	84	28.9	71	NE			3		6					Gloomy	Corpl.J.Surgener,A.H.C.
Cardington																			John McLaren.
Chatham, School M. E.	29.94	760.5	30.06	763.5	62.5	16.9	70	Calm			0		10					Misty	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.93	760.2	30.16	766.1	61.0	16.1	64	NW			2		7					Overcast	The Staff.
Fort Napier, Natal	28.00	711.2	30.21	767.3	68.4	20.2	33	Calm			0		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	87	30.6	84	W			1							Raining	Sgt. C. E. Keane.
Galway, Queen's College					59	15.0	76	NW			2		10					Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.05	763.3	30.10	764.5	72.6	22.6	89	NE			3		0					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.73	755.1	29.94	760.5	56.8	13.8	49	WNW			3		10k					Overcast	Harry Urquhart.
Greenwich, Royal Obs'y	29.89	759.2	30.06	763.5	65.9	18.8	54	WSW			1		6					D. clouds	The Staff.
Guernsey	29.90	759.4	30.12	765.0	58.5	14.7	70	WNW			2		0					Blue sky	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.03	762.7	30.07	763.8	65.0	18.3	54	WSW	9	4.0			6					D. clouds	The Staff.
Leicester, Museum	29.79	756.7	30.04	763.0	61.3	16.3	50	SW			1		4					D. clouds	J. E. Carryer.
Malta, Mediterranean	30.01	762.2	30.08	764.0	70	21.1	52	W			2		1					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.99	761.7	30.03	762.7	84.8	29.3	79	NE			1		2					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.53	750.0	30.05	763.3	62.0	16.7	60	W			2		6			Blank		D. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	29.83	757.7	30.06	763.5	64.2	17.9	54	WSW			2		4					D. clouds	The Staff.
Plymouth	30.05	763.3	30.12	765.0	59.8	15.4	78	SSW			1		8					D. clouds	John Merrifield.
Sandwick Manse, Orkneys			30.04	763.0	50.3	10.2	84	N	16	7.2			10			Blank		Misty	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.78	756.4	29.84	757.9	71.6	22.0	64	SW			1		5					D. clouds	Serg't W. H. Lyne.
Sheffield	29.77	756.1	30.04	763.0	66.1	18.9	62	SW			2		5			0	0	D. clouds	W. F. Cooper.
Silloth Rectory	29.98	761.5	30.01	762.2	59.7	15.4	75	W			1		6			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.05	763.3	59.0	15.0	67	W	16	7.2			7					D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	29.85	758.2	30.06	763.5	66.6	19.2	57	W			2		6					D. clouds	Rev.C.H.Griffiths,F.M.S
Truro, Royal Institution	30.12	765.0	30.13	765.3	68	20.0	60	NW			4		6					D. clouds	W. Newcombe.
Valencia, Observatory	30.13	765.3	30.15	765.8	56.6	13.7	82	NW	18	8.0			10					D. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.09	764.3	30.13	765.3	58	14.4	86	S	4	1.8		0	0			0	0	Clear	H. J. Cundall, C. E.
Chatham, N. B.*	30.06	763.5	30.12	765.0	56	13.3	79	W	3	1.3		0	0			0	0	Clear	G. A. Blair.
Chicontimi, Quebec					58.1	14.5		SE			1	0	0			0	0	Smoky	Rev. V. A. Huart.
Cornwall, Ontario	29.90	759.4	30.09	764.3	58.2	14.6	82	SW			1	0	0			0	0	Blue sky	James Smith, M. A
Dalhousie, N. B	30.05	763.3	30.08	764.0	55.5	13.1		W			1	0	0			0	0	Hazy	H. A. Johnson.
Father Point, Quebec*	30.05	763.3	30.07	763.8	60	15.6	82	Calm	0	0		0	Sk			0	0	Smoky	J. McWilliams.
Fort Garry, Manitoba*	28.69	728.7	29.48	748.8	61	16.1	94	W	4	1.8		0	0			0	0	Clear	James Stewart.
Fredericton, N. B	30.09	764.3	30.15	765.8	57.0	13.9	82	Calm	0	0		0	Sk			0	0	Smoky	Prof. Harrison.
Granton, Ontario	29.00	736.6	30.08	764.0	61.0	16.1	82	SE			2	0	0			0	0	Clear	James Grant.
Halifax, N. S.*	30.06	763.5	30.19	766.8	55	12.8	97	Calm	0	0			10n			0.016	0.4	Cloudy	A. Allison.
Hamilton, Ontario	29.72	754.9	30.10	764.5	66.5	19.2	77	NE			1	0	0			0	0	Clear	Geo. Dickson, B. A.
Kingston, Ontario*	29.81	757.2	30.15	765.8	57	13.9	80	S	1	0.4		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S	30.11	764.8	30.15	765.8	50.0	10.0	82	SW			2	4ck	0	SW		0.36	9.1	Fair	C. H. Rigby.
Montreal, Quebec*	29.91	759.7	30.10	764.5	66	18.9	53	SW	13	5.8		0	Sk			0	0	Smoky	C. H. McLeod, C. E.
Moose Factory, Ontario	29.71	754.6	29.74	755.4	70.8	21.6	50	SW			3	0	7ks			0	0	D. clouds	J. R. Nason.
Parry Sound, Ontario*	29.36	745.7	30.03	762.7	67	19.4	64	SE	8	3.6		2cs	0	SE		0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.42	747.3	30.10	764.5	58	14.4	82	Calm	0	0		5cs	0	SW		0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.43	747.5	30.06	763.5	63	17.2	86	E	6	2.7		2ck	2ks	W	W	0	0	Fair	M. Payne.
Quebec, Quebec*	29.82	757.4	30.12	765.0	58	14.4	76	W			1		Sk			0	0	Smoky	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.65	753.1	30.10	764.5	53	11.7	83	Calm	0	0		0	0			0	0	Clear	W. H. McIntyre.
Saugeen, Ontario*	29.30	744.2	29.99	761.7	64	17.8	60	S	8	3.6		0	Hz			0	0	Hazy	K. Stewart.
St. Andrews, N .B	30.10	764.5	30.15	765.8	51	10.6	96	S	1	0.4			Fg			0	0	Foggy	
St. John, N. B	30.03	762.7	30.20	767.1	52.0	11.1	93	S	10	4.5			Fg			0	0	Foggy	G. Murdock, C. E.
Stratford, Ontario	28.79	731.3	30.05	763.3	58.9	14.9	79	SE	9	4.0		2cs	0			0	0	Blue sky	C. J. Macgregor, M. A.
Sydney, C. B*	30.11	764.8	30.15	765.8	55	12.8	93	SW	3	1.3		0	10ks		S	0.23	5.8	Clearing	T. C. Hill, C. E.
Toronto, Ontario*	29.75	755.6	30.13	765.3	59	15.0	70	E	3	1.3		0	0			0	0	Clear	Magnetic Observatory
Windsor, N. S	30.07	763.8	30.16	766.1	55.5	13.1	93	SW	2	0.9			10n			0	0	Foggy	
Woodstock, Ontario	29.02	737.1	30.05	763.3	68.4	20.2	71	SE	6	2.7		6c	0	W		0	0	D. clouds	Prof. Wolverton.
Yarmouth, N. S.*	30.09	764.3	30.15	765.8	52	11.1	93	W	1	0.4			Fg			0	0	Foggy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.74	755.4	29.99	761.7	52	11.1	86	W	0	0		Sk	Sk			0	0	Fair	John Delany.
St. Pierre, N. F			29.99	761.7	54.7	12.6		NW			2					0	0		N. F. Land, Comd't.
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	30.27	768.8			78.4	25.8	37	WNW	16.3	7.3			0			0	0		John Duthie.
Cape Town, C. G. H. Obs'y	30.16	766.1	30.20	767.1	55.0	12.8		NW	8.9	4.0		0	0			0	0		The Staff, for D. Gill.
Worcester*†	29.25	742.9			72.6	22.6	45	NNW			1	0	0			0	0	Fine	C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.70	754.3	29.72	754.9	78.8	26.0	86	SSE	3.8	1.7		8k;ck	0			0	0	Almost cov'd	M. Marc Dechevrens, S.J.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	25.17	664.7	29.89	759.2	70.7	21.5	82					108				0.24	6.	Cloudy	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.85	758.1	29.89	759.3	52.0	11.1	68	NNW	16	7			10						Oversergent Fischer.
Fanöe	29.95	760.7	29.97	761.2	51.4	10.8	71	WNW			6		8						Overloerer Lauridsen.
Godthaab, Greenland	29.42	747.3	29.47	748.4	34.5	1.4	83	NW			4		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.52	749.9	29.57	751.0	48.4	9.1		S			8		10					Raining	A. O. Thorlacius.
Thorshavn	30.08	763.9	30.11	764.8	48.2	9.0	66	SW	9	4			6						Overloerer Bergh.
Vestervig	29.84	757.9	29.93	760.3	50.4	10.2	84	NNW			2		10						Locarer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.54	750.4	30.19	766.9	61.5	16.4	63	NNW			1	0	8n		NW	0.098	2.5	Very cloudy	M. Labroue, Director.
Alençon Normal School	29.60	751.8	30.15	765.8	63.0	17.2	76	NE			1	0	8kn		N	0	0	Very cloudy	M. Nicot, Director.
Arras, Engineer School	29.86	758.4	30.11	764.8	62.6	17.0	46	WNW			1	0	k		W				M. Klein, Commandant.
Avignon, Normal School	29.93	760.3	30.01	762.3	73.4	23	40	N			3		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.53	750.0	30.07	763.8	66.0	18.9	59	NE			1	0	8kn		SW	0	0	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.85	758.1	30.11	764.8	65.7	18.7	43	N			1		8	SW	NNW	0	0	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.21	741.9	30.04	763.1	62.6	17	43	ENE			1	ck	0		S	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.91	759.8	30.17	766.4	64.2	17.9	55	W			1		8			0.091	2.3	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.55	750.6	30.10	764.5	66.2	19	54	W			1	0	n		W	0.12	3.		M. Postel, Director.
Brest, Naval Observatory	29.95	760.7	30.19	766.9	61.9	16.6	71	NW			1		9		NW	0	0		M. de Rermaree, Dir.
Caen, Normal School	30.04	762.9	30.11	764.7	60.8	16	83	NNW			1		8		W	0	0	Very cloudy	M. Bitrix, Director.
Châlons-sur-Marne, N.Sch'l	29.80	757.0	30.12	765.0	70.7	21.5	40	NE			1		2	W	E	0	0	Slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.55	750.5	30.05	763.2	68.0	20	59	SW			1					0	0		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.74	729.9	30.08	764.0	61.5	16.4	62	NW			1		10			0.094	2.4	Covered	M. Alluard, Director.
Cluny, Normal School	29.32	744.6	30.11	764.9	70.7	21.5	54	SW			1		4			0.12	3.		M. de Villemontée, Dir.
Commercy, Normal School	29.20	741.7	30.06	763.4	66.0	18.9	38	W			1	0	5kn	W	W	0	0	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.48	698.0	29.93	760.3	68.0	20	21	N			6	0	k		N	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.91	734.3	30.05	763.3	70.3	21.3	33	NW			3		2		NW	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.24	742.8	29.99	761.8	68.7	20.4	37	WNW			2	ck	0			0	0		M. Ablard, Director.
Guéret, Normal School	28.55	725.1	30.11	764.9	58.1	14.5	70	SW			1	0	k		NE	0	0		M. Rivoire, Director.
Lamballe, Normal School	29.93	760.1	30.19	766.9	61.5	16.4	77	NW			1				NW	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.63	752.5	30.30	769.7	60.4	15.8	71	W			3	0	n		E	0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.12	765.0	30.22	767.6	60.8	16.0	59	WNW			1		10		WNW	0	0	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.02	737.2	30.03	762.7	65.8	18.8	43	NNW			1		5		NNW	0	0	Cloudy	M. André, Director.
Mans, Normal School	29.83	757.7	30.14	765.5	60.1	15.6	70	N			1		8		N	0.063	1.6	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.68	753.9	29.95	760.6	74.3	23.5	32	WNW			2		5		NW	0	0		M. Stephan, Director.
Montlouis l'instituteur	24.91	632.7	30.15	765.7	52.3	11.3	51	NE	9.4	4.2			4		N	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.91	759.8	30.02	762.5	73.0	22.8	55	WNW			3		5		N	0	0	Cloudy	M. P. Galzin, Director.
Nancy, Normal School	29.30	744.1	30.05	763.2	65.1	18.4	32	WNW			1	0	5k		NE	0	0	Cloudy	M. Hasse.
Nantes, Observatory	30.03	762.8	30.19	766.9	60.8	16	76	WNW			1-2		10n			0	0	Covered	M. Larocque, Director.
Nice	29.93	760.2	29.97	761.1	66.9	19.4	51	E			4		1	E	E	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.99	761.8	30.10	764.4	68.4	20.2	46	N	22.4	10.0			4	NW	SE	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.63	574.7			37.2	2.9							10	N	S	0.535	13.6	Snowy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.00	736.5	30.04	763.0	66.2	19	47	N			1		2	NW	NW	0	0	Slightly cl'dy	M. Taillieu.
Puy de Dôme Obs'y, Summit	25.22	640.7			41.0	5.0	100	NW			4		10			0.480	12.2	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	30.14	765.6	30.17	766.4	62.6	17.0	73	W			1		8		W	0	0	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.98	761.6	30.20	767.1	60.4	15.8	77	E			1		8		NW	0	0	Very cloudy	M. Moullot, Director.
Rodez, Normal School	27.97	710.4	30.11	764.7	56.3	13.5	77	NW			6		5			0.268	6.8	Cloudy	M. Richard, Director.
Rouen, Normal School	30.01	762.2	30.10	764.4	67.3	19.6	46	NNE			2		2		NW	0	0	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	29.98	761.6	30.14	765.6	59.9	15.5	69	N			1		5		N	0	0	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.94	760.4	30.10	764.6	63.5	17.5	52	S			1		8		WNW	0	0		M. Renou, Director.
Toulouse, Observatory	29.49	749.0	30.22	767.5	67.1	19.5	65	W			2		10			0	0	Covered	M. Baillaud, Director.
Tours	29.92	760.0	30.12	765.0	62.6	17.0	73	WSW			1		10		W	0.075	1.9	Covered	M. de Tastes.
Versailles, Observatory	29.61	752.1	30.10	764.6	64.8	18.2	46	SW			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.83	757.6	30.12	765.0	68.2	20.1	47	WSW			1		8		NW	0	0		M. Marié Dvy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.15	740.3	30.01	762.2	60.8	16.0	46	NNE			3	0	7k		W	0	0		Prof. Dr. Hoh.
Berlin	29.71	754.7	29.89	759.1	48.6	9.2	98	NW			4		10			0.335	8.5		Prof. Dr. Arndt.
Breslau	29.27	743.5	29.80	756.9	46.8	8.2	100	WNW			4		10			0.299	7.6	Raining	Royal University Obs'y.
Carlsruhe	29.61	752.2	30.03	762.8	64.8	18.2	71	SW			2		4	NW		0	0		Albert Senx.
Cassel	29.28	743.8	30.00	762.1	60.4	15.8	42	NW			3		2	NW		0	0		Dr. H. Möhl.
Frankfort on the Main	29.71	754.5	30.06	763.5	65.8	18.8	42	NW			1		6			0	0		Physical Society.
Friedrichshafen	28.64	727.4	30.06	763.4	60.8	16.0	56	SW			4		7	WNW		0	0		Wilhelm, Chief Tel.
Hamburg	29.91	759.7	29.98	761.5	51.3	10.7	75	NW			4		10			0	0		Dr. R. Kleeman.
Kiel	29.92	760.0	29.94	760.4	50.7	10.4	79	WNW			2		10			0.075	1.9		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.56	750.9	29.99	761.7	48.9	9.4	82	WNW			2		10	W		0.236	6.0	Rainy	Prof. Dr. Bruhns.
Magdeburg	29.77	756.1	29.96	761.0	49.3	9.6	83	WNW			4		10ks		NW	0.177	4.5		Dr. Assmann.
Memel	29.54	750.4	29.59	751.6	48.2	9.0	100	N			4		10n					Rain & fog	Reinbrecht & Issermann.
Munich	28.22	716.7	30.08	764.1	57.7	14.3	46	W			4		10	SW		0	0		Central Station.
Neufahrwasser	29.70	754.4	29.72	754.8	45.7	7.6	77	NNW			4		10			0.071	1.8		A. Lothes.
Neustadt, Palatinate	29.53	750.0	30.06	763.5	66.7	19.3	50	W			2		7			0	0		Dicknether.
Stuttgart	29.08	738.7	29.96	761.0	63.0	17.2	39	N			2		3	N		0	0		Prof. Dr. Schoder.
Thorn																			Dr. O. Cunerth.
Weissenburg, Bavaria	28.52	724.5	29.99	761.7	59.9	15.5	39	NW			6		9	NW		0	0		Prof. Kemlein.
Wustrow	29.85	758.2	29.87	758.8	53.1	11.7	88	NNW			4		10s			0.217	5.5		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.55	750.6	29.94	760.4	73.0	22.8	.....	SW	.....	.....	2.0	.....	0	.....	.....	.....	.....	Clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.52	749.7	29.56	750.9	88.1	31.2	76	SW	29.0	13.0	.....	.....	0	.....	.....	0	0	Blue sky	
Deesa	29.04	737.7	29.50	749.2	98.8	37.1	35	WSW	15.8	7.1	.....	.....	8	SW	SW	0	0	D. clouds	
Bombay	29.65	753.2	29.69	754.1	85.9	29.9	76	W	12.0	5.4	.....	.....	6	.....	W	0.63	16.0	D. clouds	
Poona, Yarrowda	27.84	707.0	29.67	753.7	80.2	26.8	63	WSW	.....	.....	.....	.....	4	.....	W	0	0	D. clouds	
Belgaum	27.19	690.7	29.72	754.9	75.9	24.4	75	W	13.0	5.8	.....	.....	8	SW	SW	0.12	3.0	Showery	
Lahore	28.71	729.3	29.42	747.3	98.7	37.1	35	W	1.9	0.8	.....	.....	0	.....	.....	0	0	Blue sky	
Roorkee	28.56	725.5	29.43	747.4	93.8	34.3	60	NW	1.6	0.7	.....	.....	7	.....	.....	0	0	Misty	
Agra	28.92	734.6	29.48	748.7	84.2	29.0	76	N	2.8	1.2	.....	.....	8	.....	N	0	0		
Nagpur	28.48	723.4	29.49	749.0	92.5	33.6	55	NW	6.4	2.9	.....	.....	6	.....	NW	0.43	10.9	D. clouds	
Jubbulpore	28.15	714.8	29.46	748.3	89.6	32.0	58	W	6.5	2.9	.....	.....	9	.....	.....	0.12	3.0	Overcast	
Lucknow	29.05	737.9	29.42	747.3	81.2	27.3	89	NE	4.9	2.2	.....	.....	7	NNW	.....	0.57	14.5	Blue sky	
Allahabad	29.12	739.5	29.41	747.1	98.4	36.9	45	Calm	4.1	1.8	.....	.....	8	.....	.....	0	0	D. clouds	
Patna	29.24	742.8	29.42	747.2	91.9	33.3	77	E	4.0	1.8	.....	.....	10	E	E	0.26	6.6	Overcast	
Hazaribagh	27.50	698.5	29.46	748.2	86.8	30.4	68	SE	5.7	2.6	.....	.....	10	S	N	0	0	Thund'r st'm	
Cuttack	29.47	748.4	29.55	750.5	80.8	27.1	85	SSW	0.6	0.3	.....	.....	10	.....	.....	2.74	69.6	Showery	
Calcutta, Alipore	29.50	749.4	29.53	750.0	80.6	27.0	93	SSW	10.0	4.5	.....	.....	9	.....	SE	0.03	0.8	Drizzling	
Dhubri	29.39	746.4	29.51	749.4	85.4	29.7	79	Calm	1.6	0.7	.....	.....	3	NW	.....	1.83	46.5	D. clouds	
Chittagong	29.48	748.8	29.56	750.9	83.8	28.8	82	SW	3.8	1.7	.....	.....	8	.....	.....	0	0	D. clouds	
Sibsagar	29.21	741.9	29.54	750.2	86.2	30.1	80	SW	2.8	1.2	.....	.....	6	W	W	0.57	14.5	D. clouds	
Zanzibar, Africa	.....	.....	30.04	763.0	81.9	27.7	52	SSW	10	4.5	.....	.....	3	.....	SSW	0	0	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.54	750.3	29.94	760.5	64.8	18.2	49	NW	1.8	0.8	.....	.....	7	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.39	746.6	29.89	759.3	71.1	21.7	35	SW	8.1	3.6	.....	.....	4	SW	.....	0	0	.....	Prof. Schiaparelli.
Padua	29.86	758.4	29.97	761.1	68.2	20.1	52	WNW	4.3	1.9	.....	.....	3	W	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.02	737.2	29.91	759.6	70.2	21.2	40	ESE	3.1	1.4	.....	.....	2	.....	.....	0	0	.....	Prof. P. F. Denza.
Genoa	29.83	757.6	30.02	762.5	64.8	18.2	67	SW	6.9	3.1	.....	.....	4	S	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	28.04	712.1	29.89	759.1	67.1	19.5	43	ESE	.....	.....	6	.....	2	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	29.90	759.5	29.93	760.7	64.8	18.2	63	NE	9.8	4.4	.....	.....	7	WNW	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.72	755.0	29.98	761.4	70.3	21.3	48	W	.....	.....	4	.....	7	W	.....	0	0	.....	Prof. Costantino Pitter.
Leghorn	29.93	760.3	30.02	762.4	65.3	18.5	56	W	11.2	5.0	.....	.....	4	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.86	758.4	30.03	762.8	68.0	20.0	49	WSW	11.2	5.0	.....	.....	2	.....	.....	0	0	.....	Prof. P. S. Ferrari.
Lecce	29.77	756.2	30.02	762.5	73.0	22.8	35	WSW	4.9	2.2	.....	.....	3	.....	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.15	740.3	30.02	762.4	66.6	19.2	70	SSW	3.8	1.7	.....	.....	5	SW	.....	0	0	.....	Prof. D. Conti.
Cagliari	29.87	758.6	30.06	763.4	65.5	18.6	63	NW	.....	.....	4	.....	7	NW	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	29.85	758.3	30.10	764.6	63.9	17.7	55	N	5.6	2.5	.....	.....	10	.....	.....	0.039	1.0	.....	Prof. G. Cincciatore.
Syracuse	29.98	761.6	30.03	762.7	72.3	22.4	44	SE	11.9	5.3	.....	.....	7	.....	.....	0	0	.....	Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.52	749.8	30.04	763.0	65.3	18.5	56	WSW	9.8	4.4	.....	.....	3	NW	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	22.15	562.5	.....	.....	37.6	3.1	52	NE	.....	.....	2	8cs	0	NE	.....	0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.18	563.3	.....	.....	41.5	5.3	55	N	.....	.....	2	7ck	0	NE	.....	0	0	Misty	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y †..	29.92	759.9	29.93	760.2	72.8	22.7	88	W	1.1	0.5	.....	ck	8ks	.....	W	0	0	Cloudy	K. Sasaki.
Kioto	29.80	756.9	29.97	761.2	70.8	21.6	89	SSW	2.8	1.2	.....	ck	3s	.....	.....	0.158	4.0	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.80	756.9	29.99	761.7	76.9	24.9	90	SSW	13.6	6.1	.....	ck	10s	.....	.....	0.010	0.3	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	29.79	756.6	29.86	758.4	71.9	22.2	94	NNW	2.0	0.9	.....	10c;cs	0	SW	.....	0.010	0.3	Cloudy	The Staff.
Wakayama	29.93	760.2	29.98	761.5	71.9	22.2	88	ENE	1.8	0.8	.....	5ck	0	W	.....	0.118	3.0	Fair	Y. Kuwamuce.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.87	758.7	30.06	763.6	74.8	23.8	65	E	18.0	8.0	.....	0	2	.....	SSE	0	0	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanajuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez.
Leon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Leal.
Mazatlan	29.61	752.1	29.87	758.6	78.0	25.6	91	E	0	0	.....	1cs	0	.....	.....	0	0	Clear	F. Quijano, C. E.
Mexico, Central Obs'y	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	The Staff.
Pabellon, Aguascalientes	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. V. de Leon, M. E.
Puebla, Catholic Institute	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. P. Spina.
San Luis Potosi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Barroeta, M. D.
Tlacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.10	764.4	30.10	764.4	63.9	17.7	.....	SW	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Groningen	29.97	761.3	30.03	762.7	58.3	14.6	.....	W	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Helder	30.04	762.9	30.04	762.9	55.4	13.0	.....	SSW	.....	.....	2	.....	.....	.....	.....	0.130	3.3	.....	
Hellevoetsluis	30.06	763.6	30.06	763.6	61.2	16.2	70	WSW	.....	.....	3	.....	.....	.....	.....	0	0	.....	
Utrecht	30.04	762.9	30.08	764.1	59.7	15.4	64	WNW	.....	.....	2	.....	8	.....	.....	0	0	Very cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.85	758.2	29.91	759.8	54.0	12.2	76	Calm	0	0			8			0	0		
Christiania	29.67	753.7	29.82	757.3	67.6	19.8	48	SW	9	4			3			0	0		
Gjesvær	30.17	766.2	30.19	766.8	37.6	3.1		Calm			0		4						
Lodingen	30.05	763.3	30.10	764.5	48.6	9.2	39	NNE			4		0			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.20	767.1	30.22	767.5	66.6	19.2	92	SSW	3.1	1.4			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.13	739.9	30.09	764.3	81.5	27.5	24	WNW	1.3	0.6			0			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.14	765.6	30.23	767.8	68.9	20.5	68	SW	4.3	1.9			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.82	757.4	30.17	766.3	75.6	24.2	32	NNE	16.8	7.5			0			0	0		The Staff.
Ponta Delgada, Azores	30.34	770.5	30.41	772.3	66.2	19.0	77	Calm	0	0			10			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.74	729.9	29.73	755.1	89.1	31.7	31	NNE	11	5		0	3k						Capt. Lasarew.
Archangel	29.88	758.9	29.90	759.4	42.6	5.9	87	ENE	18	8			10						Capt. Sselliweratow.
Astrakhan	29.84	758.0	29.76	755.9	82.9	28.3	45	SE	11	5			0						Capt. Wieganow.
Barnaul ‡	29.31	744.4	29.77	756.1	84.0	28.9	41	SW	4	2		0	3k						Meteorological Obs'y.
Dorpat	28.87	733.3	29.11	739.3	53.6	12.0	78	NNW	9	4			9n						Observatory.
Ekaterinburg	28.97	735.7	29.86	758.5	85.8	29.9	27	NW	4	2		7c	0					Light clouds	Meteorological Obs'y.
Kasan	29.50	749.3	29.75	755.6	88.9	31.6	25	S	11	5		0	1k						Observatory.
Kertch	29.77	756.2	29.79	756.7	72.7	22.6	63	SW	7	3			6						Lagorio & Sastyrez.
Kieff	28.83	732.2	29.46	748.2	52.0	11.1	69	W	9	4		c;cs	10ks						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.36	745.7	29.56	750.7	71.8	22.1	54	SSW	45	20			6						Meteorological Obs'y.
Moscow	28.97	735.7	29.50	749.3	56.1	13.4	96	NW	4	2			10s					Raining	Meteorological Obs'y.
Nertchinsk	27.25	692.4	29.45	748.0	58.8	14.9	65	Calm	0	0			4			0.035	0.9		Meteorological Obs'y.
Nikolaiev	29.60	751.7	29.67	753.5	56.8	13.8	81	WSW	18	8			10n						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.27	743.4	29.35	745.6	56.1	13.4	88	SE			6		10n			0.051	1.3		Lieut. Iwanow.
Pekin, China	29.60	751.8	29.74	755.4	63.9	17.7	80	SW	4	2			10n					Thnd'rstorm	Physical Observatory.
St. Petersburg	29.51	749.6	29.53	750.0	53.6	12.0	98	E	11	5			10n					Light rain	Central Physical Obs'y.
Tashkend, Laboratory	28.19	715.9	29.67	753.5	73.4	25.8	67	Calm	0	0			10			Blank			Teich, A. M.
Tiflis	28.38	720.8	29.71	754.5	86.5	30.3	35	S	2	1		8cs	0						Physical Observatory.
Warsaw	29.18	741.2	29.60	751.9	46.6	8.1	93	NW	13	6			10n			Blank			Astronomical Obs'y.
Wilna	29.03	737.3	29.44	747.8	56.1	13.4	90	N	4	2			10					Heavy cld's	Berg, Assistant.
Yeniseisk	29.50	749.3	29.79	756.6	46.2	7.9	88	NW	9	4			10					Raining	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.03	762.7	58.5	14.7	61	E			1	10cs	0	N		0.07	1.8	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			30.09	764.3	54	12.2	93	NE			3	10	5	N		0	0	Cloudy	J. Youngclause.
North Unst, Shetland Isl'ds			29.93	760.2				NE			3		Hz						Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.98	761.6	30.09	764.2	68.0	20.	53	SE	4.0	1.8			1			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.28	769.2	30.34	770.6	68.4	20.2	59	NW	1.3	0.6		2	3	SE		0.118	3.0	Cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.26	692.5			61.2	16.2	64	N	6.9	3.1			7			0	0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.93	709.3	30.08	764.1	74.1	23.4	39	W	5.4	2.4		0	3			0	0	Lightly cl'dy	The Staff.
Murcia, Met. Obs'y ‡	29.96	761.0	30.11	764.7	77.0	25.0	45	S	2.9	1.3		0	0			0	0	Clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.33	744.9	30.20	767.1	67.1	19.5	61	N	4.9	2.2		3	4			0	0	Cloudy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.94	760.4	30.00	762.1	78.4	25.8	79	ENE	2.7	1.2		4c;cs	0	W		0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.89	759.1	29.94	760.4	84.1	28.9	82	SSW	1.1	0.5			9k		E	0.10	2.5	Covered	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.04	762.9	30.13	765.4	78.6	25.9	32	E	8.6	3.9		0	0			0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I.	29.94	760.4	30.03	762.7	77.4	25.2	94	SE	5.6	2.5		4k	3k	SE	SE	0.283	7.2	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.85	758.2	30.00	761.9	81.3	27.4	81	SW	3.2	1.6		8ck	0	SW		0	0	Cloudy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.01	762.3	30.05	763.3	52.9	11.6	29	NE			4		0			0	0		
Umea	29.93	760.3	29.98	761.6	49.3	9.6	38	NE			6		7			0	0		
Hernosand	29.91	759.7	29.96	761.0	44.8	7.1	51	NE			7		7			0	0		
Stockholm	29.63	752.5	29.80	757.0	43.5	6.4	62	N			6		10			0.020	0.5		
Wisby	29.64	752.8	29.70	754.3	43.5	6.4	76	NE			6		10					Raining	
Sub-Series.																			
Upsala	29.64	752.8	29.72	755.0	43.5	6.4	61	N	20.8	9.3			10		NNE	0	0		S. G. Fineman.
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.65	727.7	30.06	763.4	61.2	16.2	38	N			1		1			0	0	Clear	The Observatory.
Zurich ‡	28.45	722.7	30.07	763.7	61.5	16.4	43	NW			2		7			0	0	Cloudy	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.89	759.2	69.3	20.7	61	SW	9.0	4.0			4		SW	0	0		The Observatory.
Valona			30.08	764.1	65.8	18.8		Calm			0		2			0.08	2.	Slightly cl'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.83	757.7	87.8	31.0	58	SW			2		0			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.11	764.8	30.19	766.8	60	15.6	82	N	4	1.8			Fg		NW	0.03	0.8	Dense fog	
Alpena, Michigan	29.28	743.7	29.93	760.2	64.3	17.9	73	S	16	7.2		2k	2s	SW		0	0	Fair	
Atlanta, Georgia	28.97	735.8	30.12	765.0	67.0	19.4	92	E	7	3.1			10s		Calm	0	0	Cloudy	
Atlantic City, New Jersey	30.15	765.8	30.16	766.1	60	15.6	88	NE	2	0.9			10s		Calm	0	0	Cloudy	
Augusta, Georgia	29.97	761.2	30.15	765.8	72.8	22.7	76	E	4	1.8		1c	0			0	0	Clear	
Baltimore, Maryland	30.12	765.0	30.18	766.6	65	18.3	84	Calm	0	0		7cs;k	Fg	E		0	0	Fair	
Barnegat, New Jersey	30.13	765.3	30.15	765.8	60	15.6	88	N	2	0.9		8k	0	NE		0	0	Fair	
Bismarck, Dakota	27.80	707.6	29.60	751.8	60	15.6	65	SW	5	2.2		2c	0	S		0	0	Fair	
Boise City, Idaho	27.11	688.6	29.87	758.7	50.4	10.2	65	NE	2	0.9		0	5s		W	Inap.	Inap.	Fair	
Boston, Massachusetts	30.01	762.2	30.16	766.1	66.0	18.9	75	N	1	0.4		0	Hz			0.08	2.0	Clear	
Brackettville, Texas	28.75	730.2	29.76	755.9	74	23.3	81	E	7	3.1			10ks		E	0	0	Cloudy	
Brownsville, Texas	29.87	758.7	29.91	759.7	80	26.7	87	SE	6	2.7		2c	0			0	0	Clear	
Buffalo, New York	29.42	747.3	30.10	764.5	61.8	16.6	64	SW	4	1.8		0	Sk			0	0	Clear	
Burlington, Vermont	29.88	758.9	30.16	766.1	59	15.0	73	SE	1	0.4		0	Sk			0	0	Dense smoke	
Cairo, Illinois	29.65	753.1	30.04	763.0	73	22.8	81	NE	15	6.7			10ks		SW	0	0	Threatening	
Campo, California	27.35	694.7	29.92	760.0	45	7.2	61	S	3	1.3		0	0			0	0	Clear	
Camp Thomas, Arizona	27.10	689.9			55	12.8	39	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	30.11	764.8	30.13	765.3	68	20.0	74	N	14	6.3		1k	0			0	0	Clear	
Cape May, New Jersey	30.12	765.0	30.15	765.8	61	16.1	83	SE	3	1.3			10ks			0	0	Cloudy	
Castroville, Texas	29.15	740.4	29.83	757.7	77	25.0	73	S	4	1.8			10s		S	0	0	Cloudy	
Cedar Keys, Florida	30.00	762.0	30.02	762.5	80	26.7	82	E	4	1.8		0	8ks		E	0	0	Fair	
Champaign, Illinois	29.12	739.6	29.87	758.7	74.9	23.8	77	SW	8	3.6		0	0			0	0	Clear	
Charleston, S. Carolina	30.05	763.3	30.11	764.8	72	22.2	85	N	10	4.5		0	0			0	0	Clear	
Charlotte, N. Carolina	29.33	745.0	30.19	766.8	70.0	21.1	57	N	5	2.2		0	0			0	0	Clear	
Chattanooga, Tennessee	29.34	745.2	30.14	765.5	71	21.7	75	SE	3	1.3		2k	0	S		0	0	Fair	
Cheyenne, Wyoming	23.90	608.6	29.77	756.1	50.2	10.1	52	NW	12	5.4			10s		NW	0.01	0.3	Cloudy	
Chicago, Illinois	29.17	740.9	29.85	758.2	69.0	20.6	80	S	10	4.5		8c	0			0.13	3.3	Fair	
Chincoteague, Virginia	30.12	765.0	30.14	765.5	60	15.6	77	E	16	7.2			10s		NE	Inap.	Inap.	Cloudy	
Cincinnati, Ohio	29.42	747.3	30.06	763.5	65	18.3	84	E	2	0.9		9c	0	W		0	0	Cloudy	
Cleveland, Ohio	29.37	746.0	30.09	764.3	63	17.2	77	SE	6	2.7		5ck	0	S		0	0	Fair	
Coleman City, Texas	28.10	713.7	29.69	754.1	72	22.2	76	S	6	2.7		2k	0			Inap.	Inap.	Fair	
Columbus, Ohio	29.25	742.9	30.07	763.8	66	18.9	74	SE	4	1.8		5cs	2s			0	0	Fair	
Concho, Texas	27.97	710.4	29.85	758.2	72	22.2	80	S	10	4.5		0	0			0	0	Clear	
Corsicana, Texas	29.50	749.3	29.96	761.0	78	25.6	78	S	6	2.7		5cs	0			0	0	Fair	
Davenport, Iowa	29.21	741.9	29.85	758.2	69	20.6	80	SW	7	3.1			10s		SW	1.00	25.4	Cloudy	
Dayton, Washington T'y	28.12	714.2	29.87	758.7	47	8.3	92	S	1	0.4		5ck	0	SW		0	0	Fair	
Deadwood, Dakota	25.14	638.5	29.70	754.4	50	10.0	58	W	2	0.9		5cs	0	W		0	0	Fair	
Decatur, Texas	28.70	729.0	29.81	757.2	75	23.9	77	SE	16	7.2		2ck	2s	SE		0	0	Fair	
Delaware Breakwater, Del.	30.14	765.5	30.16	766.1	60	15.6	88	E	8	3.6			10s		NE	0.01	0.3	Cloudy	
Denison, Texas	29.09	738.9	29.87	758.7	76	24.4	86	S	12	5.4		0	8ks		S	0	0	Fair	
Denver, Colorado	24.72	627.9	29.76	755.9	52.0	11.1	60	S	4	1.8		0	0			0	0	Clear	
Des Moines, Iowa	28.93	734.8	29.81	757.2	65	18.3	94	W	2	0.9		2cs	0			0.53	13.5	Clear	
Detroit, Michigan	29.36	745.7	30.03	762.7	66.9	19.4	74	S	10	4.5		2cs	0	W		0	0	Clear	
Dodge City, Kansas	27.17	690.1	29.66	753.4	61.4	16.3	48	SW	4	1.8		0	0			0	0	Clear	
Dubuque, Iowa	29.14	740.1	29.82	757.4	68.1	20.1	84	SW	6	2.7			10s		Calm	0.34	8.6	Cloudy	
Duluth, Minnesota	28.79	731.3	29.47	748.5	63	17.2	94	SW	12	5.4			10n		SW	0.45	11.4	Light rain	
Eagle Pass, Texas	29.13	739.9	29.94	760.5	75.4	24.1	77	SE	3	1.3		1c	0	Calm		0	0	Clear	
Eagle Rock, Idaho	25.16	639.1	29.87	758.7	44	6.7	76	SW	18	8.0			10ks		SW	0	0	Cloudy	
Eastport, Maine	30.10	764.5	30.17	766.3	51.5	10.8	96	S	5	2.2			Fg			0	0	Dense fog	
El Paso, Texas	26.17	664.7	29.82	757.4	66	18.9	19	NW	6	2.7		0	0			0	0	Clear	
Erie, Pennsylvania	29.38	746.2	30.07	763.8	64	17.8	68	SE	11	4.9		2c	0			0	0	Fair	
Escanaba, Michigan	29.05	737.9	29.69	754.1	59	15.0	88	S	16	7.2			10s		S	0.02	0.5	Cloudy	
Florence, Arizona	28.36	720.3	29.96	761.0	56	13.3	35	NE	2	0.9		0	0			0	0	Clear	
Fort Apache, Arizona	25.02	635.5	29.80	756.9	44	6.7	30	NE	4	1.8		0	Sk		Calm	0	0	Light smoke	
Fort Assinnaboine, Montana	27.24	691.9	29.93	760.2	60	15.6	44	W	12	5.4		10k	0	Calm		0	0	Cloudy	
Fort Bennett, Dakota	28.09	713.5	29.56	750.8	56	13.3	87	W	2	0.9		10cs	0	SW		0.14	3.6	Cloudy	
Fort Benton, Montana	26.99	685.5	29.73	755.1	56	13.3	63	SW	7	3.1		0	0			0	0	Clear	
Fort Buford, Dakota	27.67	702.8	29.59	751.6	55	12.8	81	S	4	1.8		2cs	0	Calm		0.03	0.8	Clear	
Fort Custer, Montana	26.64	676.6	29.73	755.1	55	12.8	74	SW	4	1.8			10n		S	0.03	0.8	Light rain	
Fort Davis, Texas	25.18	639.6	30.14	765.5	72	22.2	50	SE	4	1.8		c	0			0	0	Clear	
Fort Elliott, Texas	27.06	687.3	30.13	765.3	72	22.2	67	S	16	7.2		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.33	745.0	29.80	758.4	71	21.7	75	E	16	7.2		2c	0	N		0	0	Fair	
Fort Grant, Arizona	25.23	640.8	30.03	762.7	62	16.7	18	N	5	2.2		0	0			0	0	Clear	
Fort Griffin, Texas																			
Fort Keogh, Montana	27.23	691.6	29.64	752.8	56	13.3	62	SW	5	2.2			10n			Inap.	Inap.	Light rain	
Fort Macon, North Carolina	30.07	763.8	30.08	764.0	70	21.1	80	NE	9	4.0		0	0			0	0	Clear	
Fort McKavett, Texas	27.70	703.6	29.54	750.3	69.8	21.0	57	S	7	3.1		0	0			0.07	1.8	Clear	
Fort Missoula, Montana	26.63	676.4	30.01	762.2	53	11.7	67	S	1	0.4			10s		SW	Inap.	Inap.	Cloudy	
Fort St. Michaels	29.93	760.2	29.96	761.0	34	1.1	100	SW	18	8.0			10ks		SW	0.05	1.3		
Fort Shaw, Montana	26.18	665.0	29.63	752.6	50	10.0	65	W	10	4.5		5k	0	W		0	0	Fair	
Fort Sill, Indian Territory	28.61	726.7	29.82	757.4	75	23.9	77	S	8	3.6		0	0			0	0	Clear	
Fort Stevenson, Dakota	27.81	706.4	29.59	751.6	57	13.9	87	W	2	0.9		2ck	0	Calm		0	0	Clear	
Fort Verde, Arizona					52	11.1	41	SW			1	2cs	0	W		0	0	Fair	
Fredericksburg, Texas	28.21	716.5	29.72	754.9	70	21.1	90	SW	8	3.6		1k	0	SW		0	0	Fair	
Galveston, Texas	29.94	760.5	29.98	761.5	81	27.2	74	SW	12	5.4		0	5ks		SW	0	0	Fair	
Grand Haven, Michigan	29.22	742.2	29.87	758.7	68	20.0	79	SE	9	4.0		0	8s		SE	0.07	1.8	Fair	
Hatteras, North Carolina	30.08	764.0	30.10	764.5	69	20.6	70	E	10	4.5		0	0			0	0	Clear	
Helena, Montana	25.66	651.8	29.86	758.4	51	10.6	59	N	4	1.8		5k	0	Calm		0	0	Fair	
Henrietta, Texas	28.86	733.0	29.71	754.6	79	26.1	74	SE	9	4.0		2ck	2s	NE		0	0	Fair	
Indianapolis, Indiana	29.20	741.7	29.97	761.2	70.5	21.4	70	S	6	2.7		9c;cs;k	0	W		0	0	Fair	
Indianola, Texas	29.93	760.2	29.96	761.0	80.0	26.7	78	S	17	7.6		2c	1ks	N	S	0	0	Fair	
Jacksboro, Texas	28.71	729.2	29.78	756.4	78	25.6	65	SW	9	4.0		5k	0	SW		0	0	Fair	
Jacksonville, Florida	30.01	762.2	30.03	762.7	81	27.2	88	NE	6	2.7		2k	0	NE		0	0	Fair	
Keokuk, Iowa	29.20	741.7	29.82	757.4	69.1	20.6	80	S	8	3.6			10s		S	0.32	8.1	Cloudy	
Key West, Florida	30.00	762.0	30.03	762.7	84.0	28.9	69	E	3	1.3		2cs;k	0			0	0	Fair	
Kittyhawk, North Carolina	30.12	765.0	30.14	765.5	67	19.4	74	E	3	1.3		2c	1ks	N		0	0	Fair	
Knoxville, Tennessee	29.14	740.1	30.14	765.5	67	19.4	79	E	2	0.9		0	0			0	0	Clear	
La Crosse, Wisconsin	29.00	736.6	29.70	754.4	70	21.1	70	SW	12	5.4		0	2s		S	0.80	20.3	Fair	
La Mesilla, New Mexico	26.05	661.7	30.20	767.1	52.2	11.2	29	Calm	0	0		0	0			0	0	Clear	
Laredo, Texas	29.44	747.8	29.77	756.1	78	25.6	86	SE	4	1.8		0	0			0	0	Clear	
Leavenworth, Kansas	28.95	735.3	29.82	757.4	74	23.3	68	S	10	4.5		1k	0	S		0.72	18.3	Clear	
Lewiston, Idaho	29.03	737.3	29.86	758.4	56	13.3	73	SE	2	0.9			10s		Calm	0	0	Cloudy	
Little Rock, Arkansas	27.67	702.8	29.98	761.5	78	25.6	86	S	1	0.4		0	8s		S	0	0	Fair	
Los Angeles, California	29.57	751.1	29.94	760.5	53.1	11.7	93	SW	1	0.4			Fg		Calm	0	0	Light fog	
Louisville, Kentucky	29.46	748.3	30.01	762.2	69.0	20.6	75	SE	6	2.7		8cs	0			0	0	Fair	
Lynchburg, Virginia	29.48	748.8	30.15	765.8	64	17.8	73	Calm	0	0		1c	0			0	0	Clear	
Madison, Wisconsin	28.81	731.8	29.79	756.7	67	19.4	89	S	16	7.2			10s		Calm	0.56	14.2	Cloudy	
Marquette, Michigan	28.92	734.6	29.63	752.6	63	17.2	78	S	8	3.6		8k	0	SW		0.01	0.3	Fair	
Mason, Texas	28.32	719.3	30.01	762.2	73	22.8	76	S	5	2.2		1ck	0	Calm		0	0	Clear	
Memphis, Tennessee	29.70	754.4	30.03	762.7	80	26.7	78	SE	3	1.3		0	0			0.84	21.3	Clear	
Milwaukee, Wisconsin	29.10	739.1	29.83	757.7	62	16.7	83	S	8	3.6		5cs	1s			0.37	9.4	Fair	

JUNE 12, 1881.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
United States Series—Continued.																			
Mobile, Alabama	29.96	761.0	30.03	762.7	78	25.6	86	NW	2	0.9	.....	8cs	Hz	W	.....	0	0	Fair	
Montgomery, Alabama	29.86	758.4	30.08	764.0	71	21.7	80	NE	1	0.4	.....	5c	0	N	.....	0	0	Fair	
Moorhead, Minnesota	28.63	727.2	29.59	751.6	62	16.7	77	W	8	3.6	.....	0	0	.....	.....	2.21	56.1	Clear	
Morgantown, W. Virginia	29.10	740.7	30.14	765.5	61	16.1	88	Calm	0	0	.....	0	Fg	.....	.....	0	0	Clear	
Mt. Washington, N. H.	24.09	611.9	30.12	765.0	53	11.7	35	E	16	7.2	.....	0	Sk	.....	.....	0	0	Clear	
Nashville, Tennessee	29.53	750.0	30.05	763.3	72.1	22.3	70	E	2	0.9	.....	5c	0	.....	.....	0	0	Fair	
New Haven, Connecticut	30.04	763.0	30.15	765.8	62	16.7	83	NE	6	2.7	.....	Hz	Hz	.....	.....	0	0	Dense haze.	
New London, Connecticut	30.13	765.3	30.18	766.6	65	18.3	73	N	2	0.9	.....	1k	0	Calm	.....	0.01	0.3	Clear	
New Orleans, Louisiana	29.98	761.5	30.03	762.7	78.5	25.8	86	SW	4	1.8	.....	0	0	.....	.....	0.01	0.3	Clear	
Newport, Rhode Island	30.11	764.8	30.16	766.1	60.2	15.7	84	NE	4	1.8	.....	4ck	1s	NE	Calm	0.02	0.5	Fair	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	30.12	765.0	30.16	766.1	57.1	13.9	81	NE	7	3.1	.....	2ck	0	NE	.....	0.07	1.8	Fair	
New York, New York	29.98	761.5	30.15	765.8	65	18.3	78	N	4	1.8	.....	0	Fg	.....	.....	0	0	Clear	
Norfolk, Virginia	30.08	764.0	30.12	765.0	72	22.2	67	NE	4	1.8	.....	2k	0	.....	.....	0	0	Clear	
North Platte, Nebraska	26.93	684.0	29.75	755.6	60	15.6	77	N	10	4.5	.....	2c	0	NW	.....	0.01	0.3	Clear	
Olympia, Washington T'y	29.70	754.4	29.74	755.4	52.5	11.4	93	S	1	0.4	.....	.....	1on	.....	Calm	0.13	3 3	Light rain	
Omaha, Nebraska	28.65	727.7	29.79	756.7	67	19.4	79	NE	3	1.3	.....	2cs	8ks	SW	SW	0.03	0.8	Cloudy	
Oswego, New York	29.82	757.4	30.14	765.5	57.5	14.2	81	S	5	2.2	.....	Hz	Hz	.....	.....	0	0	Dense haze.	
Pensacola, Florida	30.00	762.0	30.03	762.7	78	25.6	86	NW	3	1.3	.....	1c	0	Calm	.....	0	0	Clear	
Philadelphia, Pa	30.12	765.0	30.18	766.6	60	15.6	94	S	1	0.4	.....	.....	Fg	.....	.....	0	0	Dense fog	
Phœnix, Arizona	28.76	730.5	30.54	775.7	60	15.6	49	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.84	453.1	30.04	763.0	26	— 3.3	17	SW	28	12.5	.....	0	0	.....	.....	0.07	1.8	Clear	
Ploche, Nevada	24.01	609.8	29.80	758.4	52	11.1	41	Calm	0	0	.....	10c	0	SW	.....	0	0	Cloudy	
Pittsburg, Pennsylvania	29.36	745.7	30.14	765.5	57.5	14.2	91	NE	2	0.9	.....	0	Fg	.....	Calm	0	0	Clear	
Port Eads, Louisiana	30.03	762.7	30.04	763.0	80.2	26.8	87	W	6	2.7	.....	1c	0	Calm	.....	0	0	Clear	
Port Huron, Michigan	29.38	746.2	30.04	763.0	66.6	19.2	74	S	10	4.5	.....	8c	0	W	.....	0	0	Fair	
Portland, Maine	30.11	764 8	30.16	766.1	60	15.6	77	W	2	0.9	.....	0	Hz	.....	.....	0.01	0.3	Clear	
Portland, Oregon	29.75	755.6	29.82	757.4	55.8	13.2	91	S	12	5.4	.....	.....	1on	.....	S	0.18	4.6	Light rain	
Portsmouth, N. Carolina	.....	.....	.....	.....	68	20.0	79	NE	13	5.8	.....	2c	0	Calm	.....	0	0	Clear	
Prescott, Arizona	24.74	628.4	29.81	757.2	44	6.7	37	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	29.99	761.7	30.00	762.0	83.5	28.6	73	SE	1	0.4	.....	1k	0	SW	.....	0	0	Clear	
Red Bluff, California	29.56	750.8	29.89	759.2	67.0	19.4	64	N	5	2.2	.....	0	1s	.....	NW	0	0	Clear	
Rio Grande City, Texas	29.72	754.9	29.93	760.2	75	23.9	81	SE	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Rochester, New York	29.52	749.8	30.14	765.5	58	14.4	70	W	6	2.7	.....	0	Hz	.....	.....	0	0	Clear	
Roseburg, Oregon	29.35	745.5	29.91	759.7	56.2	13.4	93	E	1	0.4	.....	.....	1on	.....	.....	0.11	2.8	Light rain	
Sacramento, California	29.85	758.2	29.92	760.0	58.5	14.7	82	SE	4	1.8	.....	5c	0	.....	.....	0	0	Fair	
St. Louis, Missouri	29.37	746.0	29.95	760.7	67.1	19.5	92	S	9	4.0	.....	10c;ck	0	W	.....	0.07	1.8	Cloudy	
St. Paul, Minnesota	28.83	732.3	29.67	753.0	64	17.8	83	S	12	5.4	.....	5k	0	SW	.....	0.53	13.5	Fair	
Salt Lake City, Utah	25.61	650.5	29.81	757.2	55	12.8	68	Calm	0	0	.....	.....	10s	.....	Calm	0.07	1.8	Threatening	
San Antonio, Texas	29.36	745.7	30.05	763.3	75	23.9	86	SE	2	0.9	.....	0	4ks	.....	SE	0	0	Fair	
San Diego, California	29.82	757.4	29.89	759.2	61.3	10.3	77	Calm	0	0	.....	.....	10s	.....	.....	0	0	Cloudy	
Sandusky, Ohio	29.39	740.5	30.05	763 3	66	18.9	79	S	9	4.0	.....	5ck	1s	.....	.....	0	0	Fair	
Sandy Hook, New Jersey	30.13	765.3	30.10	766.1	60.9	16.1	94	SW	1	0.4	.....	0	Fg	.....	.....	0.03	0.8	Clear	
San Francisco, California	29.90	759.4	29.97	761.2	55	12.8	84	W	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Santa Fé, New Mexico	23.27	591.0	29.78	756.4	50	10.0	32	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Savannah, Georgia	30.02	762.5	30.10	764.5	74	23.3	86	NE	6	2.7	.....	.....	10ks	.....	NE	0	0	Cloudy	
Shreveport, Louisiana	29.77	756.1	30.00	762.0	78	25.6	82	S	5	2.2	.....	0	5s	.....	SW	0	0	Fair	
Silver City, New Mexico	24.28	616.7	29.74	755.4	48	8.9	56	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Sitka, Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.26	6.6	.....	
Smithville, North Carolina	30.07	763.8	30.10	764.5	73	22.8	76	NE	5	2.2	.....	0	Hz	.....	.....	0	0	Clear	
Spokane Falls, Wash. Ter.	27.84	707.1	29.80	756.9	40.5	8.1	72	S	7	3.1	.....	8ck	0	.....	.....	0.01	0.3	Fair	
Springfield, Illinois	29.23	742.4	29.89	759.2	68	20.0	90	S	4	1.8	.....	10s	8ks	W	SW	0.20	5.1	Cloudy	
Springfield, Massachusetts	30.05	763.3	30.18	766.6	56.0	13.3	94	NE	1	0.4	.....	.....	10s;fg	.....	N	0	0	Cloudy	
Stockton, Texas	26.87	682.5	29.86	758.4	69.8	21.0	90	SE	12	5.4	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	28.60	728.0	29.50	749.3	60	15.6	82	W	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Thatcher's Island, Mass.	30.14	765.5	29.19	766.8	61.6	16.4	82	NW	6	2.7	.....	0	0	.....	.....	0.51	13.0	Clear	
Toledo, Ohio	29.36	745.7	30.04	763.0	69	20.0	70	S	6	2.7	.....	5c;cs	1s	SW	.....	0	0	Fair	
Tucson, Arizona	27.47	697.7	29.70	755.9	60	15.6	20	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.53	750.0	29.93	760.2	55.5	13.1	72	SW	3	1.3	.....	.....	10s	.....	SW	0	0	Cloudy	
Uvalde, Texas	28.97	735.8	29.00	753.4	73	22.8	85	S	1	0.4	.....	2cs	0	Calm	.....	0	0	Clear	
Vicksburg, Mississippi	29.78	756.4	30.04	763.0	78	25.6	88	S	6	2.7	.....	1c	0	S	.....	0.08	2.0	Clear	
Visalia, California	29.52	749.8	29.87	758.7	61.5	16.4	66	NW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C.	30.08	764.0	30.19	766.8	67	19.4	74	Calm	0	.0	.....	0	0	.....	.....	0	0	Clear	
Wickenburg, Arizona	.....	.....	.....	.....	57	13.9	47	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	30.00	763.5	30.11	764.8	70	21.1	80	NE	4	1.8	.....	Hz	Sk	Calm	Calm	0	0	Dense haze.	
Winnemucca, Nevada	25.58	649.7	29.78	756.4	50	10.0	79	SE	4	1.8	.....	5ck	0	SW	.....	0	0	Fair	
Wood's Holl, Mass.	30.11	764.8	30.15	765.8	62	16.7	88	NE	4	1.8	.....	10k	0	NE	.....	0	0	Cloudy	
Yankton, Dakota	28.46	722.9	29.72	754.9	65	18.3	68	W	6	2.7	.....	0	0	.....	.....	0	0	Clare	
Yuma, Arizona	29.64	752.8	29.78	756.4	68.1	20.1	56	SW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.10	561.3	.....	.....	56.5	13.6	73	Calm	0	0	.....	.....	10u	.....	.....	0	0	Cloudy	Thomas Herran
Buff Bay Town, Jamaica.‡	29.74	755.4	30.05	763.3	75	23.9	90	S	.....	.....	.....	5c	2k	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.99	761.7	30.04	763.0	83	28.3	70	Calm	0	0	.....	4cs	0	Calm	.....	0	0	Fair	A. Van Caneghem, Asst.
Kingston, Jamaica, W. I.	29.93	760.2	29.94	760.5	80.8	27.1	72	Calm	0	0	.....	10cs	0	.....	.....	0	0	Cloudy	Robert Johnstone.
Navassa, W. I.	29.80	758.4	29.94	760.5	81	27.2	78	NE	10	4.5	.....	.....	10	.....	.....	0.10	2.5	Cloudy	F. M. Everett.
Paramaribo, S. A.	30.01	762.2	30.01	762.2	80	26.7	82	SE	.....	.....	2	3c	4k	SE	.....	0.410	10.4	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.38	746.2	29.93	760.2	78	25.6	89	Calm	0	0	.....	.....	10ks	.....	Calm	0.31	7.9	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	76.1	24.5	.....	NE	.....	.....	1	10ck	0	NE	.....	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.55	750.6	29.60	751.8	74.0	23.3	88	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	J. Fortescue & W Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dirn from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington.
H M. S. Alert, Thursday Island, Oceania	29.96	761.0	78.2	25.7	81	SE			3		2							D. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Argostoli, Ionian Islands	30.03	762.7	68.5	20.3	62	NNW			3		4	NNW						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe
H. M. S. Arab, N. 14° 08′, E. 48° 58′	29.58	751.3	85	30.0	75	SSW			6		0					7	SW	Blue sky	Comm. R. W. Stopford.
H. M. S. Bacchante, S. 35° 23′, E. 120° 01′	29.92	760.0	55	12.8		SW			3		5	W				2	SW	D. clouds.	Capt. Lord C. Scott.
H. M. S. Beacon, N. 24° 47′, E. 66° 59′	29.58	751.3																	Comm. G. W. Hand.
H. M. S. Bittern, Varna, Bosphorus			65	18.3		WNW			4		4	W				2	NW	Squally	Capt. E. B. Pusey.
H. M. S. Blanche, N. 13° 09′, W. 61° 14′	29.99	761.7	82	27.8	87	E			2-4		4							Squally	Capt. C. G. F. Knowles.
H. M. S. Boadicea, St. Helena Island, Africa	30.04	763.0	70	21.1	79	NNE			2		2	ENE						D. clouds	Com. F. W. Richards.
H. M. S. Champion, Monte Video, Uruguay	30.03	762.7	56	13.3	87	S			2		10	S				1	S	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 38° 33′, E. 120° 44′	29.57	751.1	61	16.1	100	SW			1		10	E						Raining	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 39° 00′, E. 9° 20′	30.07	763.8	63	17.2		WSW			5		3	WNW				4	WNW	Squally	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.22	767.6	78	25.6		N			2-4		2	WNW						Squally	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.12	765.0	79	26.1	90	SE			4-5		6	SE						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 49° 41′, W. 54° 47′	30.06	763.5	47	8.3	89	NNW			1		0					1	NE	Blue sky	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 7° 13′, E. 72° 23′	29.89	759.2	79	26.1		SE			1		5							D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 8° 40′, E. 102° 15′	29.83	757.7	83	28.3		SE			5		8	SE				5	S	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, N. 7° 05′, E. 171° 46′	29.94	760.5	83	28.3	83	ENE			2-3		5	ENE						D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Tamatave, Madagascar	30.14	765.5	74	23.3	68	SSW			3-4		4	SSW				1	SE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Gold Cove, Newfoundland	30.03	762.7	52	11.1		Calm			0		0							Blue sky	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo N. 20° 50′, W. 84° 02′	29.98	761.5	85	29.4	83	ENE			1-2		1	E				1	E	Blue sky	Comm. R. N. Custance.
H M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd	29.71	754.6	52.5	11.4	83	E			4-5		3							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.33	745.0	38	3.3	90	Calm			0		9							Overcast	Capt. L. F. Jones.
H. M. S. Griffon, N. 24° 03′, W. 77° 12′	30.09	764.3	85	29.4	64	ESE			1									D. clouds	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Malta, Mediterranean	30.09	764.3	70	21.1	95	WNW			1-2		1					1	WNW	Blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.00	762.0	64	17.8		SE			1		3	NW						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.84	757.9	74	23.3		NW			1		5	N					N	D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 15′, E. 110° 15′	29.73	755.1	85	29.4	85	SE			2-3		5	NE				1	SE	Squally	Capt. A. Carpenter.
H. M. S. Midge, N. 24° 28′, E. 118° 03′	29.87	758.7				SW			3		4	SW						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. M. S. Modeste, S. 22° 35′ E. 63° 55′	30.30	770.1	76	24.4	86	Calm			0		9					1	ENE	Showery	Capt. J. G. Mead.
H. M. S. Monarch, Tunis, Tunis, N. Africa	30.12	765 0	66	18.9	84	N			2		4	NNE						D. clouds	Capt. G. Tryon, C B

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, N. 4° 17′, E. 113° 33′			82.5	28.1		Calm			0		1	SW				2	SW	Blue sky	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	30.10	764.5	54.5	12.5	90	Calm			0		10							Misty	Capt. E. B Drummond.
H. M. S. Orontes, S. 11° 28′, E. 5° 52′ .*†	30.00	762.0	73.5	23.1	70	SSW			1-2		1	WSW				1	S	Blue sky	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.87	758.7	78	25.6	100	Calm			0		3					1	SE	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, N. 13° 21′, W. 70° 26′	29.85	758.2	83	28.3	83	E			6		3					2		D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready, N. 160° 45′, E. 97° 33′	29.73	755.1	78	25.6		SW			2-6		10							Raining	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 48° 26′, W. 123° 27′	29.76	755.9	52	11.1		ENE			1		3							Showery	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 5° 48′, E. 39° 10′	30.03	762.7	80.3	26.8	78	S			3-4		4					Sm'h		Squally	Capt. C. E. Foot.
H. M. S. Salamis.																			Capt. A. Fitz George.
H. M. S. Sea Gull, S. 8° 30′, E. 48° 38′	29.54	750.3	81	27.2	74	SSE			4		1	SE				3	SE	Blue sky	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 40° 35′, W. 11° 41′	30.36	771.1	64	17.8	83	N			2		3	N				2	NNE	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Caldera, Chili, S. A	30.02	762.5	57	13.9	87	N			2		10	Calm						Overcast	Capt. A. H. Markham.
H. M. S. Turquoise, S. 53° 04′, W. 73° 56′	30.19	766.8	43	6.1	100	WNW			3-5		10							Raining	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne,																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.			84	28.9		SE			1		3							D. clouds	Com. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W	30.24	768.1	56	13.3	87	W			1		6							Blue sky	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, Mohammera, Persia	29.56	750.8	101.5	38.6	23	Calm			0									Misty	Capt. T. P. Nesham.
H M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Caudid dos Reis, Comd't.
Quanza, Santiago, Cape Verd Id's	30.07	763.7	84.2	29.0	50	NE			3		0					2	NE	Blue sky	Carlos M. de Silva Costa, Comd't
Rio Lima																			S. C da Silva Costa, Comd't.
Sado., St, Paulde Lonado, Benguela	30.04	763.0	72.5	22.5	82	WNW			3		3					1		D. clouds	G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.84	757.9	80.6	27.0	84	SSE			2		8		SE					D. clouds	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H M. Corvette Saga N. 42° 11′, W. 10° 07′	30.30	769.6	69.4	20.8	75	NNE			1		7							D. clouds	Capt. M. von Krusenstierna.
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.00	762.0	78	25.6	91	Calm	0	0			2			0	0			Fair	
N. Yard, Portsmouth, N. H.	30.14	765.5	62	16.7	88	Calm	0	0			0?			1.2	30.			Rainy?	
Naval Hospital, Yokahama, Japan	29.74	755.4	72	22.2	95	Calm			0		5		W	Slight				Fair	
Adams N. 7° 23′, W. 80° 03′	29.68	753.9	80	26.7	87	W			2		8		E			Long		Cloudy	
Alaska, Callao, Peru	29.94	760.5	65	18.3	89	Calm			0		8			0	0	Sm'h		Cloudy	
Alert, Yokohama, Japan	29.78	756.4	76	24.4	91	Calm			0		2		WNW			Sm'h		Clear	
Alliance, Norfolk, Va	29.97	761.2	70	21.1	85	NW			1		2			0	0			Fair	
Ashuelot, Kobe, Japan	29.97	761.2	70	21.1	95	WSW			1		5		NW					Clearing	
Colorado, New York, N. Y.	30.14	765.5	63	17.2	83	NE	2	0.9			0			0	0			Misty	
Constitution, Newport, R. I.	30.11	764.8	59	15.0	100	NE			1		10							Fair	
Franklin, Norfolk, Va	30.04	763.0	71	21.7	73	NE	10.8	4.8			2		N	0	0			Fair	
Galena. Cadiz, Spain	30.10	764.5	73	22.8	67	WSW			1		2					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal.	30.00	762.0	67	19.4	84	SW	1.2	0.5			2		SW	0	0			Fair	
Jamestown, Sitka, Alaska	29.68	753.9	46	7.8	92	Calm			0		8			0.21	5.3	Sm'h		Cloudy	
Kearsarge. Norfolk, Va	30.15	765.8	70	21.1	57	NE			1		2		NE					Fair	
Lackawanna. Papati, Tahiti I'd, Oceania	30.20	767.1	75	23.9	90	SE			1		2		SE					Fair	
Marion, Montevideo, Uruguay	29.93	760.2	53	11.7	100	SSE			4		10		SE	Slight		Mod.	S	Cloudy	
Michigan, Erie, Pennsylvania	30.04	763.0	64	17.8	73	S			2		0							Clear	
Minnesota, Newport, R. I.	30.17	766.3	68	20.0	94	NNE			2		5		E			Sm'h		Misty	
Monocacy, Yokohama, Japan	29.89	759.2	74	23.3	90	Calm			0		5							Fair	
New Hampshire. Norfolk, Va	30.09	764.3	71	21.7	85	NNE	10	4.5			2		Calm	0	0			Clear	
Nipsic. N. 40° 54′, W. 12° 56′	30.33	770.4	64	17.8	83	N			2		10					Sm'h		D. clouds	
Onward, Callao, Peru	29.95	760.7	65	18.3	89	S			1		8					Long	W	Cloudy	
Palos, Nagasaki, Japan	29.98	761.5	78	25.6	95	SSW			3		8							Fair	
Passaic, Washington, D. C.	30.15	765.8	62	16.7	88	Calm			0		0?							Fair.?	
Pensacola, Mare Isl'd, Cal.	29.96	761.0	60	15.6	88	WSW			3		2			0	0	Sm'h		Clear	
Portsmouth. Narragansett Bay, R. I.	30.14	765.5	53	11.7	100	ENE			2		2		E			Sm'h	E	Fair	
Powhatan, Newport, R. I	30.15	765.8	65	18.3	78	N			1		2		N					Fair	
Quinnebaug, Tompkinsville, N. Y.	30.13	765.3	61	16.1	88	NW			1		2					Sm'h		Foggy	
Ranger, Mazatlan, Mexico	29.80	756.9	81	27.2	83	ENE			1		2		Calm	0	0	Long	S	Fair	
Richmond, Nagasaki, Japan	29.99	761.7	79	26.1	91	S			1		10		S	0.05	1.3			Cloudy	
Saratoga, N. 41° 10′, W. 71° 20′	30.13	765.3	52	11.1	100	ENE			2		8			0	0	Mod.	ENE	Cloudy	
Shenandoah, Montevideo, Uruguay	30.11	764.8	53	11.7	93	SE			4		10		SSE			Mod.	SSE	Cloudy	
St. Louis, League Island, Pa	29.74	755.4	62	16.7	88	Calm	0	0			2			0	0			Clear	
Swatara, Shangbai, China	29.74	755.4	84	28.9	75	SW			2		5		Calm					D. clouds	
Ticonderoga, S. 51° 50′, W. 51° 30′	30.06	763.5	39	3.9	100	NNW	1	0.4			10		NW	0	0	Sm'h		Foggy	
Trenton, Marseilles, France	29.95	760.7	72	22.2	43	NNW			4		2			0	0	Sm'h		Clear	
Vandalia. Huntington, Long I'd.	30.12	765.0	60	15.6	94	NNE			1		0							Clear	
Wabash, Boston, Massachusetts	30.17	766.3	60	15.6	88	NW	3	1.3						0.14	3.6			Hazy	
Wachusetts, N. Yard, Mare I'd, Cal.	29.97	761.2	60	15.6	88	SW			2		2		W	0	0			Fair	
Yantic, Key West, Florida	29.95	760.7	81	27.2	96	Calm			0		2							Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	Up'er 0—10	Lo'er 0—10	Upper. From.	Lower. From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 38° 05′, W. 72° 30′	30.10	764.5	60.8	16.0	77	NNE			1		10							Overcast	Capt. A. J. Brown.
British Merchant, ‡ N. 33° 41′, W. 123° 59′	30.05	763.3	60.2	15.7	88	NW			4		8							Misty	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero																			W. N. Lailey.
City of Agra, N. 10° 42′, W. 22° 52′	30.03	762.7	81.0	27.2	87	NNE			4		3							D. clouds	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 39° 15′, W. 16° 52′	30.38	771.6	68.0	20.0	65	NNE			2		2							Blue sky	Capt. Jas. Buchan.
Denbighshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R. N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Naiad, N. 50° 11′, W. 4° 04′	30.16	766.1	54.3	12.4	98	WSW			4		9							Overcast	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 31° 19′, W. 42° 40′	30.41	772.4	77.5	25.3	73	NE			2		2							Blue sky	Capt. M. Parry.
Sierra Estrella, N. 25° 59′, W. 22° 33′	30.21	767.3	71.8	22.1	78	NE			4		7							Misty	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathlevén, ‡ N. 34° 41′, E. 20° 07′	30.03	762.7	66.5	19.2	79	W			4		6							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, Montreal, Canada	30.16	766.1				Calm			0		10							Hazy	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia, ‡ N. 43° 30′, W. 46° 26′	30.07	763.8	61	16.1		SSW			5		Fog			Fog		Mod.	SW	Foggy	Capt. W. H. P. Haines.
S. S. Scythia, N. 42° 28′, W. 54° 27′	29.98	761.5	59	15.0	?	NW			3		10		WNW	Drizzles		Sm'h	W	Foggy	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic, ‡ N. 48° 00′, W. 34° 48′	30.14	765.5	56	13.3	75	SW			4		7		SW			Swell	WNW	Showery	Capt. H. Parsell.
S. S. Britannic, N. 50° 29′, W. 24° 19′ †	30.32	770.1	55	12.8	100	W			4		2		W			Long	W	Misty	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic																			Capt. Ch. W. Kennedy
S. S. Republic, N. 41° 43′, W. 54° 49′ †	30.24	768.1	67	19.4	90	SSW			4		10			24h'rs		mod.	Sm'h	Misty	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig, N. 37° 57′, W. 67° 17′	30.04	763.0	71.5	21.9	90	SW			3		10		SW			Mod.	SW	Raining	Capt. C. Phole.
S. S. Hermann, N. 49° 46′, W. 17° 43′	30.30	769.6	56.3	13.5		NNW			2		8?		WNW	0	0	H'vy	WNW	Overcast?	Capt. H. Baur.
S. S. Hohenzollern, ‡ N. 41° 07′, W. 52° 31′	30.15	765.8	66.9	19.4		WSW			3		5			0	0	Mod.	WNW	Hazy	
S. S. Köln																			Capt. Th. Jüngst.
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Strassburg, N. 48° 16′, W. 26° 56′	30.33	770.4	60.8	16.0		SW			4		2		SW	0	0	Long	WNW	Fair	Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. Liverpool, England	30.02	762.5	71	21.7	95	N			1		2		N					Clear	Capt. J. W. Shackford.
S. S. Indiana, Philadelphia, Pa.†	29.94	760.5	68	20.0	95	NE			4		5		NE	0	0	Sm'h		Foggy	Capt. R. W. Sargent.
S. S. Ohio, N. 38° 46′, W. 72° 31′.*†	30.19	766.8	60	15.6	100	NE			2		10		NE	0	0	Sm'll	SW	Cloudy	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, N. 39° 04′, W. 71° 03′.††	30.09	764.3	61	16.1	88	ENE			3		10		ENE			Sm'h	E	Cloudy	Capt. Geo H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 23° 02′, W. 107° 49′.††	29.68	753.9	82	27.8	67	E			2		0			0	0	G'tl	SSW	Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 37° 54′, W. 124° 39′.††	30.13	765.3	63	17.2	83	WNW			4		2		NW	0	0	High	WNW	Clear	Capt. H. Davison.
S. S. Gaelic, N. 38° 33′, E. 146° 24′.*†	30.11	764.8	67	19.4	95	SSE			4		8		S			Mod.	S	Misty	Capt. W. H. Kidley.
S. S. Oceanic, Hong Kong, China	30.04	763.0	85	29.4	65	SSE			3		6		S					Cloudy	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Rolles.
S. S. Oregon, Portland, Oregon.†	29.77	756.1	55.0	12.8	93	SE			1		10		SE					Rainy	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, N. 34° 26′, W. 118° 38′.††	30.00	762.0	61	16.1	88	NW			1		8		NW	0	0	Sm'h		Fair	Capt. J. N. Ingalls.
S. S. Dakota, N. 44° 10′, W. 124° 48′.††	29.88	758.9	57	13.9	87	SW			2		2		W	0	0	Long	WNW	Fair	Capt. H. G. Morse.
S. S. Idaho, N. 44° 33′, W. 124° 41′.††	29.82	757.4	55	12.8	100	S			6		10		S			R'gh	SW	Heavy rain	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator, N. 36° 37′, W. 121° 56′.††	30.00	762.0	55	12.8	93	NW			2		0					Mod.	W	Clear	Capt. Thos. Wallace.
S. S. State of California, N. 45° 50′, W. 124° 10′.††	29.73	755.1	53	11.7	?	S			4		10		S			Sm'h	S	Raining	Capt. G. Debney.
S. S. Victoria, N. 42° 45′, W. 124° 49′.††	29.91	759.7	53	11.7	100	S			6		8					Mod.	SW	Raining	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 33° 22′ W. 135° 20′	30.28	769.1	62	16.7	100	N			2		8		NE			Sm'h		Misty	A. Bannerman, 2d Officer.
S. S. City of New York, Sydney, N. S. W.†	30.25	768.3	56	13.3	100	W			1		10		SW					Raining	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, Panama, Panama.†	29.93	760.2	82	27.8	91	Calm			0	5ck?	0	NE		1 hour				Clear?	Capt. D. S. Austin.
S. S. City of Peking, N. 38° 03′, W. 123° 30′.††	30.00	762.0	56	13.3	87	WNW			5		10		WNW	0	0	Sm'h		Foggy	Capt. G. G. Berry.
S. S. City of Sidney, Honolulu, Sandwich I'ds.*†	30.20	767.1	79	26 1	76	ENE			4		5		ENE	0	0	Sm'h		Fair	Capt. H. C. Dearborn.
S. S. City of Tokio, Yokohama, Japan.†	29.99	761.7	76	24.4	76	Calm			0		2		SW					Clear	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 24° 20′, W. 111° 48′.††	29.97	761.2	63	17.2	94	WNW			4		2		Calm	0	0	Mod.	WNW	Clear	Capt. R. R. Searle.
S. S. Granada, N. 17° 40′, W. 102° 05′.††	29.86	758.4	84	28.9	79	ESE			2		8		ESE	0	0	Mod.	SSW	Fair	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. W.	30.27	768.8	70	21.1	61	SE			2		5?		SE					Clear?	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, N. 44° 13′, W. 41° 47′.††	30.19	766.8	61	16.1	50	SW			6		10		SW	6 hours		R'gh	SW	Misty	A. Feddersen, 2d Officer.
S. S. Rhynland, N. 40° 20′, W. 70° 48′.††	30.21	767.3	55	12.8	87	N			1		0			0	0	Sm'h		Foggy	Capt. Wm. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, Providence Island, R. I.	30.12	765.0	60	15.6	82	NE	3	1.3		2ck	0			0	0			Fair	Capt J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, Arroyo, Porto Rica.†	30.06	763.5	85	29.4		Var.			6		10			Heavy		Mod.		Squally	Capt. W H. Champlin.
U. S. F. C. S. Fish Hawk, Washington, D. C.†	30.14	765.5	65	18.3	89									0	0			Clear	
Bark Sunbeam, Lisbon, Portugal.†	30.17	766.3	76	24.4	61	NNE			6		0			0	0			Clear	Capt. Jos. Hand.

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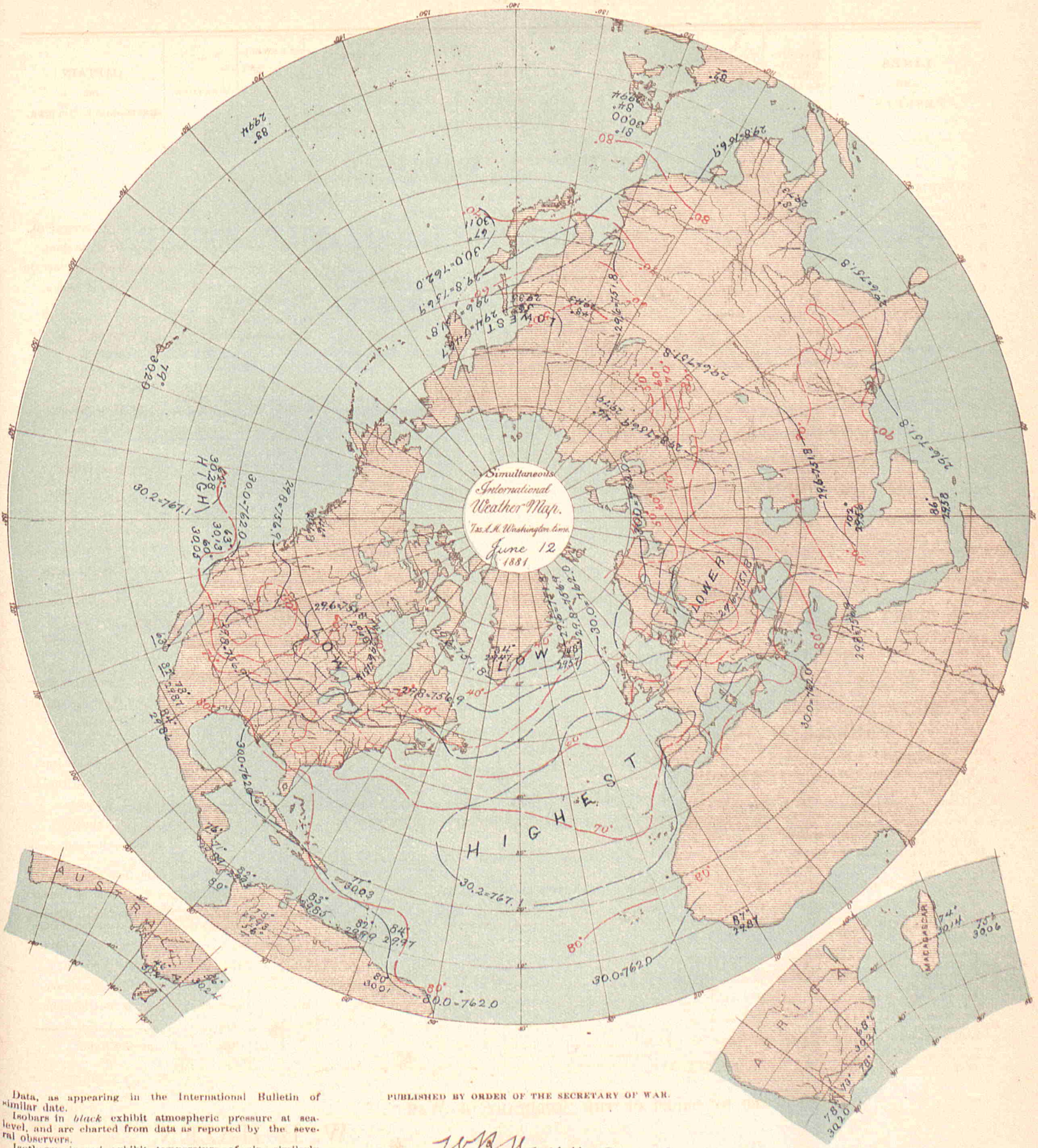
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 13, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	BAROMETER. Corrected for instrum'tal error and temperature. Mill.	BAROMETER. Reduced to sea-level. Inch.	BAROMETER. Reduced to sea-level. Mill.	TEMPERATURE OF THE AIR. Fah.	TEMPERATURE OF THE AIR. Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	WIND. Velocity. Miles p. h'r	WIND. Velocity. Mtrs p. sec	WIND. Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	CLOUDS. Amount and kind. Lo'er 0—10	CLOUDS. Direction. Upper. From.	CLOUDS. Direction. Lower From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Mill.	WEATHER.	OBSERVERS.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours‡			30.00	761.9	74.1	23.4	85	W			1		0			0	0	Clear	Raynard.
Algiers‡			30.11	764.9	70.9	21.6	61	NE			3		0			0	0	Clear	Nicolas.
La Calle‡			30.14	765.5	75.9	24.4	66	W			1		0			0	0	Clear	Fonfrède.
Tunis‡			30.17	760.3															Jacques.
Sfax‡			30.21	767.2															Gau.
Saida‡			30.10	764.4	83.8	28.8	18	SW			2		2			0	0	Fair	Dumas.
Tebessa‡			30.18	766.5	70.5	21.4	28	Calm			0		4			0	0	Cloudy	Watrin.
Geriville‡					80.2	26.8	47	NW			2		0			0	0	Clear	Lonchamp.
Laghouat‡			30.12	765.1	80.2	26.8	23	E			3		0			0	0	Clear	Herbin.
Biskra‡			30.17	766.2	85.3	29.6	65	SE			1		0			0	0	Clear	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.96	761.0	30.05	763.3	51.1	10.6	80	NNE	3	1.3			8			0	0	Fine	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.43	747.4	29.96	760.9	71.2	21.8	45	SW			2		4			0.142	3.6		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.11	739.5	29.89	759.1	50.9	10.5	87	W	10.5	4.7			10			0.063	1.6	Raining	Dr. Wierzbicki.
Eperies	28.95	735.3	29.82	757.4	55.6	13.1	67	NW			2		108			0.091	2.3		Julius Mikolik.
Gratz‡	28.71	729.1	29.92	760.0	66.0	18.9	61	SSW			2		6			0.035	0.9		Andreas Rospini.
Hermannstadt	28.44	722.4	29.87	758.7	52.9	11.6	80	NW			3		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.66	727.9	29.98	761.5	59.4	15.2	62	WSW			1		10			0.138	3.5		The Staff.
Lemberg	28.80	731.4	29.78	756.4	49.5	9.7	78	NW			3		10			0.020	0.5		Dr. T. Stanecki.
Pola	29.93	760.1	30.04	762.9	69.8	21.0	61	S			2		4			0	0		I. R. Hydrographic Office.
Szathmar	29.43	747.4	29.89	759.2	53.6	12.0	76	W			3		10			0.303	7.7		Beicht Peter, S. J.
Szegedin	29.65	753.0	29.92	760.0	60.8	16.0	80	W			4		6			0	0		Karl Stancel.
Trieste	29.95	760.6	30.05	763.2	72.3	22.4	62	Calm			0		10			0.094	2.4		Secco.
Vienna	29.26	743.3	29.97	761.3	59.7	15.4	59	W			2		10			0.091	2.3		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter Printed June 13, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

Aberdeen	30.01	762.2	30.11	764.8	50.4	10.2	70	N	11	4.9			9			0	0	Overcast	W. Boswell.
Armagh, Observatory	29.91	759.7	30.15	765.8	55.0	12.8	79	N	2	0.9			10					Gloomy	S. Call.
Bidston, Liverpool Obs'y			30.09	764.3	57.4	14.1	65	WNW	12	5.4			1					Blue sky	John Hartnup.
Bolton, Sharples	29.54	750.3	30.08	764.0	56.2	13.4	73	ESE	3	1.3			10					Gloomy	Thomas Mackereth.
Bradford, Yorkshire	29.69	754.1	30.09	764.3	53.5	11.9	73	NE			1		10			0	0	Overcast	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.91	759.7	29.94	760.5	78	25.6	95	NE			2		9					Raining	Corpl. J. Surgener, A.H.C.
Cardington																			John McLaren.
Chatham, School M. E.	29.94	760.5	30.06	763.5	65.0	18.3	59	NW			1		4					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.89	759.2	30.11	764.8	64.3	17.9	57	N			2		3					D. clouds	The Staff.
Fort Napier, Natal	27.86	707.6	30.08	764.0	75.1	23.9	90	Calm			0		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	88	31.1	84	W			1		2					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			30.01	762.2	59	15.0	76	SW			2		10					Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	29.98	761.5	30.04	763.0	73.4	23.0	84	E			4		2					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.85	758.2	30.05	763.3	60.5	15.8	57	ENE			1		4					Blue sky	Harry Urquhart.
Greenwich, Royal Obs'y	29.89	759.2	30.03	763.5	66.8	19.3	51	NNW			1		3					D. clouds	The Staff.
Guernsey	29.85	758.2	30 07	763.8	60	15.6	85	SSW			2		5					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.04	763.0	30.07	763.8	62.2	16.8	49	NNW	8	3.6			3					Blue sky	The Staff.
Leicester, Museum	29.81	757.2	30.06	763.5	59.2	15.1	65	NW			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	30.06	763.5	30.14	765.5	72	22.2	58	NW			2		1					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.97	761.2	30.02	762.5	83.0	28.3	85	N			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.55	750.6	30.07	763.8	61.0	16.1	65	NW			1		4					D. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	29.85	758.2	30.08	764.0	62.2	16.8	51	WNW			2		7					D. clouds	The Staff.
Plymouth	30.01	762.2	30.08	764.0	68.2	20.1	64	NW			2		5					D. clouds	John Merrifield.
Sandwick Manse, Orkneys			30.14	765.5	49	9.4	70	NNW	14	6.3			10					Misty	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.84	757.9	29.90	759.4	75.8	24.3	66	SW			1		5					D. clouds	Serg't W. H. Lyne.
Sheffield	29.84	757.9	30.12	765.0	55.4	13.0	79	NE			1		10			Inap.	Inap.	Overcast	W. F. Cooper.
Silloth Rectory	30.06	763.5	30.08	764.0	65.9	18.8	53	W			1		8			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.10	764.5	58.0	14.4	65	NE	4	1.8			7					D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	29.86	758.4	30.08	764.0	65.7	18.7	54	NW			2		7					D. clouds	Rev. C. H. Griffiths, F.M.S
Truro, Royal Institution	30.12	765.0	30.13	765.3	67	19.4	65	N			2		3					D. clouds	W. Newcombe.
Valencia, Observatory	30.12	765.0	30.15	765.8	58.6	14.8	72	N	15	6.7			6					D. clouds	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

Bathurst, N. B					67.0	19.4		SW	3	1.3		2k	0			0	0	Blue sky	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.12	765.0	30.16	766.1	61	16.1	80	SW	6	2.7		0	0			0	0	Clear	H. J. Cundall, C. E.
Chatham, N. B.*	30.05	763.3	30.11	764.8	62	16.7	78	SW	6	2.7		0	0			0	0	Clear	G. A. Blair.
Chicontimi, Quebec					62.6	17.0		Calm			0	0	0			0	0	Blue sky	Rev. V. A. Huart.
Cornwall, Ontario	29.79	756.7	29.98	761.5	64.7	18.2	82	SW			1	10cs	0	SW		0	0	D. clouds	James Smith, M. A
Dalhousie, N. B	29.97	761.2	30.00	762.0	64.0	17.8		W			1	0	0			0	0	Hazy	H. A. Johnson.
Father Point, Quebec*	29.93	760.2	29.95	760.7	65	18.3	92	SW	15	6.7		0	Sk			0	0	Smoky	J. McWilliams.
Fort Garry, Manitoba*	28.89	733.8	29.69	754.1	57	13.9	86	NW	6	2.7		0	2s		NW	Inap.	Inap.	Fair	James Stewart.
Fredericton, N. B	30.11	764.8	30.18	766.6	60.1	15.6	84	SE	9	4.0		0	0			0	0	Clear	Prof. Harrison.
Granton, Ontario	28.80	731.5	29.85	758.2	67.0	19.4	84	S			2	0	0			0	0	Clear	James Grant.
Halifax, N. S.*	30.13	765.3	30.27	768.8	47	8.3	97	SE	5	2.2			Fg			0	0	Foggy	A. Allison.
Hamilton, Ontario	29.54	750.3	29.92	760.0	60.1	15.6	85	SW			3	0	7ks			0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario*	29.65	753.1	29.98	761.5	66	18.9	76	SW	3	1.3		8c	0			0	0	Fair	S. Woods, M. A.
Little Glace Bay, N. S	30.14	765.5	30.18	766.6	65.0	18.3	73	SW			4	3ck	0	SW		0	0	Hazy	C. H. Rigby.
Montreal, Quebec*	29.82	757.4	30.01	762.2	69	20.6	65	S	8	3.6		5c	Sk	NW		0	0	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario	29.63	752.6	29.66	753.4	73.0	22.8	53	SW			2	5cs	0			Inap.	Inap.	D. clouds	J. R. Nason.
Parry Sound, Ontario*	29.18	741.2	29.85	758.2	69	20.6	70	SE	10	4.5		5k	2ks	SE	SE	Inap.	Inap.	Fair	Rev. R. Moseley.
Peterboro, Ontario	29.24	742.7	29.96	761.0	66.7	19.3	73	SE			1		9ks			0	0	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.25	742.9	29.92	760.0	66	18.9	95	SW	5	2.2		10k	0	SW		0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.29	744.0	29.92	760.0	65	18.3	86	SW	3	1.3			10n		SW	0	0	Cloudy	M. Payne.
Quebec, Quebec*	29.75	755.6	30.07	763.8	65	18.3	73	Calm	0	0		0	Sk			0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.47	748.5	29.91	759.7	64	17.8	65	E	2	0.9		0	0			0	0	Clear	W. H. McIntyre.
Saugeen, Ontario*	29.10	739.1	29.78	756.4	70	21.1	73	SE	20	8.9			10ks			0.26	6.6	Cloudy	K. Stewart.
St. Andrews, N .B	30.14	765.5	30.19	766.8	48	8.9	96	SE	1	0.4			Fg			0	0	Foggy	
St. John, N. B	30.04	763.0	30.21	767.3	51.0	10.6	86	SE	4	1.8			Fg			0	0	Foggy	G. Murdock, C. E.
Stratford, Ontario	28.63	727.2	29.85	758.2	68.3	20.2	81	SW	9	4.0			10s			0	0	D. clouds	C. J. Macgregor, M. A.
Sydney, C. B*	30.15	765.8	30.19	766.8	66	18.9	69	SW	10	4.5		0	0			0	0	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.58	751.3	29.95	760.7	62	16.7	84	E	7	3.1			10ks		SW	0	0	Cloudy	Magnetic Observatory
Windsor, N. S	30.08	764.0	30.18	766.6	56.0	13.3	90	W	2	0.9		0	2n			0	0	Fair	
Woodstock, Ontario	28.85	732.8	29.87	758.7	69.1	20.6	77	SE	18	8.0			10ks			0	0	D. clouds	Prof. Wolverton.
Yarmouth, N. S.*	30.16	766.1	30.23	767.8	49	9.4	96	E	1	0.4			Fg			0	0	Foggy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.93	760.2	30.17	766.3	66	18.9	68	SW	4	1.8		0	0			0	0	Fair	John Delany.
St. Pierre, N. F			30.12	765.0	55.0	12.8		SW			2					0	0		N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

Cape St. Francis Lt. House	30.15	765.8			71.2	21.8	46	NNW	12.2	5.5			9ks			0	0	Hazy	John Duthie.
Cape Town, C. G. H. Obs'y	30.14	765.5	30.18	766.6	47.0	8.3		NNW	5.9	2.6		5c	4s			0	0		The Staff, for D. Gill.
Worcester *†.	29.10	739.1			74.7	23.7	40	NNW			1	4	4			0	0	Light clouds	C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.64	752.8	29.66	753.4	79.7	26.5	89	Calm	0	0		5c;ck	0			0	0	Very cloudy	M. Marc Dechevrens, S.J.

STATIONS.	Barometer. Corrected for instru'm'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.

San José	25.17	664.7	29.89	759.2	65.8	18.8	93	SE			1	1ck	0			0.91	23.	Fair	Amand Maison.

DANISH SERIES.

Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.

Copenhagen	29.85	758.1	29.89	759.3	55.8	13.2	63	N	13	6	4		9						Oversergent Fischer.
Fanöe	29.91	759.8	29.93	760.3	57.4	14.1	65	NW					8						Overloerer Lauridsen.
Godthaab, Greenland	29.58	751.4	29.63	752.5	36.7	2.6	95	W			2		10					Foggy	S. Kleinschmidt.
Stykkisholm, Iceland	29.75	756.0	29.81	757.1	49.1	9.5		SE			6		10					Raining	A. O. Thorlacius.
Thorshavn	30.07	763.8	30.11	764.7	52.0	11.1	79	Calm	0	0			8						Overloerer Bergh.
Vestervig	29.84	758.0	29.94	760.4	55.4	13.0	73	NW			2		5						Loearer Oesterbol.

FRENCH SERIES.

Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.

Agen, Normal School	29.56	750.9	30.21	767.4	61.9	16.6	75	NW			1	0	n;nk		SE	0	0		M. Labroue, Director.
Alençon Normal School	29.60	751.8	30.15	765.8	65.8	18.8	72	S			1	0	8kn		SW	0	0	Very cloudy	M. Nicot, Director.
Arras, Engineer School	29.86	758.5	30.12	765.0	59.9	15.5	81	NW			2	0	n		NW	0	0		M. Klein, Commandant.
Avignon, Normal School	29.98	761.4	30.06	763.4	74.5	23.6	37	N			2		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.55	750.6	30.10	764.4	65.8	18.8	50	NW			1	0	8kn			0	0	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.83	757.6	30.09	764.2	64.2	17.9	59	WNW			1		10		NW	0	0	Covered	M. Frère Eugene Marie.
Besançon, Normal School	29.21	742.0	30.04	763.0	64.4	18	50	S			1	clr	0	SW		0	0		M. Gobin, Director.
Bordeaux, Observatory	29.92	759.9	30.17	766.3	66.2	19.0	49	S			1		8		ESE	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.61	752.0	30.15	765.7	65.8	18.8	51	W			1	0	kn		W	0	0		M. Postel, Director.
Brest, Naval Observatory	29.90	759.5	30.15	765.7	63.0	17.2	85	NW			1		10		NW	0.031	0.8		M. de Kermaree, Dir.
Caen, Normal School	30.00	761.9	30.07	763.7	68.0	20	72	SW			1		5		SW	0	0	Cloudy	M. Bétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.72	754.9	30.04	763.1	69.8	21.0	49	N			1		5			0	0	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.54	750.2	30.04	763.1	64.8	18.2	60	SW			1					0	0		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.76	730.6	30.10	764.6	62.2	16.8	67	N			1		10			0.051	1.3	Covered	M. Allnard, Director.
Cluny, Normal School	29.31	744.4	30.14	765.5	68.9	20.5	51	W			2		4		W	0.16	4.		M. de Villemontée, Dir.
Commercy, Normal School	29.22	742.2	30.08	763.9	61.2	16.2	50	W			4		10kn	W	W	0	0	Covered	Dr. Coulet, Director.
Gap, Normal School	27.54	699.5	29.90	761.8	71.6	22	32	SE			1				SE	0	0		M. Jeanginard, Director.
Gréasque, du. Rhone	28.92	734.5	30.14	765.5	69.1	20.6	46	W			2		5		SW	0	0	½ covered	M. Kina, Director.
Grenoble, Normal School	29.28	743.8	30.01	762.3	69.8	21	46	NW			2	clr	0			0	0		M. Ablard, Director.
Guéret, Normal School	28.55	725.2	30.12	765.0	62.2	16.8	72	W			1	0	kn		NE	0	0		M. Rivoire, Director.
Lamballe, Normal School	29.88	758.9	30.15	765.8	62.2	16.8	77	SSW			2				SSW	0.098	2.5		M. Ollitrault, Director.
Lescar, Normal School	29.60	751.9	30.26	768.6	66.6	19.2	60	NW			1	0	s			0.567	14.4		M. Chauvin, Director.
Lorient, Naval Observatory	30.07	763.7	30.17	766.3	59.0	15.0	89	SSE			3		10			0.118	3.0	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.07	738.3	30.11	764.7	65.5	18.6	54	NNW			1		10		NNW	0	0	Covered	M. André, Director.
Mans, Normal School	29.84	757.9	30.14	765.6	63.3	17.4	59	NW			3		8		W	0	0	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.78	756.4	30.05	763.2	66.4	19.1	58	W			3		3		ENE	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.91	632.8	30.15	765.8	52.5	11.4	69	E	15.0	6.7			5		W	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.95	760.6	30.05	763.3	78.1	25.6	44	SW			2		2		NE	0	0	Slightlycl'dy	M. P. Galzin, Director.
Nancy, Normal School	29.30	744.2	30.05	763.2	66.9	19.4	38	WSW			2	0	5kn		SW	0	0	Cloudy	M. Hasse.
Nantes, Observatory	30.01	762.2	30.17	766.3	64.4	18	62	SW			1-2		10n		SW	0	0		M. Larocque, Director.
Nice	30.02	762.5	30.05	763.3	68.4	20.2	65	E			2		5	E	E	0	0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	30.03	762.7	30.13	765.3	67.5	19.7	39	NE	13.0	5.8			2	W	SE	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.62	574.5			41.4	5.2							0			0	0	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.04	737.7	30.08	764.1	68.0	20	46	N			1		5	NW	NW	0	0	Cloudy	M. Taillieu.
Puy de Dôme Obs'y, Summit	25.27	641.8			42.6	5.9	94	NW			2		10			0.031	0.8	Covered	M. Allnard, Director.
Rochefort, Naval Obs'y	30.18	766.5	30.21	767.3	64.6	18.1	96	SW			1		8		SW	0	0	¼ covered	Lt. E. Decanio, Director.
Roche-sur-Yon, N. School	30.00	761.9	30.21	767.3	64.4	18.0	67	NW			1		8		NW	0	0	Very cloudy	M. Mouillot, Director.
Rodez, Normal School	28.00	711.1	30.12	765.1	58.5	14.7	70	NW			2		5			0	0	Cloudy	M. Richard, Director.
Rouen, Normal School	30.02	762.5	30.07	763.7	64.0	17.8	65	W			2		8		NW	0	0	Very cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.97	761.2	30.13	765.2	65.5	18.6	53	W			2		5		NW	0	0	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.93	760.3	30.10	764.5	65.3	18.5	49	WNW			1		8	WNW	N	0	0		M. Renou, Director.
Toulouse, Observatory	29.50	749.4	30.23	767.9	67.0	19.8	45	W			1		5			0	0	Cloudy	M. Bailland, Director.
Tours	29.94	760.4	30.13	765.4	66.2	19.0	54	W			1		8		WNW	0	0	¾ covered	M. de Tastes.
Versailles, Observatory	29.61	752.1	30.10	764.6	64.0	17.8	52	W			2					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.82	757.5	30.11	764.9	62.6	17.0	51	WNW			1		8		NW	0	0		M. Marié Davy, Director.

GERMAN SERIES.

Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.

Bamberg	29.13	739.8	29.99	761.7	63.7	17.6	44	W			3	0	6k		W	0.016	0.4	Raining	Prof. Dr. Hoh.
Berlin	29.72	754.9	29.89	759.2	59.5	15.3	57	W			2		8			0.083	2.1	Light rain	Prof. Dr. Arndt.
Breslau	29.39	746.4	29.91	759.8	56.1	13.4	66	WNW			2		10			0.039	1.0		Royal University Obs'y.
Carlsruhe	29.57	751.1	29.99	761.7	67.3	19.6	52	SW			4		10	SW		0	0		Albert Senx.
Cassel	29.22	742.3	29.94	760.5	54.7	12.6	72	SW			3		6	SW		0.096	2.5		Dr. H. Möhl.
Frankfort on the Main	29.63	752.5	29.98	761.5	67.6	19.8	41	W			1		10			0	0		Physical Society.
Friedrichshafen	28.63	727.1	30.03	762.7	65.1	18.4	61	SW			3		10	W		0	0		Wilhelm, Chief Tel.
Hamburg	29.84	758.0	29.91	759.8	56.8	13.8	70	N			2		10			0,008	0,2		Dr. R. Kleeman.
Kiel	29.90	759.5	29.92	759.9	55.0	12.8	74	NE			1		8			Inap.	Inap.		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.50	749.4	29.92	759.9	61.9	16.6	59	SW			2		9	WSW		0.031	0.8		Prof. Dr. Bruhns.
Magdeburg	29.71	754.7	29.90	759.4	59.0	15.0	70	WSW			1		10ks		NW	0.016	0.4		Dr. Assmann.
Memel	29.62	752.4	29.67	753.6	46.6	8.1	91	NNW			5		10n						Reinbrecht & Issermann.
Munich	28.21	716.0	30.08	763.9	62.2	16.8	35	E			2		10	NE		0	0		Central Station.
Neufahrwasser	29.79	756.7	29.81	757.1	48.9	9.4	82	NW			3		10			0.031	0.8		A. Lothes.
Neustadt, Palatinate	29.44	747.8	29.97	761.2	67.3	19.6	47	W			4		8	W		0	0		Dicknether.
Stuttgart	29.06	738.1	29.93	760.2	66.2	19.0	34	W			1		9	W		0	0		Prof. Dr. Schoder.
Weissenburg, Bavaria	28.51	724.2	29.97	761.3	62.6	17.0	41	NW			6		10	W		0	0		Dr. O. Unnerth.
Wustrow	29.86	758.5	29.89	759.1	56.3	13.5	82	NW			3		10s			0	0		Prof. Kemlein.
																			Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.60	751.9	29.98	761.6	75.0	23.9		SW			2.5		0					Clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.50	749.3	29.55	750.5	87.5	30.8	81	WSW	44.0	19.7		0				0	0	Blue sky	
Deesa	29.05	737.9	29.50	749.4	98.0	36.7	37	SSW	16.5	7.4		4		SW		0	0	D. clouds	
Bombay	29.68	753.8	29.71	754.7	86.8	30.4	72	WNW	11.0	4.9		3		WNW		0	0	D. clouds	
Poona, Yarrowda	27.87	707.9	29.71	754.6	82.0	27.8	60	WSW				7		W		0	0	D. clouds	
Belgaum	27.23	691.6	29.75	755.6	78.4	25.8	61	WSW	14.0	6.3		9		SW	SW	0	0	D. clouds	
Lahore	28.69	728.8	29.39	746.5	105.3	40.7	23	W	2.1	0.9		0				0	0	Blue sky	
Roorkee	28.57	725.6	29.43	747.4	95.9	36.1	58	Calm	1.4	0.6		3				0	0	Misty	
Agra	28.91	734.3	29.46	748.2	91.1	32.8	61	E	3.7	1.6		6		E		0	0		
Nagpur	28.50	724.0	29.53	750.1	81.7	27.6	80	S	7.9	3.5		10		SW		2.04	51.8	Thnd'r str'm	
Jubbulpore	28.18	715.7	29.52	749.9	78.4	25.8	91	S	3.7	1.6		9				0.50	12.7	Overcast	
Lucknow	29.08	738.7	29.46	748.2	80.2	26.8	93	NW	2.9	1.3		10				0.46	11.7	Overcast	
Allahabad	29.10	739.2	29.40	746.8	91.7	33.2	59	SW	0.4	0.2		10				0.02	0.5	Overcast	
Patna	29.26	743.1	29.43	747.5	89.4	31.9	82	E	4.5	2.0		6		E	E	0	0	D. clouds	
Hazaribagh	27.49	698.2	29.45	748.0	84.3	29.1	74	SW	7.4	3.3		8			E	0	0	Thunder	
Cuttack	29.43	747.4	29.51	749.5	79.0	26.1	86	S	0.8	0.4		10				2.50	63.5	Showery	
Calcutta, Alipore	29.46	748.3	29.48	748.9	88.3	31.3	74	ESE	8.0	3.6		8		S		0	0	D. clouds	
Dhubri	29.42	747.2	29.54	750.2	83.0	28.3	85	Calm	1.5	0.7		2		NW		0	0	D. clouds	
Chittagong	29.52	749.7	29.61	752.0	82.7	28.2	87	E	5.2	2.3		9				0	0	D. clouds	
Sibsagar	29.25	742.9	29.57	751.1	86.0	30.0	80	SSW	3.0	1.3		10		SW	SW	0.74	18.8	D. clouds	
Zanzibar, Africa			30.07	763.8	82.5	28.1	64	SSW	10	4.5		2			S	0	0	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.63	752.5	30.03	762.7	64.4	18.0	66	W	4.3	1.9		10				0	0		Prof. Giovanni Clodig.
Milan	29.47	748.5	29.97	761.2	72.5	22.5	44	SW	6.3	2.8		4		NW		0	0		Prof. Schiaparelli.
Padua	29.89	759.2	30.00	761.9	65.8	18.8	52	ENE	4.9	2.2		7		WNW		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.04	737.6	29.92	760.0	69.8	21.0	40	E	5.6	2.5		2				0	0		Prof. P. F. Denza.
Genoa	29.89	759.3	30.09	764.2	65.8	18.8	64	S	7.4	3.3		2		SE		0	0		Prof. G. M. Garibaldi.
Mondovi	28.09	713.5	29.94	760.5	85.6	29.8	54	WNW			4	0				0	0		Prof. D. C. Bruno.
Pesaro	29.97	761.2	30.02	762.4	69.8	21.0	47	NE	17.4	7.8		2				0	0		Prof. Luigi Guidi.
Florence	29.80	757.0	30.06	763.4	73.0	22.8	36	SW			2	4				0	0		Prof. Costantino Pitter.
Leghorn	29.99	761.8	30.08	763.9	68.7	20.4	70	W	1.3	0.6		2				0	0		Prof. P. Monte.
Rome	29.93	760.1	30.10	764.5	69.8	21.0	51	WSW	9.4	4.2		7				0	0		Prof. P. S. Ferrari.
Lecce	29.83	757.7	30.08	764.0	68.7	20.4	58	NW	4.9	2.2		5		NW		0.008	0.2		Prof. C. de Giorgi.
Cosenza	29.21	742.0	30.08	764.1	68.4	20.2	69	WNW	4.3	1.9		2		NW		0	0		Prof. D. Conti.
Cagliari	29.91	759.8	30.10	764.6	72.9	22.7	44	NW			4	4		NW		0.079	2.0		Prof. A. Pacinotti.
Palermo	29.91	759.7	30.16	766.0	66.2	19.0	67	NE	2.5	1.1		8				0.118	3.0		Prof. G. Cilacciatore.
Syracuse	30.05	763.2	30.09	764.3	72.7	22.6	49	ESE	13.0	5.8		3				0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.57	751.1	30.09	764.2	66.7	19.3	61	SW	8.7	3.9		5		NNW		0	0		Prof. F. Brioschi.
Stelvio	22.20	564.0			40.3	4.6	35	SW			1	0	28		NW	0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.25	565.2			40.8	4.9	76	N			2		10n		NW	0	0	Misty	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y †..	29.79	756.6	29.80	756.9	74.5	23.6	84	SSW	8.2	3.7		5cs;ck	0			0	0	Fair	K. Sasaki.
Kioto	29.66	753.3	29.83	757.7	76.0	24.4	78	SW	4.0	1.8		3c;ck	0			0	0	Fair	M. Tojima.
Nagasaki, I. M. Obs'y	29.69	754.1	29.89	759.2	76.6	24.8	83	SSW	13.9	6.2			10s			0.010	0.3	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	29.68	753.9	29.74	758.4	72.6	22.6	88	S	3.3	1.5		5c;cs	0			0	0	Fair	The Staff.
Wakayama	29.81	757.2	29.86	758.4	76.6	24.8	76	SE	7.8	3.5		4ck;cs	0			0	0	Fair	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	30.01	762.2	30.20	767.2	72.6	22.6	69	ESE	16.5	7.4		0	8		SE	0	0	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon																			Prof. M. Leal.
Mazatlan	29.63	752.6	29.89	759.1	78.0	25.6	82	E	1.6	0.8		3cs	1ks	E		Inap.	Inap.	½ cloudy	F. Quijano, U. E.
Mexico, Central Obs'y																			The Staff.
Pabellon, Aguascalientes																			M. Y. de Leon, M. E.
Puebla, Catholic Institute																			Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas																			J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.09	764.3	30.09	764.3	58.6	14.8		NNW			3					0	0		
Groningen	29.90	759.5	29.96	760.9	54.7	12.6		N			3					0.346	8.8		
Helder	30.01	762.3	30.01	762.3	52.9	11.6		NW			4					0	0		
Hellevoetsluis	30.05	763.2	30.05	763.2	58.3	14.6	69	WNW			4					0	0		
Utrecht	29.99	761.7	30.04	762.9	60.3	15.7	59	WNW			2		8			0	0	Very cloudy	H. van der Brink

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
NORWEGIAN SERIES.																			
Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.88	758.9	29.94	760.5	51.1	10.6	85	Calm	0	0			9			0.094	2.4		
Christiania	29.72	754.9	29.86	758.5	63.9	17.7	42	WSW	7	3			4			0	0		
Gjæsvær	30.21	767.3	30.23	767.9	42.4	5.8		Calm			0		0						
Lodingen	30.09	764.2	30.13	765.4	54.5	12.5	29	NNE			4		0			0	0		
PORTUGUESE SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.07	763.8	30.09	764.2	66.4	19.1	94	W	9.8	4.4			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.15	740.4	30.10	764.6	84.4	29.1	21	NNE	2.5	1.1			0			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.03	763.4	30.14	765.6	68.9	20.5	69	SW	3.1	1.4			1			0	0		Capt. D. A. da Cunha.
Lisbon, Observatory	29.74	755.4	30.09	764.2	77.0	25.0	43	S	4.9	2.2			0			0	0		The Staff.
Ponta Delgada, Azores	30.20	767.1	30.27	768.9	70.9	21.6	63	SW	1.8	0.8			4			0	0		
RUSSIAN SERIES.																			
Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.66	728.0	29.66	753.4	85.6	29.8	28	ENE	7	3			10k						Capt. Lasarew.
Archangel	29.85	758.3	29.87	758.8	48.0	8.9	80	NE	18	8			10						Capt. Sselliwerstow.
Astrakhan	29.75	755.7	29.67	753.6	75.4	24.1	57	Calm	0	0			10n;s			Blank			Capt. Wisganow.
Barnaul‡	29.17	741.0	29.63	752.6	82.8	28.2	44	N	9	4			2						Meteorological Obs'y.
Dorpat	29.23	742.5	29.47	748.6	49.1	9.5	88	NW	7	3			10n					Light rain	Observatory.
Ekaterinburg	28.99	736.3	29.89	759.2	84.4	29.1	32	E	4	2		0	10ks;n						Meteorological Obs'y.
Kasan	29.44	747.8	29.69	754.0	91.0	32.8	16	S	2	1			0						Observatory.
Kertch	29.82	757.5	29.84	758.0	67.5	19.7	61	SW	4	2			3						Lagorio & Sastyres.
Kieff	28.98	736.0	29.60	751.9	54.0	12.2	89	S	9	4			10n;ks					Raining	Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.54	750.3	29.74	755.4	58.3	18.5	53	WSW	4	2			10						Meteorological Obs'y.
Moscow	29.10	739.0	29.62	752.4	64.0	17.8	49	S	13	6		0	6ks						Meteorological Obs'y.
Nertchinsk	27.15	689.5	29.35	745.6	53.6	12.0	66	NW	9	4			5			0	0		Meteorological Obs'y.
Nikolaiev	29.67	753.6	29.74	755.4	66.4	19.1	57	SW	9	4		0	3kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.39	740.6	29.48	748.8	43.0	6.1	88	Calm			0		10n			0.008	0.2		Lieut. Iwanow.
Pekin, China	29.41	747.1	29.56	750.7	65.7	18.7	70	NW	7	3			9n						Physical Observatory.
St. Petersburg	29.35	745.6	29.37	746.0	53.2	11.8	86	NNE	11	5			10n						Central Physical Obs'y.
Tashkend, Laboratory	28.21	716.5	29.07	753.6	85.1	29.5	48	Calm	0	0			3			Blank			Teich, A. M.
Tiflis	28.37	720.6	29.74	755.4	67.6	19.8	50	WNW	45	20		0	7ks						Physical Observatory.
Warsaw	29.35	745.6	29.78	750.3	52.2	11.2	74	WNW	11	5			10ks			Blank			Astronomical Obs'y.
Wilna	29.17	740.8	29.58	751.3	55.8	13.2	73	W	4	2			10						Berg, Assistant.
Yeniseisk	29.65	753.1	29.94	760.5	43.2	6.2	55	N	11	5			8						M. O. Marks.
SCOTTISH SERIES.																			
Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.12	765.0	53.3	11.8	78	E			2	0	8k			0	0	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			30.15	765.8	59	15.0	94	N			3	3	3	NE		0	0	Cloudy	J. Youngclause.
North Unst, Shetland Isl'ds			30.02	762.5				N			4	5	5	N					Robert Burnet.
SPANISH SERIES.																			
Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.02	762.5	30.12	765.1	70.5	21.4	49	SSW	4.0	1.8		1ck	0			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.13	765.2	30.18	766.6	70.5	21.4	64	E	1.8	0.8		2	4	NE		0.020	0.5	Cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.23	691.6			63.7	17.6	56	NE	2.2	1.0			0			0	0	Clear	Domingo Martin.
Madrid, Royal Obs'y	27.90	708.6	30.04	763.1	75.2	24.0	30	SE	4.5	2.0		0	0			0	0	Clear	The Staff.
Murcia, Met. Obs'y‡	29.98	761.4	30.12	765.0	78.8	26.0	41	SSE	4.0	1.8		0	0			0	0	Clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.19	741.3	30.05	763.2	73.2	22.9	53	N	6.3	2.8			1			0	0	Almost clear	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	29.94	760.3	30.00	762.0	79.8	26.6	77	ENE	1.8	0.8		4c;cs	0	W		0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.87	758.8	29.93	760.1	85.0	29.4	72	ESE	4.4	2.0		0	5kn		E	0	0		Federico Faura, S. J.
San Fernando, Naval Obs'y	29.90	701.0	30.06	763.4	80.6	27.0	31	E	22.3	9.9		0	0			0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.94	760.4	30.03	762.7	78.1	25.6	97	S	0	0		4k	4kn	S	S	0.630	16.0	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.82	757.4	29.97	761.1	82.3	27.9	81	WSW	3.0	1.5		0	4k		WSW	0	0	Partly cl'dy	José L. Fastovra.
SWEDISH SERIES.																			
Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.00	761.9	30.04	762.9	58.6	14.8	30	NE			4		0			0	0		
Umea	29.93	760.3	29.98	761.6	54.7	12.6	24	NE			8		0			0	0		
Hernosand	29.93	760.1	29.98	761.4	46.9	8.3	51	NE			7		8			0	0		
Stockholm	29.62	752.4	29.80	756.9	47.5	8.6	78	N			4		10			0	0		
Wisby	29.67	753.7	29.73	755.2	45.7	7.6	83	NNW			6		10			0.008	0.2		
SUB-SERIES.																			
Upsala	29.65	753.1	29.73	755.3	46.4	8.0	65	N	19.7	8.8			10			0	0		S. G. Fineman.
SWISS SERIES.																			
Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.68	728.4	30.08	763.9	64.4	18.0	37	N			1		8			0	0	Covered	The Observatory.
Zurich‡	28.45	722.5	30.05	763.2	63.9	17.7	56	W			3		6			0.024	0.6	Cloudy	The Observatory.
TURKISH SERIES.																			
Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.95	760.8	71.2	21.8	54	SW	14	6.5			4		SW	0	0		The Observatory.
Valona			30.17	766.4	71.8	22.1		Calm			0		2			0	0	Slightlycl'dy	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			29.98	761.5	82.9	28.3	55	SW			3		0			0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.

UNITED STATES SERIES.

By authority of the Secretary of War.

Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

Albany, New York	30.04	763.0	30.12	765.0	69	20.6	65	S	3	1.3		2c	Hz			0	0	Fair	
Alpena, Michigan	29.11	739.4	29.76	755.9	58.8	14.9	88	E	3	1.3		10s			W	Inap.	Inap.	Cloudy	
Atlanta, Georgia	28.95	735.3	30.10	764.5	75.5	24.2	59	E	7	3.1		10c	0	Calm		0	0	Cloudy	
Atlantic City, New Jersey	30.13	765.3	30.14	765.5	56	13.3	94	N	7	3.1			Fg		Calm	0	0	Dense fog	
Augusta, Georgia	29.94	760.5	30.12	765.0	73.8	23.2	82	E	1	0.4		5cs	Hz	N		0	0	Fair	
Baltimore, Maryland	30.10	764.5	30.16	766.1	65	18.3	84	E	2	0.9			10s;fg		E	0	0	Cloudy	
Barnegat, New Jersey	30.12	765.0	30.14	765.5	54	12.2	93	NE	6	2.7			10s		N	0	0	Cloudy	
Bismarck, Dakota	28.05	712.5	29.79	756.7	58	14.4	69	SW	4	1.8		5c	0	NW		0.10	2.5	Fair	
Boise City, Idaho	27.21	691.	29.97	761.2	57.3	14.1	63	NE	1	0.4		2ck	0	S		0.02	0.5	Fair	
Boston, Massachusetts	30.02	762.5	30.17	766.3	47.5	8.6	99	E	3	1.3			Fg			0.03	0.8	Dense fog	
Bracketville, Texas	28.82	732.0	29.84	757.9	71	21.7	90	E	10	4.5			10ks		E	0	0	Cloudy	
Brownsville, Texas	29.92	760.0	29.96	761.0	82	27.8	83	S	4	1.8		0	0			0	0	Clear	
Buffalo, New York	29.26	743.2	29.94	760.5	70	21.1	62	S	9	4.0			10s		S	0	0	Cloudy	
Burlington, Vermont	29.76	755.9	30.04	763.0	69.0	20.6	65	S	6	2.7		2ck	0	SW		0	0	Fair	
Cairo, Illinois	29.64	752.8	30.03	762.7	80	26.7	78	SW	6	2.7		2c	0	W		0.04	1.0	Fair	
Campo, California	27.38	695.4	29.95	760.7	43.3	6.3	83	S	3	1.3		1c	0	SW		0	0	Clear	
Camp Thomas, Arizona	27.20	690.9			51.0	10.6	46	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	30.09	764.3	30.11	764.8	65	18.3	84	NW	8	3.6		8k	0	N		0	0	Fair	
Cape May, New Jersey	30.08	764.0	30.11	764.8	60	15.6	88	NE	7	3.1			10s		NE	0	0	Cloudy	
Castroville, Texas	29.24	742.7	29.91	759.7	78	25.6	73	S	3	1.3		0	5s		S	0	0	Cloudy	
Cedar Keys, Florida	30.08	764.0	30.10	764.5	76	24.4	91	NE	7	3.1		8cs	0			Inap.	Inap.	Fair	
Champaign, Illinois	29.67	738.4	29.82	757.4	68.9	20.5	95	S	12	5.4		8k	2s	SW	S	0.15	3.8	Cloudy	
Charleston, S. Carolina	30.08	764.0	30.14	765.5	73	22.8	81	N	5	2.2		8ck	0	NE		0	0	Cloudy	
Charlotte, N. Carolina	29.26	743.2	30.12	765.0	70.0	24.4	56	S	2	0.9		2c	Hz			0	0	Fair	
Chattanooga, Tennessee	29.31	744.5	30.11	764.8	71	21.7	85	Calm	0	0		2ck	Fg	SW	Calm	0	0	Fair	
Cheyenne, Wyoming	24.13	612.9	29.94	760.5	56	13.3	46	SW	8	3.6		0	0			0	0	Clear	
Chicago, Illinois	29.12	739.6	29.80	756.9	68.5	20.3	78	SW	9	4.0		10k	0	SW		0.90	22.9	Cloudy	
Chincoteague, Virginia	30.11	764.8	30.13	765.3	60	15.0	88	N	7	3.1		10k	0	N		0	0	Cloudy	
Cincinnati, Ohio	29.36	745.7	30.00	762.0	74	23.3	72	SE	3	1.3		10k	0	NW		0	0	Cloudy	
Cleveland, Ohio	29.20	741.7	29.92	760.0	70.5	21.4	80	E	3	1.3			10ks		E	0.34	8.6	Cloudy	
Coleman City, Texas	28.19	716.0	29.79	756.7	69	20.6	80	S	4	1.8		0	0			0	0	Clear	
Columbus, Ohio	29.12	739.6	29.94	760.5	70	21.1	80	SE	6	2.7			10ks		S	0	0	Threatening	
Concho, Texas	28.07	713.0	29.95	760.7	72	22.2	80	S	8	3.6		0	0			0	0	Clear	
Corsicana, Texas	29.58	751.3	30.04	763.0	76	24.4	82	S	4	1.8		0	8ks			0	0	Cloudy	
Davenport, Iowa	29.20	741.7	29.84	757.9	70	21.1	85	W	5	2.2		1cs	0	Calm		0.28	7.1	Clear	
Dayton, Washington T'y	28.26	717.8	30.01	762.2	53.2	11.8	79	S	4	1.8		10k	0	SW		0.47	11.9	Cloudy	
Deadwood, Dakota	25.31	642.9	29.86	758.4	52	11.1	66	Calm	0				10s		W	0.03	0.8	Cloudy	
Decatur, Texas	28.78	731.0	29.90	759.4	76	24.4	77	S	10	4.5		0	0			0	0	Clear	
Delaware Breakwater, Del.	30.10	764.5	30.12	765.0	61	16.1	88	N	6	2.7		5ck	5ks	SW	N	0	0	Cloudy	
Denison, Texas	29.18	741.2	29.96	761.0	75	23.9	86	S	12	5.4		0	0			0	0	Clear	
Denver, Colorado	24.86	631.4	29.90	759.4	53.4	11.9	58	W	1	0.4		0	0			0	0	Clear	
Des Moines, Iowa	29.00	736.6	29.88	758.9	63	17.2	89	NW	6	2.7		0	0			1.50	48.3	Clear	
Detroit, Michigan	29.13	739.9	29.80	756.9	69.9	21.1	80	SE	4	1.8		7c;cs	0	W		0.10	2.5	Cloudy	
Dodge City, Kansas	27.30	694.9	29.85	758.2	69	20.6	56	E	16	7.2		0	0			0	0	Clear	
Dubuque, Iowa	29.11	739.4	29.79	756.7	64.1	17.8	68	W	8	3.6		0	0			0.74	18.8	Clear	
Duluth, Minnesota	28.97	735.8	29.05	753.1	63	17.2	72	NW	18	8.0			10s		Calm	0.12	3.0	Cloudy	
Eagle Pass, Texas	29.21	741.9	30.02	762.5	74.5	23.6	81	SE	7	3.1		c	0			0	0	Clear	
Eagle Rock, Idaho	25.28	642.1	29.99	761.7	49	9.4	64	SW	8	3.6		0	0			0	0	Clear	
Eastport, Maine	30.13	765.3	30.20	767.1	46.5	8.1	92	S	2	0.9			Fg			0	0	Dense fog	
El Paso, Texas	26.24	666.5	29.89	759.2	54	12.2	43	N	1	0.4		0	0			0	0	Clear	
Erie, Pennsylvania	29.22	742.2	29.90	759.4	71	21.7	71	S	14	6.3			10ks		SW	0.01	0.3	Cloudy	
Escanaba, Michigan	29.03	737.3	29.67	753.6	58	14.4	94	SE	5	2.2			10s		SE	0.66	16.8	Cloudy	
Florence, Arizona	28.30	720.3	29.90	760.0	58	14.4	44	Calm	0	0		0	0			0	0	Clear	
Fort Apache, Arizona	25.08	637.0	29.86	758.4	46	7.8	40	E	6	2.7		0	Sk		Calm	0	0	Dense smoke	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota	28.30	718.8	29.77	756.1	56	13.3	87	N	1	0.4		5c	0	NW		0	0	Fair	
Fort Benton, Montana	27.10	688.3	29.84	757.9	59	15.0	48	SW	11	4.9		0	0			0	0	Clear	
Fort Buford, Dakota	27.87	707.9	29.79	756.7	52	11.1	86	Calm	0	0		10cs	0	W		0	0	Cloudy	
Fort Custer, Montana	26.75	679.4	29.84	757.9	58	14.4	70	SE	4	1.8		8k	0	SW		Inap.	Inap.	Fair	
Fort Davis, Texas	25.22	640.6	30.18	766.6	66	18.9	41	S	6	2.7		0	0			0	0	Clear	
Fort Elliott, Texas	27.15	689.6	30.22	767.6	71	21.7	53	SW	12	5.4		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.38	746.2	29.91	759.7	79	26.1	74	SE	4	1.8		0	0			0	0	Clear	
Fort Grant, Arizona	25.27	641.8	30.07	763.8	65	18.3	18	N	4	1.8		0	0			0	0	Clear	
Fort Griffin, Texas																			
Fort Keogh, Montana	27.39	695.7	29.80	756.9	55	12.8	74	SW	1	0.4			10s			0.01	0.3	Cloudy	
Fort Macon, North Carolina	30.09	764.3	30.10	764.5	67	19.4	84	N	10	4.5		5cs	0	SW		0	0	Fair	
Fort McKavett, Texas	27.70	703.1	29.63	752.6	66.1	18.9	69	S	7	3.1		0	0			0	0	Clear	
Fort Missoula, Montana	26.71	678.4	30.09	764.3	48	8.9	85	SW	2	0.9		2k	0	W		0.17	4.3	Fair	
Fort St. Michaels	29.86	758.4	29.90	759.4	37	2.8	100	S	5	2.2			10n		S	0.13	3.3		
Fort Shaw, Montana	26.31	668.3	29.76	755.9	51	10.6	59	W	14	6.3		2k	0	W		0	0	Clear	
Fort Sill, Indian Territory	28.71	729.2	29.92	760.0	72	22.2	76	S	10	4.5		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.01	711.4	29.79	756.7	55	12.8	87	W	4	1.8		5cs	0	Calm		0.46	11.7	Fair	
Fort Verde, Arizona					50.1	13.4	29	W			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.30	718.8	29.80	756.9	70	21.1	85	SW	6	2.7		0	0			0	0	Clear	
Galveston, Texas	30.00	762.0	30.04	763.0	81	27.2	78	S	4	1.8		1ck	0	S		0	0	Clear	
Grand Haven, Michigan	29.11	739.4	29.76	755.9	67	19.4	84	SE	15	6.7		0	5s		W	0.88	22.4	Fair	
Hatteras, North Carolina	30.08	764.0	30.10	764.5	63	17.2	89	N	12	5.4			10s		N	0	0	Cloudy	
Helena, Montana	25.80	655.3	30.00	762.0	62	10.7	46	N	2	0.9		2c	0	Calm		0	0	Fair	
Henrietta, Texas	28.93	734.8	29.80	756.9	79	26.1	70	SW	3	1.3		0	0			0	0	Clear	
Indianapolis, Indiana	29.15	740.4	29.92	760.0	70	21.1	77	SW	8	3.6		4cs	2ks	Calm	NW	0.07	1.8	Fair	
Indianola, Texas	30.00	762.0	30.03	762.7	77.8	25.4	86	S	3	1.3		2k	1ks	S	Calm	0	0	Fair	
Jacksboro, Texas	28.80	731.5	29.88	758.9	70	24.4	73	SW	6	2.7		0	0			0	0	Clear	
Jacksonville, Florida	30.06	763.5	30.08	764.0	80	26.7	78	NE	4	1.8		0	0			0	0	Clear	
Keokuk, Iowa	29.19	741.4	29.80	756.9	73.8	23.2	81	SW	8	3.6		0	0			0.89	22.6	Clear	
Key West, Florida	29.58	751.5	30.01	762.2	84.1	28.9	69	SE	2	0.9		5cs	0			0	0	Fair	
Kittyhawk, North Carolina	30.11	764.8	30.13	765.3	62	16.7	88	N	15	6.7			10s		N	0	0	Cloudy	
Knoxville, Tennessee	29.11	739.4	30.11	764.8	70.5	21.4	82	Calm	0	0		0	Sk		Calm	0	0	Clear	
La Crosse, Wisconsin	28.96	735.6	29.67	753.6	66.3	19.1	69	SW	8	3.6		0	5s		SW	0.12	3.0	Fair	
La Mesilla, New Mexico	26.10	662.9	30.25	768.3	52.0	11.1	66	Calm	0	0		0	0			0	0	Clear	
Laredo, Texas	29.52	749.8	29.84	757.9	77	25.0	91	SE	2	0.9		0	0			0	0	Clear	
Leavenworth, Kansas	29.07	738.4	29.94	760.5	70	21.1	80	NW	1	0.4		5ck	0	W		0.12	3.0	Fair	
Lewiston, Idaho	29.16	740.7	29.99	761.7	53	11.7	79	Calm	0	0			10ks		Calm	0.29	7.4	Cloudy	
Little Rock, Arkansas	29.66	753.4	29.97	761.2	75	23.9	90	Calm	0	0		2c	0			0.10	2.5	Clear	
Los Angeles, California	29.58	751.3	29.95	760.7	59.2	15.1	88	SW	2	0.9			10s		Calm	0	0	Cloudy	
Louisville, Kentucky	29.42	747.3	29.97	761.2	76.5	24.7	86	E	5	2.2		8ck	0	SW		0	0	Fair	
Lynchburg, Virginia	29.45	748.0	30.12	765.0	70	21.1	75	Calm	0	0		0	0			0	0	Clear	
Madison, Wisconsin	28.74	730.0	29.72	754.9	65	18.3	94	SW	8	3.6		5cs	5s	SW	SW	0.36	9.1	Cloudy	
Marquette, Michigan	28.95	735.3	29.66	753.4	55	12.8	81	S	4	1.8			10s		Calm	0.01	0.3	Cloudy	
Mason, Texas	28.39	721.1	30.08	764.0	73.1	22.8	76	S	4	1.8		0	1ks		S	0	0	Clear	
Memphis, Tennessee	29.72	754.9	30.05	763.3	80	26.7	78	SE	1	0.4		1cs	Hz	Calm	Calm	0	0	Light haze	
Milwaukee, Wisconsin	29.01	739.8	29.74	755.4	64	17.8	89	SW	15	6.7		0	8ks		SW	0.87	22.1	Fair	

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
UNITED STATES SERIES—CONTINUED.																			
Mobile, Alabama	30.02	762.5	30.09	764.3	76	24.4	91	N	2	0.9		1c	0			Inap.	Inap.	Clear	
Montgomery, Alabama	29.86	758.4	30.08	764.0	76.1	24 5	72	E	2	0.9		2c	0			0	0	Clear	
Moorhead, Minnesota	28.78	731.0	29.74	755.4	62	16.7	77	SW	2	0.9		0	5s		SW	0.51	13.0	Fair	
Morgantown, W. Virginia	29.07	738.4	30.03	762.7	67	19.4	89	Calm	0	0			10s;fg		NW	0	0	Cloudy	
Mt. Washington, N. H	24.05	611.1	30.09	764.3	54.8	12.7	44	SE	9	4.0		0	Sk			0	0	Clear	
Nashville, Tennessee	29.53	750.0	30.05	763.3	81.3	27.4	68	Calm	0	0		0	Sk			0	0	Dense smoke	
New Haven, Connecticut	30.02	762.5	30.14	765.5	54	12.2	100	SE	3	1.3			Fg			0	0	Dense fog	
New London, Connecticut	30.10	764.5	30.15	765.8	54	12.2	100	SE	5	2.2			Fg			0	0	Dense fog	
New Orleans, Louisiana	30.02	762.5	30.08	764.0	81.5	27.5	77	W	3	1.3		0	1ks		W	0	0	Clear	
Newport, Rhode Island	30.11	764.8	30.16	766.1	50.0	10.0	93	NE	6	2.7			10s;fg		Calm	0	0	Cloudy	
New River, N. Carolina																			
New Shoreham, Rhode I'd	30.12	765.0	30.15	765.8	49.5	9.7	100	NE	15	6.7			Fg		NE	0	0	Dense fog	
New York, New York	29.97	761.2	30.14	765.5	55	12.8	100	SE	6	2.7			Fg			0	0	Dense fog	
Norfolk, Virginia	30.10	764.5	30.14	765.5	64	17.8	78	W	3	1.3			10s			0	0	Cloudy	
North Platte, Nebraska	27.11	688.6	29.93	760.2	52	11.1	86	NW	4	1.8		0	0			0.01	0.3	Clear	
Olympia, Washington T'y	29.93	760.2	29.97	761.2	52.5	11.4	83	W	6	2.7			10s		S	0.28	7.1	Cloudy	
Omaha, Nebraska	28.80	731.5	29.94	760.5	63	17.2	78	NW	4	1.8		0	0			0.64	16.3	Clear	
Oswego, New York	29.69	754.1	30.01	762.2	69.3	20.7	70	S	8	3.6		2ck	5s	W	W	0	0	Fair	
Pensacola, Florida	30.05	763 5	30.09	764.3	78	25.6	91	NW	2	0.9		0	0			0	0	Clear	
Philadelphia, Pa	30.09	764.3	30.15	765.8	58	14.4	100	E	6	2.7			10s;fg			0	0	Cloudy	
Phœnix, Arizona	28.70	730.5	30.51	774.9	64	17.8	43	E	1	0.4		0	0			0	0	Clear	
Pike's Peak, Colorado	18.02	457 7	30.22	767.6	28	— 2.2	22	SW	24	10.7		0	0			0	0	Clear	
Ploche, Nevada	23.09	586.5	29.94	760.5	56	13.3	40	S	2	0.9		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.24	742.7	30.03	763.7	68	20.0	74	S	5	2.2		10cs	0	W		0	0	Cloudy	
Port Eads, Louisiana	30.07	763.8	30.08	764.0	80.3	26.8	82	NW	6	2.7		0	Hz		Calm	0	0	Clear	
Port Huron, Michigan	29.13	739.9	29.79	756.7	67.0	19.4	84	S	16	7.2		8cs	2s	W	Calm	0.10	2.5	Cloudy	
Portland, Maine	30.12	765.0	30.17	766.3	55	12.8	74	SE	3	1.3			10s;fg		Calm	0	0	Cloudy	
Portland, Oregon	29.93	760.2	30.00	762.0	55.2	12.9	88	SE	7	3.1			10s		SW	0.30	7.6	Cloudy	
Portsmouth, N. Carolina					65	18.3	78	NE	17	7.6		8ic	0	W		0	0	Cloudy	
Prescott, Arizona	24.80	629.9	29.87	758.7	49	9.4	37	SW	2	0.9		0	0			0	0	Clear	
Punta Rassa, Florida	30.00	762.0	30.01	762.2	80	25.7	78	E	6	2.7		6c;k	0	Calm		0	0	Fair	
Red Bluff, California	29.56	750.8	29.88	758.9	65.0	18.3	58	N	5	2.2		0	0			0	0	Clear	
Rio Grande City, Texas	29.77	756.1	29.98	761.5	76	24.4	86	E	6	2.7		0	0			0	0	Clear	
Rochester, New York	29.38	746.2	30.00	762.0	71	21.7	66	W	6	2.7		5cs	Hz	W		0	0	Fair	
Roseburg, Oregon	29.47	748 5	30.03	762 7	57	13.9	94	Calm	0	0			10s			0.15	3.8	Cloudy	
Sacramento, California	29.83	757.7	29.90	759.4	61.8	16.6	77	S	4	1.8		0	0			0	0	Clear	
St. Louis, Missouri	29.34	745.2	29.92	760.0	74.9	23.8	82	SW	10	4.5		10cs;hz	0	SW		0	0	Cloudy	
St. Paul, Minnesota	28.87	733.3	29.71	754.6	61	16.1	88	SW	4	1.8		5c	0	NW		0.06	1.5	Fair	
Salt Lake City, Utah	25.64	651.2	29.84	757.9	58	14.4	53	Calm	0	0		2k	0	SW		0.06	1.5	Clear	
San Antonio, Texas	29.34	745.2	30.03	762.7	76.4	24.7	87	SE	2	0.9		0	4ks		SE	0	0	Fair	
San Diego, California	29.85	758.2	29.92	760.0	60.5	15.8	82	E	3	1.3			10s			0	0	Cloudy	
Sandusky, Ohio	29.19	741.4	29.85	758.2	71	21.7	80	SE	9	4.0		2k	2s			0	0	Fair	
Sandy Hook, New Jersey	30.12	765.0	30.15	765.8	56.0	13.3	97	SW	6	2.7			Fg			0	0	Dense fog	
San Francisco, California	29.90	759.4	29.96	761.0	55	12.8	93	SE	1	0.4			Fg			0	0	Dense fog	
Santa Fé, New Mexico	23.37	593.6	29.88	758.9	55	12.8	28	Calm	0	0		0	0			0	0	Clear	
Savannah, Georgia	30.04	763.0	30.13	765.3	74	23.3	86	N	4	1.8		0	Fg			0	0	Clear	
Shreveport, Louisiana	29.82	757.4	30.05	763.3	77	25.0	86	S	3	1.3		8cs	0	S		0	0	Fair	
Silver City, New Mexico	24.33	618.0	29.79	756.7	53	11.7	31	Calm	0	0		0	0			0	0	Clear	
Sitka Alaska	29.04	752.8	29.71	754.6	43	6.1	92	Calm	0	0		Hz	Fg			0	0	Light haze	
Smithville, North Carolina	30.10	764.5	30.13	765.3	75	23.9	77	SE	2	0.9		Hz	1ks			0	0	Clear	
Spokane Falls, Wash. Ter.	27.94	709.7	29.90	759.4	52	11.1	79	S	10	4.5			10s		SW	0.23	5.8	Cloudy	
Springfield, Illinois	29.20	741 7	29.86	758.4	73	22.8	87	SW	6	2.7		0	7s		W	0.17	4.3	Fair	
Springfield, Massachusetts	30.01	762.2	30.14	765.5	59.0	15.0	93	N	5	2.2			10s;fg		N	0	0	Cloudy	
Stockton, Texas	25.96	084.8	29.95	760.7	67.2	19.6	79	SE	12	5.4		0	0			0.10	2.5	Clear	
St. Vincent, Minnesota	28.86	733.0	29.70	754.4	60	15.6	71	NW	2	0.9		0	0			Inap.	Inap.	Clear	
Thatcher's Island, Mass	30.14	765.5	30.19	766.8	48.1	8.9	100	E	7	3.1			Fg		E	0	0	Dense fog	
Toledo, Ohio	29.16	740.7	29.84	757.9	70	21.1	90	S	4	1.8		2cs	2s	SW		1.14	29.0	Clearing	
Tucson, Arizona	27.49	698.2	29.78	756.4	61	16.1	17	S	5	2.2		0	0			0	0	Clear	
Umatilla, Oregon	29.65	753.1	30.05	763.3	56.0	13.3	84	E	4	1.8			10s		W	0.11	2.8	Cloudy	
Uvalde, Texas	29.06	738.1	29.85	758.2	74	23.3	81	S	5	2.2		2k	0	Calm		0	0	Clear	
Vicksburg, Mississippi	29.83	757.7	30.08	764.0	77	25.0	86	S	4	1.8		8c	0	W		0	0	Fair	
Visalia, California	29.50	749.3	29.85	758.2	68	20.0	72	NW	3	1.3		0	0			0	0	Clear	
Washington, D. C	30.03	762.7	30.14	765.5	66	18.9	84	NE	2	0.9		10k	0	E		0	0	Cloudy	
Wickenburg, Arizona					59	15.0	33	Calm			0	0	0			0	0	Clear	
Wilmington, N. Carolina	30.06	763.5	30.12	765.0	72	22.2	85	NE	2	0 9		11z	2ks	Calm	Calm	0	0	Fair	
Winnemucca, Nevada	25.63	651.0	29.84	757.9	46	7.8	69	SW	6	2.7		0	0			0	0	Clear	
Wood's Holl, Mass	30.12	765.0	30.16	766.1	50	10.0	100	NE	5	2.2			Fg		Calm	0	0	Dense fog	
Yankton, Dakota	28.64	727.4	29.90	759.4	63	17.2	78	SW	7	3.1		0	0			0.36	9.1	Clear	
Yuma, Arizona	29.67	753.6	29.81	757.2	66.7	19.3	64	Calm	0	0		0	0			0	0	Clear	
SUB-SERIES.																			
Bogota, U. S. Columbia	22.06	560.3			55.5	13.1	77	Calm	0	0			10ks			0	0	Cloudy	Thomas Herran.
Buff Bay Town, Jamaica.‡	29.71	754.6	30.02	762.5	77	25.0	82	E				2k	5k						
Havana, Cuba, W. I	29.99	701.7	30.04	763.0	82	27.8	74	Calm	0	0		4cs	0	Calm		0	0	Fair	A. Van Caneghem, Ass't.
Kingston, Jamaica, W. I	29.91	759.7	29.92	760.0	81.7	27.6	73	N	1	0.4		5ck;cs	0	W		0	0	Cloudy	Robert Johnstone.
Navassa, W. I	29.85	758.2	29.93	760.2	81	27.2	81	NE	15	6.7			10			0.01	0.3	Cloudy	F. M. Everett.
Paramaribo, S. A	30.01	762.2	30.01	762.2	78	25.6	86	SE			2	3c	4k	SE		0.710	18.0	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.37	746.0	29.92	760.0	79	26.1	89	Calm	0	0		0	8s		Calm	0	0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					75.2	24		W			1	10ck	0	W		1.54	39.		Earl Flint.
Santiago de Cuba, W. I																			Robert Mason.
St. Thomas, W. I																			G. O. Gyllich.
York Factory, B. A	29.82	757.4	29.87	758.7	32.0	0.0	94	NE	10	4.5		2k	0	NE		0	0	Foggy	J. Fortescue & W Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross																			Comm A. J.Errington.
H. M. S. Alert, Thursday Island, Oceanica	29.99	761.7	77.5	25.3	79	SE			2-3		8							D. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Argostoli, Ionian Islands	30.08	764.0	70	21.1	63	NNW			2		2	NNW						D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab, N. 13° 34′, E. 47° 32′	29.69	754.1	85	29.4	79	SW			3		0					4	SW	Blue sky	Comm. R. W. Stopford
H. M. S. Bacchante, S. 36° 09′, E. 124° 06′	29.96	761.0	60	15.6		WSW			5-6		4	WSW				4	SW	D. clouds	Capt. Lord C. Scott.
H. M. S. Beacon, N 24° 47′, E. 66° 59′	29.55	750.6	85	29.4	87	W			5-6		4	WSW						D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, Varna, Bosporus			68	20.0		W			2-3		6	SW				1	SW	D. clouds	Capt. E. B. Pusey.
H. M. S. Blanche, N 13° 15′, W. 61° 18′	29.97	761.2	82	27.8	78	ENE			2-3		6							Squally	Capt. C. G. F. Knowles.
H. M. S. Boadicea, St. Helena, Africa	30.04	763.0	75	23.9	68	Calm			0		0							Blue sky	Com. F. W. Richards.
H. M. S. Champion, Monte Video, Uruguay	30.10	764.5	63	17.2	88	NE			1		4	Calm				1	S	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 38° 08′, E. 119° 54′	29.52	749.8	62	16.7	94	WSW			2		2							D. clouds	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruiser, Cagliari, Sardinia	30.11	764.8	71	21.7		W			2		2	WNW						D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, N 31° 38′, W. 26° 47′	30.25	768.6	70	21.1	85	N			2		9					2	NNW	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.20	767.1	75	23.9		WNW			5		1	WNW						Blue sky	Capt C. Domville.
H. M. S. Dock-Yard, Bermuda, W.I.	30.10	764.5	79	26.1	90	SE			3-4		2	SE						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 49° 40′, W. 54° 55′	29.93	760.2	54	12.2	73	SSW			3		4	WNW				1	SW	Misty	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 7° 13′, E. 72° 23′	29.90	759.4	78	25.6		Calm			0		2							D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 10° 15′, E. 99° 30′	29.83	757.7	80	26.7		SE			5		4	SE				5	S	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, N. 7° 10′, E. 171° 20′	29.90	759.4	84	28.9	83	E			3		4	E						D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Tamatave, Madagascar	30.17	766.3	74	23.3	69	SE			3-5		5	SSW				1	SE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Gold Cove, Newfouddland	29.98	761.5	60	15.6		S			2		8	S						D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn, N. 12° 47′, E. 44° 58	29.64	752.8	87	30.6	71	SSE			2		1							Blue sky	Capt. P. Aldrich.
H. M. S. Flamingo, N. 20° 34′, W. 84° 47′	29.99	761.7	84	28.9	91	NE			1-2							2	NE	Overcast	Comm. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	29.92	760.0	50	10.0	78	WNW			2		4							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.25	742.9	41	5.0	83	WSW			1		3							Blue sky	Capt. L. F. Jones.
H. M. S. Griffin, N. 24° 15′, W. 77° 18′	30.03	762.7	84	28.9	67	Calm			0									Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber,																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C.P. Fitzgerald.
H. M. S. Iris, Malta, Mediterranean.	30.16	766.1	70	21.1	95	WNW			2		3					1	NNW	Blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.00	762.0	64	17.8		Calm			0		6	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.76	755.9	76	24.4		SW			1		1							Blue sky	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 15′, E. 110° 15′	29.73	755.1	83.2	28.4	83	SE			2-3		6	NE				1	SE	Squally	Capt. A. Carpenter.
H. M. S. Midge, N. 24° 28′, E. 118° 03′	29.87	758.7				SSW			3		5	SW				3	SW	D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. N. S. Modeste, S. 23° 40′, E. 62° 00′	30.31	769.9	73	22.8	76	SSE			4-5		4	SSE				4	SSE	Squally	Capt. J. G. Mead.
H. M. S Monarch, Tunis, Tunis, Africa	30.20	767.1	68	20.0	79	NNE			2		3	NNE						D. clouds	Capt. G. C. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, N. 5° 16′, E. 115° 15′			83.5	28.6		Calm			0		1	SW						Blue sky	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	30.16	766.1	46.5	8.1	96	SSE			2									Foggy	Capt. E. B. Drummond.
H. M. S. Orontes, S. 7° 23′, E. 4° 02′ *†	30.04	763.0	74.5	23.6	74	ESE			2		6	NW				1	S	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S Pelican, N. 8° 55′, W. 79° 30′	29.82	757.4	79	26.1	100	W			1		5					1	Con.	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, N. 15° 43′, W. 73° 18′	29.85	758.2	83	28.3	79	ENE			6		3					4	ENE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A.C.Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.78	756.4	76	24.4		SW			2		9							Raining	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 48° 26′, W. 123° 27′	29.95	760.7	48	8.9		WSW			1		2							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 17′, E. 39° 11′	30.09	764.3	79.3	26.3	86	SSE			1		2					Sm'h		D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, S. 8° 29′, E. 45° 06′	29.60	751.8	78	25.6	77	SSE			4		1					3	SE	Blue sky	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 42° 27′, W. 10° 22′	30.20	767.1	65	18.3	83	N			2		1					3	WNW	Blue sky	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Caldera, Chili, S. A	30.02	762.5	57	13.9	81	SW			1		10	Calm						Overcast	Capt. A. H. Markham.
H. M. S. Turquoise, S. 53° 32′, W. 72° 34′	30.19	766.8	41	5.0	83	WNW			2		10							Overcast	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I			80	26.7		NNW			1		4							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W	30.21	767.3	55	12.8	87	Calm			0		4	NW						Showery	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Dawasser, Persia	29.65	753.1	100.5	38.1	37	Calm			0									Misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candido dos Rios, Comd't.
Quanza, Santiago, Cape Verd I'ds.	30.02	762.6	83.8	28.8	58	NE			3		0					2	NE	Blue sky	Carlos M. da Silva Costa, Comd't
RioLima																			S. C. da Silva Costa, Comd't.
Sado, Loando, Africa	30.07	763.7	71.6	22.0	77	NNW			3		2					1		Blue sky	G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.85	758.3	82.0	27.8	86	S			2		3		S	2	hours			Showery	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga, N. 39° 44′, W. 10° 12′	30.13	765.3	69.1	20.6	78	NNE			4		1							Blue sky	Capt. M. von Krusenstierna
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.16	765.1	82	27.8	79	NW	3	1.3			5		NE	0	0			Fair	
N. Yard, Portsmouth, N. H.	30.17	765.3	51	10.6	86	E	4	1.8			0			0	0			Clear	
Naval Hospital, Yokahama, Japan	29.61	752.1	76	24.4	79	SW			3		8		SW	0	0			Fair	
Adams N. 7° 39′, W. 82° 40′	29.70	754.4	81	27.2	91	WNW			2		5		S			Long		Fair	
Alaska, Callao, Peru	29.90	759.4	65	18.3	89	SE			1		10			0	0	Sm'h		Cloudy	
Alert, Yokohama, Japan *	29.85	758.2	80	26.7	74	W			3		5		W			Sm'h		Fair	
Alliance, Norfolk, Va	30.02	762.5	63	17.2	89	W			1		10			0	0			Cloudy	
Ashuelot, Kobe, Japan	29.86	758.4	73	22.8	90	W			2		5		SW			Light	S	Fair	
Colorado, New York, N. Y	30.17	766.3	55	12.8	100	S	2	0.9			10		NNW					Foggy	
Constitution, Newport, R. I	30.10	764.5	50	10.0	93	NE			2		10							Overcast	
Franklin, Norfolk, Va	30.05	763.3	63	17.2	89	W	6	2.7			10		W	0	0			Cloudy	
Galena. N. 36° 34′, W. 6° 29′	30.05	763.3	77	25.0	50	NW			1		0					Sm'h		Clear	
Independence, N. Yard, Mare I'd, Cal	29.93	760.2	78	25.6	84	SW	1.2	0.4			2		SW	0	0			Fair	
Jamestown, Sitka, Alaska *	29.68	753.9	44	6.7	92	N			1		5		NNE	0	0			Fair	
Kearsarge. Norfolk, Va	30.14	765.5	63	17.2	83	W			1		10					Sm'h		Cloudy	
Lackawanna. Papati, Tahiti I'd, Oceania †	30.19	766.8	76	24.4	95	SE			0–1		5		SE					Fair	
Marion, Montevideo, Uruguay *†	30.01	762.2	54	12.2	87	NNE			2		2		Calm			Sm'h		Foggy	
Michigan, Erie, Pennsylvania	29.85	758.2	71	21.7	66	S			4		10							Cloudy	
Minnesota, Newport, R. I	30.16	766.1	50	10.0	93	NE			2		10					Sm'h		Misty	
Monocacy, Yokohama, Japan	29.75	755.6	79	26.1	78	SW			2		8							Fair	
New Hampshire. Norfolk, Va	30.10	764.5	63	17.2	89	WSW	2	0.9			5		Calm	0	0			Cloudy	
Nipsic. N. 41° 15′, W. 10° 1.′	30.12	765.0	63	17.2	83	NNE			4		0					Mod. Cross	NNE	Blue sky	
Onward, Callao, Peru †	29.93	760.2	65	18.3	89	SE			3		10		NW			Long	W	Cloudy	
Palos, Nagasaki, Japan	29.89	759.2	77	25.0	91	SSW			5		10		S					Rainy	
Passaic, Washington, D. C	30.15	765.8	65	18.3	89	NE			2		8?		NE					Clear?	
Pensacola, Mare Isl'd, Cal	29.96	761.0	60	15.6	88	SSW			1		0			0	0	Sm'h		Clear	
Portsmouth. Newport, R. I	30.16	766.1	50	10.0	100	NE			2									Misty	
Powhatan, Newport, R. I	30.16	766.1	50	10.0	?	NE			3		10							Misty	
Quinnebaug, Tompkinsville, N. Y	30.19	766.8	57	13.9	94	S			1		10		S			Sm'h		Cloudy	
Ranger, Mazatlan, Mexico *	29.82	757.4	81	27.2	78	ESE			2		2		Calm	0	0	Mod.	SE	Fair	
Richmond, Nagasaki, Japan	29.93	760.2	78	25.6	86	SW			3		10			0.06	1.5			Cloudy	
Saratoga, Newport, R. I	30.15	765.8	49	9.4	100	NE			3		10			0	0			Misty	
Shenandoah, Montevideo, Uruguay *	30.23	767.8	54	12.2	87	NNE			2		2					Sm'h		Fair	
St. Louis, League Island, Pa	29.70	754.4	59	15.0	94	Calm	0	0			0			0	0			Hazy	
Swatara, Shanghai, China *†	29.68	753.9	83	28.3	83	Calm			0		8		Calm					D. clouds	
Tennessee, Navy Yard, N. Y	30.15	765.8	62	16.7	88	ENE	1	0.4			10		Calm	0	0	Sm'h		Foggy	
Ticonderoga, S. 51° 30′, W. 48° 20′	29.94	760.5	40	4.4	100	NNW			6		10		NNW	0.50	12.7	R'gh	NNW	Rainy	
Trenton, Marseilles, France *	30.04	763.0	66	18.9	74	WSW			4		0			0	0	Sm'h		Clear	
Vandalia. Huntington, Long I'd	30.09	764.3	57	13.9	100	Calm			0		10		Calm					Cloudy	
Wabash, Boston, Massachusetts	30.22	767.6	52	11.1	93	ENE	7	3.1			10		Calm	0	0			Hazy	
Wachusetts, N. Yard, Mare I'd, Cal	29.95	760.7	60	15.6	94	SW			2		0			0	0			Clear	
Yantic, Key West, Florida *	29.95	760.7	84	28.9	75	N			2		2		N					Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle, N. 39° 18′, W. 73° 40′	30.14	765.5	56.0	13.3	94	NNE			3		8							D. clouds	Capt. A. J. Brown.
British Merchant, ‡ N. 30° 45′, W. 124° 39′	30.06	763.5	61	16.1	94	NNW			3		8							Drizzling	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 53° 40′, W. 11° 20′	30.15	765.8	54	12.2	67	Calm			0		10					Str'g	WNW	Overcast.	Capt. W. N. Lailey.
City of Agra, N. 9° 47′, W. 24° 12′	30.04	763.0	84.0	28.9	81	N			1		1						NW	Blue sky	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 38° 18′, W. 17° 58′	30.26	768.6	65.0	18.3	73	WNW			2		8							D. clouds	Capt. A. Buchan.
Denbighshire																			Capt. H. Y. Murdock.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Naiad, N. 49° 21′, W. 4° 32′	30.13	765.3	59.4	15.2	82	NNW			2		8							D. clouds	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 31° 53, W. 43° 13′	30.40	772.1	79	26.1	66	Calm			0		3							D. clouds	Capt. M. Parry.
Sierra Estrella, N. 23° 54′, W. 23° 13′	30.16	766.1	69.7	20.9	77	NNE			4		4							Misty	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 35° 41′, E. 15° 52′	30.11	764.8	64.0	17.8	89	WNW			4		5							D. clouds	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 46° 30′, W. 72° 14′	30.10	764.5				Calm			0		0							Hazy	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Gallia, ‡ N. 45° 55′, W. 39° 01′	30.15	765.8	60	15.6		N			4		5		NE	0	0			Fine	Capt. W. H. P. Hains.
S. S. Algeria																			Capt. W. Watson.
S. S. Scythia, N. 41° 36′, W. 61° 06′	30.05	763.3	61	16.1	94	Var.			2		10		S	Showers		Sm'h	E	Foggy	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic, ‡ N. 45° 35′, W. 42° 02′	30.15	765.8	54	12.2	80	NW			2		5		Calm	0	0	Sw'll	NW	D. clouds	Capt. H. Parsell.
S. S. Britannic, N. 48° 57′, W. 32° 36′ †	29.76	755.9	51	10.6	?	NNW			6		2		NW			H'vy	NW	Raining	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Glendell.
S. S. Germanic																			Capt. Ch. W. Kennedy.
S. S. Republic, N. 43° 05′, W. 46° 45′ †	30.33	770.4	55	12.8	86	NE			3		5		NE	0	0	Sm'h		Fair	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig, N. 39° 04′, W. 60° 57′	30.12	765.0	74.0	23.3	88	S			2		8		S			Mod.	SW	Raining	Capt. C Phole.
S. S. Hermann, N. 49° 25′, W. 24° 49′	29.44	747.8	55.4	13.0		SSW			8		10		SW	7 hours		Very h'vy	SSW	Overcast	Capt. H. Baur.
S. S. Hohenzollern, ‡ N. 40° 43′, W. 58° 22′	30.21	767.3	67.1	19.5		SSW			3		2		SW	0	0	Mod.	SW	Fair	
S. S. Köln																			Capt. Th. Jüngst
S. S. Strassburg, N. 49° 01′, W. 20° 17′	30.01	762.2	58.1	14.5		SSW			5		10		SSW	0	0	Mod.	SW	Cloudy	Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England	30.03	762.7	65	18.3	94	SW			2		2		SW					Clear	Capt. J. W. Shackford.
S. S. Indiana, Philadelphia, Pa.†	30.08	764.0	70	21.1	85	NE			4		2		NE	0	0			Clear	Capt. R. W. Sargent.
S. S. Ohio																			W. Shackford, Chief Off'r
S. S. Pennsylvania, N. 39° 20′, W. 64° 42′.†	30.09	764.3	72	22.2	95	SE			3		10		SE			Sm'h	SE	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, Mazatlan, Mexico.†	29.70	754.4	79	26.1	86	ESE			2		2		SE	0	0	G'tl	SSW	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 39° 09′, W. 129° 03′.†	30.16	766.1	60	15.6	88	SW			4		8		W	Rain		High	WNW	Cloudy	Capt. H. Davison.
S. S. Gaelic, N. 41° 23′, E. 151° 13′.*†	29.82	757.4	61	16.1	88	SW			5		10		SW			Mod.	SW	Overcast	Capt. W. H. Kidley.
S. S. Oceanic, Hong Kong, China	30.10	764.5	85	29.4	65	SSE			3		6?		S					Cloudy?	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, N. 44° 05′, W. 124° 23′.†	30.03	762.7	55.0	12.8	90	SSW			2		10		SW			Mod.	SSW	Cloudy	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, N. 35° 40′, W. 121° 24′.†	29.88	758.9	51	10.6	93	NW			2		Fog			0	0.	Sm'h		Foggy	Capt. J. N. Ingalls.
S. S. Dakota, N. 47° 15′, W. 124° 51′.†	29.99	761.7	52	11.1	87	SW			4		1		NW	0	0	Sm'h	NW	Clear	Capt. H. G. Morse.
S. S. Idaho, N. 41° 36′, W. 124° 35′.†	30.06	763.5	55	12.8	93	Calm			0		Fog					Mod.	SW	Foggy	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 35° 20′, W. 121° 20′.†	29.96	761.0	58	14.4	94	NW			8		Fog		NW			Long	NW	Foggy	Geo. H. Harrison.
S. S. Senator, San Francisco, Cal.†	29.98	761.5	54	12.2	93	Calm			0		10							Hazy	Capt. Thos. Wallace.
S. S. State of California, Portland, Oregon.†	29.97	761.2	55	12.8	87	S			3		10		S					Raining	Capt. G. Debney.
S. S. Victoria, N. 39° 42′, W. 124° 20′.†	30.10	764.5	57	13.9	100	Calm			0		8					Mod.	S	Cloudy	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 35 05′, W. 129° 48′	30.19	766.8	60	15.6	76	N			2		10		N			Sm'h	NW	Misty	A. Bannerman, 2d Officer
S. S. City of New York, Sydney, N. S. W.†	30.17	766.3	47	8.3	100	W			1		10		W					Raining	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, Panama, Panama.†	29.87	758.7	77	25.0	95	SW			3		8n		NW	8 hours		Mod.	S	Squally	Capt. D. S. Austin.
S. S. City of Peking																			Capt. G. G. Berry.
S. S. City of Sidney, N. 17° 49′, W. 159° 24′.*†	30.06	763.5	78	25.6	72	ENE			5		8		ENE			Mod	ENE	Drizzling	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 34° 30′, E. 138° 24′.†	29.93	760.2	76	24.4	81	SW			6		2		SW			Mod.	SW	Clear	A. L. Ritchie, 2d Officer
S. S. Colima, N. 27° 12′, W. 114° 40′.†	29.90	759.4	62	16.7	88	NW			5		0			0	0	Mod.	NW	Clear	Capt. R. R. Searle.
S. S. Granada, Acapulco, Mexico.†	29.88	758.9	83	28.3	79	Calm			0		0			3 hours				Clear	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. Wales	30.27	768.8	71	21.7	82	E			1		0							Clear	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, ‡ N. 41° 40′, W. 46° 32′.†	30.14	765.5	69	20.6	95	NE			1		8		NE	0	0	Sm'h		Overcast	A. Feddersen, 2d Officer.
S. S. Rhynland, N. 40° 18′, W. 64° 30′.†	30.29	769.4	70	21.1	85	E			3		10		E	0.01	3.	Sm'h		Cloudy	Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 40° 22′, W. 71° 24′.†	30.14	765.5	53	11.7	80	NE	5	2.2			Fog			0	0			Foggy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle																			Capt H. F. Woodbury.
Brigantine George, Arroyo, Porto Rica.†	30.05	763.3	84	28.9		Var.			6		10			Heavy		Mod.		Squally	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Washington, D. C.†	30.10	764.5	66	18.9	89	ENE	2	0.9		5k	2s			0	0			Fair	
Bark Sunbeam, Lisbon, Portugal.†	30.12	765.0	78	25.6	95	SW			1		0			0	0			Clear	Capt. Jos. Hand.

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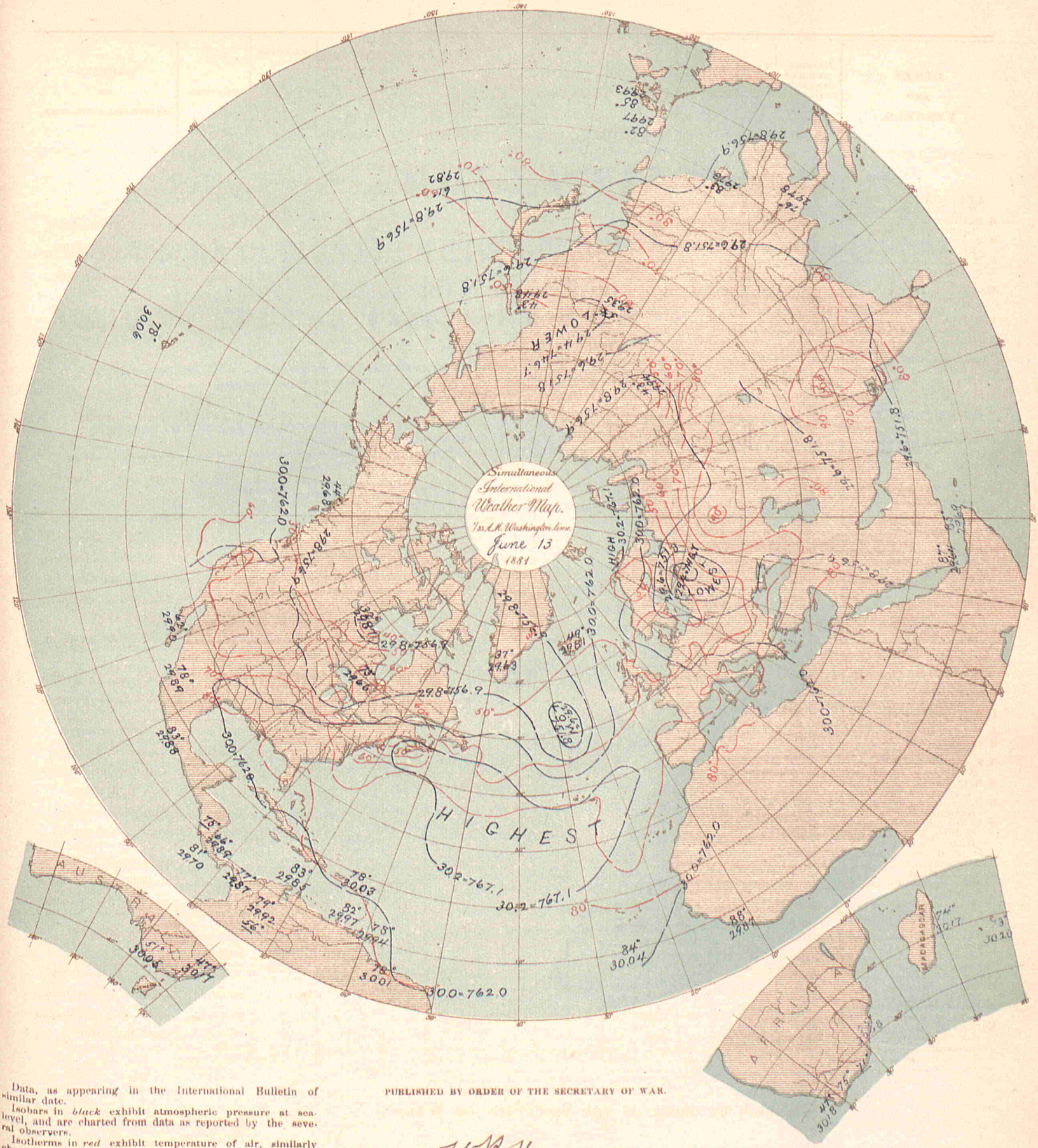
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 14, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours‡			29.95	760.6	72.5	22.5	77	NNW			3		3			0	0	Pretty fair.	Raynard.
Algiers‡			30.02	762.5	70.9	21.6	95	NE			3		10			0	0	Covered	Nicolas.
La Calle‡			30.04	762.9	75.6	24.2	80	E			4		6			0	0	Cloudy	Fonfrède.
Tunis‡			30.07	763.7															Jacques.
Sfax‡			30.13	765.3															Gau.
Saida‡			30.04	762.5	94.6	34.8	12	SSW			3		1			0	0	Very fair	Dumas.
Tebessa‡			30.11	764.7	75.6	24.8	30	SW			5		9			0	0	Covered	Watrin.
Geriville‡					82.4	28.0	33	SSE			8		0			0	0	Clear	Lonchamp.
Laghouat‡			30.09	764.3	91.8	33.2	13	SW			5		2			0	0	Fair	Herbin.
Biskra‡			30.13	765.4	88.5	31.4	39	SE			4		1			0	0	Very fair	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.65	753.1	29.74	755.4	49.1	9.5	85	N	9	4.0			9			0	0	Threatening	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.45	748.0	29.99	761.7	62.2	16.8	77	SW			3		8			0.405	10.3	Raining	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.14	740.2	29.91	759.8	50.4	10.2	93	W	9.8	4.4			10			0.055	1.4	Raining	Dr. Wierzbicki.
Eperies	28.97	735.9	29.85	758.2	52.2	11.2	85	N			1		10n			0.102	2.6		Julius Mikolik.
Gratz‡	28.73	729.8	29.95	760.7	65.8	18.8	65	SE			2		3			0	0		Andreas Rospini.
Hermannstadt	28.50	723.8	29.88	758.9	60.9	19.4	48	NW			4		5			0.047	1.2		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.07	728.3	30.00	762.1	57.0	13.9	70	SW			2		9			0	0		The Staff.
Lemberg	28.80	731.6	29.78	756.4	54.3	12.4	87	SW			2		10			0.142	3.6		Dr. T. Stanecki.
Pola	29.91	759.7	30.02	762.5	69.8	21.0	68	SW			2		1			0.134	3.4		I. R. Hydrographic Office.
Szathmar	29.41	746.9	29.85	758.5	59.9	15.5	81	S			4		10			0.610	15.5		Beicht Peter, S. J.
Szegedin	29.68	753.8	29.95	760.9	58.3	14.6	98	S			2		9			0.047	1.2		Karl Stancel.
Trieste	29.92	760.0	30.02	762.6	68.4	20.2	78	SW			1		10			0.047	1.2		Secco.
Vienna	29.29	743.9	30.00	761.9	60.8	16.0	61	W			2		7			0.055	1.4		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter Printed June 14, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. 0—10	0—10	Direction, Up'er From.	Lo'er From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES. Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.96	761.0	30.06	763.5	49.0	9.4	66	SE	9	4.0			9			0	0	Overcast	W. Boswell.
Armagh, Observatory	29.74	755.4	29.97	761.2	62.2	16.8	45	SE	12	5.4			1					D. clouds	S. Call.
Bidston, Liverpool Obs'y			29.99	761.7	64.3	17.9	58	ESE	17	7.6			3					Blue sky	John Hartnup.
Bolton, Sharples	29.47	748.5	30.00	762.0	60.8	16.0	62	SE	7	3.1			9					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.60	751.8	29.99	761.7	59.0	15.0	62	SE			1		4			0	0	D. clouds	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.95	761.0	29.99	761.7	82	27.8	81	NE			2		9					Overcast	Corpl. J. Surgener, A.H.C.
Cardington																			John McLaren.
Chatham, School M. E	29.93	760.2	30.06	763.5	62.0	16.7	60	NE			1		4					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.81	757.2	30.04	763.0	58.2	14.6	77	SSE			2		4					D. clouds	The Staff.
Fort Napier, Natal	27.91	708.9	30.12	765.0	73.4	23.0	76	NE			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	88	31.1	84	W			1							Raining	Sgt. C. E. Keane.
Galway, Queen's College			29.78	756.4	63	17.2	52	NW			4		10					Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	29.98	751.5	30.03	762.7	71.2	21.8	84	E			3		9					D. clouds	2nd Cpl. C. Baldwin.
Glasgow, Observatory	29.78	756.4	29.98	761.5	61.0	16.1	62	ENE			4		5					D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	29.88	758.9	30.04	763.0	63.7	17.6	60	ENE			1		6					D. clouds	The Staff.
Guernsey	29.78	756.4	29.99	761.7	57	13.9		WNW			1		7					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.01	762.2	30.05	763.3	62.9	17.2	52	SE	6	2.7			8					Misty	The Staff.
Leicester, Museum	29.79	756.7	30.04	763.0	58.8	14.9	62	S			1		9					D. clouds	J. E. Carryer.
Malta, Mediterranean	30.08	764.0	30.16	766.1	74.8	23.8	57	SW			2		0					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.97	761.2	30.02	762.5	85.2	30.1	76	N			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.52	749.8	30.01	763.0	61.9	16.6	64	ENE			2		7					D. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	29.81	757.2	30.04	763.0	62.4	16.9	60	ENE			1		8					Overcast	The Staff.
Plymouth	29.96	701.0	30.03	762.7	59.8	15.4	76	S			2		10					Misty	John Merrifield.
Sandwick Manse, Orkneys			30.05	763.5	50.8	10.4	74	NW	6	2.7			10					Misty	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.95	760.7	30.02	762.5	75.6	24.2	62	SSW			1		2					Blue sky	Serg't W. H. Lyne.
Sheffield	29.98	761.5	30.06	763.5	61.0	16.1	66	E			1		5			0	0	D. clouds	W. F. Cooper.
Silloth Rectory	29.95	761.0	29.98	761.5	67.6	19.8	81	Calm			0		6			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.02	762.5	64.3	17.9	53	E	3	1.3			4					Misty	Rev. S. J. Perry.
Stratfield Turgiss	29.81	757.2	30.03	762.7	63.4	17.4	65	S			1		9					D. clouds	Rev C. H. Griffiths, F. M. S
Truro, Royal Institution	30.01	762.2	30.02	762.5	67	19.4	60	S			4		5					D. clouds	W. Newcombe.
Valencia, Observatory	29.85	758.2	29.87	758.7	55.3	13.5	85	SE	30	13.4			10					Drizzling	The Met'g'l Office.
CANADIAN SERIES. Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B					68.0	20.0		SW	4	1.8			10n					Raining	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.91	759.7	29.95	760.7	57	13.9	87	S	3	1.3			10s			0	0	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	29.79	750.7	29.85	758.2	64	17.8	82	S	7	3.1			10ks		S	0	0	Cloudy	G. A. Blair.
Chicontimi, Quebec					71.0	21.7		SE			4	1cs	0			0	0	Blue sky	Rev. V. A. Huart.
Cornwall, Ontario	29.49	749.0	29.67	753.6	67.0	19.4	80	SW			2		9s			0.039	1.0	D. clouds	James Smith, M. A
Dalhousie, N. B	29.71	754.6	29.75	755.6	65.0	18.3		W			1	0	0			0	0	Hazy	H. A. Johnson.
Father Point, Quebec*	29.68	753.9	29.70	754.4	66	18.9	66	SW	20	8.9		0	Sk			0	0	Smoky	J. McWilliams.
Fort Garry, Manitoba*	29.19	741.4	30.01	762.2	50	10.0	78	N	4	1.8		0	2ks		NW	0.03	0.8	Fair	James Stewart.
Fredericton, N. B	29.81	757.2	29.88	758.9	59.5	15.3	91	S	6	2.7			10s			0	0	Threatening	Prof. Harrison.
Granton, Ontario	28.75	730.2	29.81	757.2	62.0	16.7	88	W			2	0	0			0.24	6.1	Clear	James Grant.
Halifax, N. S.*	29.70	755.9	29.88	758.9	55	12.8	98	NE	3	1.3			Fg			0.172	4.4	Heavy rain	A. Allison.
Hamilton, Ontario	29.38	746.2	29.76	755.9	66.6	19.2	86	SW			3	4ck	0	SW		0.22	5.6		Geo. Dickson, B. A.
Kingston, Ontario*	29.39	746.5	29.71	754.6	61	16.1	93	S	5	2.2		5c	2ks	S	S	0.39	9.9	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S	29.94	760.5	29.98	761.5	60.0	15.6	77	SW			3		Hz			0	0	Hazy	C. H. Rigby.
Montreal, Quebec*	29.48	748.8	29.67	753.6	67	19.4	86	SW	9	4.0			10ks		W	0.01	0.3	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario	29.50	749.3	29.53	750.0	36.8	2.7	92	N			3		10n			1.18	30.0	Raining	J. R. Nason.
Parry Sound, Ontario*	29.04	737.6	29.72	754.9	56	13.3	93	W	8	3.6		5k	5n	W	W	0.29	7.4	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	29.01	730.8	29.73	755.1	68.7	20.4	69	W			2	6ck	0			0	0	Fair	J. F. Jeffers, M. A.
Port Dover, Ontario	29.13	739.9	29.80	756.9	65	18.3	94	SW	4	1.8		2c	0	SW		0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.19	741.4	29.81	757.2	67	19.4	80	W	8	3.6		0	0			0.09	2.3	Clear	M. Payne.
Quebec, Q uebec*	29.45	748.3	29.77	756.1	65	18.3	73	NW			1		10s		NW	0	0	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.14	740.1	29.58	751.3	64	17.8	73	W	8	3.6			10ks		W	0.14	3.6	Cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.07	738 4	29.77	756.1	54	12.2	92	SW	5	2.2		2k	0			0.12	3.0	Clear	K. Stewart.
St. Andrews, N. B	29.84	757.9	29.89	759.2	50	10.0	96	SE	2	0.9			Fg			0.02	0.5	Foggy	
St. John, N. B	29.72	754.9	29.88	758.9	53.0	11.7	96	S	1	0.4			10n			0.120	3.0	Light rain	G. Murdock, C. E.
Stratford, Ontario	28.55	725.2	29.88	758.9	62.9	17.2	87	NW	10	4.5		0	0			0.446	11.3	Blue sky	C. J. Macgregor, M. A.
Sydney, C. B*	29.99	761.7	30.03	762.7	59	15.0	87	S	8	3.6			10n			0	0	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.39	746.5	29.70	755.9	63	17.2	89	S	9	4.0		5cs	0	W		0.09	2.3	Fair	Magnetic Observatory
Windsor, N. S	29.79	756.7	29.89	759.2	55.0	12.8	90	N	4	1.8			10n			0.13	3.3	Raining	
Woodstock, Ontario	28.70	730.5	29.78	756.4	66.0	18.9	82	W	11	4.9		0	0			0.16	4.1	Blue sky	Prof. Wolverton.
Yarmouth, N. S*	29.82	757.4	29.89	759.2	58	14.4	98	NE	2	0.9			Fg			0.83	21.1	Heavy rain	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.95	760.7	30.19	766.8	65	18.3	73	SW	1	0.4		0	0			0	0	Fair	John Delany.
St. Pierre, N. F			30.03	762.7	54.7	12.6		SW			1					0.20	5.1		N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES. Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

Cape St. Francis Lt. House	30.16	766.1			72.0	22.2	65	NNW	14.8	6.6		9c	0			0	0	Hazy	John Duthie.
Cape Town, C. G. H. Obs'y	30.12	765.0	30.16	766.1	57.2	14.0		SE	2.6	1.2		4	4k;ks			0	0		The Staff, for D. Gill.
Worcester*†	29.10	739.1			66	18.9	52	NNW			1	5	5			0	0	Light clouds	C. Stokes.

CHINESE SERIES. Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.75	755.7	29.78	756.3	71.2	21.8	82	WSW	0.7	0.3			10			0.287	7.3	Covered	M. Marc Dechevrens, S.J.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.

San José	25.18	655.0	29.90	759.4	66.6	19.2	95	NE			1	10s	0			0.59	15.	Cloudy	Amand Maison.

DANISH SERIES.

Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.

Copenhagen	29.87	758.7	29.92	759.9	60.4	15.8	42	N	16	7			7						Oversergent Fischer.
Faröe	29.91	760.4	29.95	760.9	54.9	12.7	82	WNW			4		9						Overlœrer Lauridsen.
Godthaab, Greenland	29.78	755.5	29.83	757.6	38.1	3.4	78	S			4		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.80	756.9	29.84	758.0	54.1	12.3		SE			2		10					Raining	A. O. Thorlacius.
Thorshavn	30.05	763.4	30.09	764.3	49.3	9.6	85	SE	9	4			10						Overlœrer Bergh.
Vestervig	29.85	758.2	29.95	760.6	54.9	12.7	82	NW			2		10						Lœrer Oesterbol.

FRENCH SERIES.

Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.

Agen, Normal School	29.48	748.7	30.10	754.6	81.3	27.4	18	ENE			1	ck	o	E		o	o		M. Labroue, Director.
Alençon Normal School	29.60	751.8	30.15	755.8	68.0	20	91	SW			2		o			0.252	6.4	Clear	M. Nicot, Director.
Arras, Engineer School	29.75	755.8	30.01	762.2	65.0	18.9	61	NE			1	o	lk		NE				M. Klein, Commandant.
Avignon, Normal School	29.93	760.2	30.01	762.2	77.0	25	37	N			2		o			o	o	Clear	M. Girard, Director.
Bar-sur-Seine	29.49	749.0	30.04	762.9	67.3	19.6	55	W			1	o	8kn		W	o	o	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.70	755.8	30.01	762.3	68.9	20.5	53	S			1		8		WSW	0.098	0.2	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.17	740 8	29.99	761.7	66.2	19	54	S			1	o	cn		W	o	o		M. Gobin, Director.
Bordeaux, Observatory	29.87	758.8	30.13	765.4	70.2	21.2	49	S			1		2		SE	o	o	Slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	29.55	750.6	30.10	764.4	65.2	19	57	W			1		kn		W	o	o		M. Postel, Director.
Brest, Naval Observatory	29.84	757.8	30.08	764.0	65.5	18.6	75	SW			1		8		SW	o	o		M. de Remaree, Dir.
Caen, Normal School	30.00	763.6	30.13	765.4	64.9	18.3	82	N			2		5		W	o	o	Cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.55	753.3	29.97	761.2	68.0	20.0	61	N			1		5			0.004	0.1	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.53	750.0	30.04	762.9	66.6	19.2	70	SW			1					o	o		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.71	729.1	30.02	762.6	68.0	20.0	60	ENE			1		8			o	o	¾ covered	M. Allnard, Director.
Cluny, Normal School	29.25	743 3	30.10	764.4	71.6	22	48	SW			1		4		W	0.004	0.1		M. de Villemontée, Dir.
Commercy, Normal School	29.18	741.1	30.03	762.8	65.0	18.9	54	SSE			3		8kn	SSE	SSE	o	o	Very cloudy	Dr. Coulet, Director.
Gap, Normal School	27.50	698.5	29.97	761.2	68.9	20.5	40	SW			1				E	o	o		M. Jeangirard, Director.
Gréasque, du. Rhone	28.97	735.7	30.11	764 7	73.8	23.2	44	NW			1		2		W	o	o	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.25	743.1	30.00	761.9	73.4	23	45	NW			2	ck	o	SW		o	o		M. Ablard, Director.
Guéret, Normal School	28.45	722 7	30.02	762 5	63.1	17.3	58	SW			1	o	lk		NE	o	o		M. Rivoire, Director.
Lamballe, Normal School	29.78	756.5	30.05	763.3	62.6	17	92	N			2				N	o	o		M. Ollitrault, Director.
Lescar, Normal School	29.49	749.1	30.15	765.7	72.3	22.4	63	S			1					0.16	4.		M. Chauvin, Director.
Lorient, Naval Observatory	30.00	761.9	30.10	764.5	64.4	18.0	53	WSW			4		5	SW	W	o	o	½ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.03	737.4	30.07	763.8	60.2	19.0	51	NNW			1		10		NNW	o	o	Covered	M. André, Director.
Mans, Normal School	29.72	751.8	30.02	762.5	65.7	19.3	72	SW			4		5		W	0.083	2.1	Cloudy	M. Piboon, Director.
Marseille, Observatory	29.75	756.0	30.03	762.8	70.0	21.1	49	SW			1		1			o	o		M. Stephan, Director.
Montlouis l'instituteur	24.91	632.0	30.14	765.6	57.2	14.0	67	E	15.8	7.5			4		S	o	o		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.91	759.8	30.02	762.5	75.6	24.8	49	S			3		2			o	o	Slightly cl'dy	M. P. Galzin, Director.
Nancy, Normal School	29.23	742.5	29.98	761.5	63.7	17.6	53	WNW			1	o	8kn		W			Raining	M. Hisse.
Nantes, Observatory	29.93	760.3	30.10	764.4	66.2	19	75	SSW			1-2		10a		WSW	0.051	1.3		M. Lavocque, Director.
Nice	29.99	761.8	30.02	762.0	70.2	21.2	58	SE			2		5	E	SE	o	o	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.94	760.5	30.01	763 1	72.0	22.2	41	S	13.0	5.8			1	W		o	o		Dr. Fines.
Pic-du-Midi, Plantade	22.66	575 5			47.8	8.8							1		W	o	o	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.04	737.5	30. 7	763.7	71.6	22	41	S			1		5	NW	NW	o	o	Cloudy	M. Tallien.
Puy de Dôme Obs'y, Summit	25.24	641.1			45.6	8.1	87	W			2		8			0.031	0.8	¾ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	30.08	764.1	30.11	764.9	68.4	20.2	89	W			1		8		SW	o	o	¾ covered	Lt. E. Deganne, Director.
Roche-sur-Yon, N. School	29.90	759.5	30.11	764.8	65.5	18.6	75	W			1		5		SW	o	o	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.91	708.9	30.10	762.0	69.2	19	47	N			1		o			o	o	Clear	M. Richard, Director.
Rouen, Normal School	29.93	760.1	30.01	762.3	67.3	19.6	71	ESE			1		5		SE	o	o	Cloudy	M. Pletrier, Director.
Saint Lô, Normal School	29.80	758.5	30.02	762.5	64.0	17.8	73	WNW			2		5		NW	0.08	2.	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.87	758.8	30.01	763.0	65.6	19.2	64	S V			1		7		WSW	o	o		M. Renou, Director.
Toulouse, Observatory	29.40	746.8	30.13	765.2	75.9	24.4	55	E			1		o			o	o	Clear	M. Baillaud, Director.
Tours	29.85	758.3	30.05	763.3	64.8	18.2	77	WSW			2		10		W	0.098	0.2	Covered	M. de Tastes.
Versailles, Observatory	29.54	750.4	30.03	762.8	64.8	18.2	93	SW			2					o	o		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.75	755.0	30.05	763.4	69.6	20.9	58	S			2		8	W	S	o	o		M. Marié Davy, Director.

GERMAN SERIES.

Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.

Bamberg	29.15	740.5	30.02	762.4	63.1	17.3	46	WNW			2	o	3k		W	o	o		Prof. Dr. Hoh.
Berlin	29.78	755.3	29.95	760.0	57.2	14.0	79	W			1		10			0.008	0.2		Prof. Dr. Arndt.
Breslau	29.42	747.3	29.95	760.7	51.6	10.9	93	WNW			2		10			0.154	3.9		Royal University Obs'y.
Carlsruhe	29.00	751.9	30.02	762.5	63.6	19.2	45	NNW			1		2	NW		o	o		Albert Sanz.
Cassel	29.33	744.9	30.04	763.1	55.8	13.2	64	W			1		8	W		o	o		Dr. H. Mühl.
Frankfort on the Main	29.71	754.0	30.00	763.6	95.1	18.4	49	SW			1		9			o	o		Physical Society.
Friedrichshafen	28.03	727.2	30.04	762.9	64.4	18.0	74	SSW			2		6	WSW		0.235	6.0		Wilhelm, Chief Tel.
Hamburg	29.93	760.1	30.00	761.9	58.5	14.7	68	WNW			3		9			o	o		Dr. R. Kleeman.
Kiel	29.93	760.1	29.94	760.5	58.5	14.7	64	WNW			2		10			0.015	0.4		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.90	759.7	30.01	762.3	58.3	14.0	60	WNW			2		10	NW		0.303	7.7	Raining	Prof. Dr. Bruhns.
Magdeburg	29.80	756.8	29.98	761.0	55.2	12.9	81	WNW			3		10ks		NW	0.130	3.3		Dr. Assmann.
Memel	29.71	754.5	29.75	755.7	44.0	7.0	94	NW			4		10n					Rain & fog	Reinbrecht & Issermann.
Munich	28.23	717.1	30.10	764.5	61.5	16.4	44	W			1		5	NW		0.035	0.9		Central Station.
Neufahrwasser	29.82	757 3	29.83	757.7	51.8	11.0	70	WNW			2		10			o	o		A. Lothos.
Neustadt, Palatinate	29.52	749.8	30.05	763.2	60.4	19.1	55	E			2		7	N		o	o		Dickmather.
Stuttgart	29.08	738.7	29.95	760.7	68.5	20.3	30	NW			1		7	W		o	o		Prof. Dr. Schoder.
Weissenburg, Bavaria	28.56	725.5	30.02	762.6	59.2	15.1	52	W			6		9	NW		o	o		Dr. O. Ounerth.
Wustrow	29.91	759.7	29.94	760.4	50.5	13.6	83	W			4		10s			o	o		Prof. Kemtein.
																			Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Velocity.		Force	Clouds. Amount and kind.		Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.71	754.6	30.09	764.2	77.0	25.0		SW			1.5		0					Clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.50	749.2	29.55	750.4	86.4	30.2	84	WSW	42.0	18.8			3		WSW	0	0	Misty	
Deesa	29.02	737.1	29.47	748.5	102.8	39.3	28	W					0			0	0	Blue sky	
Bombay	29.70	754.4	29.74	755.4	85.6	29.8	76	W	17.0	7.6			4	WSW		0.12	3.0	D. clouds	
Poona, Yarrowda	27.89	708.4	29.74	755.3	79.5	26.4	61	WNW	28.0	12.5			4		W	0.01	0.3	D. clouds	
Belgaum	27.28	692.8	29.82	757.5	73.0	22.8	77	WSW	10.0	4.5			8	SW	SW	0.04	1.0	Drizzling	
Lahore	28.68	728.5	29.38	746.1	108.3	42.4	17	W	2.6	1.2			0			0	0	Blue sky	
Roorkee	28.58	726.0	29.46	748.2	87.8	31.0	76	NE	4.4	2.0			9			0	0	Misty	
Agra	28.92	734.5	29.47	748.4	91.6	33.1	59	E	5.9	2.6			D			0	0		
Nagpur	28.53	724.5	29.56	750.8	80.0	26.7	78	SW	9.6	4.3			10		W	0.78	19.8	Overcast	
Jubbulpore	28.18	715.9	29.53	749.9	80.1	26.7	85	NW	4.3	1.9			10			0.36	9.1	Overcast	
Lucknow	29.11	739.4	29.48	748.9	84.2	29.0	77	NNE	5.7	2.6			10			1.66	42.2	Overcast	
Allahabad	28.14	740.1	29.45	748.0	79.9	26.6	95	NW	4.6	2.1			10			0.26	6.6	Raining	
Patna	29.30	744.1	29.47	748.6	91.1	32.8	76	SE	7.7	3.4			6	SE	SE	0	0	D. clouds	
Hazaribagh	27.45	697.2	29.42	747.2	82.3	27.9	78	SSE	7.2	3.2			10			0.08	2.0	Thund'rst'm	
Cuttack	29.41	746.9	29.49	749.0	80.2	26.8	96	Calm	0.2	0.1			10			0.82	20.8	Raining	
Calcutta, Alipore	29.39	746.4	29.41	747.0	83.6	28.7	83	S	2.0	0.9			10			1.13	28.7	Showery	
Dhubri	29.37	745.9	29.48	748.9	83.2	28.4	87	Calm	3.0	1.3			8			0	0	D. clouds	
Chittagong	29.49	748.9	29.58	751.2	80.7	27.1	88	SE	7.8	3.5			8			0	0	D. clouds	
Sibsagar	29.25	743.3	29.60	751.7	82.0	27.8	87	SW	1.9	0.8			10	W	W	1.37	34.8	D. clouds	
Zanzibar, Africa			30.11	764.8	79.1	26.2	80	SSW	9	4.0			9		S	0.02	0.5	Threatening	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.60	751.7	30.00	761.9	68.9	20.5	63	SW	1.8	0.8			9			0.280	7.1		Prof. Giovanni Clodig.
Milan	29.46	748.3	29.96	761.0	74.5	23.6	44	NW	7.4	3.3			9	NW		0	0		Prof. Schiaparelli.
Padua	29.88	758.9	29.98	761.6	72.7	22.6	44	SSW	4.3	1.9			10	ENE		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.10	739.0	29.98	761.5	72.0	22.2	51	SE	3.8	1.7			6	SW		0	0		Prof. P. F. Denza.
Genoa	29.89	759.3	30.09	764.2	63.7	17.6	78	SE	5.6	2.5			10	SE		0.043	1.1		Prof. G. M. Garibaldi.
Mondovi	28.08	713.2	29.93	760.2	68.9	20.5	55	E			6		2			0	0		Prof. D. C. Bruno.
Pesaro	29.96	761.0	30.01	762.2	73.4	23.0	48	SW	16.1	7.2			4	W		0	0		Prof. Luigi Guidi.
Florence	29.82	757.3	30.07	763.7	66.9	19.4	62	SW			2		10	SW		0	0		Prof. Costantino Pitter.
Leghorn	30.02	762.4	30.10	764.5	68.4	20.2	63	W	9.4	4.2			4			0	0		Prof. P. Monte.
Rome	29.95	760.7	30.12	765.1	70.3	21.3	49	SW	12.5	5.6			6			0	0		Prof. P. S. Ferrari.
Lecce	29.86	758.4	30.11	764.7	73.0	22.8	33	WNW	11.2	5.0			1			0	0		Prof. C. de Giorgi.
Cosenza	29.25	742.9	29.75	756.0	70.9	21.6	69	NW	4.9	2.2			2	WNW		0	0		Prof. D. Conti.
Cagliari	29.89	759.2	30.08	764.0	70.9	21.6	54	SE			2		0			0	0		Prof. A. Pacinotti.
Palermo	29.93	760.1	30.17	766.4	68.9	20.5	61	NE	8.1	3.6			3	W		0	0		Prof. G. Clacciatore.
Syracuse	30.04	763.1	30.09	764.2	76.1	24.5	52	SE	6.3	2.8			2			0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.61	752.1	30.13	765.2	68.0	20.0	71	SSW	8.1	3.6			6		NE	0	0		Prof. F. Brioschi.
Stelvio	22.20	564.0			42.3	5.7	51	SW			1	8ck	0	W		0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.24	564.8			42.4	5.8	72	N			2		10n		NW	0	0	Covered	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y †	29.66	753.3	29.67	753.6	72.4	22.4	91	W	12.0	5.4			10n			2.456	62.2	Raining	K. Sasaki.
Kioto	29.58	751.3	29.75	755.6	75.3	24.1	75	SW	0.9	0.4		ck	2s			0.008	0.2	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.55	750.6	29.75	755.6	68.6	20.3	98	SSW	5.9	2.6			10n			1.990	50.6	Raining	S. Takehayashi.
Tokei Obs'y, Yeddo	29.55	750.6	29.61	752.1	75.8	24.3	76	SW	11.2	5.0			0			0	0	Very clear	The Staff.
Wakayama	29.71	754.6	29.76	755.9	76.8	29.4	77	SSW	21.6	9.7			0			0	0	Clear	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	30.08	764.0	30.27	768.9	72.3	22.4	56	ESE	21.5	9.6		2	4		ESE	0.01	0.3	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.42	620.3	30.04	763.0	64	17.8	74	N			1	0	0			0	0	Clear	Prof. M. Leal.
Mazatlan	29.64	752.9	29.90	759.4	78.3	25.7	80	ESE	5.3	2.3		7cs	0	NE		0	0	Cloudy	F. Quijano, U. E.
Mexico, Central Obs'y	23.14	587.7	30.03	762.8	57.2	14.0	70	NW	1.1	0.5		0	7ks		N	Inap	Inap.	Cloudy	The Staff.
Pabellon, Aguascalientes	23.99	609.2	29.94	760.4	62.6	17.0	71	NW			1	1cs	0			0	0	Clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.45	595.5	30.11	764.9	56.3	13.5	56	W	1.8	0.8			10		S	0.028	0.7	Covered	Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.61	574.3	30.23	768.0	51.8	11.0	68	E	1.8	0.8		0	0			0	0	Clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.08	764.0	30.08	764.0	59.4	15.2		NW			3					0	0		
Groningen	29.98	761.4	30.03	762.8	54.7	12.6		NW			1					0	0		
Helder	30.03	762.7	30.03	762.7	54.0	12.2		NNW			1					0.020	0.5		
Hellevoetsluis	30.05	763.2	30.05	763.2	60.8	16.0	67	WNW			2					0	0		
Utrecht	30.02	762.4	30.06	763.6	57.4	14.1	65	WNW			2		8			0	0	Very cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	OBSERVERS.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.86	758.4	29.92	760.0	55.8	13.2	77	Calm	0	0			1			0	0		
Christiania	29.71	754.5	29.85	758.1	69.3	20.7	20	ESE	4	2			1			0	0		
Gjæsvær	30.21	767.2	30.23	767.8	38.3	3.5		N			2		10						
Lodingen	30.05	763.2	30.10	764.4	54.7	12.6	44	NNE			4		0			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.93	760.2	29.95	760.6	68.0	20.0	91	SSW	3.1	1.4			4			0.669	17.0		Dr. J. A. Sampaio.
Campo Major	29.03	737.3	29.97	761.3	86.4	30.2	20	ESE	3.1	1.4			2			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.04	762.9	30.12	765.1	69.8	21.0	70	SW	2.5	1.1			5			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.67	753.7	30.02	762.5	75.7	24.3	40	NNE	9.4	4.2			0			0	0		The Staff.
Ponta Delgada, Azores	30.08	764.0	30.15	765.8	65.5	18.6	92	SW	8.1	3.6			10			0.024	0.6	Light rain	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.69	728.8	29.70	754.4	80.6	27.0	31	SSW	40	18		9cs	0						Capt. Lasarew.
Archangel	29.85	758.3	29.87	758.8	49.8	9.9	73	NE	4	2			10						Capt. Sseliwerstow.
Astrakhan	29.91	759.8	29.83	757.7	76.1	24.5	38	W	18	8		0	3k			Blank			Capt. Wisganow.
Barnaul‡	29.44	747.7	29.93	760.2	58.6	14.8	38	NE	9	4			0						Meteorological Obs'y.
Dorpat	29.40	746.7	29.63	752.7	56.7	13.7	74	NE	4	2			10kn						Observatory.
Ekaterinburg	28.84	732.4	29.75	755.6	76.1	24.5	58	SW	4	2			10n					Light rain	Meteorological Obs'y.
Kasan	29.24	742.7	29.49	749.1	82.8	28.2	35	S	4	2			7						Observatory.
Kertch	29.90	759.5	29.92	760.0	66.2	19.0	66	SW	7	3			9						Lagorio & Sastyrez.
Kieff	29.02	737.2	29.64	752.9	62.8	17.1	53	W	9	4		ck	9s						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.48	748.8	29.68	753.9	68.9	20.5	41	WSW	22	10			6			Blank			Meteorological Obs'y.
Moscow	29.06	738.0	29.60	751.7	56.5	13.6	87	NNW	7.8	3.5		0	8ks					Raining	Meteorological Obs'y.
Nertchinsk	27.19	690.6	29.41	747.0	51.8	11.0	45	NW	4	2			1			0	0		Meteorological Obs'y.
Nikolaiev	29.81	757.2	29.88	759.0	64.2	17.9	61	SW	9	4		0	6kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.37	746.1	29.46	748.3	59.9	10.5	88	SE			6		10n			0.441	11.2		Lieut. Iwanow.
Pekin, China	29.33	744.9	29.47	748.5	76.3	24.6	77	Calm	0	0		0	3k						Physical Observatory.
St. Petersburg	29.63	752.7	29.65	753.1	59.2	15.1	70	SE	4	2			10k;n						Central Physical Obs'y.
Tashkend, Laboratory	28.26	717.7	29.74	755.4	79.5	26.4	78	S	4	2			10			Blank			Teich, A. M.
Tiflis	28.52	724.5	29.87	758.7	79.5	26.4	32	NW	4	2		0	6ks						Physical Observatory.
Warsaw	29.40	746.8	29.82	757.5	54.3	12.4	69	WNW	11	5			10ks			Blank			Astronomical Obs'y.
Wilna	29.28	743.8	29.70	754.4	51.8	11.0	88	W	4	2			10					Heavy cl'ds	Berg, Assistant.
Yeniseisk	29.76	755.9	30.05	763.3	41.5	5.3	52	WNW	11	5			10						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.04	763.0	55.9	13.3	74	E			3	0	0			0	0	Fine	Andrew Gibb.
Monach Lt. House, Hebrides			29.97	761.2	58	14.4	94	SSE			4	5	3	SE		0	0	Cloudy	J. Youngclause.
North Unst, Shetland Isl'ds			30.04	763.0				N			4		10						Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.97	761.2	30.07	763.8	72.0	22.2	64	S	4.5	2.0			0			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.96	761.0	30.02	762.4	78.3	25.7	54	NW	2.0	0.9		0	0			0	0	Clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.12	688.8			76.1	24.5	37	SW	3.4	1.5			0			0	0	Clear	Domingo Martin.
Madrid, Royal Obs'y	27.82	705.7	29.93	760.2	84.4	29.1	32	SE	4.7	2.1		0	9			0	0	Clouds	The Staff.
Murcia, Met. Obs'y‡	29.90	759.4	30.04	763.1	80.2	26.8	37	ESE	4.0	1.8		2	4	NE		0	0	Almost cov'd	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.68	738.6	29.94	760.5	73.2	22.9	56	NE	4.9	2.2			2			0	0	Lightly cl'dy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.94	760.4	30.00	762.0	81.6	27.6	77	ESE	3.1	1.4		4c;cs	0	WNW		0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.83	757.6	29.88	758.9	86.0	30.0	76	SE	8.8	4.0		0	2ks		E	0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.88	758.9	29.97	761.3	77.7	25.4	21	NE	24.1	10.8			10		E	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.91	759.8	30.00	762.1	80.6	27.0	88	SE	6.9	3.1		2cs	3k	SE	SE	0	0		Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.77	756.1	29.91	759.8	83.2	28.4	76	NW	2.9	1.3		0	3ks		NW	0	0	Lightly cl'dy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.98	761.6	30.02	762.6	60.4	15.8	75	NE			4		0			0	0		
Umea	29.91	759.7	29.96	761.0	57.7	14.4	25	NE			8		0			0	0		
Hernosand	29.94	760.4	29.99	761.7	49.5	9.7	41	NE			7		2			0	0		
Stockholm	29.62	752.3	29.80	756.8	45.3	7.4	91	N			6		10			0	0		
Wisby	29.68	753.8	29.74	755.3	40.8	8.2	75	NNE			4		7			0.028	0.7		
Sub-Series.																			
Upsala	29.62	752.3	29.71	754.5	44.8	7.1	70	N	19.5	8.7			10		NNE	0.047	1.2		S. G. Fineman.
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.65	727.6	30.04	762.9	65.5	18.6	57	N			1		9			0	0	Covered	The Observatory.
Zurich‡	28.43	722.2	30.04	762.9	65.1	18.4	60	SE			1		6			0.591	15.0	Cloudy	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.07	763.8	71.2	21.8	51	SW	9	4.0			3		SW	0	0		The Observatory.
Valona			30.18	766.6	73.8	23.2		SW			1		2			0	0	Slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			30.07	763.7	81.1	27.3	53	W			1	20	0			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.76	755.9	29.84	757.9	65	18.3	78	S	6	2.7			10s			0.02	0.5	Cloudy.	
Alpena, Michigan	29.13	739.9	29.78	756.4	61.8	16.6	77	W	14	6.3		1c	0	NW		0.08	2.0	Clear.	
Atlanta, Georgia	28.93	734.8	30.08	764.0	76.2	24.6	72	NW	5	2.2		10c	0	Calm		0	0	Cloudy.	
Atlantic City, New Jersey	29.94	760.5	29.95	760.7	60	15.6	88	S	10	4.5			10s		Calm	0	0	Cloudy.	
Augusta, Georgia	29.85	758.2	30.03	762.7	77.2	25.1	61	S	6	2.7			10s		SW	0	0	Cloudy.	
Baltimore, Maryland	29.87	758.7	29.92	760.0	67	19.4	89	S	4	1.8			10s			0	0	Cloudy.	
Barnegat, New Jersey	29.91	759.7	29.93	760.2	60	15.6	97	SW	9	4.0			10s		Calm	0	0	Cloudy.	
Bismarck, Dakota	28.25	717.5	29.99	761.7	61	16.1	77	Calm	0	0		1c	0	Calm		0.12	3.0	Clear	
Boise City, Idaho	27.11	688.6	29.87	758.7	56.3	13.5	63	W	2	0.9		2k	0	W		0	0	Fair	
Boston, Massachusetts	29.74	755.4	29.88	758.9	60.0	15.6	90	S	3	1.3			10s		SW	0.03	0.8	Cloudy.	
Bracketville, Texas	28.87	733.3	29.89	759.2	73	22.8	85	E	12	5.4		0	0			0	0	Clear	
Brownsville, Texas	29.95	760.7	29.99	761.7	77	25.0	82	Calm	0	0		2c	0			0	0	Clear.	
Buffalo, New York	29.10	739.1	29.79	756.7	57.8	14.3	90	SW	7	3.1		2cs;k	0			0.05	1.3	Clear.	
Burlington, Vermont	29.46	748.3	29.74	755.4	66.2	19.0	82	S	18	8.0		8cs	2s	W		Inap.	Inap.	Cloudy.	
Cairo, Illinois	29.66	753.4	30.05	763.3	81	27.2	70	E	6	2.7		1c	0	Calm		0	0	Clear.	
Campo, California	27.35	694.7	29.92	760.0	45	7.2	76	S	2	0.9		5ck	0	SW		0	0	Fair	
Camp Thomas, Arizona	27.17	690.1			60	15.6	34	Calm			0	2ck	0			0	0	Clear.	
Cape Henry, Virginia	29.92	760.0	29.94	760.5	71	21.7	80	SW	16	7.2		2c	0			0	0	Clear.	
Cape May, New Jersey	29.90	759.4	29.92	760.0	63	17.2	89	S	13	5.8			Fg			0	0	Dense fog.	
Castroville, Texas	29.26	743.2	29.94	760.5	77	25.0	77	Calm	0	0		0	2s		S	0	0	Fair	
Cedar Keys, Florida	30.07	763.8	30.09	764.3	76	24.4	73	NE	7	3.1		0	0			0	0	Clear	
Champaign, Illinois	29.22	742.2	29.99	761.7	67	19.4	74	NW	8	3.6		0	0			0	0	Clear.	
Charleston, S. Carolina	30.01	762.2	30.07	763.8	79	26.1	74	W	8	3.6		0	0			0	0	Clear.	
Charlotte, N. Carolina	29.15	740.4	30.01	762.2	79.0	26.1	54	W	2	0.9		5cs	Hz	W		0	0	Fair	
Chattanooga, Tennessee	29.36	745.7	30.16	766.1	69	20.6	85	NE	16	7.2			10n		N	Inap.	Inap.	Th'der storm	
Cheyenne, Wyoming	24.11	612.4	29.92	760.0	53.4	11.9	58	N	8	3.6		5ck	0	W		0	0	Fair	
Chicago, Illinois	29.28	743.7	29.96	761.0	68.3	20.2	60	NW	6	2.7		5ck	0	W		0	0	Fair	
Chincoteague, Virginia	29.94	760.5	29.96	761.0	62	16.7	100	SE	12	5.4			Fg		Calm	0	0	Dense fog.	
Cincinnati, Ohio	29.39	746.5	30.03	762.7	69	20.6	85	Calm	0	0		Hz	0			1.90	48.3	Clear.	
Cleveland, Ohio	29.18	741.2	29.90	759.4	67.3	19.6	76	W	10	4.5		0	0			0.05	1.3	Clear	
Coleman City, Texas	28.25	717.5	29.86	758.4	71	21.7	75	S	3	1.3		0	0			0	0	Clear	
Columbus, Ohio	29.14	740.1	29.96	761.0	68	20.0	74	W	6	2.7		0	0			1.75	44.4	Clear	
Concho, Texas	28.14	714.7	30.02	762.5	71	21.7	85	S	4	1.8		0	0			0	0	Clear	
Corsicana, Texas	29.62	752.3	30.08	764.0	77	25.0	77	S	4	1.8		0	0			0	0	Clear	
Davenport, Iowa	29.36	745.7	30.00	762.0	68	20.0	74	Calm	0	0		7k	Sk	NW	Calm	Inap.	Inap.	Fair	
Dayton, Washington T'y	28.27	718.0	30.02	762.5	51.4	10.8	72	S	4	1.8		10k	0	Calm		0.03	0.8	Cloudy	
Deadwood, Dakota	25.46	646.7	30.01	762.2	49	9.4	71	S	1	0.4		2cs	0	SW		0	0	Fair	
Decatur, Texas																			
Delaware Breakwater, Del.	29.91	759.7	29.93	760.2	62	16.7	94	S	16	7.2			10ks		S	0	0	Cloudy	
Denison, Texas	29.27	743.4	30.05	763.3	75	23.9	86	S	4	1.8		0	0			0	0	Clear	
Denver, Colorado	24.79	629.7	29.86	758.4	64.0	17.8	53	SE	1	0.4		0	0			0	0	Clear	
Des Moines, Iowa	29.13	739.9	30.01	762.2	64	17.8	83	SW	4	1.8		1k	0			0	0	Clear	
Detroit, Michigan	29.19	741.4	29.86	758.4	61.4	16.3	82	W	12	5.4		0	0			0.05	1.3	Clear	
Dodge City, Kansas	27.42	696.5	29.91	759.7	68.1	20.1	79	SE	2	0.9		0	0			0	0	Clear	
Dubuque, Iowa	29.32	744.7	30.00	762.0	65.2	18.4	73	W	1	0.4		5k	0	NW		0	0	Fair	
Duluth, Minnesota	29.27	743.4	29.95	760.7	63	17.2	72	W	12	5.4		0	0			0.24	6.1	Clear	
Eagle Pass, Texas	29.25	742.9	30.06	763.5	75.5	24.2	81	SE	7	3.1		0	0			0	0	Clear	
Eagle Rock, Idaho	25.19	639.8	29.90	759.4	55	12.8	87	N	2	0.9		0	5ks		NW	0	0	Fair	
Eastport, Maine	29.82	757.4	29.89	759.2	48	8.9	96	S	1	0.4			10n			0.07	1.8	Light rain	
El Paso, Texas	26.23	666.2	29.88	758.9	66	18.9	59	E	1	0.4		1c	0			0	0	Clear	
Erie, Pennsylvania	29.12	739.6	29.81	757.2	67	19.4	79	SW	13	5.8		0	0			0.73	18.5	Clear	
Escanaba, Michigan	29.17	740.9	29.81	757.2	65	18.3	73	NW	9	4.0		0	0			1.03	26.2	Clear	
Florence, Arizona	28.31	719.1	29.91	759.7	70	21.1	21	NE	2	0.9		0	0			0	0	Clear	
Fort Apache, Arizona	25.06	636.5	29.84	757.9	49	9.4	37	E	3	1.3		2c	Sk	Calm	Calm	0	0	Fair	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota	28.47	723.1	29.94	760.5	60	15.6	82	NW	2	0.9		5c	0	NW		0	0	Fair	
Fort Benton, Montana	27.12	688.8	29.86	758.4	60	15.6	55	Calm	0	0		0	5ks		Calm	0	0	Fair	
Fort Buford, Dakota	28.05	712.5	29.97	761.2	55	12.8	74	Calm	0	0		5cs	0	SW		0	0	Fair	
Fort Custer, Montana	26.79	680.5	29.88	758.9	59	15.0	54	NE	2	0.9			10s		S	0	0	Cloudy	
Fort Davis, Texas	25.26	641.6	30.22	767.6	67	19.4	33	W	8	3.6		0	0			0	0	Clear	
Fort Elliott, Texas	27.29	693.2	30.36	771.1	66	18.9	69	Calm	0	0		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.48	748.8	30.01	762.2	77	25.0	70	SE	4	1.8		0	0			0	0	Clear	
Fort Grant, Arizona	25.25	641.3	30.05	763.3	70	21.1	21	N	5	2.2		2cs	0			0	0	Clear	
Fort Griffin, Texas	28.76	730.5	29.98	761.5	76.2	24.6	64	Calm	0	0		0	0			0	0	Clear	
Fort Keogh, Montana	27.60	701.0	30.01	762.2	59	15.0	56	SE	3	1.3		5c	0			0	0	Fair	
Fort Macon, North Carolina	30.01	762.2	30.02	762.5	75	23.9	90	SW	14	6.3		2c	5ks	SW	Calm	0	0	Fair	
Fort McKavett, Texas	27.80	706.1	29.66	753.4	70	21.1	80	S	5	2.2		0	0			0	0	Clear	
Fort Missoula, Montana	26.68	677.7	30.06	763.5	52	11.1	100	Calm	0	0			10n			0.40	10.2	Heavy rain	
Fort St. Michaels	29.77	756.1	29.80	756.9	38	3.3	100	S	27	12.1			10n		S	0.12	3.0		
Fort Shaw, Montana	26.34	669.0	29.79	756.7	56	13.3	69	W	2	0.9		8cs	0	W		Inap.	Inap.	Cloudy.	
Fort Sill, Indian Territory	28.80	731.5	30.02	762.5	72	22.2	76	S	2	0.9		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.21	716.5	29.99	761.7	58	14.4	82	W	2	0.9		0	0			0	0	Clear	
Fort Verde, Arizona					60	15.6	24	S			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.34	719.8	29.85	758.2	71	21.7	85	Calm	0	0		0	0			0	0	Clear	
Galveston, Texas	30.04	763.0	30.08	764.0	81	27.2	78	S	4	1.8		2k	0	SW		0	0	Clear	
Grand Haven, Michigan	29.27	743.4	29.92	760.0	62	16.7	72	W	6	2.7		0	0			0	0	Clear	
Hatteras, North Carolina	29.99	761.7	30.01	762.2	71	21.7	90	S	11	4.9		0	2s			0.02	0.5	Clear	
Helena, Montana	25.76	654.3	29.96	761.0	54	12.2	74	S	2	0.9		2c	0	Calm		0	0	Fair	
Henrietta, Texas	29.01	736.8	29.89	759.2	77	25.0	77	SE	4	1.8		0	0			0	0	Clear	
Indianapolis, Indiana	29.23	742.4	30.00	762.0	71.5	21.9	69	W	1	0.4		0	0			Inap.	Inap.	Clear	
Indianola, Texas	30.04	763.0	30.07	763.8	78.8	26.0	82	SE	6	2.7		1k	1ks	S	S	0	0	Clear	
Jacksboro, Texas	28.89	733.8	29.97	761.2	76	24.4	73	SW	6	2.7		0	0			0	0	Clear	
Jacksonville, Florida	30.05	763.3	30.07	763.8	76	24.4	77	N	6	2.7		0	0			0	0	Clear	
Keokuk, Iowa	29.38	746.2	30.00	762.0	72.2	22.3	71	NE	2	0.9		2k	0	NW		0	0	Fair	
Key West, Florida	29.99	761.7	30.02	762.5	81.2	27.3	78	E	7	3.1			10s		E	0.13	3.3	Cloudy	
Kittyhawk, North Carolina	29.98	761.5	30.00	762.0	75	23.9	77	SW	17	7.6		2ck	0			0	0	Fair	
Knoxville, Tennessee	29.12	739.6	30.12	765.0	65.8	18.8	96	SW	10	4.5			10n		SW	0.91	23.1	Light rain	
La Crosse, Wisconsin	29.21	741.9	29.93	760.2	63.5	17.5	72	SW	8	3.6		0	5s		S	0	0	Fair	
La Mesilla, New Mexico	26.09	662.7	30.24	768.1	62.5	16.9	52	Calm	0	0		1c	0			0	0	Clear	
Laredo, Texas	29.56	750.8	29.89	759.2	79	26.1	82	SE	4	1.8		0	0			0	0	Clear	
Leavenworth, Kansas	29.13	739.9	30.00	762.0	73	22.8	76	Calm	0	0		0	0			0	0	Clear	
Lewiston, Idaho	29.13	739.9	29.96	761.0	55	12.8	87	NE	1	0.4		0	5s		NE	0.11	2.8	Fair	
Little Rock, Arkansas	29.73	755.1	30.04	763.0	74	23.3	90	SW	2	0.9		0	0			0	0	Clear	
Los Angeles, California	29.56	750.8	29.93	760.2	60.1	15.6	82	SW	1	0.4			10s		Calm	0	0	Cloudy	
Louisville, Kentucky	29.46	748.3	30.01	762.2	72.5	22.5	80	E	4	1.8		0	Sk			0.15	3.8	Clear	
Lynchburg, Virginia	29.27	743.4	29.94	760.5	73	22.8	76	NW	1	0.4		0	0			0.25	6.3	Clear	
Madison, Wisconsin	28.96	735.6	29.94	760.5	63	17.2	78	NW	12	5.4		1cs	0	NW		0	0	Clear	
Marquette, Michigan	29.11	739.4	29.82	757.4	66	18.9	64	W	14	6.3		5k	0	W		0.67	17.0	Fair	
Mason, Texas	28.44	722.4	30.14	765.5	73	22.8	81	S	2	0.9		0	0			0	0	Clear	
Memphis, Tennessee	29.74	755.4	30.08	764.0	81	27.2	78	Calm	0	0		2cs	0	W		0	0	Clear	
Milwaukee, Wisconsin	29.22	742.2	29.95	760.7	64	17.8	73	W	11	4.9		1ck	0	W		0	0	Clear	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.00	762.0	30.07	763.8	81	27.2	87	NW	2	0.9		0	Hz			0	0	Clear	
Montgomery, Alabama	29.86	758.4	30.08	764.0	78	25 6	82	E	1	0.4		0	Hz			0	0	Clear	
Moorhead, Minnesota	29.01	736.8	29.97	761.2	60.1	15.6	77	W	6	2.7		0	0			0	0	Clear	
Morgantown, W, Virginia	28.96	735.6	29.86	758.4	73	22.8	81	SW	4	1.8		0	8ks		W	0.57	14.5	Fair	
Mt. Washington, N. H.	23.78	604.0	29.81	757.2	53.8	12.1	73	NW	10	4.5		8o	2s;sk	Calm	Calm	0	0	Fair	
Nashville, Tennessee	29.53	750.0	30.05	763.3	77.8	25.4	72	S	6	2.7		5cs	5ks	S	S	0	0	Cloudy	
New Haven, Connecticut	29.81	757.2	29.92	760.0	56	13.3	94	S	5	2.2			10s;fg			0	0	Cloudy	
New London, Connecticut	29.91	759.7	29.96	761.0	56	13.3	100	NW	4	1.8			Fg			0.03	0.8	Dense fog	
New Orleans, Louisiana	30.00	762.0	30.05	763.3	80.5	26.9	75	SW	6	2.7		1c	Hz			0	0	Clear	
Newport, Rhode Island	29.88	758.9	29.92	760.0	57.0	13.9	94	SW	6	2.7			10s		SW	0.03	0.8	Cloudy	
New River, N. Carolina																			
New Shoreham, Rhode I'd	29.90	759.4	29.92	760.0	55.5	13.1	100	SW	8	3.6			Fg		SW	0.04	1.0	Dense fog	
New York, New York	29.77	756.1	29.94	760.5	56	13.3	100	SE	8	3.6			10s;fg			0.38	9.7	Cloudy	
Norfolk, Virginia	29.92	760.0	29.96	761.0	72	22.2	80	SW	12	5.4		0	0			0	0	Clear	
North Platte, Nebraska	27.12	688.8	29.94	760.5	66	18.9	84	SE	8	3.6		5c	0	SE		0	0	Fair	
Olympia, Washington T'y	30.03	762.7	30.07	763.8	42.0	5.6	91	S	2	0.9		10ck	0	W		Inap.	Inap.	Cloudy	
Omaha, Nebraska	28.88	733.5	30.02	762.5	71	21.7	85	SW	1	0.4		0	2ks			0	0	Clear	
Oswego, New York	29.44	747.8	29.76	755.9	68.3	20.2	83	W	6	2.7		1c	0	W		0.80	20.3	Clear	
Pensacola, Florida	30.03	762.7	30.06	763.5	82	27.8	87	Calm	0	0		0	0			0	0	Clear	
Philadelphia, Pa	29.87	758.7	29.93	760.2	61	16.1	100	SW	8	3.6			10n			0.01	0.3	Light rain	
Phœnix, Arizona	28.74	730.0	30.49	774.4	66	18.9	54	E	3	1.3		0	0			0	0	Clear	
Pike's Peak, Colorado	18.09	459.5	30.30	769.6	35	1.7	27	SW	16	7.2		0	0			0	0	Clear	
Pioche, Nevada	24.01	609.8	29.86	758.4	64	17.8	36	S	4	1.8		10cs	0	SW		0	0	Cloudy	
Pittsburg, Pennsylvania	29.12	739.6	29.91	759.7	70	21.1	80	W	7	3.1		0	0			0.02	0.5	Clear	
Port Eads, Louisiana	30.08	764.0	30.09	764.3	81.2	27.3	83	W	6	2.7		0	Hz		Calm	0	0	Dense haze	
Port Huron, Michigan	29.17	740.9	29.83	757.7	65.6	18.7	74	W	12	5.4		2ck	0	W		0.07	1.8	Clear	
Portland, Maine	29.81	757.2	29.86	758.4	58	14.4	82	S	5	2.2			10s		Calm	0.03	0.8	Cloudy	
Portland, Oregon	30.03	762.7	30.10	764.5	52.4	11.3	69	NW	8	3.6			10ks		SW	0.16	4.1	Cloudy	
Portsmouth, N. Carolina					72	22.2	90	SW	21	9.4		10k	Fg	W	Calm	0	0	Cloudy	
Prescott, Arizona	24.77	629.1	29.84	757.9	54	12.2	32	SW	1	0.4		5cs	0	SW		0	0	Fair	
Punta Rassa, Florida	30.02	762.5	30.03	762.7	77	25.0	73	NE	8	3.6		8c	0	NW		0	0	Fair	
Red Bluff, California	29.48	748.8	29.81	757.2	68.0	20.0	51	N	5	2.2		0	1s		Calm	0	0	Clear	
Rio Grande City, Texas	29.83	757.7	30.04	763.0	77	25.0	86	E	5	2.2		0	0			0	0	Clear	
Rochester, New York	29.16	740.7	29.78	756.4	69	20.6	80	W	5	2.2		5cs	0	Calm		0.70	17.8	Fair	
Roseburg, Oregon	29.52	749.8	30.08	764.0	52.6	11.4	83	NW	2	0.9			10s			0.14	3.6	Cloudy	
Sacramento, California	29.79	756.7	29.86	758.4	61.4	16.3	77	SE	8	3.6		0	5s			0	0	Fair	
St. Louis, Missouri	29.46	748.3	30.04	763.0	74.1	23.4	68	E	8	3.6		1c	0	NW		0	0	Clear	
St. Paul, Minnesota	29.13	739.9	29.97	761.2	64	17.8	78	W	2	0.9		2k	0	W		Inap.	Inap.	Clear	
Salt Lake City, Utah	25.53	648.5	29.73	755.1	68	20.0	38	SE	3	1.3		8k	0	SW		0	0	Cloudy	
San Antonio, Texas	29.37	746.0	30.06	763.5	77.4	25.2	82	Calm	0	0		0	1ks		SE	0	0	Clear	
San Diego, California	29.81	757.2	29.88	758.9	61.5	16.4	82	W	3	1.3			10s			0	0	Cloudy	
Sandusky, Ohio	29.24	742.7	29.90	759.4	68	20.0	79	W	15	6.7		0	0			0	0	Clear	
Sandy Hook, New Jersey	29.91	759.7	29.94	760.5	57.2	14.0	94	SW	8	3.6			10n		S	0.07	1.8	Light rain	
San Francisco, California	29.88	758.9	29.94	760.5	55	12.8	96	SW	9	4.0			Fg			0	0	Dense fog	
Santa Fé, New Mexico	23.42	594.9	29.93	760.2	66	18.9	23	E	4	1.8		0	0			0	0	Clear	
Savannah, Georgia	29.99	761.7	30.08	764.0	78.5	25.8	67	SW	8	3.6		2cs	0			0	0	Fair	
Shreveport, Louisiana	29.87	758.7	30.10	764.5	77.6	25.3	85	SW	3	1.3		0	Hz			0	0	Clear	
Silver City, New Mexico	24.33	618.0	29.79	756.7	55	12.8	12	N	1	0.4		2c	0	N		0	0	Clear	
Sitka Alaska																0	0		
Smithville, North Carolina	30.00	762.0	30.03	762.7	78	25.6	82	SW	12	5.4		2k	1ks	SW		0	0	Fair	
Spokane Falls, Wash. Ter.	27.93	709.4	29.89	759.2	52	11.1	86	N	3	1.3		10k	0	W		0	0	Cloudy	
Springfield, Illinois	29.39	746.5	30.05	763.3	71	21.7	73	S	2	0.9		0	1s		NW	0	0	Clear	
Springfield, Massachusetts	29.75	755.6	29.88	758.9	58.4	14.7	91	S	6	2.7			10s;fg		S	0	0	Cloudy	
Stockton, Texas	27.00	685.8	30.00	762.0	68.6	20.3	90	SE	16	7.2		0	0			0	0	Clear	
St. Vincent, Minnesota	29.16	740.7	30.00	762.0	52	11.1	86	NW	8	3.6		0	0			0.14	3.6	Clear	
Thatcher's Island, Mass	29.83	757.7	29.88	758.9	62.4	16.9	88	SW	5	2.2		0	0			0	0	Clear	
Toledo, Ohio	29.22	742.2	29.90	759.4	71	21.7	71	W	8	3.6		0	0			0.01	0.3	Clear	
Tucson, Arizona	27.46	697.5	29.75	755.6	65	18.3	26	SE	4	1.8		5c	0			0	0	Clear	
Umatilla, Oregon	29.66	753.4	30.08	763.5	53.5	11.9	83	NW	2	0.9		0	5s		S	0.01	0.3	Fair	
Uvalde, Texas	29.09	738.9	29.88	758.9	75	23.9	86	SE	4	1.8			8s		Calm	0	0	Cloudy	
Vicksburg, Mississippi	29.86	758.4	30.11	764.8	77	25.0	86	NW	2	0.9		Hz	0			0	0	Clear	
Visalia, California	29.46	748.3	29.82	757.4	64	17.8	48	NW	5	2.2		0	0			0	0	Clear	
Washington, D. C	29.81	757.2	29.92	760.0	66	18.9	95	S	6	2.7			10s			0	0	Threatening	
Wickenburg, Arizona					66	18.9	36	Calm			0	5cs	0			0	0	Fair	
Wilmington, N. Carolina	29.95	760.7	30.00	762.0	76	24.4	77	W	10	4.5		2k;hz	0	Calm		0	0	Fair	
Winnemucca, Nevada	25.54	648 7	29.75	755.6	56	13.3	46	SW	10	4.5		5ok	0	SW		0	0	Fair	
Wood's Holl, Mass	29.88	758.9	29.92	760.0	56	13.3	100	SW	12	5.4			Fg		SW	0.03	0.8	Dense fog	
Yankton, Dakota	28 72	729.5	29.98	761.5	65	18.3	58	N	6	2.7		0	0			0	0	Clear	
Yuma, Arizona	29.59	751.6	29.73	755.1	75.7	24.3	52	W	1	0.4		8ck	0	SW		0	0	Cloudy	
Sub-Series.																			
Bogota, U. S. Columbia	22.08	560.8			56.0	13.3	77	Calm	0	0		8ck	0			0.05	1.3	Cloudy	Thomas Herran.
Buff Bay Town, Jamaica	29.74	755.4	30.06	763.5	78	25.6	72	E				0	0						
Havana, Cuba, W. I	30.00	762.0	30.05	763.3	82	27.8	78	SE	2.4	1.1		8cs	4ks	Calm	NE	0	0	Fair	A. Van Caneghem, Ass't.
Kingston, Jamaica, W. I	29.94	760.5	29.95	760.7	82.3	27.9	70	N	1	0.4		10c;cs	0			0.12	3.0	Cloudy	Robert Johnstone.
Navassa, W. I	29.86	758.4	29.94	760.5	81	27.2	70	NE	13	5.8		Hz	2k		E	0	0	Fair	F. M. Everett.
Paramaribo, S. A	30.02	762.5	30.02	762.5	78	25.6	86	SE			2	5ck	5k	E		0.020	0.5	½ cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.39	746.5	29.94	760.5	78	25.6	89	Calm	0	0			10ks		Calm	0.65	16.5	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					75.2	24		W			1	0	7k		W	1.319	33.5		Earl Flint.
Santiago de Cuba, W. I																			Robert Mason.
St. Thomas, W. I																			G. O. Gyllich.
York Factory, B. A	30.13	765.3	30.18	766.6	28.0	— 2.2	94	NE	8	3.6		4k	6s	NW	NE	0.40	10.2	Raining	J. Fortescue & W Wood.

BRITISH NAVAL SERIES.

Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																			Comm. A. J. Errington.
H M. S. Alert, Thursday Island, Oceania	30.00	762.0	77	25.0	77	SE			2		8							D. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, N. 38° 02′, E. 20° 51′	30.19	766.8	69	20.6	70	NNW			3-4		3					2	NNW	D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe
H. M. S. Arab, N. 13° 03′, E. 45° 59′	29.76	755.9	88	31.1	75	SW			2		0					4	S	Blue sky	Comm. R. W. Stopford.
H. M. S. Bacchante, S. 36° 43′, E. 128° 20′	30.09	764.3	57	13.9		SW			4-6		6	SW				6	SW	D. clouds.	Capt. Lord C. Scott.
H. M. S. Beacon, N. 24° 47′, E. 66° 59′	29.54	750.3	83	28.3	87	WSW			3-4		5	SW						Misty	Comm. G. W. Hand.
H. M. S. Bittern, Varna, Bosphorus			69	20.6		Calm			0		8	S						D. clouds	Capt. E. B. Pusey.
H. M. S. Blanche, N. 14° 36′, W. 61° 26′	29.96	761.0	80	26.7	91	ESE			4-5		10					3	SE	Raining	Capt. C. G. F. Knowles.
H. M. S. Boadicea, St. Helena Island, Africa	30.07	763.8	77	25.0	69	SSE			1-3		2	SSE						D. clouds	Com. F. W. Richards.
H. M. S. Champion, Monte Video, Uruguay.	30.15	765.8	59	15.0	87	NW			2		7	Calm						D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 39° 04′, E. 119° 51′	29.48	748.8	65	18.3	89	SW			3		1							Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, Cagliari, Sardinia	30.11	764.8	73	22.8		SSE			1		1	ESE						Blue sky	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, N. 33° 06′, W. 25° 02′	30.21	767.3	70	21.1	79	NW			1		9					3	NW	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.27	768.8	65	18.3		Calm			0		2	WNW						Misty	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.14	765.5	80	26.7	89	SE			3-4		3	SE						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 49° 09′, W. 55° 16′	29.91	759.7	59.5	15.3	73	SSW			2-3		0							Blue sky	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 7° 13′, E. 72° 23′	29.93	760.2	80	26.7		ESE			1-2		6							D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 11° 40′, E. 96° 20′	29.85	758.2	80	26.7		ESE			3		7	ESE				5	S	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, N. 7° 10′, E. 171° 20′	29.92	760.0	81	27.2	83	ENE			1-2		10	SW						Showery	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Tamatave, Madagascar.	30.24	768.1	75	23.9	68	SE			4-5		5	ESE				1	SE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Jackson's Arm, N. F.	29.91	759.7	65	18.3		W			1		3	W						D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn N. 12° 47′, E. 44° 58′	29.71	754.6	88	31.1	65	S			2		2							D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo N. 20° 42′, W. 83° 41′	30.01	762.2	84	28.9	87	NE			1-2		2	NE				2	E	D. clouds	Comm. R. N. Custance.
H M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, VancouverI'd.	30.01	762.2	48	8.9	77	Calm			0		9							Showery	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.22	742.2	40	4.4	80	WNW			3		3							D. clouds	Capt. L. F. Jones.
H. M. S. Griffon, N. 25° 12′, W. 77° 55′	30.03	764.7	84	28.9	67	ENE			2		3	ENE						D. clouds	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Malta, Mediterranean	30.21	767.3	77	25.0	65	NNW			1-2		0							Blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.02	762.5	63	17.2		Calm			0		6	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.73	755.1	76	24.4		WSW			3-4		0							Blue sky	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	29.72	754.9	82.2	27.9	87	SSW			1		10							Overcast	Capt. A. Carpenter.
H. M. S. Midge, N. 23° 21′, E. 117° 38′	29.81	757.2				SW			3		7	SW				3	SW	D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. M. S. Modeste, S. 23° 00′ E. 59° 20′	30.29	769.4	72	22.2	80	SSE			4		7	NNW				4	SSE	Squally	Capt. J. G. Mead.
H. M. S. Monarch, Tunis, Tunis, N. Africa	30.09	764.3	75	23.9	75	SE			2-5		1	SSE						Blue sky	Capt. G. Tryon, C. B

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, N. 5° 16′, E. 115° 15′			84.5	29.2		Calm			0		10							Overcast	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.87	758.7	56	13.3	100	Calm			0									Foggy	Capt. E. B. Drummond.
H. M. S. Orontes, S. 3° 21′, E. 2° 07′ .....*†	30.00	762.0	74.5	23.6	83	ESE			2-3		1	ENE				1	S	Blue sky	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.89	759.2	79	26.1	95	Calm			0		10					2	SE	Overcast	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, N. 17° 11′, W. 76° 13′	29.89	759.2	83	28.3	79	ENE			5		4					3	ENE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.78	756.4	80	26.7		S			4		10							D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 48° 26′, W. 123° 27′	30.05	763.3	47	8.3		WSW			1		6							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	30.13	765.3	79.3	26.3	73	S			2		8					Sm'h		D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, S. 8° 40′, E. 42° 35′	29.67	753.6	78	25.6	82	SE			3		1					3	SSE	Blue sky	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 44° 30′, W. 8° 50′	30.11	764.8	66	18.9	78	Calm			0		5					2	W	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, S. 25° 23′, W. 7° 48′	29.94	760.5	58	14.4	81	N			2		10	Calm						Overcast	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.			80	26.7		NE			1		3							D. clouds	Com. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	29.97	761.2	57	13.9	57	NW			1-3		0							Blue sky	Com. J. C. Wilson, A. D. C.
H. M. S. Woodlark, N. 29° 33′, E. 49° 00′	29.74	755.4	88.5	31.4	59	N			3							4	NW	Misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candid dos Reis, Comd't.
Quanza, Santiago, Cape Verd Id's	29.99	761.7	83.3	28.5	52	NE			3		0					2	NE	Blue sky	Carlos M. de Silva Costa, Comd't
Rio Lima																			S. C da Silva Costa, Comd't.
Sado																			G. A de Brito Capello, Comd't.
Tamega, Macao, China	29.78	756.3	80.6	27.0	88	S			1		5		S	10 hours				Raining	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of R. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga N. 32° 13′, W. 8° 51′	29.97	761.3	71.1	21.7	78	N			2		1							Blue sky	Capt. M. von Krusenstiern s.
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.12	765.0	84	28.9	79	NW	1	0.4			0			0	0			Clear	
N. Yard, Portsmouth, N. H	29.85	758.4	57	13.9	87	SE	6	2.7		10c	0	SE		0	0			Foggy	
Naval Hospital, Yokahama, Japan	29.51	749.5	75.5	24.2	77	SW			6		0			0	0			Clear.	
Adams N. 9° 32′, W. 84° 36′	29.70	754.4	81	27.2	95	NNW			1		8		SW			Long	W	Cloudy	
Alaska, Callao, Peru	29.92	760.0	64	17.8	89	NE			1		10			0	0	Sm'h		Cloudy	
Alert, Yokohama, Japan	29.53	750.0	77	25.0	73	SW			6		0					Sm'h		Clear	
Alliance, Norfolk, Va	29.87	758.7	71	21.7	90	N			2		2		SSE	0	0			Clear	
Ashuelot, Kobe, Japan	29.76	755.9	74	23.3	95	SW			2		5		SW			Mod.	SW	Fair	
Colorado, New York, N. Y	29.94	760.5	57	13.9	94	SE	10	4.5			10		SE	0.02	0.5			Rainy	
Constitution, Newport, R. I	29.85	758.4	56	13.3	87	SW			4		10							Misty	
Franklin, Norfolk, Va	29.91	759.7	70	21.1	95	SW	14.4	6.4			0			0	0			Clear	
Galena. N. 37° 42′, W. 9° 05′	29.98	761.5	67	19.4	89	NNW			3		0					Mod	NW	Clear	
Independence, N. Yard, Mare I'd, Cal	29.95	760.7	75	23.9	68	SW	2.4	1.1			2		SW	0	0			Fair	
Jamestown, Sitka, Alaska	29.85	758.2	53	11.7	100	Calm			0		10			0	0			Cloudy	
Kearsarge. Norfolk, Va	29.98	761.5	70	21.1	90	SSW			2		2		S;W			Sm'h		Fair	
Lackawanna. S. 17° 08′, W. 150° 25′	30.21	767.3	80	25.7	91	ENE			3		8		NE			Sm'h	NE	Fair	
Marion, Montevideo, Uruguay	30.09	764.3	55	12.8	93	N			2		10		Calm			Sm'h		Cloudy	
Michigan, Cleveland, Ohio	30.02	762.5	71	21.7	80	NW			4		0							Clear.	
Minnesota, Newport, R. I	29.92	760.0	62	16.7	94	SW			3		10					Sm'h		Misty	
Monocacy, Yokohama, Japan	29.68	753.9	77	25.0	85	SW			4		2							Clear	
New Hampshire. Norfolk, Va	29.93	760.2	70	21.1	90	S	14	6.3			5		S	0	0			Fair	
Nipsic. N. 41° 45′, W. 9° 49′	30.04	763.0	63	17.2	89	NNW			4		2					Long	N	D. clouds	
Onward, Callao, Peru †	29.95	760.7	64	17.8	89	Calm			0		10					Long	W	Cloudy	
Palos, Nagasaki, Japan	29.72	754.9	71	21.7	95	SW			1		10							Rainy	
Passaic, Washington, D. C	29.94	760.5	67	19.4	89	S			1		10							Cloudy	
Pensacola. Mare Isl'd, Cal	29.92	760.0	58	14.4	88	S			3		5			0	0	Sm'h		Clear	
Portsmouth. Newport, R. I	29.94	760.5	56	13.3	?	SW			3		10		SW					Foggy	
Powhatan. Newport, R. I	29.93	760.2	58	14.4	94	SW			2		10							Misty	
Quinnebaug, Tompkinsville, N. Y	29.92	760.0	59	15.0	88	SW			1		10		S			Sm'h		Cloudy	
Ranger, N. 23° 17′, W. 108° 21′	29.78	755.4	81	27.2	79	SE			2		2		Calm	0	0	Sm'h		Fair	
Richmond, Nagasaki, Japan	29.75	755.6	73	22.8	90	SW			2		10			0.65	16.5			Rainy	
Saratoga, Newport, R. I	29.93	760.2	55	13.3	100	SSW			1–2		10			Light				Misty	
Shenandoah, Montevideo, Uruguay	30.31	769.9	54	12.2	93	N			2		10		N			Sm'h		Cloudy	
St. Louis, League Island, Pa	29.50	749.3	64	17.8	89	S	4	1.8			10		S					Rainy	
Swatara. Shangbai, China	29.75	755.6	75	23.9	77	SW			4		8		Calm					D. clouds	
Tennessee, Navy Yard, N. Y	29.96	731.0	60	15.6	94	SSW	5	2.2			10		SSW	0.19	4.8	Sm'h		Misty	
Ticonderoga, N. 51° 23′, W. 47° 40′	29.54	750.3	40	4.4	100	W			4		10		Calm	0.032	0.8	Cross	NNW; W	Cloudy	
Trenton, Marseilles, France	30.01	762.2	69	20.6	75	W			3		0			0	0	Sm'h		Hazy	
Vandalia. Huntington, Long I'd	29.93	760.2	58	14.4	91	SSW			3		10		Calm					Raining	
Wabash, Boston, Massachusetts	29.94	760.5	65	18.3	78	S	6	2.7			10		S	0.01	0.3			Hazy	
Wachusetts, N. Yard, Mare I'd, Cal	29.89	759.2	62	16.7	88	SW			3		5		S	0	0			Fair	
Yantic, Key West, Florida	29.95	760.7	80	25.7	87	E			2		2							Clear	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 28° 34′, W. 123° 57′	30.05	763.3	63.5	17.5	80	NNE			3		10							Overcast	Capt. E. J. Molony. Capt. H. Youlden.
Chin Yang																			
S. S. Cipero, N. 51° 46′, W. 15° 08′	29.66	753.4	54.1	12.3	87	SSW			6		5					7	WSW	D. clouds	W. N. Lailey.
City of Agra, N. 8° 00′, W. 24° 33′	30.00	762.0	79.5	26.4	87	N			4		10							Overcast	Capt. T. Young. Capt. W. Scott.
Barque Commewyne																			
Barque Coppename, N. 37° 20′, W. 18° 29′	30.20	767.1	64.5	18.1	78	WSW			3		8							D. clouds	Capt. Jas. Buchan. Capt. H. Y. Murdock.
Denbighshire																			Capt. H. Spalding.
Barque Dochra																			Capt. J. E. C. Patterson.
Ship Ellen Stuart																			Capt. A. Watson.
Barque Elissa																			Capt. A. Campbell.
S. S. Ethiopia																			Capt. J. Kidder.
S. S. Fleurs Castle																			Capt. H. Park.
Barque Gem																			Capt. W. Waring.
S. S. Gordon Castle																			Capt. W. Symington.
S. S. Han Kow																			Capt. H. H. Williams.
Barque Harvest Moon																			Capt. Jas. Campbell.
Barquentine Hope																			Capt W. Randall.
Ship Iron Cross																			Capt. A. Kellett.
S. S. Kangaroo																			Capt. Alex. Wilson.
Kryolith																			Capt. G. H. Jones.
S. S. Lamperts																			Capt W. P. Hughes.
Laomene																			Capt. J. Raeburn, R. N.R.
Ship Lochee																			Capt. C. A. F. Powell.
S. S. Lusitania																			Capt. W. Ellery.
Majestic																			Capt. H. W. Dyke.
Barque Markland																			Capt. E. W. Turner.
Barque Mertola																			
Naiad, N. 49° 31′, W. 4° 54′	30.05	763.3	56.5	13.6	65	WSW			1		8							D. clouds	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 31° 44′, W. 43° 29′	30.37	771.4	75	23.9	77	NNW			2		7							D. clouds	Capt. M. Parry.
Sierra Estrella, N. 21° 42′, W. 24° 05′	30.11	764.8	70.8	21.6	79	NNE			4		5							Misty	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 36° 02′, E. 14° 12′	30.13	765.3	65.5	18.6	89	WNW			4		3							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 47° 03′, W. 70° 32′	29.76	755.9				WNW			1		8		NW					Hazy	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia, ‡ N. 48° 26′, W. 30° 42′	29.81	757.2	59	15.0		NW			3		10		NW	Mist		Con.		Overcast	Capt. W. H. P. Hains.
S. S. Scythia, N. 40° 49′, W. 67° 49′	29.75	755.6	55	12.8	100	W			2		10		SW	Showers		Sm'h	SE	Foggy	Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic, ‡ N. 43° 21′, W. 48° 58′	30.16	766.1	51	10.6	93	Calm			0					0	0	Sm'h		Foggy	Capt. H. Parsell.
S. S. Britannic, N. 46° 47′, W. 40° 05′ †	29.97	761.2	56	13.3	?	WNW			6		2		NW			H'vy	WNW	Raining	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic																			Capt. Ch. W. Kennedy
S. S. Republic, N. 46° 05′, W. 39° 57′ †	30.12	765.0	61	16.1	83	W			5		5		NW	0	0	Mod.	NNW	Fair	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig, N. 40° 50′, W. 54° 48′	30.14	765.5	75.0	23.9	79	S			1		8		S			Sm'h		Cloudy	Capt. C. Phole.
S. S. Hermann, N. 48° 44′, W. 30° 15′	29.76	755.9	51.8	11.0		E			8		10		SW	0	0	Light	SW	Overcast	Capt. H. Baur.
S. S. Hohenzollern, ‡ N. 40° 24′, W. 64° 07′	29.96	761.0	65.8	18.8		WSW			6		8		WSW	0	0	H'vy	WSW	Hazy	
S. S. Köln																			Capt. Th. Jüngst.
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Strassburg, N. 49° 51′, W. 13° 21′	29.77	756.1	61.7	16.5		SSW			3		10		SSW	3 hours		Mod.	S	Hazy	Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England	29.90	759.4	66	18.9	84	S			1		2		S					Clear	Capt. J. W. Shackford.
S. S. Indiana, Philadelphia, Pa. †	29.96	761.0	63	17.2	88	NW			4		8		NW	0	0			Cloudy	Capt. R. W. Sargent.
S. S. Ohio																			Wm. Shackford, Chief Off'r
S. S. Pennsylvania, N. 39° 53′, W. 58° 22′ †	30.13	765.3	74	23.3	95	SSW			3		5		SW			Sm'h	S	Fair	Capt. Geo H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 24° 12′, W. 110° 00′ †	29.63	752.6	83	28.3	67	SE			1		8		NE	0	0	Sm'h		Cloudy	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 40° 16′, W. 134° 09′ †	30.36	771.1	62	16.7	66	NNW			4		8		NNW	0	0	Mod.	NW	Cloudy	Capt. H. Davison.
S. S. Gaelic, N. 43° 58′, E. 156° 43′ †	29.89	759.2	43	6.1	92	NNE			3		10		NNE			Sl't	SW	Foggy	Capt. W. H. Kidley.
S. S. Oceanic, N. 22° 29′, E. 115° 08′	30.07	763.8	82	27.8	82	SW			4		6?		S					Cloudy?	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, N. 38° 35′, W. 123° 55′ †	29.99	761.7	55.5	13.1	90	NW			4		5		NW			Mod.	NW	Fair	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, N. 37° 47′, W. 122° 22′ †	29.93	760.2	59	15.0	100	W			2		Fg			0	0	Sm'h		Foggy	Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, N. 38° 13′, W. 123° 16′ †	29.92	760.0	54	12.2	93	NW			5		0					Mod.	NW	Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 34° 15′, W. 119° 15′ †	29.92	760.0	58	14.4	82	SW			6		8		SW			R'gh	SW	Cloudy	Geo. H. Harrison.
S. S. Senator, San Francisco, Cal. †	29.85	758.4	54	12.2	93	W			1		10							Misty	Capt. Thos. Wallace.
S. S. State of California, Portland, Oregon †	30.06	763.5	49	9.4	100	NW			3		5		W					Fair	Capt. G. Debney.
S. S. Victoria, N. 37° 49′, W. 122° 30′ †	29.99	761.7	54	12.2	86	SW			2		2					Light	SW	Clear	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia, N. 36° 48′ W. 123° 55′	30.00	762.0	66	18.9	94	NNW			4		10		NW			Long	NW	Foggy	A. Bannerman, 2d Officer.
S. S. City of New York, Sydney, N. S. W. †	29.95	760.7	60	15.6	81	NW			2		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 9° 09′, W. 84° 55′ †	29.92	760.0	79	25 1	86	W			2		10n;s		NW	5 hours		Mod.	SW	Cloudy	Capt. D. S. Austin.
S. S. City of Peking																			Capt. G. G. Berry.
S. S. City of Sidney, N. 13° 21′, W. 161° 13′ *†	29.97	761.2	78	25.6	72	ENE			5		8		ENE	0	0	H'vy	ENE	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 32° 50′, E. 134° 40′ †	29.89	759.2	77	25.0	81	SW			6		5		SW			R'gh	SW	Fair	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 30° 46′, W. 116° 40′ †	29.93	760.2	62	16.7	83	NW			5		10		NW	0	0	Mod.	NW	Hazy	Capt. R. R. Searle.
S. S. Granada, N. 15° 20′, W. 96° 00′ †	29.86	758.4	86	30.0	88	NE			3		2		NE	2 hours		Mod.	NE	Clear	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. W.	30.31	769.9	62	16.7	58	E			5		0							Clear	
RED STAR LINE. *Jas. A. Wright President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, N. 40° 16′, W. 52° 02′ †	30.12	765.0	79	26.1	82	Calm			0		0			0	0	Sm'h		Clear	A. Feddersen, 2d Officer.
S. S. Rhyniand, N 40° 15′, W. 58° 16′ †	30.30	769.6	72	22.2	90	S			5		10		S	0.2	5.	Mod.	SSW	Cloudy	Capt. Wm. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, N. 40° 43′, W. 71° 41′	29.94	760.5	57	13.9	81	WSW	4	1.8			Fg			0.06	1.5		SSE	Foggy	Capt J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, Arroyo, Porto Rico †	30.05	763.3	84	28.9		ENE			5		8		E	Showers		Mod.		Stormy	Capt. W H. Champlin.
U. S. F. C. S. Fish Hawk, Point Lookout, Md. †	29.92	760.0	68	20.0	95	SSE	8	3.6		2c	8n			0	0			Fine	
Bark Sunbeam, N. 38° 17′, W. 10° 10′ †	30.04	763.0	67	19.4	84	NNW			6		2		N	0	0	Sm'h		Fair	Capt. Jos. Hand.

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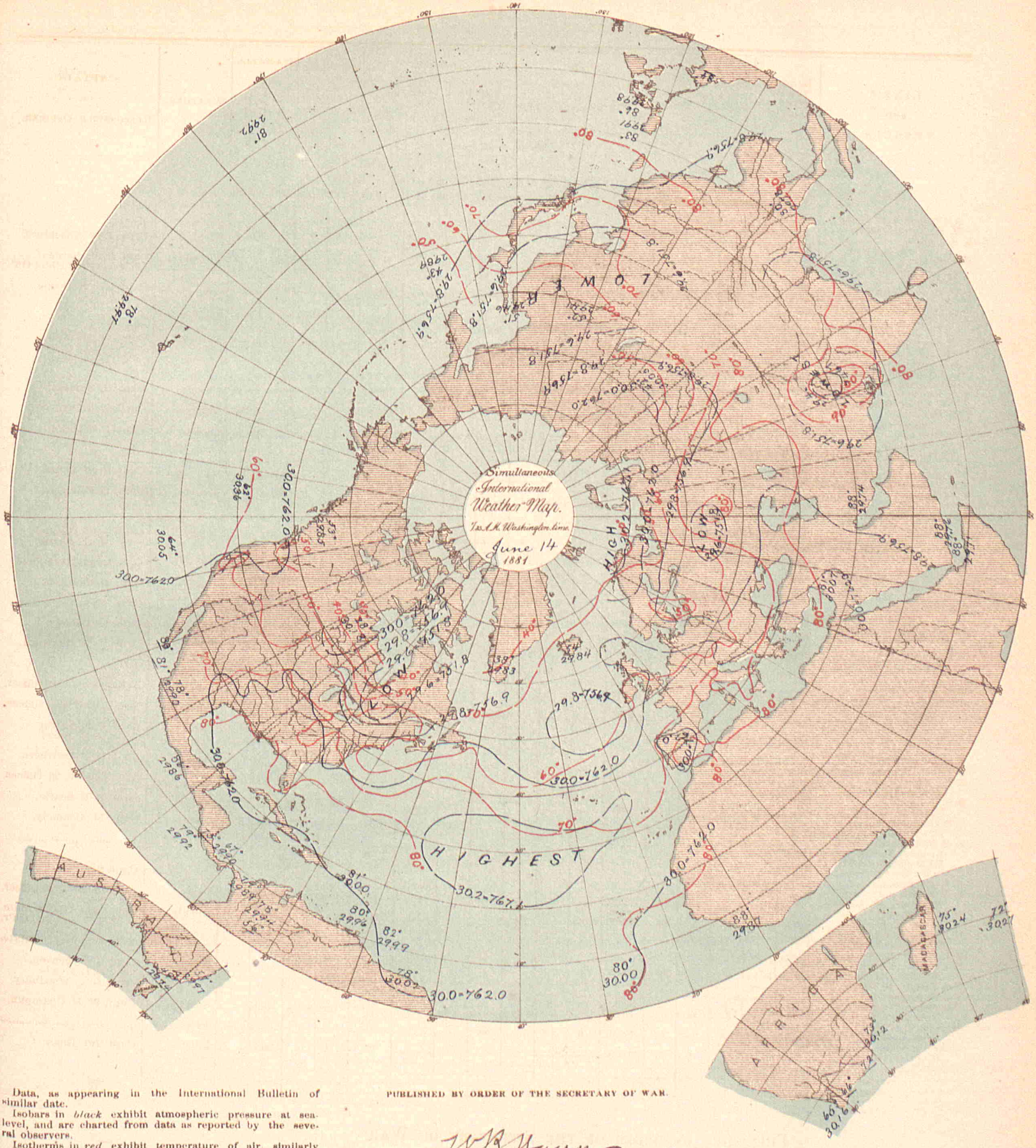
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 15, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours‡			29.97	761.1	75.7	24.3	80	W			1		0			0	0	Clear	Raynard.
Algiers‡			30.03	762.7	74.5	23.6	74	NE			4		0			0	0	Clear	Nicolas.
La Calle‡			30.02	762.6	66.9	19.4	83	E			4		6			0	0	Cloudy	Fonfrède.
Tunis‡			29.99	761.8															Jacques.
Sfax‡			30.07	763.7															Gau.
Saida‡			30.02	762.6	72.0	22.2	71	NW			4		4			0	0	Cloudy	Dumas.
Tebessa‡			30.04	763.1	88.9	31.6	16	W			6		8			0	0	Very cloudy	Watrin.
Geriville‡					77.0	25.0	39	SSE			8		0			0	0	Clear	Lonchamp.
Laghouat‡			30.08	764.0	96.4	35.8	14	SSW			6		4			0	0	Cloudy	Herbin.
Biskra‡			30.08	764.0	95.7	35.4	70	SE			1		8			0	0	Cloudy	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.84	757.9	29.93	760.2	46.0	7.8	83	W	13	5.8			7			0.24	6.1	Squally	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.43	747.4	29.97	761.2	62 6	17.0	59	SE			1		3			0.031	0 8		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.19	741.3	29.95	760.6	56.8	13.8	60	W	8.7	3.9			10			0.150	3.8		Dr. Wierzbicki.
Eperies	29.03	737.3	29.89	759.2	60.1	15.6	75	Calm			0		10n			0	0		Julius Mikolik.
Gratz‡	28.71	729.3	29.94	760.4	65.1	18.4	64	SSW			3		7			0.106	2.7		Andreas Rospini.
Hermannstadt	28.54	725.0	29.93	760.2	68.0	20.0	38	NW			3		6			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.63	727.3	29.95	760.7	61.2	16.2	72	SW			1		8			0.236	6.0		The Staff.
Lemberg	28.91	734.2	29.88	758.9	59.0	15.0	69	NW			2		10			0.051	1.3		Dr. T. Stanecki.
Pola	29.88	759.0	29.99	761.8	66.6	19.2	73	NNW			1		2			0	0		I. R. HydrographicOffice.
Szathmar	29.51	749.5	29.97	761.2	57.9	14.4	92	SW			5		10			0.165	4.2		Beicht Peter, S. J.
Szegedin	29.67	753.6	29.94	760.5	64.4	18.0	76	S			1		8			0	0		Karl Stancel.
Trieste	29.89	759.2	29.99	761.8	69.8	21.0	66	NW			1		2			0	0		Secco.
Vienna	29.27	743.5	29.98	761.4	61.9	16.6	5	NW			1		10			0.047	1.2		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter Printed June 15, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction; Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.86	758.4	29.96	761.0	50.0	10.0	74	SSE	16	7.2			10			0.015	0.4	Overcast	W. Boswell.
Armagh, Observatory	29.64	752.8	29.86	758.4				SSW	3	1.3			10					Raining	S. Call.
Bidston, Liverpool Obs'y			29.92	760.0	62.0	16.7	65	SSE	11	4.9			10					Overcast	John Hartnup.
Bolton, Sharples																			Thomas Mackereth.
Bradford, Yorkshire	29.52	749.8	29.92	760.0	59.8	15.4	68	SW			1		10			0.02	0.5	Overcast	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.94	760.5	29.97	761.2	85	29.4	76	NE			1		6					Gloomy	Corpl.J.Surgener,A.H.C.
Cardington																			John McLaren.
Chatham, School M. E.	29.85	758.2	29.98	761.5	66.2	19.0	62	S			1		9					Gloomy	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.73	755.1	29.95	760.7	60.6	15.9	88	S			2		10					Foggy	The Staff.
Fort Napier, Natal	27.86	707.6	30.07	763.8	73.0	22.8	81	NE			1		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	88	31.1	84	SW			1		2					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			29.79	756.7	60	15.6	71	N			2		10					Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.00	762.0	30.05	763.3	75.6	24.2	77	E			1		0					Blue sky	2nd Cpl. C. Baldwin.
Glasgow, Observatory	29.70	754.4	29.90	759.4	55.5	13.1	79	ENE			5		10					Overcast	Harry Urquhart.
Greenwich, Royal Obs'y	29.80	756.9	29.96	761.0	69.4	20.8	54	S			1		9					D. clouds	The Staff.
Guernsey	29.77	756.1	29.98	761.5	62	16.7	74	SE			1		3					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.94	760.5	29.98	761.5	66.2	19.0	59	SW	10	4.5			5					D. clouds	The Staff.
Leicester, Museum	29.68	753.9	29.92	760.0	67.5	19.7	54	S			1		8					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.93	760.2	30.01	762.2	75.4	24.1	75	S			2		0					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.98	761.5	30.03	762.7	86.0	30.0	78	E			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.43	747.5	29.93	760.2	68.2	20.1	58	WSW			2		9					D. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	29.74	755.4	29.97	761.2	65.5	18.6	61	Calm			0		7					D. clouds	The Staff.
Plymouth	29.89	759.2	29.96	761.0	59.0	15.0	91	S			1		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.97	761.2	49.7	9.8	80	ESE	16	7.2			10					Misty	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.90	759.4	29.96	761.0	77.4	25.2	63	SSW			1		1					Blue sky	Serg't W. H. Lyne.
Sheffield	29.66	753.4	29.93	760.2	66.1	18.9	74	SW			1		10			0.02	0.5	Overcast	W. F. Cooper.
Silloth Rectory	29.88	758.9	29.91	759.7	61.6	16.4	79	Calm			0		10			0.074	1.9	Overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.95	760.7	61.1	16.2	67	SSW	8	3.6			10					Misty	Rev. S. J. Perry.
Stratfield Turgiss	29.78	756.4	29.99	761.7	64.9	18.3	52	SW			3		8					D. clouds	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	29.93	760.2	29.94	760.5	62	16.7	83	S			4		7					Gloomy	W. Newcombe.
Valencia, Observatory	29.82	757.4	29.84	757.9	58.8	14.9	69	SW	10	4.5			9					Misty	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B					62.0	16.7		S	8	3.6			10n			Inap.	Inap.	Raining	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.59	751.6	29.63	752.6	59	15.0	90	S	10	4.5		5c	2s			0.56	14.2	Fair	H. J. Cundall, C. E.
Chatham, N. B.*	29.49	749.0	29.55	750.6	58	14.4	93	S	8	3.6			10n			0.11	2.8	Cloudy	G. A. Blair.
Chicontimi, Quebec					44.0	6.7		NW			6		10ks			0.01	0.3	Raining	Rev. V. A. Huart.
Cornwall, Ontario	29.74	755.4	29.93	760.2	52.4	11.3	74	NW			2	0	8s			0.117	3.0	D. clouds	James Smith, M. A
Dalhousie, N. B	29.50	749.3	29.53	750.0	63.5	17.5		SE			1					0	0	D. clouds	H. A. Johnson.
Father Point, Quebec*	29.55	750.6	29.57	751.1	50	10.0	76	NW	35	15.6		0	Sk			0.17	4.3	Smoky	J. McWilliams.
Fort Garry, Manitoba*	29.26	743.2	30.07	763.8	55	12.8	89	SE	10	4.5		5k	5ks	W	W	0	0	Cloudy	James Stewart.
Fredericton, N. B	29.54	750.3	29.60	751.8	60.0	15.6	85	SW	5	2.2		1ck	5s	W		0.070	1.8	Fair	Prof. Harrison.
Granton, Ontario	29.93	737.3	30.13	765.3	54.0	12.2	93	NW			1	0	0			Inap.	Inap.	Clear	James Grant.
Halifax, N. S.*	29.61	752.1	29.74	755.4	55	12.8	97	S	7	3.1			Fg			0.148	3.8	Foggy	A. Allison.
Hamilton, Ontario	29.70	754.4	30.08	764.0	59.7	15.4	88	SW			1	0	0			0	0	Clear	Geo. Dickson, B. A.
Kingston, Ontario*	29.65	753.1	29.99	761.7	55	12.8	67	NW	8	3.6		8k	0	NW		0	0	Fair	S. Woods, M. A.
Little Glace Bay, N. S	29.66	753.4	29.70	754.4	63.8	17.7	77	SW			4	8k	0	SW		0	0	Cloudy	C. H. Rigby.
Montreal, Quebec*	29.68	753.9	29.88	758.9	52	11.1	78	NW	12	5.4			10s		NW	0.13	3.3	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario	30.21	767.3	30.24	768.1	31.5	— 0.3	78	N			4		10n			0.63	16.0	Raining	J. R. Nason.
Parry Sound, Ontario*	29.45	748.0	30.14	765.5	49	9.4	71	N	15	6.7		0	0			0.10	2.5	Clear	Rev. R. Moseley.
Peterboro, Ontario	29.33	745.0	30.07	763.8	56.0	13.3	69	N			3	0	0			0	0	Clear	J. F. Jeffers, M. A.
Port Dover, Ontario	29.41	747.0	30.10	764.5	59	15.0	94	NW	8	3.6		0	0			0	0	Clear	H. Morgan.
Port Stanley, Ontario	29.46	748.3	30.09	764.3	58	14.4	82	NW	6	2.7		2k	0	NW		0.62	15.7	Clear	M. Payne.
Quebec, Quebec*	29.46	748.3	29.78	756.4	47	8.3	70	NW			6		10s		NW	0.01	0.3	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.61	752.1	30.08	764.0	49	9.4	57	N	8	3.6		0	0			0.08	2.0	Clear	W. H. McIntyre.
Saugeen, Ontario*	29.43	747.5	30.15	765.8	49	9.4	91	NE	19	8.5		8k	0			0	0	Cloudy	K. Stewart.
St. Andrews, N. B	29.58	751.3	29.63	752.6	52	11.1	99	Calm	0	0			Fg			0.06	1.5	Foggy	
St. John, N. B	29.48	748.8	29.64	752.8	48.0	8.9	100	SW	12	5.4			Fg			0.110	2.8	Dense fog	G. Murdock, C. E.
Stratford, Ontario	28.84	732.5	30.05	763.3	54.4	12.4	88	NW	7	3.1		0	0			0	0	Blue sky	C. J. Macgregor, M. A.
Sydney, C. B.*	29.71	754.6	29.75	755.6	57	13.9	94	S	7	3.1			10n			0.05	1.3	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.72	754.9	30.10	764.5	58	14.4	72	NW	12	5.4		2ck	5ks	NW		0	0	Cloudy	Magnetic Observatory
Windsor, N. S.	29.56	750.8	29.65	753.1	61.5	16.4	85	S	18	8.0			9n			0.53	13.5	Cloudy	
Woodstock, Ontario	29.05	737.9	30.09	764.3	59.1	15.1	74	NW	6	2.7		0	0			0	0	Blue sky	Prof. Wolverton.
Yarmouth, N. S.*	29.66	753.4	29.73	755.1	50	10.0	90	SW	8	3.6			Fg			0.06	1.5	Foggy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.89	759.2	30.13	765.3	71	21.7	75	SW	1	0.4		0	0			0	0	Fair	John Delany.
St. Pierre, N. F.			29.80	756.9	55.4	13.0		SW			1					1.42	36.1		N. F. Land, Comd't

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

Cape St. Francis Lt. House	30.08	764.0			74.0	23.3	53	NW	11.2	5.0		8cs	0			0	0	Hazy	John Duthie.
Cape Town, C. G. H. Obs'y.	30.08	764.0	30.12	765.0	52.2	11.2		NNW	8.8	3.9		4	5ks;s			0	0		The Staff, for D. Gill.
Worcester*†	29.08	738.6			72	22.2	48	NNW			1	0	2			0	0	Fine	C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.77	756.2	29.80	756.8	69.4	20.8	84	SE	4.3	1.9			10			0	0	Covered	M. Marc Dechevrens, S.J.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	25.22	666.0	29.94	760.5	66.6	19.2	97	SE			1	10ck;d	0			1.38	35.	Cloudy	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.92	760.0	29.97	761.2	50.0	10.0	82	NNW	13	6			10					Raining	Oversergent Fischer.
Fanöe	29.95	760.8	29.97	761.3	56.3	13.5	73	WNW			4		8						Overloerer Lauridsen.
Godthaab, Greenland	30.00	762.1	30.05	763.2	41.7	5.4	75	S			4		10						S. Kleinschmidt.
Stykkisholm, Iceland	29.89	759.2	29.93	760.3	53.6	12.0		SE			2		8						A. O. Thorlacius.
Thorshavn	29.99	761.7	30.02	762.6	48.2	9.0	74	SE	9	4			10						Overloerer Bergh.
Vestervig	29.87	758.7	29.97	761.1	53.2	11.8	85	Calm			0		10						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.36	745.8	29.98	761.6	74.8	23.8	49	SE			1	0	2nk			0	0	Slightly cl'dy	M. Labroue, Director.
Alençon Normal School	29.51	749.6	30.06	763.6	64.0	17.8	86	NW			1	0	2ks		NW	0.04	1.	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	29.74	755.3	29.99	761.7	65.1	18.4	63	N			1	0	k		N				M. Klein, Commandant.
Avignon, Normal School	29.91	759.6	29.98	761.6	82.4	28	41	N			1		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.42	747.3	29.96	760.9	72.3	22.4	49	W			1	0	8kn		W	0	0	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.72	755.0	29.98	761.6	69.3	20.7	50	ENE			1		8	W	S	0	0	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.12	739.6	29.94	760.4	71.8	22.1	49	SSW			1	c	0	W		0	0		M. Gobin, Director.
Bordeaux, Observatory	29.70	754.3	29.95	760.7	75.9	24.4	49	SE			1		10		WSW	0	0	Covered	M. Rayet, Director.
Bourges, Normal School	29.48	748.7	30.01	762.3	73.4	23	44	SW			1	0	k		SW	0	0		M. Postel, Director.
Brest, Naval Observatory	29.78	756.3	30.02	762.5	67.3	19.6	72	SSW			2		7		S	0	0		M. de Rermaree, Dir.
Caen, Normal School	29.93	760.1	29.99	761.8	65.3	18.5	66	NNW			1		5		W	0	0	Cloudy	M. Bétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.55	750.6	29.82	757.4	72.3	22.4	62	N			1		8		SE	0.079	2.0	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.47	748.4	29.97	761.1	66.6	19.2	72									0	0		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.63	727.3	29.93	760.3	74.1	23.4	45	ENE			1	0	5k			0	0	¼ covered	M. Allnard, Director.
Cluny, Normal School	29.14	740.2	29.97	761.2	74.8	23.8	57	SE			1		4		SE	0.386	9.8		M. de Villemontée, Dir.
Commercy, Normal School	29.12	739.7	29.98	761.4	69.8	21	50	NNE			3		8kn	NNE	NNE	0.008	0.2	Very cloudy	Dr. Coulet, Director.
Gap, Normal School	27.50	698.5	29.95	760.8	71.6	22	43	N			1		n		S	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.94	735.1	30.08	764.1	82.4	28.0	35	SW			1		2		N	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.22	742.3	29.95	760.9	76.1	24.5	45	WNW			1		ck	0		0	0		M. Ablard, Director.
Guéret, Normal School	28.41	721.7	29.95	760.6	71.6	22	43	SW			1		ck	0	NE	0	0		M. Rivoire, Director.
Lamballe, Normal School	29.75	755.7	30.02	762.5	66.2	19	66	E			1				E	0.12	3.		M. Ollitrault, Director.
Lescar, Normal School	29.42	747.2	30.06	763.6	77.4	25.2	60	W			1	c	0			0	0		M. Chauvin, Director.
Lorient, Naval Observatory	29.95	760.8	30.06	763.4	69.1	20.6	68	S			1		2		Calm	0	0	¼ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.96	735.6	29.98	761.5	76.6	24.8	35	SE			1		5		NNE	0	0	Cloudy	M. André, Director.
Mans, Normal School	29.71	754.5	30.01	762.2	67.6	19.8	65	SW			3		2		W	0	0		M. Piboen, Director.
Marseille, Observatory	29.73	755.2	30.00	761.9	70.9	21.6	57	WSW			1		1		SW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.90	632.4	30.13	765.4	67.1	19.5	35	SW	9.4	4.2			6		W	0.965	24.5	Hailing	M. Cave, for Dr. Fines.
Montpellier, Normal School	29.87	758.8	29.98	761.4	77.7	25.4	60	S			3		0			0	0	Clear	M. P. Galxin, Director.
Nancy, Normal School	29.23	742.4	29.98	761.4	64.0	17.8	71	NW			1	0	5kn		W	0.075	1.9	Cloudy	M. Hasse.
Nantes, Observatory	29.80	758.5	30.02	762.6	70.0	21.1	57					c	9k	WSW	WSW	0	0		M. Larocque, Director.
Nice	29.97	761.2	30.00	762.1	69.8	21.0	54	E			4		5	W	E	0	0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.87	758.6	29.97	761.2	75.7	24.3	41	SE	9.4	4.2			1		W	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.65	575.4			47.3	8.5							10		WSW	0.283	7.2	Stormy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.99	736.3	30.02	762.6	79.9	26.6	39	S			1		0			0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.22	640.6			53.6	12.0	95	S			1	0	5k			0.004	0.1	¼ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	29.98	761.4	30.01	762.2	73.4	23.0	91	SE			1		8		SW	0	0	¼ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.76	756.0	29.97	761.2	75.6	24.2	57	W			1		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.87	707.9	29.93	760.3	73.8	23.2	44	SE			1		0			0	0	Clear	M. Richard, Director.
Rouen, Normal School	29.88	759.0	29.97	761.2	70.2	21.2	60	W			1		5		W	0	0	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.85	758.2	30.01	762.2	66.4	19.1	48	SW			1		5		W	0.43	11.	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.82	757.3	29.98	761.5	70.9	21.6	57	WNW			1		7		W	0	0		M. Renou, Director.
Toulouse, Observatory	29.29	743.9	30.01	762.3	82.4	28.0	56	SSE			1		5			0	0	Cloudy	M. Baillaud, Director.
Tours	29.79	756.7	29.99	761.7	72.0	22.2	56	SW			1		8		W	0.047	1.2	¼ covered	M. de Tastes.
Versailles, Observatory	29.49	749.1	29.98	761.6	69.1	20.6	61	W			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.71	754.6	30.00	762.0	69.6	20.9	62	WNW			1		6		W	0.004	0.1		M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer; Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.11	739.5	29.98	761.4	64.8	18.2	48	W			1	0	2k		W	0	0		Prof. Dr. Hoh.
Berlin	29.80	750.8	29.97	761.1	60.3	15.7	64	SW			1		7			0	0		Prof. Dr. Arndt.
Breslau	29.45	747.9	29.98	761.4	60.1	15.6	58	W			2		9			0	0		Royal University Obs'y.
Carlsruhe	29.55	750.6	29.97	761.1	70.3	21.3	61	SW			1		4		SW	0	0		Albert Senz.
Cassel	29.26	743.1	29.97	761.3	64.0	17.8	49	NNE			2		5		N	0	0		Dr. H. Möhl.
Frankfort on the Main	29.65	753.c	30.00	762.0	67.1	19.5	54	W			1		9			0.004	0.1		Physical Society.
Friedrichshafen	28.61	726.6	30.01	762.3	64.0	17.8	73	S			3		5	W		0.091	2.3		Wilhelm, Chief Tel.
Hamburg	29.93	760.2	30.00	762.0	57.2	14.0	71	WNW			2		10			0	0		Dr. R. Kleeman.
Kiel	29.93	760.3	29.95	760.7	58.1	14.5	69	NW			2		8			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.60	751.7	30.01	762.3	56.5	13.6	67	WSW			2		10	W		0.020	0.5		Prof. Dr. Bruhns.
Magdeburg	29.80	757.0	29.99	761.8	57.9	14.4	64	WNW			2		10ks		NW	0	0		Dr. Assmann.
Memel	29.85	758.2	29.90	759.4	48.7	9.3	71	NW			4-3	0	4k						Reinbrecht & Issermann.
Munich	28.19	716.1	30.06	763.4	63.7	17.6	54	NW			2		5	NW		0.157	4.0		Central Station.
Neufahrwasser	29.86	758.5	29.88	758.9	52.7	11.5	77	ENE			2		5			0	0		A. Lothes.
Neustadt, Palatinate	29.43	747.4	29.95	760.8	72.5	22.5	43	SW			2		8	N		Inap.	Inap.		Dicknether.
Stuttgart	29.05	737.9	29.91	759.8	69.8	21.0	43	NW			1		7	W		0	0		Prof. Dr. Schoder.
Weissenburg, Bavaria	28.51	724.1	29.97	761.2	66.9	19.4	42	NW			4		5	NW		0.091	2.3		Prof. Kemlein.
Wustrow	29.93	760.3	29.96	761.0	55.9	13.3	85	WNW			3		10s			0	0		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instru'm'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r.	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

GREEK SERIES.

Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.

Athens	29.63	752.5	30.00	762.1	76.8	24.9		SW			2.0		0					Clear	Schmidt & Wourlisch.

INDIAN SERIES.

Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.

Kurrachee	29.44	747.7	29.49	748.9	88.6	31.4	77	WSW	52.0	23.2			0			0	0	Blue sky	
Deesa	29.00	736.7	29.46	748.2	97.4	36.3	39	SW	19.4	8.7			6	SSW	SSW	0	0	D. clouds	
Bombay	29.68	753.8	29.72	754.8	87.1	30.6	70	W	13.0	5.8			2		WSW	0.01	0.3	D. clouds	
Poona, Yarrowda	27.86	707.6	29.68	754.0	84.0	28.9	48	W	29.0	13.0			5		W	0	0	D. clouds	
Belgaum	27.23	691.5	29.75	755.7	76.7	24.8	63	SW	14.0	6.3			5	E	W	0	0	D. clouds	
Lahore	28.63	727.2	29.33	745.0	103.3	39.6	29	NE	1.9	0.8			0			Inap.	Inap.	Blue sky	
Roorkee	28.48	723.3	29.34	745.2	93.8	34.3	58	SE	3.0	1.3			4			0.15	3.8	Misty	
Agra	28.80	731.6	29.34	745.2	102.1	38.9	27	SW	5.0	2.2			2			0	0		
Nagpur	28.50	723.9	29.53	749.9	83.7	28.7	71	NW	6.6	3.0			10		W	0.30	7.6	Overcast	
Jubbulpore	28.16	715.2	29.49	749.0	83.7	28.7	74	W	5.1	2.3			8			1.16	29.5	Overcast	
Lucknow	29.06	738.1	29.43	747.4	89.1	31.7	71	ENE	1.0	0.4			7	SE		0	0	Blue sky	
Allahabad	29.12	739.7	29.43	747.4	86.8	30.4	86	Calm	1.9	0.8			10			0.96	24.4	Overcast	
Patna	29.20	741.6	29.37	746.0	91.5	33.1	61	NE	5.3	2.4			5	NE	NE	0	0	D. clouds	
Hazaribagh	27.42	696.5	29.39	746.5	80.8	27.1	78	N	5.4	2.4			10			0.26	6.6	Thund'r st'm	
Cuttack	29.37	746.0	29.45	748.0	85.2	29.6	70	W	1.0	0.4			8			0.16	4.1	D. clouds	
Calcutta, Alipore	29.37	745.9	29.39	746.5	84.7	29.3	79	SSW	8.0	3.6			9	ENE		0.62	15.7	D. clouds	
Dhubri	29.32	744.8	29.44	747.8	83.0	28.3	85	Calm	5.8	2.6			1			0.25	6.4	D. clouds	
Chittagong	29.44	747.7	29.53	750.0	81.9	27.7	83	SE	8.9	4.0			10			0	0	Overcast	
Sibsagar	29.18	741.2	29.51	749.6	82.8	28.2	85	NE	3.0	1.3			10	W	W	0.70	17.8	D. clouds	
Zanzibar, Africa			30.08	764.0	78.7	25.9	78	S	6	2.7			9		S	0.07	1.8	Threatening	

ITALIAN SERIES.

By authority of the Minister of Agriculture, Industry and Commerce.

Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.

Udine	29.59	751.5	29.99	761.7	70.5	21.4	50	W	1.3	0.6			6			1.409	35.8		Prof. Giovanni Clodig.
Milan	29.47	748.4	29.97	761.1	74.3	23.5	42	WSW	6.0	2.7			4	W		0.031	0.8		Prof. Schiaparelli.
Padua	29.89	759.2	30.00	761.9	69.8	21.0	57	NW	1.8	0.8			7	WSW		0.268	6.8		Prof. Dott. Lorenzoni.
Moncalieri	29.08	738.6	29.96	761.0	73.6	23.1	52	SE	2.5	1.1			7	SSE		0.020	0.5		Prof. P. F. Denza.
Genoa	29.87	758.8	30.07	763.7	65.8	18.8	73	SE	5.6	2.5			8	SE		0.004	0.1		Prof. G. M. Garibaldi.
Mondovi	28.10	713.8	29.95	760.8	67.5	19.7	69	WNW			4		0			0.898	22.8		Prof. D. C. Bruno.
Pesaro	29.96	760.9	30.00	762.1	68.4	20.2	67	NW	7.4	3.3			6	W		0	0		Prof. Luigi Guidi.
Florence	29.79	756.6	30.04	763.0	72.3	22.4	44	SW			2		10	W		0	0		Prof. Costantino Pitter.
Leghorn	29.98	761.4	30.06	763.5	69.8	21.0	68	NW	4.9	2.2			6			0	0		Prof. P. Monte.
Rome	29.88	758.9	30.05	763.3	73.8	23.2	41	WSW	9.4	4.2			2			0	0		Prof. P. S. Ferrari.
Lecce	29.75	755.7	30.00	762.0	77.9	25.5	31	NNE	9.4	4.2			4			0	0		Prof. C. de Giorgi.
Cosenza	29.15	740.3	30.02	762.4	74.8	23.8	72	NW	1.8	0.8			0			0	0		Prof. D. Conti.
Cagliari	29.80	757.0	29.99	761.8	71.2	21.8	66	SE			2		3	W		0	0		Prof. A. Pacinotti.
Palermo	29.80	756.8	30.04	763.1	70.2	21.2	59	NE	8.7	3.9			0			0	0		Prof. G. Ciacciatore.
Syracuse	29.92	760.0	29.97	761.1	76.3	24.6	57	S	4.3	1.9			5			0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.52	749.8	30.03	762.8	70.2	21.2	61	SSW	6.3	2.8			2	NW		0	0		Prof. F. Brioschi.
Stelvio	22.24	564.9			42.8	6.0	50	SW			4	0	3ks		NW	0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.27	565.6			43.2	6.2	73	N			2		10n		NW	0	0	Misty	Prof. P. F. Denza.

JAPANESE SERIES.

Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I. M. Obs'y †‡	29.88	758.9	29.89	759.2	65.4	18.6	93	WNW	0.6	0.3		ck	10s			0.250	6.4	Overcast	K. Sasaki.
Kioto	29.73	755.1	29.90	759.4	69.7	20.9	85	SSW	0.3	0.1			10s			0.670	17.0	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.71	754.6	29.91	759.7	64.4	18.0	83	NE	2.1	0.9			10n			1.950	49.5	Raining	S. Takehayashi.
Tokei Obs'y, Yeddo	29.74	755.4	29.81	757.2	75.3	24.1	80	SW	17.6	7.9		0	30ks			0	0	Fair	The Staff.
Wakayama	29.86	758.4	29.91	759.7	69.1	20.6	75	Calm	0	0			10s			0.458	11.6	Cloudy	Y. Kuwamuca.

MAURITIUS SERIES.

Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	30.04	763.0	30.23	767.8	72.1	22.3	65	ESE	25.5	11.4		0	3		ESE	0.03	0.8	Squally	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

Furnished by the co-operation of Senor Mariano Barcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.42	620.2	30.01	762.2	66.0	18.9	73	NE			2	7c	2k	NE	NE	0	0	Very cloudy	Prof. M. Leal.
Mazatlan	29.65	753.1	29.91	759.6	78.2	25.7	93	E	1.6	0.8		6c;cs	2n		ESE	0	0	Very cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	23.12	587.2	30.05	763.3	56.5	13.6	84	NW	3.4	1.5			10n			0.658	16.7	Overcast	The Staff.
Pabellon, Aguascalientes	24.01	609.9	29.93	760.2	63.5	17.5	65	NE			1	2c	5ks	E	E	0	0	Cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.41	594.7	30.10	764.5	57.6	14.2	53	N	2.7	1.2		0	9		W	0.095	2.5	Very cloudy	Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Chazaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.61	574.4	30.20	767.0	56.7	13.7	72	ENE	10.7	4.8		3cs	0	ENE		0	0	Clear	J. A. Bonilla, M. E.

NETHERLANDS SERIES.

Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	30.02	762.5	30.02	762.5	61.7	16.5		W			2					0	0		
Groningen	29.95	760.6	30.00	762.0	56.5	13.6		NNE			1					0.008	0.2		
Helder	30.00	762.0	30.00	762.0	56.1	13.4		NNE			1					0	0		
Hellevoetsluis	30.00	762.1	30.00	762.1	67.8	19.9	65	W			1					0	0		
Utrecht	29.97	761.1	30.01	762.3	58.6	14.8	64	NNW			2		8			0	0	Very cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction, Upper.	Clouds. Direction, Lower.	Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.86	758.5	29.93	760.1	57.9	14.4	78	Calm	0	0	.....	.....	0	.....	.....	0	0	.....	
Christiania	29.84	757.8	29.98	761.5	61.5	16.4	44	ENE	7	3	.....	.....	10	.....	.....	0	0	.....	
Gjæsvær	30.11	764.9	30.14	765.5	49.5	9.7	.....	Calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	
Lodingen	30.06	763.5	30.11	764.7	61.0	16.1	49	NNE	.....	.....	1	.....	0	.....	.....	0	0	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.17	766.3	30.19	766.7	65.7	18.7	88	SSW	5.6	2.5	.....	.....	6	.....	.....	0	0	.....	Dr. J. A. Sampaio.
Campo Major	29.00	736.7	29.96	760.9	82.4	28.0	27	SW	2.5	1.1	.....	.....	0	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	30.12	765.0	30.21	767.3	68.0	20.0	64	Calm	0	0	.....	.....	10	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.74	755.5	30.10	764.4	71.2	21.8	50	NNW	13.6	6.1	.....	.....	2	.....	.....	0	0	.....	The Staff.
Ponta Delgada, Azores	30.05	763.2	30.12	765.0	68.0	20.0	87	Calm	0	0	.....	.....	10	.....	.....	0.398	10.1	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.49	723.6	29.50	749.2	77.5	25.3	45	SSE	18	8	.....	.....	1on	.....	.....	.....	.....	.....	Capt. Lasarew.
Archangel	30.08	763.9	30.10	764.4	47.3	8.5	51	N	13	6	.....	.....	0	.....	.....	.....	.....	.....	Capt. Sseliwerstow.
Astrakhan	30.02	762.5	29.94	760.4	74.1	23.4	41	WSW	11	5	.....	0	8k;n	.....	.....	Blank		.....	Capt. Wisganow.
Barnaul	29.37	746.1	29.86	758.5	62.1	16.7	31	NNE	9	4	.....	.....	0	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	29.54	750.4	29.79	756.6	46.6	8.1	98	N	7	3	.....	.....	1on	.....	.....	.....	.....	Light rain...	Observatory.
Ekaterinburg	28.59	726.1	29.48	748.9	77.9	25.5	42	SSE	13	6	.....	cs	2s	.....	.....	.....	.....	Light clouds	Meteorological Obs'y.
Kasan	29.30	744.3	29.56	750.8	69.1	20.6	51	WSW	4	2	.....	9ck	0	.....	.....	.....	.....	.....	Observatory.
Kertch	29.95	760.8	29.97	761.3	69.1	20.6	79	SSW	11	5	.....	.....	6	.....	.....	.....	.....	.....	Lagorio & Sastyres.
Kieff	29.11	739.3	29.73	755.1	60.6	15.9	59	WNW	9	4	.....	.....	10cks	.....	.....	.....	.....	.....	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.57	751.1	29.77	756.2	63.1	17.3	60	SW	13	6	.....	.....	6	.....	.....	Blank		.....	Meteorological Obs'y.
Moscow	28.86	733.1	29.39	746.5	61.5	16.4	78	E	7.8	3.5	.....	0	6ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.35	694.6	29.59	751.6	49.1	9.5	71	Calm	0	0	.....	.....	3	.....	.....	0	0	.....	Meteorological Obs'y.
Nikolaiev	29.83	757.7	29.90	759.5	69.6	20.9	55	W	9	4	.....	0	3kn	.....	.....	.....	.....	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.35	745.5	29.44	747.7	45.9	8.3	84	Calm	.....	.....	0	.....	1on	.....	.....	0.205	5.2	.....	Lieut. Iwanow.
Pekin, China	29.35	745.5	29.49	749.1	81.9	27.7	52	S	4	2	.....	.....	0	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	29.79	756.7	29.81	757.1	52.3	11.3	59	NE	22	10	.....	8c;cs	0	.....	.....	.....	.....	Solar corona	Central Physical Obs'y.
Tashkend, Laboratory	28.28	718.2	29.74	755.4	86.7	30.4	53	Calm	0	0	.....	.....	4	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.62	726.9	29.98	761.4	76.5	24.7	33	WNW	18	8	.....	0	1k	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	29.48	748.7	29.89	759.3	59.9	15.5	55	WNW	9	4	.....	.....	10ks	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.40	746.8	29.82	757.4	52.2	11.2	72	NW	7	3	.....	.....	10	.....	.....	.....	.....	.....	Berg, Assistant.
Yeniseisk	29.81	757.2	30.10	764.6	44.6	7.0	50	N	4	2	.....	.....	10	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	29.95	760.7	54.0	12.2	82	E	.....	.....	2	rock	0	W	.....	0	0	Light clouds	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.84	757.9	59	15.0	94	SSE	.....	.....	4	.....	10	.....	.....	0	0	Foggy	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	29.99	761.7	.....	.....	.....	NE	.....	.....	3	7	4	NE	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.93	760.2	30.03	762.8	75.2	24.	51	SW	4.5	2.0	.....	.....	1	.....	.....	0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.95	760.8	30.01	762.2	75.0	23.9	64	NW	2.5	1.1	.....	2	4	SW	.....	0	0	Cloudy	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.05	687.0	.....	.....	77.0	25.0	42	SW	3.8	1.7	.....	.....	1	.....	.....	0	0	Almost clear	Domingo Martin.
Madrid, Royal Obs'y	27.77	705.3	29.85	758.5	84.0	28.9	31	SE	10.3	4.6	.....	0	4	.....	.....	0	0	Cloudy	The Staff.
Murcia, Met. Obs'y	29.88	759.0	30.03	762.7	76.3	24.6	47	SE	3.4	1.5	.....	3	2	NW	.....	0.004	0.1	Misty	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.09	738.8	29.95	760.6	74.8	23.8	53	SW	0	0	.....	.....	1	.....	.....	0	0	Almost clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.94	760.4	30.00	762.0	83.3	28.5	76	ENE	2.2	1.0	.....	7c;cs	1k	WNW	.....	0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.80	756.9	29.85	758.2	86.0	30.0	74	SE	3.3	1.5	.....	4cs	0	E	.....	0	0	Cloudy	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.99	761.7	30.09	764.2	74.8	23.8	65	S	12.7	5.7	.....	0	1	.....	SE	0	0	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.93	760.2	30.02	762.5	75.6	24.2	98	SE	0	0	.....	5k	4kn	SE	SE	0.413	10.5	Raining	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.75	755.6	29.89	759.3	83.1	28.4	76	NNW	2.9	1.5	.....	0	1ks	.....	NNW	0	0	Fair	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.15	765.8	30.19	766.8	58.3	14.6	39	S	.....	.....	2	.....	0	.....	.....	0	0	.....	
Umea	30.09	764.2	30.14	765.5	56.5	13.6	25	E	.....	.....	6	.....	0	.....	.....	0	0	.....	
Hernosand	30.06	763.4	30.11	764.7	50.5	10.3	27	E	.....	.....	7	.....	2	.....	.....	0	0	.....	
Stockholm	29.78	756.3	29.95	760.8	53.1	11.7	79	ENE	.....	.....	4	.....	10	.....	.....	0.024	0.6	.....	
Wisby	29.79	756.7	29.85	758.2	45.0	7.2	91	NE	.....	.....	4	.....	7	.....	.....	0.043	1.1	.....	
Sub-Series.																			
Upsala	29.80	756.8	29.88	759.0	49.6	9.8	86	NNE	11.2	5.0	.....	.....	10	.....	NNE	0	0	.....	S. G. Fineman.
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.65	727.7	30.03	762.7	71.4	21.9	44	WSW	.....	.....	2	.....	4	.....	.....	0.134	3.4	Cloudy	The Observatory.
Zurich	28.42	721.9	30.02	762.6	64.8	18.2	73	SW	.....	.....	2	.....	4	.....	.....	0.039	1.0	Raining	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.02	762.6	77.7	25.4	40	SW	11	5.0	.....	.....	0	.....	.....	0	0	.....	The Observatory.
Valona	.....	.....	30.11	764.9	74.3	23.5	.....	SW	.....	.....	1	.....	2	.....	.....	0	0	Slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	30.02	762.4	75.9	24.4	63	N	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. C. V. A. van Dyck

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.83	757.7	29.91	759.7	67	19.4	64	NW	12	5.4		1k	0			1.28	32.5	Clear.	
Alpena, Michigan	29.54	750.3	30.19	766.8	52.5	11.4	73	NE	10	4.5		0	0			0	0	Clear.	
Atlanta, Georgia	28.96	735.6	30.11	764.8	74	23.3	78	NW	4	1.8		0	0			Inap.	Inap.	Clear.	
Atlantic City, New Jersey	29.99	761.7	30.00	762.0	68	20.0	74	W	8	3.6		0	0			0.03	0.8	Clear.	
Augusta, Georgia	29.92	760.0	30.10	764.5	77.0	25.0	73	NW	1	0.4		2cs	0	W		0	0	Fair.	
Baltimore, Maryland	30.00	762.0	30.04	763.0	71	21.7	71	W	6	2.7		0	Hz			0	0	Clear.	
Barnegat, New Jersey	29.94	760.5	29.96	761.0	68	20.0	79	W	10	4.5		8ck;k	0	W		0.77	19.6	Fair.	
Bismarck, Dakota	28.07	713.0	29.81	757.2	56	13.3	93	E	14	6.3		5c	0	Calm		0.54	13.7	Fair.	
Boise City, Idaho	27.12	688.8	29.88	758.9	48.3	9.1	70	W	8	3.6			10s		Calm	0	0	Cloudy.	
Boston, Massachusetts	29.68	753.9	29.83	757.7	65.8	18.8	64.8	W	13	5.8		0	0			0.04	1.0	Clear.	
Bracketville, Texas	28.90	734.0	29.92	760.0	74	23.3	81	E	6	2.7		0	5ks		E	0	0	Fair.	
Brownsville, Texas	29.85	758.2	29.89	759.2	77	25.0	91	Calm	0	0		5c	0			0	0	Fair.	
Buffalo, New York	29.37	746.0	30.06	763.5	58	14.4	76	NW	4	1.8		5ck	0	W		0.22	5.6	Fair.	
Burlington, Vermont	29.01	752.1	29.89	759.2	56.0	13.3	72	N	4	1.8			10s		NW	0.03	0.8	Cloudy.	
Cairo, Illinois	29.79	756.7	30.18	766.6	73	22.8	81	SE	10	4.5			10s		Calm	0	0	Threatening	
Campo, California	27.38	695.4	29.95	760.7	39	3.9	73	NW	3	1.3		0	0			0	0	Clear.	
Camp Thomas, Arizona	27.14	689.3			71	21.7	41	Calm			0	10ck	0			0	0	Cloudy.	
Cape Henry, Virginia	30.02	762.5	30.04	763.0	74	23.3	68	NW	8	3.6		2c	0	W		0	0	Clear.	
Cape May, New Jersey	29.97	761.2	30.00	762.0	66	18.9	84	W	10	4.5		0	0			0	0	Clear.	
Castroville, Texas	29.29	744.0	29.96	761.0	78	25.6	73	S	1	0.4			10s		S	0	0	Cloudy.	
Cedar Keys, Florida	30.04	763.0	30.06	763.5	84	28.9	75	W	1	0.4		0	0			0	0	Clear.	
Champaign, Illinois	29.28	743.7	30.05	763.3	70.5	21.4	75	SE	8	3.6			10s		SE	0	0	Cloudy.	
Charleston, S. Carolina	29.99	761.7	30.05	763.3	80	26.7	74	N	5	2.2		0	0			0	0	Clear.	
Charlotte, N. Carolina	29.20	743.2	30.12	765.0	79.8	26.6	51	N	5	2.2		5c	Hz			0	0	Fair.	
Chattanooga, Tennessee	29.35	745.5	30.15	765.8	70.5	21.4	95	Calm	0	0			Fg		Calm	0.05	1.3	Dense fog.	
Cheyenne, Wyoming	24.02	610.1	29.83	757.7	58	14.4	42	NW	2	0.9		5c	0			0	0	Fair.	
Chicago, Illinois	29.42	747.3	30.10	764.5	74.0	23.3	56	S	1	0.4		Hz	0			0	0	Clear.	
Chincoteague, Virginia	30.01	762.2	30.03	762.7	72	22.2	71	NW	7	3.1		0	0			Inap.	Inap.	Clear.	
Cincinnati, Ohio	29.52	749.8	30.16	766.1	69	20.6	80	NW	2	0.9		10cs	Fg	NW		0	0	Cloudy.	
Cleveland, Ohio	29.42	747.3	30.14	765.5	64.5	18.1	76	N	3	1.3		0	0			0	0	Clear.	
Coleman City, Texas																			
Columbus, Ohio	29.32	744.7	30.14	765.5	64	17.8	73	NW	4	1.8		0	0			0	0	Clear.	
Concho, Texas	28.16	715.3	30.04	763.0	75	23.9	72	SE	6	2.7		0	0			0	0	Clear.	
Corsicana, Texas	29.62	752.3	30.08	764.0	78	25.6	73	S	4	1.8		0	0			0	0	Clear.	
Davenport, Iowa	29.46	748.3	30.10	764.5	70	21.1	80	E	8	3.6			10ks		W	0	0	Cloudy.	
Dayton, Washington T'y	28.30	718.8	30.05	763.3	51.2	10.7	65	S	8	3.6		5c	0	Calm		0.01	0.3	Fair.	
Deadwood, Dakota	25.26	641.6	29.81	757.2	01	16.1	82	SW	4	1.8			10s		SW	0	0	Cloudy.	
Decatur, Texas																			
Delaware Breakwater, Del.	29.99	761.7	30.01	762.2	68	20.0	79	NW	14	6.3		0	0			0	0	Clear.	
Denison, Texas	29.29	744.0	30.07	763.8	75	23.9	81	S	4	1.8		0	0			0	0	Clear.	
Denver, Colorado	24.72	627.9	29.78	756.4	09.5	20.8	23	S	6	2.7		5ck	0	SW		0	0	Fair.	
Des Moines, Iowa	29.15	740.4	30.03	762.7	68	20.0	90	S	8	3.6			10ks		SE	1.14	29.0	Cloudy.	
Detroit, Michigan	29.44	747.8	30.11	764.8	65.0	18.3	63	NE	8	3.6		2k	0	W		0	0	Clear.	
Dodge City, Kansas	27.40	695.9	29.89	759.2	70.5	21.4	55	S	13	5.8		0	0			0	0	Clear.	
Dubuque, Iowa	29.42	747.3	30.10	764.5	66.3	19.1	84	NE	1	0.4			10s		Calm	0	0	Threatening	
Duluth, Minnesota	29.52	749.8	30.20	767.1	53	11.7	80	NE	10	4.5			10s		NE	0	0	Cloudy.	
Eagle Pass, Texas	29.27	743.4	30.08	764.0	74.1	23.4	81	SE	5	2.2		0	0			0	0	Clear.	
Eagle Rock, Idaho	25.14	638.5	29.85	758.2	51	10.6	86	N	10	4.5		0	8ks		SW	0.22	5.6	Fair.	
Eastport, Maine	29.57	751.1	29.64	752.8	49	9.4	94	S	6	2.7			Fg			0.08	2.0	Dense fog.	
El Paso, Texas	20.23	666.2	29.88	758.9	67	19.4	60	SE	2	0.9		0	0			0	0	Clear.	
Erie, Pennsylvania	29.39	746.5	30.09	764.3	62	16.7	77	W	5	2.2		0	0			0.06	1.5	Clear.	
Escanaba, Michigan	29.59	751.6	30.23	767.8	53	11.7	80	N	8	3.6		0	0			0	0	Clear.	
Florence, Arizona	28.32	719.3	29.92	760.0	78	25.6	43	Calm	0	0		8ks	0	Calm		0	0	Cloudy.	
Fort Apache, Arizona	25.05	636.3	29.83	757.7	02	16.7	30	W	3	1.3			10s;sm		W;C	0	0	Dense smoke	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota	28.24	717.3	29.72	754.9	65	18.3	84	E	4	1.8		2cs	0	SE		0.33	8.4	Fair.	
Fort Benton, Montana	27.02	686.3	29.76	755.9	55	14.4	82	Calm	0	0			10ks		Calm	0.17	4.3	Cloudy.	
Fort Buford, Dakota	27.87	707.9	29.79	756.7	02	16.7	77	E	10	4.5		5cs	0	SW		0.03	0.8	Fair.	
Fort Custer, Montana	26.65	676.9	29.74	755.4	56	13.3	94	NW	2	0.9			10s			0.07	1.8	Cloudy.	
Fort Davis, Texas	25.24	641.1	30.29	769.1	03	17.2	62	W	7	3.1		c	0			0	0	Clear.	
Fort Elliott, Texas	27.28	692.9	30.36	771.1	65	18.3	54	SE	4	1.8		0	0			0	0	Clear.	
Fort Gibson, Indian T'y	29.50	749.3	30.03	762.7	79	26.1	78	Calm	0	0		0	0			0	0	Clear.	
Fort Grant, Arizona	25.24	641.1	30.04	763.0	77	25.0	18	NW	5	2.2			10ks			Inap.	Inap.	Cloudy.	
Fort Griffin, Texas	28.78	731.0	29.99	761.7	70.2	24.6	60	Calm	0	0		0	0			0	0	Clear.	
Fort Keogh, Montana	27.28	692.9	29.69	754.1	58	14.4	87	N	6	2.7		5c	0			0.07	1.8	Fair.	
Fort Macon, North Carolina	29.99	761.7	30.00	762.0	76	24.4	91	N	12	5.4		5c	Hz	Calm	Calm	0	0	Fair.	
Fort McKavett, Texas	27.82	706.6	29.69	754.1	68.3	20.2	79	S	8	3.6		0	0			0	0	Clear.	
Fort Missoula, Montana	26.60	675.6	29.98	761.5	53	11.7	86	NW	4	1.8			10s		NW	0.07	1.8	Cloudy.	
Fort St. Michaels	29.91	759.7	29.95	760.7	36	2.2	100	SE	2	0.9			10k		S	0	0		
Fort Shaw, Montana	20.24	666.5	29.70	754.4	51	10.6	93	N	10	4.5			10n		N	0.18	4.6	Light rain.	
Fort Sill, Indian Territory	28.81	731.8	30.02	762.5	76	24.4	73	Calm	0	0		0	0			0	0	Clear.	
Fort Stevenson, Dakota	27.96	710.2	29.74	755.4	02	16.7	88	E	8	3.6			10s		E	0.08	2.0	Cloudy.	
Fort Verde, Arizona					79.6	26.4	54	NW			2		10s		W	Inap.	Inap.	Cloudy.	
Fredericksburg, Texas	28.37	720.6	29.88	758.9	69	20.6	85	SW	1	0.4		8k	0	SW		0	0	Cloudy.	
Galveston, Texas	30.00	763.5	30.10	764.5	82	27.8	79	Calm	0	0		2ck	0	S		0	0	Clear.	
Grand Haven, Michigan	29.49	749.0	30.14	765.5	64	17.8	78	NE	3	1.3		5k	0	W		0	0	Fair.	
Hatteras, North Carolina	29.99	761.7	30.01	762.2	77	25.0	91	NW	14	6.3		0	2s			0.09	2.3	Clear.	
Helena, Montana	25.03	651.0	29.83	757.7	55	12.8	81	Calm	0	0		0	8s		Calm	0.22	5.6	Cloudy.	
Henrietta, Texas	29.03	737.3	29.91	759.7	79	26.1	74	SE	5	2.2		0	0			0	0	Clear.	
Indianapolis, Indiana	29.32	744.7	30.10	764.5	75	23.9	60	SE	3	1.3		5ck;k	0	W		0	0	Fair.	
Indianola, Texas	30.06	763.5	30.09	764.3	79.5	26.4	82	SE	7	3.1		1ck	1ks;hz	W	Calm	0	0	Clear.	
Jacksboro, Texas	28.90	734.0	29.98	761.5	76	24.4	69	S	3	1.3		0	0			0	0	Clear.	
Jacksonville, Florida	30.01	762.2	30.03	762.7	83	28.3	64	SW	10	4.5		0	0			0	0	Clear.	
Keokuk, Iowa	29.40	746.7	30.02	762.5	73.5	23.1	85	NW	5	2.2			10n		NW	0.04	1.0	Light rain.	
Key West, Florida	29.99	761.7	30.02	762.5	83.8	28.8	69	E	3	1.3		5cs	5ks		E	0	0	Cloudy.	
Kittyhawk, North Carolina	30.04	763.0	30.06	763.5	72	22.2	90	N	4	1.8		4c	0			0	0	Fair.	
Knoxville, Tennessee	29.17	740.9	30.17	766.3	69.5	20.8	98	SW	1	0.4			Fg		Calm	0.01	0.3	Dense fog.	
La Crosse, Wisconsin	29.29	744.0	30.02	762.5	63	17.2	78	NW	4	1.8			10s		NW	0	0	Cloudy.	
La Mesilla, New Mexico	26.09	662.7	30.24	768.1	60.2	19.0	50	Calm	0	0		0	0			0	0	Clear.	
Laredo, Texas	29.57	751.1	29.90	759.4	77	25.0	91	SE	2	0.9		0	0			0	0	Clear.	
Leavenworth, Kansas	29.15	740.4	30.02	762.5	77	25.0	77	S	5	2.2		2cs	0	W		0	0	Clear.	
Lewiston, Idaho	29.13	739.9	29.96	761.0	58	14.4	48	W	8	3.6			10s		W	0	0	Cloudy.	
Little Rock, Arkansas	29.77	756.1	30.08	764.0	77	25.0	86	W	1	0.4		0	0			0	0	Clear.	
Los Angeles, California	29.56	750.8	29.94	760.5	61	16.1	82	SW	1	0.4			10s		Calm	0	0	Cloudy.	
Louisville, Kentucky	29.55	750.6	30.10	764.5	71.0	21.7	80	N	2	0.9			10s			0	0	Cloudy.	
Lynchburg, Virginia	29.43	747.5	30.10	764.5	74	23.3	63	Calm	0	0		0	0			0	0	Clear.	
Madison, Wisconsin	29.13	739.9	30.11	764.8	63	17.2	83	N	4	1.8		10cs	0	W		0	0	Cloudy.	
Marquette, Michigan	29.50	750.8	30.26	768.6	53	11.7	73	NE	2	0.9		0	0			0	0	Clear.	
Mason, Texas	28.46	722.9	30.17	766.3	69.8	21.0	75	Calm	0	0		0	0			0	0	Clear.	
Memphis, Tennessee	29.77	756.1	30.10	764.5	80	26.7	78	Calm	0	0		8cs	0	NW		0	0	Fair.	
Milwaukee, Wisconsin	29.43	747.5	30.16	766.1	56	13.3	81	N	8	3.6		10cs	0			0	0	Cloudy.	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.02	762.5	30.09	764.3	82	27.8	79	N	6	2.7		2ck	Hz	NW		0	0	Fair	
Montgomery, Alabama	29.89	759.2	30.11	764.8	82.2	27.9	70	N	1	0.4		0	0			0	0	Clear	
Moorhead, Minnesota	28.98	736.1	29.94	760.5	60.1	15.6	79	SE	16	7.2			10s		SE	0	0	Cloudy	
Morgantown, W. Virginia	29.14	740.1	30.10	764.5	67	19.4	84	Calm	0	0		0	Hz			0	0	Clear	
Mt. Washington, N. H.	23.54	597.9	29.57	751.1	34.4	1.3	100	NW	48	21.5			Fg		NW	0.80	20.3	Dense fog	
Nashville, Tennessee	29.63	752.6	30.15	765.8	71.3	21.8	93	N	1	0.4			Fg			0.21	5.3	Dense fog	
New Haven, Connecticut	29.78	756.4	29.89	759.2	68	20.0	70	NW	8	3.6		0	0			0.74	18.8	Clear	
New London, Connecticut	29.83	757.7	29.88	758.9	68	20.0	80	NW	6	2.7		0	0			0.39	9.9	Clear	
New Orleans, Louisiana	30.03	762.7	30.08	764.0	83.7	28.7	72	Calm	0	0		0	Hz			0	0	Clear	
Newport, Rhode Island	29.81	757.2	29.86	758.4	67.0	19.4	69	W	11	4.9		0	0			0.17	4.3	Clear	
New River, N. Carolina					80	26.7	58	NE			2	5c	Hz	Calm				Fair	
New Shoreham, Rhode I'd	29.84	757.9	29.88	758.9	62.6	16.7	88	W	13	5.8		0	0			0.09	2.3	Clear	
New York, New York	29.78	756.4	29.95	760.7	65	18.3	78	W	10	4.5		1cs	0	W		0.33	8.4	Clear	
Norfolk, Virginia	30.01	762.2	30.05	763.3	80	26.7	59	N	4	1.8		0	0			0	0	Clear	
North Platte, Nebraska	26.90	683.2	29.72	754.9	69	20.6	52	SW	6	2.7		0	0			Inap.	Inap.	Clear	
Olympia, Washington T'y	30.06	763.5	30.10	764.5	41.0	5.0	91	S	1	0.4		2cs	0	W		Inap	Inap.	Fair	
Omaha, Nebraska	28.81	731.8	29.95	760.7	74	23.3	81	SE	8	3.6		8cs	0	W		0	0	Cloudy	
Oswego, New York	29.68	753.9	30.00	762.0	51.7	10.9	88	W	4	1.8			10s		NW	0.05	1.3	Cloudy	
Pensacola, Florida	30.04	763.0	30.07	763.8	82	27.8	91	SW	1	0.4		1k	0	N		0	0	Clear	
Philadelphia, Pa	29.94	760.5	30.00	762.0	69	20.6	70	NW	8	3.6		0	Fg			Inap.	Inap.	Clear	
Phœnix, Arizona	28.72	729.5	30.42	772.7	70	26.1	43	N	1	0.4		8k	0	SW		0	0	Cloudy	
Pike's Peak, Colorado	17.98	456.7	30.19	766.8	38	3.3	38	SW	38	17.0		0	0			0	0	Clear	
Pioche, Nevada	23.95	608.3	29.80	756.9	58	14.4	32	S	6	2.7		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.31	744.5	30.10	764.5	63.5	17.5	80	NW	3	1.3		0	Fg		Calm	0.01	0.3	Clear	
Port Eads, Louisiana	30.09	764.3	30.10	764.5	81.0	27.2	87	N	11	4.9		0	hz;2s		Calm	0	0	Fair	
Port Huron, Michigan	29.48	748.8	30.14	765.5	52.6	11.4	86	NE	12	5.4		2ck	0	NW		0.03	0.8	Clear	
Portland, Maine	29.69	754.1	29.74	755.4	65	18.3	68	W	11	4.9		5k	0	W		0.02	0.5	Fair	
Portland, Oregon	30.09	764.3	30.16	766.1	50.2	10.1	80	W	1	0.4		2k	8ks	W	W;NW	0.02	0.5	Cloudy	
Portsmouth, N. Carolina					76	24.4	77	NE	12	5.4		5k	0	NE		0	0	Fair	
Prescott, Arizona	24.76	628.9	29.84	757.9	57	13.9	47	S	1	0.4		2c	0	SW		Inap.	Inap.	Clear	
Punta Rassa, Florida	30.01	762.2	30.02	762.5	78.5	25.8	74	NE	11	4.9		8c	0	NW		0	0	Fair	
Red Bluff, California	29.61	752.1	29.94	760.5	60.0	15.6	40	NW	2	0.9		0	0			0	0	Clear	
Rio Grande City, Texas	29.87	758.7	30.08	764.0	75	23.9	86	Calm	0	0		0	0			0	0	Clear	
Rochester, New York	29.41	747.0	30.03	762.7	58	14.4	82	NW	14	6.3		2k	0	NW		0	0	Clear	
Roseburg, Oregon	29.63	752.6	30.19	766.8	49	9.4	85	Calm	0	0		8k	0	NE		0	0	Fair	
Sacramento, California	29.87	758.7	29.94	760.5	53.9	12.2	74	SE	6	2.7		0	0			0	0	Clear	
St. Louis, Missouri	29.50	749.3	30.08	764.0	74.0	23.3	76	SW	7	3.1		10cs	0			0	0	Cloudy	
St. Paul, Minnesota	29.23	742.4	30.07	763.8	63	17.2	78	E	8	3.6			10ks		E	0	0	Cloudy	
Salt Lake City, Utah	25.48	647.2	29.68	753.9	62	16.7	36	Calm	0	0		0	0			0	0	Clear	
San Antonio, Texas	29.41	747.0	30.10	764.5	73.8	23.2	86	Calm	0	0			10ks		S	0	0	Cloudy	
San Diego, California	29.83	757.7	29.90	759.4	60.5	15.8	82	NE	4	1.8			10s			0	0	Cloudy	
Sandusky, Ohio	29.47	748.5	30.13	765.3	66	18.9	74	SW	4	1.8		1k	0	W		0	0	Clear	
Sandy Hook, New Jersey	29.93	760.2	29.96	761.0	65.2	18.4	84	NW	8	3.6		5ck	0	W		0.43	10.9	Fair	
San Francisco, California	29.94	760.5	30.00	762.0	52	11.1	82	Calm	0	0		4c	0	NW		0	0	Fair	
Santa Fé, New Mexico	23.36	593.3	29.87	758.7	66	18.9	28	SE	5	2.2		0	0			0	0	Clear	
Savannah, Georgia	29.96	761.0	30.05	763.3	78	25.6	69	N	8	3.6		2cs	0			0	0	Fair	
Shreveport, Louisiana	29.86	758.4	30.09	764.3	80.4	26.9	87	S	1	0.4		0	0			0	0	Clear	
Silver City, New Mexico	24.32	617.7	29.78	756.4	65	18.3	26	Calm	0	0		0	0			0	0	Clear	
Sitka Alaska																0	0		
Smithville, North Carolina	30.00	762.0	30.03	762.7	79	26.1	66	NW	5	2.2		0	Hz			0	0	Clear	
Spokane Falls, Wash. Ter.	27.92	709.2	29.88	758.9	49	9.4	71	SW	3	1.3		8k	0			0	0	Fair	
Springfield, Illinois	29.42	747.3	30.08	764.0	72	22.2	76	NW	14	6.3			10ks;n		W;NW	Inap.	Inap.	Thund'r st'm	
Springfield, Massachusetts	29.75	755.6	29.88	758.9	69.9	21.1	69	SW	6	2.7		0	0			0.54	13.7	Clear	
Stockton, Texas	26.99	685.5	29.98	761.5	69.0	20.6	80	SE	16	7.2		0	0			0	0	Clear	
St. Vincent, Minnesota	29.21	741.9	30.05	763.3	53	11.7	86	SE	8	3.6			10s		Calm	0	0	Cloudy	
Thatcher's Island, Mass.	29.82	757.4	29.87	758.7	60.0	15.6	88	SW	22	9.8		0	0			0.03	0.8	Clear	
Toledo, Ohio	29.44	747.8	30.12	765.0	71	21.7	66	W	2	0.9		1ck	0	W		0	0	Clear	
Tucson, Arizona	27.44	697.0	29.73	755.1	79	26.1	27	E	3	1.3		0	8ks		SE	0	0	Cloudy	
Umatilla, Oregon	29.69	754.1	30.09	764.3	51.3	10.7	65	SW	12	5.4		0	0			0	0	Clear	
Uvalde, Texas	29.12	739.6	29.91	759.7	75	23.9	86	SE	2	0.9		2k	0	W		0	0	Fair	
Vicksburg, Mississippi	29.88	758.9	30.13	765.3	82	27.8	71	E	4	1.8		Hz	0			0	0	Clear	
Visalia, California	29.54	750.3	29.89	759.2	58	14.4	58	NW	2	0.9		0	0			0	0	Clear	
Washington, D. C.	29.95	760.7	30.06	763.5	72	22.2	62	NW	8	3.6		0	0			0	0	Clear	
Wickenburg, Arizona					73	22.8	43	Calm			0	8cs	0			0	0	Cloudy	
Wilmington, N. Carolina	29.98	761.5	30.03	762.7	78	25.6	69	NE	8	3.6		8c	Hz	Calm	Calm	0	0	Fair	
Winnemucca, Nevada	25.58	649.7	29.80	756.9	48	8.9	70	SW	4	1.8		0	5ks		SW	0	0	Fair	
Wood's Holl, Mass.	29.80	756.9	29.83	757.7	64	17.8	78	NW	14	6.3		0	0			0.25	6.3	Clear	
Yankton, Dakota	28.59	726.2	29.85	758.2	72	22.2	67	SE	18	8.0		0	0			0	0	Clear	
Yuma, Arizona	29.62	752.3	29.76	755.9	76.7	24.8	38	SW	3	1.3		1cs	0			Inap.	Inap.	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.10	561.3			54.0	12.2	82	Calm	0	0		10c	0			0.22	5.6	Cloudy	Thomas Herran.
Buff Bay Town, Jamaica	29.73	755.1	30.04	763.0	77	25.0	82	E				0	0						
Havana, Cuba, W. I.	29.99	761.7	30.04	763.0	83	28.3	83	Calm	0	0		8cs	4ks	Calm	Calm	0	0	Cloudy	A. Van Caneghem, Ass't.
Kingston, Jamaica, W. I.	29.95	760.7	29.96	761.0	82.1	27.8	70	SE	4	1.8		0	0			0	0	Fair	Robert Johnstone.
Navassa, W. I.	29.87	758.7	29.95	760.7	81	27.2	70	NE	7	3.1		Hz	2k		E	0	0	Hazy	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.03	762.7	79	26.1	87	E			2	6k	7ks	E		0.430	10.9		Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.46	748.3	30.01	762.2	77	25.0	89	N	2	0.9			10ks		N	0.18	4.6	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					73.4	23		W			1	0	0			0.94	24.		Earl Flint.
Santiago de Cuba, W. I.																			Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.07	763.8	30.12	765.0	38.0	3.3	95	SW	4	1.8		0	2s		NE	0	0	Fair	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																			Comm A. J. Errington.
H. M. S. Alert, Thursday Island, Oceania	29.97	761.2	76.5	24.7	77	SE			3		10							Overcast	Capt. J. P. Maclear.
H. M. S. Alexandra, N. 39° 34′, E. 20° 04′	30.08	764.0	69	20.6	65	SE			3		4	SSE				3	ESE	D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Jolliffe.
H. M. S. Arab,																			Comm. R. W. Stopford.
H. M. S. Bacchante, S. 37° 18′, E. 132° 20′	30.19	766.8	56	13.3		N			1		2	NE				2	WSW	D. clouds	Capt. Lord C. Scott.
H. M. S. Beacon, N 24° 47′, E. 66° 59′	29.53	750.0	84	28.9	91	WSW			2-4		5	SW						D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, Varna, Bosporus			72	22.2		S			2		0					1	S	Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N 16° 27′, W. 62° 06′	30.03	762.7	79	26.1	90	ENE			4-6		10					4	E	Showery	Capt. C. G. F. Knowles.
H. M. S. Boadicea, St. Helena, Africa	30.12	765.0	72	22.2	75	NNE			1-3		1	ENE						Blue sky	Com. F. W. Richards.
H. M. S. Champion, Monte Video, Uruguay	29.97	761.2	59	15.0	58	NNW			4-5		4							D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 38° 31′, E. 119° 36′	29.58	751.3	67	19.4	90	S			3		0							Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruiser, Cagliari, Sardinia	30.03	762.7	71	21.7		SSE			2		3	ESE						D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, N 33° 50′, W. 22° 53′	30.20	767.1	71	21.7	85	SSE			2		1					1	SSW	Blue sky	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Eliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.15	765.8	65	18.3		Calm			0		2	WNW						Misty	Capt C. Domville.
H. M. S. Dock-Yard, Bermuda, W.I.	30.14	765.5	80.5	26.9	89	SE			2-3		6	SE						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 49° 09′, W. 55° 16′	29.71	754.6	61.5	16.4	80	SSW			1-2		6	SW						D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 7° 13′, E. 72° 23′	29.93	760.2	80	26.7		SE			1		4							D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 12° 30′, E. 93° 30′	29.83	757.7	78	25.6		ESE			6		10	ESE				5	SE	Showery	Comm. C. Johnstone.
H. M. S. Emerald, N. 6° 30′, E. 170° 20′	29.84	757.9	79	26.1	93	ESE			1-2		8	E				2	NE	D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Tamatave, Madagascar	30.16	766.1	74	23.3	81	ESE			3		3	ESE				4	SE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Great Cat Arm, N. F.	29.68	753.9	60	15.6		WNW			2		2	WNW						D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn, N. 12° 47′, E. 44° 58	29.62	752.3	89.5	31.9	92	SSE			1		1							Blue sky	Capt. P. Aldrich.
H. M. S. Flamingo, N. 20° 09′, W. 83° 20′	29.99	761.7	85	29.4	83	NNE			1-3							2	NE	Showery	Comm. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	30.06	763.5	51	10.6	72	W			4		3							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.26	743.2	31	— 0.6	79	WSW			3		0							Blue sky	Capt. L. F. Jones.
H. M. S. Griffin, N. 25° 10′, W. 77° 43′	30.04	763.0	83	28.3	91	E			2		4	ENE						D. clouds	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber,																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Malta, Mediterranean	30.04	763.0	78	25.6	57	SSE			2		3							D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.07	763.8	64	17.8		Calm			0		2	Calm						D. clouds	Comm. R. H. Thornton
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.78	756.4	76	24.4		SW			3		0							Blue sky	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 0′, E. 109° 55′	29.69	754.1	84.8	29.3	81	Calm			0		9							Misty	Capt. A. Carpenter.
H. M. S. Midge, N. 22° 38′, E. 116° 01′	29.77	756.1				SW			3		6	SW				2	SW	D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. M. S. Modeste, S. 23° 41′, E. 57° 00′	30.15	765.8	70	21.1	?	SE			3-4		8	SSE				4	SSE	D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Tunis, Tunis, Africa	30.01	762.2	71	21.7	95	N			2		3	NNE						D. clouds	Capt. G. C. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, N. 5° 16′, E. 115° 15′			84.5	29.2		W			1		2	W						D. clouds	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.72	754.9	54	12.2	93	SSE			1									Foggy	Capt. E. B. Drummond.
H. M. S. Orontes, N. 0° 31′, W. 0° 03′ *†	29.96	761.0	78.5	25.8	84	SSE			2-3		8	ENE				1	S	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.92	760.0	79	26.1	95	NE			1		10					2	SE	Overcast	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A.C.Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.72	754.9	79	26.1		S			3		10							Raining	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 48° 26′, W. 123° 27′	30.03	762.7	51	10.6		WSW			1		3							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	30.11	764.8	78.3	25.7	78	S			3-4		9	SSE				Sm'h		D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull, S. 7° 46′, E. 39° 52′	29.66	753.4	78	25.6	86	S			4		1					2	SSE	Blue sky	Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon, N. 46° 51′, W. 6° 58′	30.00	762.0	64	17.8	86	SSW			3		4	SSW				3	W	D. clouds	Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, S. 24° 16′, W. 70° 48′	30.11	764.8	60	15.6	70	N			1		4	Calm						D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.			81	27.2		E			2		2							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	29.92	760.0	54	12.2	73	W			1		0							Blue sky	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Abu Shehr, Persia	29.63	752.6	91.5	33.1	57	NW			5-6									Heavy mist	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candido dos Reis, Comd't.
Quanza, Santiago, Cape Verd I'ds.	29.98	761.4	84.6	29.2	48	NE			3		0					2	NE	Blue sky	Carlos M. da Silva Costa, Comd't
Rio Lima																			S. C. da Silva Costa, Comd't.
Sado, Loando, Africa	29.98	761.5	74.5	23.6	76	SW			4		1					2		Blue sky	G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.74	755.3	82.4	28.0	86	SW			2		7		S					D. clouds	P. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga, N. 36° 31′, W. 7° 29′	30.04	763.1	74.3	23.5	80	SSE			1		1							D. clouds	Capt. M. von Krusenstierna
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.	Character.	Dir'n from.		
N. Yard, Pensacola, Fla	30.14	765.5	82	27.8	83	N	2	0.9			5		N	0	0			Fair	
N. Yard. Portsmouth, N. H.	29.79	756.7	65	18.3	89	NW	10	4.5			0			0	0			Misty	
Naval Hospital, Yokahama, Japan	29.64	752.8	74	23.3	88	SW			5		0			0	0			Clear.	
Adams Punta Arenas, Costa Rico	29.70	754.4	78	25.6	91	N			1		8		S			Sm'h		Cloudy	
Alaska, Callao, Peru	29.91	759.7	65	18.3	94	SSE			1		8		S	0	0	Sm'h		Cloudy	
Alert, Yokohama, Japan	29.70	754.4	76	24.4	82	S			4		2		SSW			Sm'h		Clear	
Alliance, Norfolk, Va	29.86	758.4	77	25.0	69	NW			1		2			0	0			Clear	
Ashuelot, Kobe, Japan	29.87	758.7	71	21.7	?	W			1		10		W					Cloudy	
Colorado, New York, N. Y	30.02	762.5	69	20.6	75	NW	3	1.3			8		Calm	0	0			Cloudy	
Constitution, Newport, R. I	29.81	757.2	64	17.8	73	WNW			2		0							Clear	
Franklin, Norfolk, Va	29.98	761.5	77	25.0	69	NNW	8.4	3.8			2		NNW	0	0			Fair	
Galena. Lisbon, Portugal	30.07	763.8	71	21.7	80	NNW			2		2					Mod.	NW	Fair	
Independence, N. Yard, Mare I'd, Cal	29.91	759.7	73	22.8	67	WSW	3.6	1.6			2		WSW	0	0			Fair	
Jamestown, Sitka, Alaska	30.01	762.2	52	11.1	93	Calm			0		10			0	0			Cloudy	
Kearsarge. Norfolk, Va	30.05	763.5	75	23.9	81	N			1		2		N			Sm'h		Fair	
Lackawanna. S. 16° 04′, W. 152° 54′	30.15	765.8	82	27.8	83	ENE			3-4		2		NE			Mod.	NE	Fair	
Marion, Montevideo, Uruguay	29.93	760.2	57	13.9	87	N			5		5		Calm			Mod.	N	Fair	
Michigan, Cleveland, Ohio	30.04	763.0	65	18.3	84	NW			2		2		NW					Clear	
Minnesota, Newport, R. I	29.87	758.7	74	23.3	68	NW			3		2					Sm'h		Clear	
Monocacy, Yokohama, Japan	29.82	757.4	75	23.9	81	SSW			4		5		Calm					Fair	
New Hampshire. Norfolk, Va	30.04	763.0	76	24.4	68	NW	2	0.9			2		Calm	0	0			Clear	
Nipsic. N. 42° 46′, W. 9° 37′	30.04	763.0	67	19.4	79	S			2		8					Long	NNW	Hazy	
Onward, Callao, Peru	30.02	762.5	65	18.3	89	SSE			1		10					Long	W	Cloudy	
Palos, Nagasaki, Japan	29.90	759.4	67	19.4	95	ENE			1		10							Rainy	
Passaic, Washington, D. C	30.06	763.5	71	21.7	88	NW			1		2							Fair	
Pensacola, Mare Isl'd, Cal	30.02	762.5	55	12.8	87	SW			3		0			0	0	Sm'h		Clear	
Portsmouth. Newport, R. I	29.84	757.9	65	18.3	78	W			3										
Powhatan. Newport, R. I	29.87	758.7	70	21.1	70	WSW			2		0							Clear	
Quinnebang, Tompkinsville, N. Y	29.92	760.0	65	18.3	78	W			1		0					Sm'h		Cloudy	
Ranger, N. 24° 22′, W. 109° 55′	29.81	757.2	82	27.8	87	E			2		8		Calm	0	0	Sm'h		Fair	
Richmond, Nagasaki, Japan	29.91	759.7	67	19.4	89	N			1		10			1.05	26.7			Drizzling	
Saratoga, Newport, R. I	29.85	758.2	64	17.8	78	WNW			3		0			Light				Clear	
Shenandoah, S. 35° 04′, W. 53° 46	30.16	766.1	59	15.0	88	N			4		5		N			Mod.	N	Fair	
St. Louis, League Island, Pa	29.45	748.0	70	21.1	75	W	5	2.2			8		W	0	0			Fair	
Swatara. Shanghai, China	29.77	756.1	72	22.2	80	SSE			2		10		Calm					Overcast	
Tennessee, Navy Yard, N. Y	29.96	761.0	69	20.6	80	NW	1	0.4			2		NW	0.22	5.6	Sm'h		Hazy	
Ticonderoga, S. 49° 10′, W. 45° 10′	29.78	756.4	47	8.3	92	NNW			5		10		W	0.05	1.3	Long	NNW	Cloudy	
Trenton, Marseilles, France	29.97	761.2	72	22.2	80	Calm			0		0			0	0	Sm'h		Hazy	
Vandalia. Huntington, Long I'd	29.90	759.4	65	18.3	78	W			2		2		W					Fair	
Wabash, Boston, Massachusetts	29.87	758.7	68	20.0	65	W	15	6.7			0			0.06	1.5			Clear	
Wachusetts, N. Yard, Mare I'd, Cal	29.94	760.5	57	13.9	?	SW			3		0			0	0			Clear	
Yantic, Key West, Florida	29.95	760.7	81	27.2	91	ENE			2		2							Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 25° 58′, W. 123° 01′	30.08	764.0	64	17.8	77	NNE			3		10							Overcast.	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 49° 25′, W. 17° 12′	29.67	753.6	57	13.9	94	SE			6		10					3	W	Raining	Capt. W. N. Lailey.
City of Agra, N. 6° 14′, W. 24° 47′	30.01	762.2	82.0	27.8	77	SSE			4		6							D. clouds	Capt. T. Young.
Barque Commowyne																			Capt. W. Scott.
Barque Coppename, N. 36° 16′, W. 18° 38′	30.22	767.6	67.5	19.7	65	SW			3-4		10							Overcast	Capt. A. Buchan.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elisa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 10° 59′, W. 37° 02′	30.11	764.8	79.7	26.5	80	ESE			4		2					Sm'h		D. clouds	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Naiad, N. 49° 30′, W. 8° 12′	29.88	758.9	55.8	13.2	100	WNW			3		10							Drizzling	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 32° 09′, W. 42° 16′	30.28	769.1	72.1	22.3	85	NNW			2		3							D. clouds	Capt. M. Parry.
Sierra Estrella, N. 19° 13′, W. 25° 02′	30.13	765.3	72.5	22.5	82	NE			4		6							Misty	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 37° 22′, E. 10° 05′	29.98	761.5	64.5	18.1	100	NNW			4		6							D. clouds	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.* S. S. Buenos Ayrean, N. 49° 10′, W. 64° 34′	29.48	748.8				Var.			1		8		NW					Cloudy	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian, N. 37° 30′, W. 74° 04′	30.05	763.3	72	22.2		NW			1		0					Con.	SE;S	Clear	Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.* S. S. Gallia, ‡ N. 56° 04′, W. 22° 24′	29.66	750.8	58	14.4		SE			3		10		SE	Mi	st	Sm'h		Overcast	Capt. W. H. P. Haine.
S. S. Algeria																			Capt. W. Watson.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Iemay, Imrie & Co.* S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic, ‡ N. 41° 57′, W. 56° 36′	29.88	758.9	72	22.2	90	S			4		5		SW	0	0	R'gh	WSW	D. clouds	Capt. H. Parsell.
S. S. Britannic, N. 44° 19′, W. 47° 27′ †	30.08	764.0	56	13.3	87	SW			3		2		SW			Sl't	W	Misty	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England †	30.05	763.3	66	18.9	89	SSE			3		10		S	Sho	wers			Showery	Capt. Ch. W. Kennedy.
S. S. Republic, N. 48° 24′, W. 31° 15′ †	29.80	758.9	55	12.8	87	NE			4		10			0	0	Sm'h		Gloomy	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.* S. S. Braunschweig, N. 41° 58′, W. 48° 45′	30.05	763.3	60.0	15.6	97	S			2		10		S			Sm'h		Foggy	Capt. C. Phole.
S. S. Hermann, N. 47° 40′, W. 36° 37′	29.83	757.7	55.4	13.0		NNW			4		10		W	2 ho	urs	Light	WNW	Overcast	Capt. H. Baur.
S. S. Hohenzollern, ‡ N. 39° 19′, W. 69° 05′	29.91	759.7	62.4	16.9		WNW			2		2		W	0	0	Mod.	WNW	Fair	
S. S. Köln																			Capt. Th. Jüngst
S. S. Strassburg, N. 49° 49′, W. 6° 57′	29.85	758.2	59.0	15.0		S			4		10		S	14 ho	urs	Mod.	SSW	Cloudy	Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England	29.88	758.9	64	17.8	89	S			1		10		S					Overcast	Capt. J. W. Shackford.
S. S. Indiana, Philadelphia, Pa †	30.02	762.5	74	23.3	90	WNW			4		2		NW	0	0			Clear	Capt. R. W. Sargent.
S. S. Ohio																			W. Shackford, Chief Off'r
S. S. Pennsylvania, N. 40° 00′, W. 50° 50′ †	30.15	765.8	77	25.0	82	W			1		5		W			Sm'h	W	Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 26° 57′, W. 110° 50° †	29.65	753.1	80	26.7	91	ESE			2		2		SE	0	0	G'tl	SE	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 41° 26′, W. 139° 11′ †	30.38	771.6	57	13.9	93	SSE			3		8		SW	Showers		Mod.	NW	Cloudy	Capt. H. Davison.
S. S. Gaelic, N. 45° 33′, E. 162° 27′ *†	30.11	764.8	48	8.9	43	ESE			2		2		E			Sl't	N	Fair	Capt. W. H. Kidley.
S. S. Oceanic, N. 24° 48′, E. 119° 23′	30.09	764.3	80	26.7	86	S			4		7		S	0.09	2.3	Sl't	S	Cloudy	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon																			Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, San Francisco, Cal †	29.99	761.7	56	13.3	87	Calm			0		5		W					Fair	Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, San Francisco, Cal †	29.96	761.0	48	8.9	85	W			1		0							Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 33° 15′, W. 117° 18′ †	29.92	760.0	56	13.3	94	SE			2		8		SE			Mod.	S	Cloudy	Geo. H. Harrison.
S. S. Senator, San Francisco, Cal †	29.94	760.5	49	9.4	85	W			1		0							Clear	Capt. Thos. Wallace.
S. S. State of California, Portland, Oregon †	30.11	764.8	50	10.0	79	NW			2		5		W					Fair	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal †	30.02	762.5	47	8.3	85	Calm			0		2					Sm'h		Clear	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 2d Officer
S. S. City of New York, Sydney, N. S. W †	29.88	758.9	54	12.2	93	W			1		0							Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 11° 32′, W. 87° 41′ †	29.95	760.7	80	26.7	82	NW			2	8ck	2ks		NW	5 hours		Sm'h	W	Fair	Capt. D. S. Austin.
S. S. City of Peking																			Capt. G. G. Berry.
S. S. City of Sidney, N. 8° 39′, W. 163° 06′ *†	29.88	758.9	80	26.7	78	ENE			4		10		ENE			Mod.	ENE	Drizzling	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 30° 54′, E. 130° 42′ †	30.01	762.2	73	22.8	81	SW			2		10		SW			Mod	SW	Cloudy	A. L. Ritchie, 2d Officer
S. S. Colima, N. 33° 09′, W. 119° 46′ †	29.95	760.7	58	14.4	88	WNW			6		5		WNW	0	0	R'gh	WNW	Hazy	Capt. R. R. Searle.
S. S. Granada, N. 14° 12′, W. 92° 02′ †	29.88	758.9	83	28.3	83	E			4		2		ENE	9 hours		Mod.	SE	Clear	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. Wales	30.26	768.6	55	12.8	100	NE			4		0							Clear	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, ‡ N. 40° 15′, W. 57° 12′ †	29.18	741.2	76	24.4	86	SW			4		2		SW	0	0	Mod.	SW	Fine	A. Feddersen, 2d Officer.
S. S. Rhynland, N. 40° 00′, W. 51° 09′ †	30.34	770.6	74	23.3	85	W			3		10		NNW	0.1	3.	Sm'h		Hazy	Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 39° 43′, W. 71° 45′	29.90	759.4	67	19.4	79	WSW	9	4.0			0			0	0	Short	W	Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, Arroyo, Porto Rico †	30.12	765.0	78	25.6		ENE			6		10			Heavy		R'gh		Stormy	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Point Lookout, Md †	30.04	763.0	73	22.8	85	WNW	3	1.3		0	28			0.03	0.8			Fine	
Bark Sunbeam, N. 36° 44′, W. 13° 39′ †	30.22	767.6	69	20.6	79	WNW			2		8		N	0	0	Sm'h		Cloudy	Capt. Jos. Hand.

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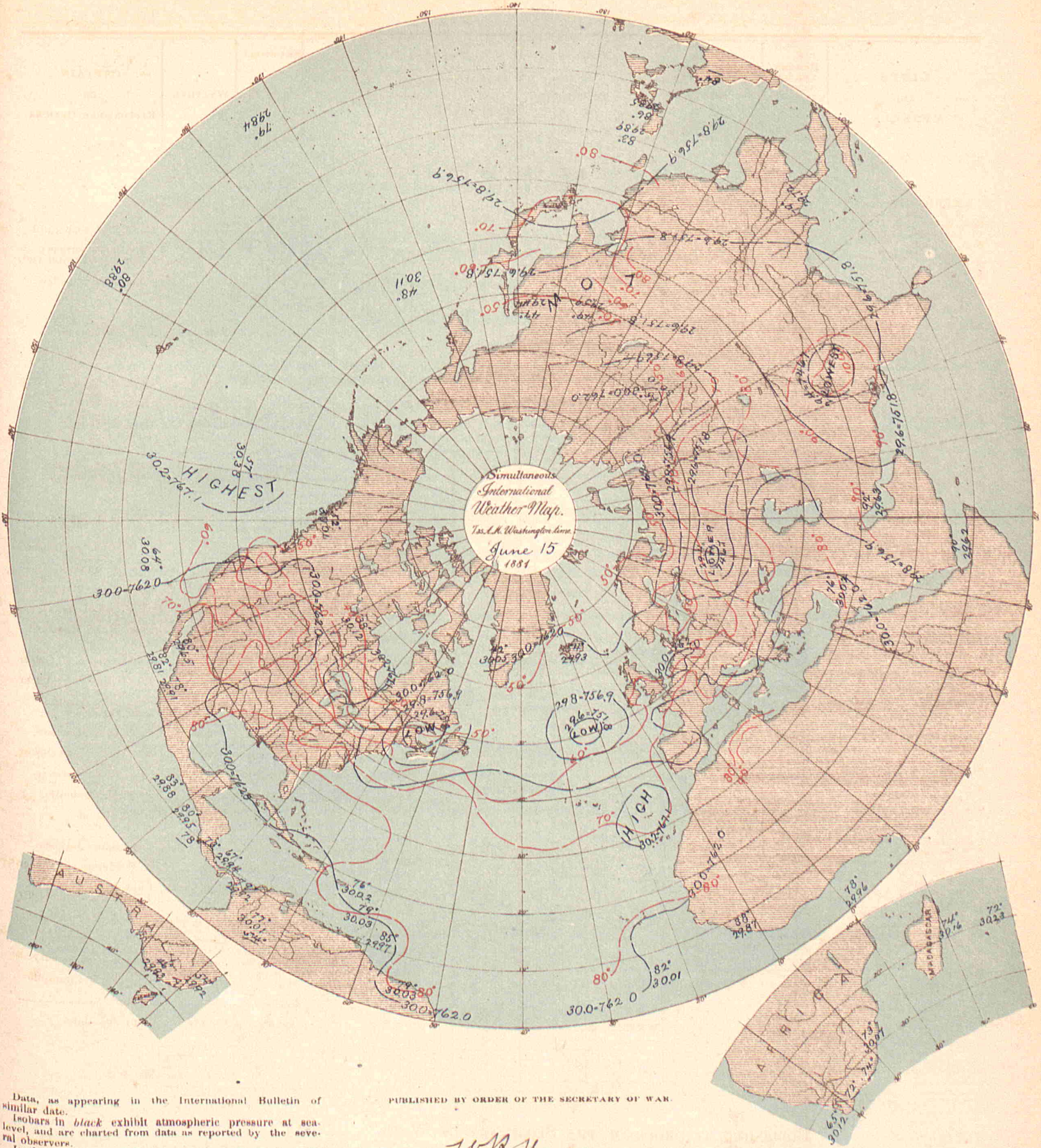
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 16, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instru'tal error and temperature. Inch.	Barometer. Corrected for instru'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather	Observers.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours			30.01	762.2	77.0	25.0	79	W			1		0			0	0	Clear	Raynard.
Algiers			30.04	763.0	74.8	23.8	80	NNE			2		0			0	0	Clear	Nicolas.
La Calle			30.09	764.3	71.2	21.8	66	ENE			4		1			0	0	Very fair	Fonfréde.
Tunis			30.09	764.3															Jacques.
Sfax			30.17	766.3															Gau.
Saida			30.08	763.9	83.3	28.5	26	N			4		0			0	0	Clear	Dumas.
Tebessa			30.10	764.6	81.0	27.2	34	NW			2		2			0	0	Fair	Watrin.
Geriville					84.2	29.0	29	NNE			1		0			0	0	Clear	Lonchamp.
Laghouat			30.10	764.4	93.6	34.2	15	NE			3		0			0	0	Clear	Herbin.
Biskra			30.10	764.5	100.0	37.8	59	SE			2		4			0	0	Cloudy	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.01	762.2	30.10	764.5	44.2	6.8	82	W	9	4.0			3			0.01	0.3	Fine	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.43	747.5	29.95	760.9	73.4	23.0	55	SE			2		4			0.350	8.9		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.19	741.3	29.94	760.5	61.2	16.2	58	W	8.7	3.9			10			0.008	0.2		Dr. Wierzbicki.
Eperies	29.02	737.0	29.87	758.7	63.7	17.6	60	N			2		10ks		S	0.209	5.3		Julius Mikolik.
Gratz ‡	28.71	729.2	29.92	760.0	68.0	20.0	56	W			1		7			0.098	2.5	Thund'r st'm	Andreas Rospini.
Hermannstadt	28.47	723.1	29.84	758.0	70.9	21.6	45	W			2		5			0.110	2.8		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.65	727.6	29.95	760.6	67.7	19.8	61	SW			1		5			0.126	3.2		The Staff.
Lemberg	28.86	733.1	29.83	757.7	58.5	14.7	72	NW			2		10			0.020	0.5		Dr. T. Stanecki.
Pola	29.91	759.7	30.02	762.5	73.4	23.0	61	S			2		6			0	0		I. R. HydrographicOffice.
Szathmar	29.44	747.7	29.90	759.4	58.6	14.8	85	W			1		10			0.197	5.0		Beicht Peter, S. J.
Szegedin	29.64	752.9	29.91	759.8	68.4	20.2	62	SW			1		5			0	0		Karl Stancel.
Trieste	29.94	760.4	30.04	763.0	73.4	23.0	58	SW			1		2			0	0		Secco.
Vienna	29.29	743.9	29.98	761.6	68.2	20.1	47	N			1		1			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed June 16, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.93	760.2	30.02	762.5	48.6	9.2	90	SE	15	6.7			10			0.120	3.0	Overcast	W. Boswell.
Armagh, Observatory	29.56	750.8	29.79	756.7	54.8	12.7	92	SE	10	4.5			10					Gloomy	S. Call.
Bidston, Liverpool Obs'y			29.86	758.4	61.7	16.5	71	SE	16	7.2			10					Overcast	John Hartnup.
Bolton, Sharples																			Thomas Mackereth.
Bradford, Yorkshire	29.51	749.5	29.90	759.4	63.8	17.7	66	SE			1		9			0.27	6.9	Raining	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.96	761.0	29.99	761.7	83	28.3	75	NE			3		7					Gloomy	Corpl.J.Surgener,A.H.C.
Cardington			29.92	760.0	70.0	21.1	57	S			0.4		10					Overcast	John McLaren.
Chatham, School M. E.	29.84	757.9	29.96	761.0	71.1	21.7	51	SE			2		10					Misty	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.63	752.6	29.85	758.2	57.0	13.9	92	S			1		10					Raining	The Staff.
Fort Napier, Natal	27.87	707.9	30.09	764.3	69.1	20.6	31	Calm			0		4?					Overcast?	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7				W			1		0					Blue sky	Sgt. C. E. Keane.
Galway, Queen's College					57	13.9	94	W			2		10			0.40	10.2	Showery	J. O'Donaghue.
Gibraltar, Mediterranean	30.02	762.5	30.07	763.8	74.0	23.3	82	WSW			4		0					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.69	754.1	29.89	759.2	55.7	13.2	83	NE			8		10					Squally	Harry Urquhart.
Greenwich, Royal Obs'y	29.78	756.4	29.95	760.7	69.2	20.7	56	SSE			1		10					Overcast	The Staff.
Guernsey	29.69	754.1	29.90	759.4	57.5	14.2	91	SSE			2		10					Raining	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.91	759.7	29.95	760.7	71.0	21.7	49	S	14	6.3			10					Overcast	The Staff.
Leicester, Museum	29.67	753.6	29.92	760.0	63.5	17.5	60	SE			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.90	759.4	29.97	761.2	69.0	20.6	90	NE			3		8					Overcast	F. S. Vine, A. H. C.
Nassau, Bahamas	29.98	761.5	30.03	762.7	85.5	29.7	78	E			3		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.40	746.7	29.91	759.7	61.8	16.6	74	SE			2		10			Blank		Overcast	John Mac Email.
Oxford, Radcliffe Obs'y	29.71	754.6	29.94	760.5	62.3	16.8	67	SSE			3		10					Threatening	The Staff.
Plymouth	29.79	756.7	29.86	758.4	56.7	13.7	98	S			1		10					Foggy	John Merrifield.
Sandwick Manse, Orkneys			30.02	762.5	53	11.7	85	SE	34	15.2			10					Misty	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.76	755.9	29.82	757.4	77.0	25.0	49	NE			2		6					D. clouds	Serg't W. H. Lyne.
Sheffield	29.69	754.1	29.96	761.0	64.7	18.2	74	SW			2		10			0.17	4.3	Overcast	W. F. Cooper.
Silloth Rectory																			Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.93	760.2	60.2	15.7	80	E	3	1.3			10					Raining	Rev. S. J. Perry.
Stratfield Turgiss	29.70	754.4	29.94	760.5	66.7	19.3	60	SE			1		8					Showery	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	29.73	755.1	29.74	755.4	61	16.1	82	S			6		10					Raining	W. Newcombe.
Valencia, Observatory	29.50	749.3	29.52	749.8	56.6	13.7	94	SE	45	20.1			10					Raining	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B					42.0	5.6		NW	7	3.1			10n					Raining	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.63	752.6	29.67	753.6	46	7.8	69	W	14	6.3			10n			Inap.	Inap.	Light rain	H. J. Cundall, C. E.
Chatham, N. B.*	29.62	752.3	29.68	753.9	41	5.0	74	W	12	5.4			10s		W	0	0	Cloudy	G. A. Blair.
Chicontimi, Quebec					41.0	5.0		NW			6		10ks					Raining	Rev. V. A. Huart.
Cornwall, Ontario	29.94	760.5	30.13	765.3	48.9	9.4	61	SW			2	0	1s			0	0	Blue sky	James Smith, M. A
Dalhousie, N. B	29.56	750.8	29.60	751.8	40.0	4.4		W			1	0	0			0	0		H. A. Johnson.
Father Point, Quebec*	29.72	754.9	29.74	755.4	81	5.0	88	N	45	20.1			10n			Inap.	Inap.	Light snow	J. McWilliams.
Fort Garry, Manitoba*	28.68	728.5	29.48	748.8	57	13.9	97	S	12	5.4			10n			0.45	11.4	Light rain	James Stewart.
Fredericton, N. B	29.70	754.4	29.77	756.1	46.0	7.8	42	NW	16	7.2			10s			Inap.	Inap.	Cloudy	Prof. Harrison.
Granton, Ontario	29.12	739.6	30.23	767.8	51.0	10.6	72	E			1	0	0			0	0		James Grant.
Halifax, N. S.*	29.61	752.1	29.74	755.4	50	10.0	75	W	8	3.6			10ks			0	0	Cloudy	A. Allison.
Hamilton, Ontario	29.85	758.2	30.24	768.1	55.5	13.1	77	SW			1	4ck	0	SW		0	0		Geo. Dickson, B. A.
Kingston, Ontario*	29.86	758.4	30.19	766.8	54	12.2	55	N	4	1.8		0	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S	29.57	751.1	29.61	752.1	49.0	9.4	72	SW			2	7k	0	SW		0	0	Cloudy	C. H. Rigby.
Montreal, Quebec*	29.86	758.4	30.06	763.5	51	10.6	56	W	18	8.0		0	2ks		NW	0	0	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario	30.20	767.1	30.24	768.1	37.2	2.9	81	SE			3		9ks			0	0	D. clouds	J. R. Nason.
Parry Sound, Ontario*	29.56	750.8	30.25	768.6	53	11.7	70	SE	8	3.6		2cs	0	N		0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario	29.37	746.0	30.11	764.8	57.7	14.3	63	W			1	0	0			0	0	Clear	J. F. Jeffers, M. A.
Port Dover, Ontario	29.54	750.3	30.23	767.8	54	12.2	87	E	6	2.7		10c	0	NW		0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.57	751.1	30.22	767.6	54	12.2	71	E	8	3.6			10ks		NW	0	0	Cloudy	M. Payne.
Quebec, Quebec*	29.60	751.8	29.92	760.0	42	5.6	58	NW			5		10ks		NW	0	0	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.74	755.4	30.21	767.3	46	7.8	69	NW	6	2.7		0	0			0	0	Clear	W. H. McIntyre.
Saugeen, Ontario*	29.56	750.8	30.28	769.1	50	10.0	64	E	7	3.1			Sk			0	0	Smoky	K. Stewart.
St. Andrews, N .B	29.74	755.4	29.80	756.9	46	7.8	53	NW	8	3.6		0	2ks			0	0	Clear	
St. John, N. B	29.61	752.1	29.77	756.1	47.0	8.3	48	NW	14	6.3			10ks			0	0	Raining	G. Murdock, C. E.
Stratford, Ontario	28.93	734.8	30.21	767.3	53.4	11.9	68	SE	5	2.2		2cs	0			0	0	Blue sky	C. J. Macgregor, M. A.
Sydney, C. B*	29.63	752.6	29.67	753.6	55	12.8	70	SW	10	4.5		8k	2ks	W	W	0	0	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.90	759.4	30.28	769.1	56	13.3	54	NE	8	3.6		2ck	2s	NW	W	0	0	Fair	*Magnetic Observatory*
Windsor, N. S	29.62	752.3	29.72	754.9	48.0	8.9	70	W	8	3.6			9n			0	0	Cloudy	
Woodstock, Ontario	29.16	740.7	30.22	767.6	55.1	12.8	65	NE	10	4.5		9cs	0	W		0.25	6.3	D. clouds	Prof. Wolverton.
Yarmouth, N. S*	29.76	755.9	29.83	757.7	45	7.2	75	NW	22	9.8		2k	0	NW		0	0	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.79?	756.7?	30.03?	762.7?	57	13.9	100	SW	2	0.9			10n					Raining	John Delany.
St. Pierre, N. F			29.60	751.8	52.9	11.6		SW			1					0	0		N. F. Land, Comd't.
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	30.20	767.1			68.5	20.3	83	SSE	6.8	3.0		0	2s			0	0	Blue sky	John Duthie.
Cape Town, C. G. H. Obs'y	30.09	764.3	30.13	765.3	58.8	14.9		SSE	5.3	2.4		0	1s			0	0		The Staff, for D. GR.
Worcester*†.	29.08	738.6			73.7	23.2	46	SW			1	0	0			0	0	Fine	C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.75	755.6	29.78	756.3	70.9	21.5	91	SE	2.0	0.9			10			0.429	10.9	Covered	M. Marc Dechevrens, S.J.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.23	666.2	29.95	760.7	68.9	20.5	91					5ck	4d			Inap.	Inap.	Cloudy	Amand Maison.

DANISH SERIES.

Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.

Copenhagen	30.06	763.6	30.11	764.8	56.8	13.8	59	NE	9	4			5						Oversergent Fischer.
Fanöe	30.06	763.4	30.08	763.9	61.5	16.4	68	NW			4		7						Overloerer Lauridsen.
Godthaab, Greenland	30.01	762.2	30.05	763.3	45.3	7.4	66	ENE			5		10						S. Kleinschmidt.
Stykkisholm, Iceland	30.09	764.2	30.13	765.3	46.8	8.2		W			2		10					Foggy	A. O. Thorlacius.
Thorshavn	30.07	763.7	30.10	764.6	51.1	10.6	75	E	16	7			10						Overloerer Bergh.
Vestervig	30.00	762.0	30.10	764.4	58.6	14.8	74	Calm			0		9						Loearer Oesterbol.

FRENCH SERIES.

Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.

Agen, Normal School	29.39	746.4	30.01	762.2	74.8	23.8	56	SSW			1	ck	o		SW	o	o		M. Labroue, Director.
Alençon Normal School	29.49	749.0	30.04	763.0	73.0	22.8	77	S			1	o	5ks		S	o	o	Cloudy	M. Nicot, Director.
Arras, Engineer School	29.72	754.8	29.97	761.2	70.7	21.5	44	SE			1	o	k		SE				M. Klein, Commandant.
Avignon, Normal School	29.93	760.3	30.01	762.3	79.5	26.4	49	SW			1		o			o	o	Clear	M. Giraud, Director.
Bar-sur-Seine	29.44	747.8	29.98	761.4	72.5	22.5	48	NE			1	o	5kn		W	o	o	Cloudy	M. Saillard, Director.
Beauvais, Normal School	29.72	754.9	29.97	761.3	74.3	23.5	47	SSE			1		8		WSW	0.169	4.3	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.12	739.6	29.94	760.5	71.6	22	58	ENE			1	o	o		E	0.768	19.5		M. Gobin, Director.
Bordeaux, Observatory	29.74	755.5	30.00	761.9	74.3	23.5	58	SE			1		5			o	o	Hazy	M. Rayet, Director.
Bourges, Normal School	29.47	748.6	30.01	762.2	75.2	24	46	SE			1		n		SE	o	o		M. Postel, Director.
Brest, Naval Observatory	29.68	753.9	29.93	760.1	62.6	17.0	85	SW			2		10		SW	0.051	1.3		M. de Rermaree, Dir.
Caen, Normal School	29.85	758.2	29.92	760.0	75.4	24.1	55	S			4		5		S	o	o	Cloudy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.61	752.1	29.92	759.9	77.7	25.4	47	Calm			o		o			o	o	Clear	M. Jadot, Director.
Charleville, Normal School	29.48	748.8	29.98	761.5	71.6	22	65	E			1					o	o		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.64	727.5	29.93	760.3	77.5	25.3	46	N			1		8			0.189	4.8	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.25	743.0	30.04	763.0	79.7	26.5	49	S			1		2		SW	o	o		M. de Villemontée, Dir.
Commercy, Normal School	29.16	740.6	30.00	762.1	71.1	21.7	50	NW			1	o	5kn	NW	NW	0.016	0.4	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.65	702.2	30.03	764.2	73.0	22.8	43	SW			1		n		SW	o	o		M. Jeangirard, Director.
Gréasque, du. Rhone	29.00	736.7	30.15	765.7	78.1	25.6	38	SE			3		2		SE	o	o	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.22	742.1	29.95	760.8	75.2	24	57	ENE			1		k			0.177	4.5		M. Ablard, Director.
Guéret, Normal School	28.41	721.7	29.95	760.6	72.1	22.3	45	SW			1		kn		NE	o	o		M. Rivoire, Director.
Lamballe, Normal School	29.72	755.0	29.99	761.8	71.6	22	59	E			2		10		E	0.04	1.	Raining	M. Ollitrault, Director.
Lescar, Normal School	29.46	748.3	30.11	764.7	72.3	22.4	64	N			1	c	o			c	o		M. Chauvin, Director.
Lorient, Naval Observatory	29.89	759.2	29.99	761.8	64.4	18.0	84	S			4		10	SW	S	0.020	0.5	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.98	736.1	30.00	762.0	77.0	25.0	47	SE			1		8		W	0.205	5.2	Very cloudy	M. André, Director.
Mans, Normal School	29.68	753.9	29.98	761.5	70.3	21.3	83	W			1		5		SW	o	o	Cloudy	M. Piboen, Director.
Marseille, Observatory	29.74	755.4	30.00	762.1	75.4	24.1	48	SSE			1		1		S	o	o		M. Stephan, Director.
Montlouis l'Instituteur	24.92	632.9	30.15	765.9	64.0	17.8	46	SW	16.8	7.5			6		W	o	o		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.89	759.2	30.00	761.9	77.0	25	61	S			2		2		NW	o	o	Slightlycl'dy	M. P. Galzin, Director.
Nancy, Normal School	29.25	743.0	29.99	761.8	71.6	22	50	NW			1	o	5kn	NW		0.063	1.6	Cloudy	M. Hasse.
Nantes, Observatory	29.85	758.2	30.02	762.4	69.6	20.9	67	SSW			o–1		10n		SW	o	o		M. Larocque, Director.
Nice	30.02	762.4	30.05	763.3	69.4	20.8	69	E			2		10	E	E	o	o	Covered	Capt. Boissière, Director.
Perpignan, Observatory	29.91	759.7	30.01	762.3	73.4	23.0	62	SE	7.4	3.3			1		NW	o	o		Dr. Fines.
Pic-du-Midi, Plantade	22.67	575.9			49.1	9.5							1		SW	o	o	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	28.99	736.4	30.01	762.2	79.2	26.2	39	N			1		10	SE	SW			Thnd'r str'm	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.24	641.1			55.9	13.3	70	SW			1		10			0.224	5.7	Covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.00	762.1	30.04	762.9	74.1	23.4	93	WSW			1		8		SW	o	o	¾ covered	Lt. E. Decanie, Director.
Roche-sur-Yon, N. School	29.79	756.6	30.00	761.9	72.0	22.2	66	W			1		10			o	o	Covered	M. Mouillot, Director.
Rodez, Normal School	27.95	709.9	30.01	762.2	74.3	23.5	55	W			1		5			o	o	Fair	M. Richard, Director.
Rouen, Normal School	29.87	758.7	29.96	760.9	75.2	24	54	SSE			1		8		W	o	o	Very cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.81	757.1	29.97	761.1	63.9	17.7	76	SSW			2		5		NNE	o	o	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.81	757.2	29.98	761.4	75.4	24.1	44				1		6	WSW	WSW	o	o		M. Renou, Director.
Toulouse, Observatory	29.35	745.4	30.07	763.8	72.5	22.5	68	NW			1		8			0.110	2.8	Very cloudy	M. Baillaud, Director.
Tours	29.79	750.6	29.98	761.6	76.6	24.8	55	WSW			1		8		W	o	o	¾ covered	M. de Tastes.
Versailles, Observatory	29.50	749.2	29.98	761.6	72.0	22.2	49	SW			1					0.142	3.6		Dr. A. Bérigny, Director.
Sun-Series.																			
Paris, Montsouris Obs'y	29.71	754.5	30.00	761.9	74.6	23.6	44	N			1		8	W		o	o		M. Marié Davy, Director.

GERMAN SERIES.

Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.

Bamberg	29.14	740.1	30.00	762.0	66.4	19.1	65	E			2	o	3k	W		0.126	3.2		Prof. Dr. Hoh.
Berlin	29.87	758.6	30.04	762.9	65.8	18.8	56	NE			1		6			o	o		Prof. Dr. Arndt.
Breslau	29.50	749.4	30.04	762.9	63.3	17.4	53	N			2		7			o	o		Royal University Obs'y.
Carlsruhe	29.55	750.5	29.96	760.9	74.1	23.4	71	WSW			2		1	NW					Albert Senz.
Cassel	29.20	743.1	29.97	761.3	69.1	20.6	49	NW			1		6	SW		0.083	2.1		Dr. H. Möhl.
Frankfort on the Main	29.65	753.2	30.01	762.2	71.2	21.8	47	NW			2		7			o	o		Physical Society.
Friedrichshafen	28.61	720.6	30.01	762.2	65.8	18.8	71	SW			2		4	WSW		0.043	1.1		Wilhelm, Chief Tel.
Hamburg	29.99	761.7	30.06	763.5	64.4	18.0	60	NNE			3		7			o	o		Dr. R. Kleeman.
Kiel	30.03	763.4	30.07	763.8	58.8	14.9	65	NNE			2		8			o	o		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.59	751.6	30.00	762.0	67.3	19.6	52	ENE			2		4	NE		o	o		Prof. Dr. Bruhns.
Magdeburg	29.82	757.5	30.00	762.1	67.5	19.7	51	NE			2	o	6ks	W		o	o		Dr. Assmann.
Memel	29.86	758.4	29.91	759.6	61.3	16.3	67	NNW			3–4	4cs	o						Reinbrecht & Issermann.
Munich	28.22	716.8	30.09	764.2	58.8	14.9	70	N			1		8	NW		0.020	0.5	Raining	Central Station.
Neufahrwasser	29.99	761.7	30.00	762.1	54.0	12.2	84	NW			2		9			0.091	2.3		A. Lothes.
Neustadt, Palatinate	29.44	747.7	29.97	761.1	73.8	23.2	46	N			2		7			o	o		Dicknether.
Stuttgart	29.03	737.4	29.89	759.3	71.1	21.7	56	SW			2		6	W		0.008	0.2		Prof. Dr. Schoder.
Weissenburg, Bavaria	28.50	724.0	29.97	761.1	68.0	20.0	56	S			4		4	SW		0.169	4.3		Prof. Kemlein.
Wustrow	30.08	763.9	30.10	764.5	58.5	14.7	77	N			3	o	5s			o	o		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.54	750.5	29.92	760.0	75.6	24.2		SW			1.5	0	5k					½ Clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.47	748.5	29.52	749.7	88.8	31.6	80	S	27.0	12.1		8			SSW	0	0	Misty	
Deesa	29.05	737.9	29.51	749.4	97.3	36.3	38	SW	16.7	7.5		3	SSW	SSW		2.07	52.6	D. clouds	
Bombay	29.70	754.4	29.74	755.4	86.6	30.3	71	SW	16.0	7.2		2		SW		0.01	0.3	D. clouds	
Poona, Yarrowda	27.88	708.0	29.70	754.4	84.5	29.2	47	W	31.0	13.8		2		WSW		0	0	D. clouds	
Belgaum	27.26	692.3	29.79	756.7	75.4	24.1	75	SW	17.0	7.6		7		SW		0	0	D. clouds	
Lahore	28.62	726.9	29.31	744.5	110.3	43.5	13	NW	2.1	0.9		0				0	0	Misty	
Roorkee	28.49	723.7	29.44	747.9	99.9	37.7	45	Calm	2.0	0.9		2				0	0	Misty	
Agra	28.85	732.9	29.39	746.4	101.1	38.4	29	SW	6.2	2.8		9		SW		0	0		
Nagpur	28.52	724.5	29.53	750.1	92.7	33.7	45	NW	6.7	3.0		8		NW		0	0	D. clouds	
Jubbulpore	28.19	716.1	29.51	749.6	89.3	31.8	57	W	6.5	2.9		7				0	0	D. clouds	
Lucknow	29.05	737.8	29.41	746.9	95.0	35.0	49	NNE	1.5	0.7		0				0	0	Blue sky	
Allahabad	29.13	739.9	29.43	747.6	89.3	31.8	79	SE	1.2	0.5		8				0	0	D. clouds	
Patna	29.29	744.0	29.47	748.5	79.9	26.6	91	NW	3.3	1.5		10	NW	NW		1.44	36.6	Raining	
Hazaribagh	27.48	698.0	29.48	748.6	75.8	24.3	87	NW	13.8	6.2		10		W		2.56	65.0	Thund'rst'm	
Cuttack	29.43	747.5	29.51	749.5	87.3	30.7	69	NW	2.0	0.9		9				0.01	0.3	D. clouds	
Calcutta, Alipore	29.40	746.8	29.42	747.4	81.7	27.6	93	WSW	8.0	3.6		9	W			0.08	2.0	Drizzling	
Dhubri	29.37	746.1	29.49	749.1	79.2	26.2	96	NE	4.6	2.1		10				1.27	32.3	Raining	
Chittagong	29.47	748.6	29.56	750.8	83.5	28.6	81	SSE	8.9	4.0		9				0	0	D. clouds	
Sibsagar	29.21	742.0	29.55	750.5	79.1	26.2	96	SE	3.5	1.6		10	W	W		2.18	55.4	Overcast	
Zanzibar, Africa			30.04	763.0	82.1	27.8	70	SSW	6	2.7		2				0	0	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.54	750.4	29.95	760.6	70.5	21.4	67	W	2.0	0.9		9				0	0		Prof. Giovanni Clodig.
Milan	29.50	749.4	30.00	762.1	75.9	24.4	46	SE	5.6	2.5		6	SSE			0	0		Prof. Schiaparelli.
Padua	29.91	759.8	30.02	762.5	70.7	21.5	77	SSE	8.1	3.6		9	NE			0.008	0.2		Prof. Dott. Lorenzoni.
Moncalieri	29.12	739.7	30.00	762.1	73.2	22.9	57	E	4.9	2.2		8	N			0	0		Prof. P. F. Denza.
Genoa	29.89	759.2	30.08	764.1	66.6	19.2	66	SW	4.9	2.2		2	W			0	0		Prof. G. M. Garibaldi.
Mondovi	28.17	715.5	30.02	762.5	70.3	21.3	58	N			4	2				0	0		Prof. D. C. Bruno.
Pesaro	29.95	760.8	30.00	762.0	69.8	21.0	73	E	6.3	2.8		4				0	0		Prof. Luigi Guidi.
Florence	29.76	756.0	30.02	762.4	76.1	24.5	42	W			2	5				0	0		Prof. Costantino Pitter.
Leghorn	29.98	761.5	30.06	763.6	70.7	21.5	44	W	0.7	0.3		2				0	0		Prof. P. Monte.
Rome	29.85	758.2	30.02	762.6	79.9	26.6	45	WSW	3.1	1.4		4				0	0		Prof. P. S. Ferrari.
Lecce	29.78	756.3	30.02	762.6	71.8	22.1	63	SE	3.4	1.5		0				0	0		Prof. C. de Giorgi.
Cosenza	29.14	740.2	30.01	762.3	75.6	24.2	71	SW	1.3	0.6		7	SW			0	0		Prof. D. Conti.
Cagliari	29.85	758.2	30.04	763.0	72.0	22.2	71	SE			4	0				0	0		Prof. A. Pacinotti.
Palermo	29.81	757.2	30.06	763.5	71.6	22.0	42	NE	8.1	3.6		5				0	0		Prof. G. Ciacciatore.
Syracuse	29.96	761.0	30.04	763.1	68.4	20.2	76	E	12.5	5.6		9				0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.47	748.5	29.98	761.5	74.8	23.8	66	WSW	6.9	3.1		4		W		0	0		Prof. F. Brioschi.
Stelvio	22.28	565.9			46.8	8.2	58	S			1	7ck	0	NW		0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.27	565.6			44.2	6.8	75	NE			1	0	8k		NW	0	0	Misty	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.66	753.3	29.68	753.9	68.4	20.2	96	WSW	10.6	4.7			10n			4.420	112.3	Raining	K. Sasaki.
Kioto	29.66	753.3	29.83	757.7	71.9	22.2	95	SSW	1.1	0.5			10n			2.350	59.7	Raining	M. Tojima.
Nagasaki, I. M. Obs'y	29.50	749.3	29.69	754.1	72.2	22.3	92	SW	8.2	3.7			10n			4.020	102.1	Light rain	S. Takehayashi.
Tokei Obs'y, Yeddo	29.85	758.2	29.92	759.9	74.0	23.3	88	S	12.1	5.4		0	6s;ks		SW	0	0	Fair	The Staff.
Wakayama	29.75	755.6	29.80	756.9	76.5	24.7	82	SSW	19.1	8.5			10n		SSW	3.205	81.4	Raining	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.99	761.7	30.18	766.6	71.5	21.9	75	E	15.0	6.7		4	4	NW	E	0.02	0.5	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.42	620.2	29.99	761.6	68.0	20.0	74	NE			3	rock	0	NE		Inap	Inap.	Covered	Prof. M. Leal.
Mazatlan	29.61	752.2	29.87	758.7	78.0	25.6	82	SSE	0	0		0	8cn			0.354	9.0	Cloudy	F. Quijano, U. E.
Mexico, Central Obs'y	23.10	586.8	30.06	763.5	56.3	13.5	90	NW	2.7	1.2			10n		N	0.186	4.7	Raining	The Staff.
Pabellon, Aguascalientes	23.99	609.2	29.90	759.4	65.3	18.5	75	NNE			2		10kn		E	Inap.	Inap.	Covered	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.41	594.7	30.10	764.5	58.1	14.5	43	Calm	0	0			10		SE	0.425	10.8	Covered	Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.62	574.6	30.21	767.3	56.5	13.6	87	E	11.0	4.8		0	98;n		E	0	0	Cloudy	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.04	762.9	30.04	762.9	68.4	20.2		SE			2					0	0		
Groningen	29.98	761.6	30.04	763.0	63.1	17.3		NE			1					0	0		
Helder	30.04	763.0	30.04	763.0	58.6	14.8		NE			2					0	0		
Hellevoetsluis	30.03	762.7	30.03	762.7	68.2	20.1	70	W			1					0	0		
Utrecht	29.99	761.8	30.04	763.0	65.7	18.7	60	NE			2		2			0	0	Lightly cl'dy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.03	762.8	30.10	764.4	59.7	15.4	72	WNW	1.1	0.5			6			0	0		
Christiania	29.94	760.4	30.08	764.1	62.4	16.9	56	WSW	9	4			8			0	0		
Gjæsvær	30.04	762.9	30.05	763.5	44.6	7.0		WSW			6		0						
Lodingen	30.07	763.7	30.11	764.9	61.3	16.3	48	Calm			0		0			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.91	759.6	29.92	760.0	67.1	19.5	87	WNW	10.5	4.7			7			0	0		Dr. J. A. Sampaio.
Campo Major	29.13	740.0	30.11	764.7	74.1	23.4	45	WSW	3.1	1.4			0			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.13	765.3	30.22	767.5	68.5	20.3	63	Calm	1.3	0.6			10			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.79	756.7	30.15	765.7	69.8	21.0	56	WSW	9.4	4.2			9			0	0		The Staff.
Ponta Delgada, Azores	30.04	763.1	30.11	764.9	68.7	20.4	80	WNW	5.6	2.5			3			0.051	1.3		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.50	723.8	29.52	749.9	70.5	21.4	45	SW	22	10		0	3ks						Capt. Lasarew.
Archangel	30.08	764.0	30.10	764.5	55.2	12.9	50	NNW	9	4			0						Capt. Seeliwerstow.
Astrakhan	30.06	763.4	29.97	761.3	78.4	25.8	46	SSW	18	8		0	1k						Capt. Wisganow.
Barnaul ‡	29.27	743.5	29.75	755.6	64.8	18.2	23	NE	18	8			0						Meteorological Obs'y.
Dorpat	29.63	752.7	29.87	758.8	56.5	13.6	50	N	9	4			0						Observatory.
Ekaterinburg	28.61	726.8	29.54	750.4	61.5	16.4	89	WNW	13	6			10n						Meteorological Obs'y.
Kasan	29.39	746.4	29.64	752.9	73.2	22.9	41	S	2	1			8						Observatory.
Kertch	29.92	759.9	29.94	760.4	67.6	19.8	80	SSE	2	1			1						Lagorio & Sastyres.
Kieff	29.10	739.2	29.72	755.0	57.9	14.4	69	NW	9	4		c;ck	8ks						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.61	752.0	29.81	757.1	69.8	21.0	49	W	18	8			5						Meteorological Obs'y.
Moscow	29.03	737.4	29.56	750.9	59.4	15.2	89	SSE	7.8	3.5		0	8ks					Raining	Meteorological Obs'y.
Nertchinsk	27.33	694.2	29.56	750.7	52.9	11.6	69	Calm	0	0			9			0	0		Meteorological Obs'y.
Nikolaiev	29.84	757.9	29.91	759.7	69.3	20.7	63	SW	18	8			9kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.67	753.7	29.76	755.9	39.6	4.2	79	Calm			0	0	1k			0	0		Lieut. Iwanow.
Pekin, China	29.47	748.5	29.61	752.1	79.2	26.2	70	SE	4	2			9n					Thunder	Physical Observatory.
St. Petersburg	29.88	758.9	29.89	759.3	54.7	12.6	51	ENE	13	6		0	2k						Central Physical Obs'y.
Tashkend, Laboratory	28.37	720.5	29.85	758.1	82.4	28.	43	Calm	0	0			1						Teich, A. M.
Tiflis	28.54	724.8	29.87	758.7	83.5	28.6	32	S	9	4		0	5ks						Physical Observatory.
Warsaw	29.52	749.7	29.94	760.5	48.0	8.9	88	WNW	13	6			10n					Light rain	Astronomical Obs'y.
Wilna	29.36	745.8	29.78	756.4	52.3	11.3	93	N	7	3			10					Raining	Berg, Assistant.
Yeniseisk	29.78	756.3	30.06	763.5	57.2	14.0	37	E	2	1			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.94	760.5	51.0	10.6	100	NE			2		10s			0.37	9.4	Foggy	Andrew Gibb.
Monach Lt. House, Hebrides			29.82	757.4	60	15.6	94	E			4		10			0.2	5.	Hazy	J. Youngclause.
North Unst, Shetland Isl'ds			30.12	765.0				SE			1	2	3	E					Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.92	760.0	30.02	762.6	75.9	24.4	52	SSW	4.3	1.9			0			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.98	761.5	30.04	762.9	74.7	23.7	64	NW	1.8	0.8		6	4	W		0	0	Covered	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.11	688.7			74.5	23.6	80	SW	5.8	2.6			3			0	0	Lightly cl'dy	Domingo Martin.
Madrid, Royal Obs'y	27.83	706.8	29.95	760.6	81.5	27.5	36	W	15.4	6.9		2	0	W		0	0	Light clouds	The Staff.
Murcia, Met. Obs'y ‡	29.85	758.5	30.00	762.1	88.3	31.3	42	ESE	1.8	0.8		0	2			0	0	Almost clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.09	738.8	29.97	761.2	62.8	17.1	85	S	17.4	7.8			10			0.075	1.9	Drizzling	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.92	759.9	29.98	761.6	80.3	26.8	72	ENE	4.9	2.2		6c;cs	3k	W	NE	0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.81	757.1	29.85	758.4	84.6	29.2	81	SE	3.3	1.5		0	1ks			0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.04	763.1	30.14	765.5	72.5	22.5	73	SW	2.4	1.1		0	7		W	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.91	759.7	30.00	762.0	75.9	24.4	100	S	0	0		3k	4kn	S	S	0.441	11.2	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.74	755.5	29.89	759.2	84.2	29.0	73	WNW	3.6	1.9		0	4k		NW	0	0	Partly cl'dy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.12	765.0	30.16	766.0	57.2	14.0	43	SW			2		0			0	0		
Umea	30.09	764.2	30.14	765.5	58.6	14.8	47	ESE			4		2			0	0		
Hernosand	30.13	765.4	30.19	766.7	57.7	14.3	45	ENE			4		0			0	0		
Stockholm	29.86	758.5	30.04	763.0	60.1	15.6	35	NE			6		0			0	0		
Wisby	29.90	759.5	29.95	761.0	47.8	8.8	81	NE			4		0			0.043	1.1		
Sub-Series.																			
Upsala	29.87	758.6	29.95	760.8	61.2	16.2	35	NNE	13.4	6.0			0			0.001	0.02		S. G. Fineman.
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.61	726.8	30.00	761.9	69.1	20.6	59	NNE			2		7			0	0	Cloudy	The Observatory.
Zurich ‡	28.43	722.1	30.02	762.4	69.1	20.6	60	SE			2		3			0	0	Clear	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.88	758.9	71.6	22.0	61	N	19	8.5			3		SW	0	0		The Observatory.
Valona			30.09	764.3	68.4	20.2		NW			1		2			0	0	Slightly cl'dy	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.92	759.9	82.4	28.0	57	W			2	0	1k		W	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.07	763.8	30.15	765.8	59	15.0	64	W	7	3.1		1c	Hz			0	0	Clear.	
Alpena, Michigan	29.56	750.8	30.21	767.3	50.5	10.3	65	SE	13	5.8		10cs	0	W		0	0	Cloudy	
Atlanta, Georgia	29.00	736.6	30.15	765.8	74.0	23.3	63	NE	5	2.2		5c	0	Calm		0	0	Fair	
Atlantic City, New Jersey	30.16	766.1	30.18	766.6	64	17.8	58	N	5	2.2		5c	0	Calm		0	0	Fair	
Augusta, Georgia	29.98	761.5	30.16	766.1	74.3	23.5	68	SE	1	0.4		2cs	Hz			0	0	Fair	
Baltimore, Maryland	30.15	765.8	30.20	767.1	71	21.7	62	NW	1	0.4		0	0			0	0	Clear	
Barnegat, New Jersey	30.14	765.5	30.16	766.1	62	16.7	61	NW	10	4.5		5c	0	Calm		0	0	Fair	
Bismarck, Dakota	27.96	710.2	29.70	754.4	58	14.4	69	W	20	8.9		0	0			0.02	0.5	Clear	
Boise City, Idaho	27.28	692.9	30.04	763.0	54.0	12.2	55	E	4	1.8		0	0			0	0	Clear	
Boston, Massachusetts	29.89	759.2	30.04	763.0	54.1	12.3	32	W	18	8.0		0	0			0	0	Clear	
Brackettville, Texas	28.85	732.8	29.86	758.4	76	24.4	82	E	9	4.0			10ks		E	0	0	Cloudy	
Brownsville, Texas	29.87	758.7	29.91	759.7	77	25.0	91	Calm	0	0		0	0			0	0	Clear	
Buffalo, New York	29.52	749.8	30.21	767.3	52.4	11.3	65	NE	4	1.8		0	Sk			0	0	Dense smoke	
Burlington, Vermont	29.81	757.2	30.09	764.3	51.0	10.6	43	N	12	5.4		0	0			0	0	Clear	
Cairo, Illinois	29.74	755.4	30.13	765.3	80	26.7	74	S	5	2.2		0	0			0	0	Clear	
Campo, California	27.40	695.9	29.97	761.2	35.5	1.9	65	SE	4	1.8		0	0			0	0	Clear	
Camp Thomas, Arizona	27.19	690.6			65.5	18.6	54	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	30.13	765.3	30.15	765.8	74	23.3	72	W	7	3.1		5c	0	W		0	0	Fair	
Cape May, New Jersey	30.13	765.3	30.16	766.1	65	18.3	84	N	8	3.6		5ck	0	NW		0	0	Fair	
Castroville, Texas	29.28	743.7	29.95	760.7	79	26.1	74	S	7	3.1			10s		S	0	0	Cloudy	
Cedar Keys, Florida	30.07	763.8	30.09	764.3	80	26.7	78	E	11	4.9		0	0			0.68	17.3	Clear	
Champaign, Illinois	29.24	742.7	30.01	762.2	71.4	21.9	95	SE	12	5.4		5c	0	SE		0	0	Fair	
Charleston, S. Carolina	30.09	764.3	30.15	765.8	78	25.6	78	N	5	2.2		0	8s		N	0	0	Cloudy	
Charlotte, N. Carolina	29.31	744.5	30.17	766.3	73.4	23.0	46	NE	6	2.7		2c	Hz			0	0	Fair	
Chattanooga, Tennessee	29.37	746.0	30.17	766.3	73	22.8	81	Calm	0	0		1cs	0	Calm		0	0	Clear	
Cheyenne, Wyoming	24.15	613.4	29.96	761.0	51.2	10.7	28	NW	16	7.2		0	0			Inap.	Inap.	Clear	
Chicago, Illinois	29.30	744.2	29.98	761.5	70.0	21.1	85	S	7	3.1			10s		SW	0	0	Cloudy	
Chincoteague, Virginia	30.16	766.1	30.18	766.6	66	18.9	59	NE	19	8.5		2k	0	NW		0	0	Fair	
Cincinnati, Ohio	29.51	749.5	30.15	765.8	71	21.7	80	E	3	1.3		1c	0	Calm		0	0	Clear	
Cleveland, Ohio	29.46	748.3	30.18	766.6	61.5	16.4	69	SE	5	2.2			10s		E	0	0	Cloudy	
Coleman City, Texas																			
Columbus, Ohio	29.32	744.7	30.14	765.5	67	19.4	69	SE	4	1.8		2ck	5s	W	S	0	0	Fair	
Concho, Texas	28.16	715.3	30.04	763.0	74	23.3	86	Calm	0	0		0	0			0	0	Clear	
Corsicana, Texas	29.65	753.1	30.11	764.8	75	23.9	77	S	4	1.8		0	0			0	0	Clear	
Davenport, Iowa	29.31	744.5	29.95	760.7	76	24.4	82	SW	8	3.6		1cs	0	SW		0.75	19.0	Clear	
Dayton, Washington T'y	28.41	721.6	30.16	766.1	49.9	9.9	58	S	1	0.4		0	0			0	0	Clear	
Deadwood, Dakota	25.41	645.4	29.95	761.0	52	11.1	47	SW				0	0			0	0	Clear	
Decatur, Texas																			
Delaware Breakwater, Del.	30.15	765.8	30.17	766.3	65	18.3	68	NE	10	4.5		7ck	0	W		0	0	Fair	
Denison, Texas	29.30	744.2	30.08	764.0	78	25.6	69	S	3	1.3		0	0			0	0	Clear	
Denver, Colorado	24.86	631.4	29.93	760.2	59.5	15.3	46	S	10	4.5		0	0			0	0	Clear	
Des Moines, Iowa	28.94	735.1	29.82	757.4	78	25.6	73	SW	16	7.2		5c	0	W		0	0	Fair	
Detroit, Michigan	29.47	748.5	30.14	765.5	62.0	16.7	100	E	7	3.1			10s		W	0	0	Cloudy	
Dodge City, Kansas	27.35	694.7	29.84	757.9	72.9	22.7	46	S	13	5.8		0	0			0	0	Clear	
Dubuque, Iowa	29.19	741.4	29.87	758.7	74	23.3	81	SE	6	2.7		1c	Hz	S	Calm	0.08	2.0	Clear	
Duluth, Minnesota	29.06	738.1	29.74	755.4	49	9.4	93	NE	17	7.6			10s		NE	0.32	8.1	Cloudy	
Eagle Pass, Texas	29.26	743.2	30.06	763.5	78.5	25.8	78	SE	9	4.0		c	0			0	0	Clear	
Eastport, Maine	25.45	646.4	30.16	766.1	40	4.4	65	S	2	0.9		0	0			0.26	6.6	Clear	
El Paso, Texas	29.73	755.1	29.80	756.9	48	8.9	36	NW	15	6.7		5k	0	NW		0	0	Fair	
Erie, Pennsylvania	26.22	666.0	29.87	758.7	70	21.1	53	NE	4	1.8		0	0			0	0	Clear	
Escanaba, Michigan	29.50	749.3	30.21	767.3	57	13.9	63	NE	4	1.8		5c	0			0	0	Fair	
Florence, Arizona	29.33	745.0	29.97	761.2	55	12.8	93	SE	17	7.6			10n		SE	0.73	18.5	Light rain	
Fort Apache, Arizona	25.07	636.8	29.85	758.2	54	12.2	15	E	3	1.3		0	Sk	Calm	Calm	0	0	Clear	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota																			
Fort Benton, Montana	28.30	718.8	29.77	756.1	63	17.2	62	NW	10	4.5		0	0			Inap.	Inap.	Clear	
Fort Buford, Dakota	27.19	690.6	29.93	760.2	51	10.6	40	SW	16	7.2		0	0			0.05	1.3	Clear	
Fort Custer, Montana	27.76	705.1	29.68	753.9	56	13.3	75	Calm	0	0		2cs	0	NW		0.28	7.1	Clear	
Fort Davis, Texas	26.85	682.2	29.95	760.7	52	11.1	73	NW	8	3.6		0	0			0.13	3.3	Clear	
Fort Elliott, Texas	25.26	641.6	30.22	767.6	70	21.1	57	S	9	4.0		0	0			0	0	Clear	
Fort Gibson, Indian T'y	27.27	692.6	30.34	770.6	66	18.9	44	S	8	3.6		0	0			0	0	Clear	
Fort Grant, Arizona	29.51	749.5	30.04	763.0	80	26.7	78	SE	4	1.8		0	0			0	0	Clear	
Fort Griffin, Texas	25.28	642.1	30.08	764.0	71	21.7	33	NE	6	2.7		0	0			Inap	Inap.	Clear	
Fort Keogh, Montana	28.77	730.7	29.99	761.7	77.0	25.0	73	SE	4	1.8		0	0			0	0	Clear	
Fort Macon, North Carolina	27.47	697.7	29.88	758.9	51	10.6	71	NW	19	8.5		0	0			0.03	0.8	Clear	
Fort McKavett, Texas	30.15	765.8	30.16	766.1	77	25.0	86	E	3	1.3		5c	Hz	Calm	Calm	0	0	Fair	
Fort Missoula, Montana	27.80	706.1	29.66	753.4	71.2	21.8	85	SE	6	2.7		1cs	0			0	0	Clear	
Fort St. Michaels	26.83	681.5	30.21	767.3	52	11.1	60	S	1	0.4		0	0			0.25	6.3	Clear	
Fort Shaw, Montana	30.18	766.6	30.22	767.6	39	3.9	100	SE	2	0.9			10ks		S	0.02	0.5		
Fort Sill, Indian Territory	26.41	670.8	29.86	758.4	47	8.3	48	W	11	4.9		0	0			0.37	9.4	Clear	
Fort Stevenson, Dakota	28.82	732.0	30.03	762.7	76	24.4	64	S	4	1.8		0	0			0	0	Clear	
Fort Verde, Arizona	27.86	707.6	29.64	752.8	58	14.4	82	W	12	5.4		0	0			0.42	10.7	Clear	
Fredericksburg, Texas					55.2	12.9	22	SW			1	0	0			0	0	Clear	
Galveston, Texas	28.34	719.8	29.85	758.2	72	22.2	85	SW	4	1.8		0	0			0	0	Clear	
Grand Haven, Michigan	30.05	763.3	30.09	764.3	82	27.8	79	Calm	0	0		Hz	Hz			0	0	Dense haze	
Hatteras, North Carolina	29.38	746.2	30.03	762.7	65	18.3	78	SE	7	3.1			10s		W	0	0	Cloudy	
Helena, Montana	30.14	765.5	30.16	766.1	72	22.2	90	Calm	0	0		0	2k			0	0	Clear	
Henrietta, Texas	25.90	657.8	30.10	764.5	44	6.7	76	SE	3	1.3		0	0			0.65	16.5	Clear	
Indianapolis, Indiana	29.04	737.6	29.92	760.0	76	24.4	73	SE	6	2.7		0	0			0	0	Clear	
Indianola, Texas	29.30	744.2	30.06	763.5	73	22.8	81	S	4	1.8		0	9ks		W	0	0	Cloudy	
Jacksboro, Texas	30.05	763.3	30.08	764.0	78.3	25.7	82	SE	8	3.6		0	Hz			0	0	Clear	
Jacksonville, Florida	28.91	734.3	30.00	762.0	75	23.9	68	SW	3	1.3		0	0			0	0	Clear	
Keokuk, Iowa	30.07	763.8	30.09	764.3	81	27.2	83	E	3	1.3		5cs	Hz			0	0	Fair	
Key West, Florida	29.30	744.2	29.90	759.4	81.8	27.7	71	SW	12	5.4		8c	0	NW		0.01	0.3	Fair	
Kittyhawk, North Carolina	29.99	761.7	30.02	762.5	82.7	28.2	75	E	5	2.2		2cs	2ks		E	0.07	1.8	Fair	
Knoxville, Tennessee	30.16	766.1	30.18	766.6	73	22.8	81	NW	5	2.2			10s			0	0	Cloudy	
La Crosse, Wisconsin	29.19	741.4	30.19	766.8	70	21.1	85	NE	2	0.9		0	5s		NE	0.14	3.6	Fair	
La Mesilla, New Mexico	29.04	737.6	29.74	755.4	72	22.2	85	S	16	7.2		0	5s		S	0.20	5.1	Fair	
Laredo, Texas	26.10	662.9	30.25	768.3	63.2	17.3	47	Calm	0	0		0	1s			0	0	Clear	
Leavenworth, Kansas	29.59	751.6	29.91	759.7	78	25.6	91	SE	2	0.9		0	c			0	0	Clear	
Lewiston, Idaho	29.00	738.1	29.93	760.2	78	25.6	69	S	12	5.4		0	0			0	0	Clear	
Little Rock, Arkansas	29.34	745.2	30.18	766.6	47	8.3	85	SE	1	0.4		0	0			0.01	0.3	Clear	
Los Angeles, California	29.77	756.1	30.08	764.0	79	26.1	82	Calm	0	0		0	0			0	0	Clear	
Louisville, Kentucky	29.56	750.8	29.93	760.2	52.2	11.2	79	N	1	0.4		0	0			0	0	Clear	
Lynchburg, Virginia	29.56	750.8	30.11	764.8	72.0	22.2	85	W	4	1.8		2k	2s			0.35	8.9	Fair	
Madison, Wisconsin	29.51	749.5	30.18	766.6	73	22.8	63	Calm	0	0		0	0			0	0	Clear	
Marquette, Michigan	28.92	734.6	29.90	759.4	68	20.0	95	S	10	4.5			10s		Calm	0	0	Cloudy	
Mason, Texas	29.29	744.0	30.00	762.0	51	10.6	93	SE	12	5.4			10n		Calm	0.08	2.0	Light rain	
Memphis, Tennessee	28.43	722.1	30.12	765.0	76	24.4	77	S	2	0.9		0	1s		S	0	0	Clear	
Milwaukee, Wisconsin	29.79	756.7	30.12	765.0	83	28.3	64	Calm	0	0		0	0			0	0	Clear	
	29.22	742.2	29.95	760.7	62	16.7	88	S	7	3.1			10s			Inap.	Inap.	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.01	762.2	30.08	764.0	80	26.7	91	N	6	2.7		0	0			0	0	Clear	
Montgomery, Alabama	29.90	759.4	30.12	765.0	79.3	26.3	65	NE	3	1.3		2c	0			0	0	Clear	
Moorhead, Minnesota	28.61	726.7	29.57	751.1	69.2	20.7	80	W	8	3.6		8cs	0	W		0	0	Fair	
Morgantown, W. Virginia	29.20	741.7	30.18	766.6	63	17.2	83	Calm	0	0			10s		NW	0	0	Cloudy	
Mt. Washington, N. H.	23.52	597.4	29.55	750.6	18	— 7.8	92	NW	40	17.9			Fg		NW	0.23	5.8	Light fog	
Nashville, Tennessee	29.62	752.3	30.14	765.5	72.8	22.7	81	Calm	0	0		0	0			0	0	Clear	
New Haven, Connecticut	30.00	762.0	30.11	764.8	56	13.3	57	NW	8	3.6		5c	0	NW		0	0	Fair	
New London, Connecticut	30.05	763.3	30.10	764.5	60	15.6	55	N	8	3.6		0	0			0	0	Clear	
New Orleans, Louisiana	29.96	761.0	30.02	762.5	85.0	29.4	64	N	8	3.6		0	Hz			0	0	Clear	
Newport, Rhode Island	30.01	762.2	30.06	763.5	60.0	15.6	55	NW	9	4.0		4c	0	Calm		0	0	Fair	
New River, N. Carolina					78	25.6	77	E			1	8cs	0	W				Cloudy	
New Shoreham, Rhode I'd	30.03	762.7	30.06	763.5	58.0	14.4	63	NW	15	6.7		2c	0	NW		0	0	Fair	
New York, New York	29.99	761.7	30.16	766.1	60	15.6	55	W	6	2.7		10s	0	W		0	0	Clear	
Norfolk, Virginia	30.13	765.3	30.17	766.3	73	22.8	72	NW	4	1.8		8cs	0	W		0	0	Fair	
North Platte, Nebraska	27.04	686.8	29.86	758.4	66	18.9	54	N	16	7.2		10c	0	NW		0.02	0.5	Cloudy	
Olympia, Washington T'y	30.15	765.8	30.19	766.8	42.0	5.6	91	N	2	0.9		5cs	0	Calm		0	0	Fair	
Omaha, Nebraska	28.66	728.0	29.80	756.9	82	27.8	56	SW	18	8.0		2c	0	W		0	0	Clear	
Oswego, New York	29.90	759.4	30.22	767.6	52.5	11.4	45	NE	5	2.2		0	0			0	0	Clear	
Pensacola, Florida	30.05	763.3	30.08	764.0	82	27.8	67	N	6	2.7		0	0			0	0	Clear	
Philadelphia, Pa	30.14	765.5	30.20	767.1	63	17.2	72	NE	11	4.9		0	Fg			0	0	Clear	
Phœnix, Arizona	28.75	730.2	30.51	774.9	66	18.9	54	E	3	1.3		0	0			0	0	Clear	
Pike's Peak, Colorado	18.00	457 2	30.21	767.3	36	2.2	37	SW	1	0.4		0	0			0	0	Clear	
Pioche, Nevada	24.12	612.6	29.97	761.2	53	11.7	19	NW	2	0.9		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.41	747.0	30.20	767.1	61.3	16.3	77	NW	2	0.9		2ck	Fg	NW	Calm	0	0	Clear	
Port Eads, Louisiana	30.04	763.0	30.05	763.3	84.0	28.9	75	N	6	2.7		0	Hz		Calm	0	0	Clear	
Port Huron, Michigan	29.53	750 0	30.19	766.8	53.0	11.7	73	E	4	1.8			10ks		NW	0.01	0.3	Cloudy	
Portland, Maine	29.90	759.4	29.95	760.7	54	12.2	43	NW	12	5.4		2k	0	NW		0	0	Clear	
Portland, Oregon	30.13	765.3	30.20	767.1	50.9	10.5	77	NW	5	2.2		8k;cs	0	NW		Inap.	Inap.	Fair	
Portsmouth, N. Carolina					74	23.3	76	E	2	0.9		8c	Hz	Calm	Calm	0	0	Cloudy	
Prescott, Arizona	24.81	630.2	29.88	758.9	49	9.4	37	SW	2	0.9		0	0			0	0	Clear	
Punta Rassa, Florida	30.02	762.5	30.03	762.7	80	26.7	74	NE	8	3.6		1k	0	Calm		0	0	Clear	
Red Bluff, California	29.58	751.3	29.91	759.7	61.0	16.1	49	N	6	2.7		0	0			0	0	Clear	
Rio Grande City, Texas	29.86	758.4	30.07	763.8	78	25.6	86	SE	4	1.8		0	5s		Calm	0	0	Fair	
Rochester, New York	29.62	752.3	30.24	768.1	54	12.2	55	NE	4	1.8		2cs	0	Calm		0	0	Clear	
Roseburg, Oregon	29.62	752.3	30.18	766.6	42.5	5.8	91	Calm	0	0		1c	0			0	0	Clear	
Sacramento, California	29.87	758.7	29.94	760.5	57.2	14.0	75	SE	4	1.8			0			0	0	Clear	
St. Louis, Missouri	29.48	748.8	30.06	763.5	78.0	25.6	81	S	7	3.1			0			0	0	Clear	
St. Paul, Minnesota	28.83	732.3	29.67	753.6	74	23.3	81	SE	12	5.4		5k	2ks	Calm	SE	0.08	2.1	Fair	
Salt Lake City, Utah	25.77	654.5	29.97	761.2	53	11.7	42	Calm	0	0		0	0			0	0	Clear	
San Antonio, Texas	29.38	746.2	30.07	763.8	70.7	24.8	82	SE	1	0.4			10s		Calm	0	0	Cloudy	
San Diego, California	29.83	757.7	29.90	759.4	58.8	14.9	82	NW	4	1.8			10s			0	0	Cloudy	
Sandusky, Ohio	29.49	749.0	30.15	765.8	65	18.3	73	SE	9	4.0			10s			0.03	0.8	Cloudy	
Sandy Hook, New Jersey	30.13	765.3	30.16	766.1	60.5	15.8	60	NW	15	6.7		5c	0			0	0	Fair	
San Francisco, California	29.93	760.2	30.00	762.0	52	11.1	86	W	3	1.3		0	0			0	0	Clear	
Santa Fé, New Mexico	23.40	594.3	29.91	759.7	56	13.3	51	Calm	0	0		0	0			0	0	Clear	
Savannah, Georgia	30.06	763.5	30.15	765.8	75	23.9	93	N	2	0.9			Fg			0	0	Dense fog	
Shreveport, Louisiana	29.90	759.4	30.12	765.0	82	27.8	79	S	6	2.7		0	Hz			0	0	Clear	
Silver City, New Mexico	24.34	618.2	29.80	756.9	66	18.9	50	NW	1	0.4		5ck	0	NW		0	0	Fair	
Sitka Alaska																0	0		
Smithville, North Carolina	30.12	765.0	30.15	765.8	78	25.6	78	E	6	2.7		8k	1s	N		0	0	Cloudy	
Spokane Falls, Wash. Ter.	28.11	714.0	30.07	763.8	44	6.7	75	SW	8	3.6		8cs	0			0	0	Fair	
Springfield, Illinois	29.37	746.0	30.03	762.7	76	24.4	86	S	6	2.7		0	0			0.08	2.0	Clear	
Springfield, Massachusetts	29.95	760.7	30.08	764.0	59.3	15.2	48	NW	5	2.2		10c	0	W		0	0	Cloudy	
Stockton, Texas	26.98	685.3	29.97	761.2	71.0	21.7	95	S	16	7.2		0	0			0	0	Clear	
St. Vincent, Minnesota	28.67	728.2	29.51	749.5	62	16.7	94	SE	24	10.7			10s		Calm	0.41	10.4	Cloudy	
Thatcher's Island, Mass	29.95	760.7	30.00	762.0	57.0	13.9	81	NW	28	12.5		0	0			0	0	Clear	
Toledo, Ohio	29.46	748.3	30.14	765.5	65	18.3	68	E	4	1.8			10s		SW	0.04	1.0	Threatening	
Tucson, Arizona	27.48	698.0	29.77	756.1	72	22.2	34	SE	2	0.9		0	0			0	0	Clear	
Umatilla, Oregon	29.84	757.9	30.24	768.1	46.0	7.8	77	E	6	2.7		0	0			0	0	Clear	
Uvalde, Texas	29.08	738.6	29.88	758.9	77	25.0	86	SE	3	1.3			10s		S	0	0	Cloudy	
Vicksburg, Mississippi	29.88	758.9	30.13	765.3	83	28.3	67	E	3	1.3		0	0			0	0	Clear	
Visalia, California	29.54	750.3	29.89	759.2	50.5	13.6	69	NW	2	0.9		0	0			0	0	Clear	
Washington, D. C.	30.10	764.5	30.21	767.3	68	20.0	65	NE	1	0.4		1ck	0			0	0	Clear	
Wickenburg, Arizona					61	16.1	21	Calm			0	0	0			0	0	Clear	
Wilmington, N. Carolina	30.10	764.5	30.15	765.8	77	25.0	82	E	3	1.3		10c;ck	Hz	Calm	Calm	0	0	Cloudy	
Winnemucca, Nevada	25.70	652.8	29.91	759.7	47	8.3	34	NE	11	4.9		0	0			0	0	Clear	
Wood's Holl, Mass	30.00	762.0	30.04	763.0	58	14.4	42	NW	20	8.9		2c	0	NW		0	0	Fair	
Yankton, Dakota	28.63	727.2	29.89	759.2	74	23.3	68	W	12	5.4		5c	2ks		W	0	0	Fair	
Yuma, Arizona	29.62	752.3	29.76	755.9	72.8	22.7	55	NE	2	0.9		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.12	561.8			54.0	12.2	80	Calm	0	0		5ck	2ks			0.07	1.8	Cloudy	Thomas Herran
Buff Bay Town, Jamaica.‡	29.75	755.6	30.06	763.5	75	23.9	85	E				0	0						
Havana, Cuba, W. I.	29.98	761.5	30.03	762.7	84	28.9	79	Calm	0	0		8cs	0	Calm		Inap.	Inap.	Cloudy	A. Van Caneghem, Ass't.
Kingston, Jamaica, W. I.	29.94	760.5	29.95	760.7	80	26.7	71	Calm	0	0		5cs	0	E		0.15	3.8	Cloudy	Robert Johnstone
Navassa, W. I.	29.86	758.4	29.94	760.5	80	26.7	82	NE	8	3.6		2s	8k;n	NE	E	0.52	13.2	Hazy	F. M. Everett.
Paramaribo, S. A.	30.02	762.5	30.02	762.5	80	26.7	82	SE			2	3c	5k	E		0.160	4.1	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.47	748.5	30.02	762.5	82	27.8	72	Calm	0	0			10ks		N	0.03	0.8	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					73.4	23		SW			1		10k		SW	0.94	24.		Earl Flint.
Santiago de Cuba, W. I.																			Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.06	763.5	30.10	764.5	39.0	3.9	95	E	28	12.5		3k	3s	SE	E	0	0	Cloudy	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0– 10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																			Comm. A. J. Errington.
H M. S. Alert, Thursday Island, Oceania	29.99	761.7	75.5	24.2	86	SE			3-4		10							Overcast	Capt. J. P. Maclear.
H. M. S. Alexandra, N. 39° 57′, E. 19° 45′	29.99	761.7	71	21.7	71	W			3		7	WSW				1	W	D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe
H. M. S. Arab,																			Comm. R. W. Stopford.
H. M. S. Bacchante, S. 38° 14′, E. 136° 45′	30.05	763.3	58	14.4		NNW			4-5		1					2	W	Blue sky	Capt. Lord C. Scott.
H. M. S. Beacon, N. 24° 47′, E. 66° 59′	29.50	749.3	83	28.3	95	WSW			3-4		5	SW						Misty	Comm. G. W. Hand.
H. M. S. Bittern, Varna, Bosphorus			66	18.9		NW			1-2		0							Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N. 16° 53′, W. 62° 25′	30.02	762.5	81	27.2	87	ESE			5		9					3	E	Squally	Capt. C. G. F. Knowles.
H. M. S. Boadicea, St. Helena Island, Africa	30.10	764.5	75	23.9	64	NNE			1		1	NNE						Blue sky	Com. F. W. Richards.
H. M. S. Champion, Monte Video, Uruguay.	29.80	756.9	62	16.7	88	NNW			4-5		8							Squally	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 38° 59′, E. 119° 42′	29.59	751.6	67	19.4	90	SE			1		3	SE						D. clouds.	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 38° 54′, E. 9° 20′	30.08	764.0	70	21.1		SE			1		6	SSW						D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae N. 36° 43′, W. 20° 36′	30.13	765.3	69	20.6	95	SSW			4		10	Calm				4	W	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.17	766.3	69	20.6		Calm			0		6	WSW						Misty	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.03	762.7	80	26.7	91	SSW			2-3		4	SSW						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 49° 09′, W. 55° 16′	29.56	750.8	57	13.9	90	S			3		10	SW						Overcast	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 7° 13′, E. 72° 23′	29.97	761.2	80	26.7		SE			2		2							D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 13° 50′, E. 90° 00′	29.87	758.7	76	24.4		SSE			6		10	SSE				3	ESE	Showery	Comm. C. Johnstone.
H. M. S. Emerald, N. 5° 54′, E. 169° 43′	29.87	758.7	82	27.8	87	ENE			1-2		9	E						D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, S. 18° 53′, E. 51° 51′	30.10	764.5	78	25.6	77	E			3-4		6	ESE				4	SE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Orange Harbor, N. F	29.56	750.8	52	11.1		WNW			1		9							Foggy	Capt. W. C. Karslake.
H. M. S. Fawn N. 12° 47′, E. 44° 58′	29.64	752.8	88	31.1	66	S			1		1							Blue sky	Capt. P. Aldrich.
H. M. S. Flamingo N. 20° 09′, W. 83° 25′	29.99	761.7	82	27.8	87	NNE			1-3							2	NE	Showery	Comm. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	30.17	766.3	50	10.0	80	NW			1		9	ENE						Showery	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.14	740.1	34	1.1	90	SSW			5		3							Snow squalls	Capt. L. F. Jones.
H. M. S. Griffon, N. 25° 55′, W. 77° 23′	30.07	763.8	84	28.9	79	ENE			2									Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Malta, Mediterranean	30.00	762.0	69	20.6	90	ESE			1-2		8	E				2	ENE	D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.09	764.3	64	17.8		ESE			1		2	NW						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.92	760.0	74	23.3		SSW			3		5	SSW						D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 05′, E. 110° 09′	29.68	753.9	86.2	30.1	83	E			1		4							D. clouds	Capt. A. Carpenter.
H. M. S. Midge, N. 22° 26′, E. 114° 57′	29.77	756.1				SW			3		4	SW				2	SW	Showery	Capt. W. N. Lang.
H. M. S. Minotaur,																			Capt. H. H. Rawson.
H. M. S. Modeste, S. 24° 15′ E. 55° 18′	30.30	769.6	67	19.4	?	ESE			1-2		0					5	E	Blue sky	Capt. J. G. Mead.
H. M. S. Monarch, Tunis, Tunis, N. Africa	30.05	763.3	71	21.7	67	NNE			3		4	NNW						D. clouds	Capt. G. Tryon, C. B

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.	Force	Amount and kind.		Direction.							
									Up'er	Lo'er	Upper.	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																		
H. M. S. Moorhen, N. 5° 16′, E. 115° 15′			81.5	27.5		NW			1	5	NW						D. clouds	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.69	754.1	50	10.0	64	WSW			3	10							Overcast	Capt. E. B Drummond.
H. M. S. Orontes, S. 4° 45′, W. 1° 15′ *†	29.93	760.2	76.5	24.7	92	SSW			2-3	10	NNE				1	S	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																		Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.90	759.4	80	26.7	95	S			1	10					2	SE	Overcast	Capt. F. R. Dicken.
H. M. S. Penguin																		Capt. A. C. Paget.
H. M. S. Phœnix																		
H. M. S. Rambler																		Capt. H. H. Grenfel. Capt. Hon. A.C. Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.78	756.4	79	26.1		SSE			1	4							D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																		Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 48° 54′, W. 123° 55′	30.18	766.6	58	14.4		SSW			1	2							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	30.07	763.8	79.3	26.3	78	SSE			3	3					Sm'h		D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																		Capt. A. Fita George.
H. M. S. Sea Gull, S. 6° 14′, E. 39° 10′	29.64	752.8	81	27.2	87	ESE			1	1	ESE						Blue sky	Comm. W. Byles.
H. M. S. Seraphis																		Capt. G. O. Twiss.
H. M. S. Shannon, N. 49° 22′, W. 4° 49′	29.90	759.4	58	14.4	93	SSW			2	10	WSW				2	W	Drizzling	Capt. J. D'Arcy.
H. M. S. Superb																		Capt. T. L. H. Ward.
H. M. S. Tenedos																		Capt. C. G. Fane.
H. M. S. Thetis																		Capt. P. W. Stephens.
H. M. S. Thunderer																		Capt. P. H. Colomb.
H. M. S. Triumph, Autofagasta, Peru	30.15	765.8	61	16.1	66	NE			1	0							Blue sky	Capt. A. H. Markham.
H. M. S. Turquoise																		Capt. M. B. Medlycott.
H. M. S. Tweed																		
H. M. S. Tyne																		Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.			80	26.7		NNE			1	3							D. clouds	Com. W. S. Brown.
H. M. S. Wild Swan																		Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	29.94	760.5	52	11.1	69	S			2	0							Blue sky	Com. J. C. Wilson, A. D.C.
H. M. S. Woodlark, Abu Shehr, Persia	29.54	750.3	87.5	30.8	75	W			3-5						2	NW	Heavy mist	Capt. T. P. Nesham.
H. M. S. Zephyr																		Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																		
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																		
PORTUGUESE NAVAL SERIES.																		
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																		
Bengo																		Carlos Candid dos Reis, Comd't.
Quanza, Santiago, Cape Verd Id's	29.98	761.5	84.7	29.3	46	NE			1	2		NE					D. clouds	
Rio Lima																		Carlos M. de Silva Costa, Comd't
Sado,																		S. C da Silva Costa, Comd't.
St. Paul de Loando, Benguela	30.04	762.9	74.5	23.6	70	WNW			3	1					1		Blue sky	G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.80	756.8	84.2	29.0	85	W			3	6		SW	2 hours				Drizzling	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES.																		
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																		
H. M. Corvette Saga N. 36° 33′, W. 6° 26′	30.10	764.5	74.8	23.8	75	NW			1	1							D. clouds	Capt. M. von Krusenstierna.
H. M. Frigate Vanadis																		Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	BAROMETER REDUCED TO SEA-LEVEL.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND.				CLOUDS.				RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		SEA-SWELL.		WEATHER.	OBSERVERS.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.15	765.8	84	28.9	61	NE	4	1.8			5		SE	0	0			Fair	
Naval Hospital, Yokahama, Japan	29.77	756.1	74	23.3	90	SW			6		10		SW	0	0			Cloudy	
Adams Punta Arenas, Costa Rico	29.80	756.9	78	25.6	91	Calm			0		10		Calm			Long	SSE	Cloudy	
Alaska, Callao, Peru	30.03	762.7	65	18.3	89	SE			1		10			0	0	Sm'h		Cloudy	
Alert, Yokohama, Japan*	29.82	757.4	76	24.4	86	S			6		8		S	0	0	Sm'h		Squally	
Alliance, Norfolk, Va	30.17	766.3	71	21.7	85	SW			1		10			0	0			Cloudy	
Ashuelot, Kobe, Japan	29.82	757.4	74	23.3	95	SW			1		10		Calm					Rainy	
Colorado, New York, N. Y	30.14	765.5	63	17.2	89	NW	9	4.0			2		NW	0	0			Fair	
Constitution, Newport, R. I	30.01	762.2	56	13.3	63	NNW			7		5							Fair	
Franklin, Norfolk, Va	30.11	764.8	71	21.7	80	WNW	3.6	1.6			8		N	0	0			Fair	
Galena. Lisbon, Portugal	30.11	764.8	69	20.6	80	W			4		10					Sm'h	W	Cloudy	
Independence, N. Yard, Mare I'd, Cal	30.04	763.0	68	20.0	84	SW	1.2	0.4			0			0	0			Clear	
Jamestown, Sitka, Alaska*	30.10	764.5	51	10.6	93	Calm			0		10			0	0	Sm'h		Cloudy	
Kearsarge. Norfolk, Va	30.20	767.1	71	21.7	80	W			1		10					Sm'h		Cloudy	
Lackawanna. S. 16° 06′, W. 154° 39′†	30.09	764.3	81	27.2	91	NNW			2-3		5		NNW			Mod	NNW	Fair	
Marion, Montevideo, Uruguay*†	29.79	756.7	61	16.1	88	NNW			5		10			Sho	wers	Sm'h		Cloudy	
Michigan, Cleveland, Ohio	30.13	765.3	63	17.2	78	NE			2		8		NE					Fair	
Minnesota, Newport, R. I	30.06	763.5	60	15.6	50	NW			2		0					Sm'h		Clear	
Monocacy, Yokohama, Japan	29.93	760.2	75	23.9	86	SSW			4		10		S					Cloudy	
New Hampshire. Norfolk, Va	30.13	765.3	71	21.7	85	Calm	0	0			10		W	0	0			Cloudy	
Nipsic. N. 45° 49′, W. 7° 17′	29.89	759.2	66	18.9	84	SSW			4		10		SSW			Mod.	SSW	Overcast	
Onward, Callao, Peru†	30.01	762.2	65	18.3	89	SE			2		10		NW			Long	W	Cloudy	
Palos, Nagasaki, Japan	29.71	754.6	73	22.8	100	SSW			2		10							Rainy	
Passaic, Washington, D. C	30.24	768.1	65	18.3	89	NE			1		2							Fair	
Pensacola, Mare Isl'd, Cal	30.00	762.0	55	12.8	93	SSW			3		0			0	0			Clear	
Portsmouth. Newport, R. I	30.06	763.5	55	12.8	87	NW			3		2		NW					Clear	
Powhatan. Newport, R. I	30.06	763.5	68	20.0	47	NNW			3		2		S					Fair	
Quinnebaug, Tompkinsville, N. Y	30.14	765.5	63	17.2	57	NW			1		2					Sm'h		Clear	
Ranger, Pichelinque, Mexico*	29.78	756.4	75	23.9	77	S			2		8		Calm	0	0	Sm'h		Cloudy	
Richmond, Nagasaki, Japan	29.70	754.4	73	22.8	95	SW			1		10		SW	1.25	31.7			Rainy	
Saratoga, Newport, R. I	30.04	763.0	55	12.8	68	NNW			2		2		NW	0	0			Fair	
Shenandoah, S. 35° 15′, W. 51° 45*	30.05	763.3	66	18.9	94	NW			6		5		N;W			Mod.	N	Fair	
St. Louis, League Island, Pa	29.73	755.1	63	17.2	57	NNW	11	4.9			2		N	0	0			Clear	
Swatara. Shangbai, China*†	29.74	755.4	75	23.9	81	WSW			2		8		Calm					D. clouds	
Tennessee, Navy Yard, N. Y	30.17	766.3	69	20.6	58	NW	3	1.3			0			0	0	Sm'h		Clear	
Ticonderoga, S. 48° 30′, W. 42° 52′	29.26	743.2	45	7.2	100	W			5		8		W	0.02	0.5	R'gh	WNW	Cloudy	
Trenton, Marseilles, France*	29.99	761.7	76	24.4	60	SSW			2		0			0	0	Sm'h		Hazy	
Vandalia. Huntington, Long I'd	30.13	765.3	60	15.6	71	NNW			2		2		N					Fair	
Wabash, Boston, Massachusetts	30.07	763.8	57	13.9	36	NNW	19	8.5			2		Calm	0	0			Clear	
Wachusetts, N. Yard, Mare I'd, Cal	29.96	761.0	60	15.6	88	SW			3		0			0	0			Clear	
Yantic, Key West, Florida*	29.94	760.5	81	27.2	91	NNE			1		5		ENE					Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisie																			Capt. A. J. Brown.
British Merchant, ‡ N. 23° 17′, W. 122° 42′	30.04	763.0	65.5	18.6	81	NE			3		10							Overcast	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 46° 46′, W. 19° 45′	29.62	752.3	55.3	12.9	80	WSW			5		8					4	WNW	D. clouds	W. N. Lailey.
City of Agra, N. 3° 50′, W. 25° 30′	30.07	763.8	81.0	27.2	74	ESE			4		1							Blue sky	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 34° 50′, W. 18° 00′	30.21	767.3	67.0	19.4	79	SW			4		2							Blue sky	Capt. Jas. Buchan.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 10° 59′, W. 37° 02′	30.12	765.0	78.5	25.8	82	ESE			4		4					Sm'h		D. clouds	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamports																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R. N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Naiad, N. 48° 46′, W. 10° 24′	29.60	751.8	58.8	14.9	?	S			6		10							Raining	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 33° 19′, W. 41° 40′	30.14	765.5	70.8	21.6	90	WNW			5		10							Showery	Capt. M. Parry.
Sierra Estrella, N. 17° 00′, W. 25° 43′	30.17	766.3	74.0	23.3	79	NNE			4		5							Misty	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 37° 26′, E. 5° 36′	30.03	762.7	67.5	19.7	95	ENE			3		5							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 47° 15′, W. 58° 32′	29.69	754.1				SW			2		10		WSW			Mod.	SW	Fair	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian, N. 40° 07′, W. 68° 38′	30.09	764.3	63	17.2		N			3		0					Sm'h		Clear	Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia, ‡ N. 50° 57′, W. 18° 13′	29.55	750.6	60	15.6		SW			4		8		SW			Mod.	SW	Fair	Capt. W. H. P. Hains.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 51° 10′, W. 15° 15′ †	29.38	746.2	56	13.3		WSW			5		5		WSW			Sm'h		Fair	Capt. J. W. Jennings.
S. S. Baltic, ‡ N. 41° 12′, W. 63° 25′	29.85	758.2	60	15.6	55	NNW			3		3		W	0	0	Light	NNW	D. clouds	Capt. H. Parsell.
S. S. Britannic, N. 43° 18′, W. 55° 11′ †	29.77	756.1	56	13.3	81	SW			4		2		SW			Sl't	SW	Raining	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England †	29.96	761.0	63	17.2	94	S			3		10		S	Light				Raining	Capt. Ch. W. Kennedy
S. S. Republic, N. 50° 01′, W. 22° 35′ †	29.48	748.8	58	14.4	94	NW			5		5		NW	Showers		Mod.	NW	Fair	Capt. P. I. Irving.
GERMAN MERCHANT--MARINE SERIES.																			
NORTH GERMAN LLOYD--Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig, N. 44° 19′, W. 42° 49′	29.90	759.4	62.0	16.7	88	NNW			2		10		NNW			Sm'h		Foggy	Capt. C. Phole.
S. S. Hermann, N. 46° 52′, W. 42° 15′	29.96	761.0	54.5	12.5		Calm			0		10		W	5 hours		Light	WNW	Fine	Capt. H. Baur.
S. S. Hohenzollern, ‡ N. 37° 46′, W. 74° 15′	30.15	765.8	65.8	18.8		NE			2		2			0	0	Sm'h	E	Fair	
S. S. Köln, N. 52° 18′ E. 3° 22′	30.10	764.5	64.5	18.1	86	E			1		0			0	0			Clear	Capt. Th. Jüngst.
S. S. Strassburg, N. 50° 38′, W. 0° 21′	29.93	760.2	56.3	13.5		SSE			3		8		WSW	2 hours		Sm'h	SSE	Hazy	Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand

UNITED STATES MERCHANT-MARINE SERIES.

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LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. Liverpool, England	29.82	757.4	63	17.2	94	SSE			4		10		SE					Rainy	Capt. J. W. Shackford.
S. S. Indiana, Philadelphia, Pa.†	30.14	765.5	78	25.6	86	WNW			4		2		NW	0	0			Fair	Capt. R. W. Sargent.
S. S. Ohio.																			Wm. Shackford, Chief Off'r
S. S. Pennsylvania, N. 41° 40′, W. 44° 17′.....†	30.03	762.7	70	21.1	90	NE			3		10		NE			Sm'h	E	Cloudy	Capt. Geo H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, Guaymas, Mexico.....†	29.66	753.4	81	27.2	83	SW			1		8		SW	0	0			Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 42° 16′, W. 144° 25′....†	30.24	768.1	61	16.1	83	W			2		8		WSW	0	0	Mod.	S	Cloudy	Capt. H. Davison.
S. S. Gaelic.																			Capt. W. H. Kidley.
S. S. Oceanic, N. 26° 46′, E. 124° 14′.....	30.12	765.0	80	26.7	90	SSW			4		5		WSW	0.02	0.5		SSE	Fine	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 40° 05′, W. 124° 15′...†	29.99	761.7	51	10.6	86	NW			5		5?		NW			Mod.	NW	Clear?	Capt. Fred. Rolles.
S. S. Oregon.																			Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Francisco, Cal.....†	29.96	761.0	51	10.6	86	Calm			0		0			0	0			Clear	Capt. J. N. Ingalls.
S. S. Dakota.																			Capt. H. G. Morse.
S. S. Idaho, San Francisco, Cal.....†	30.02	762.5	50	10.0	100	W			1		0							Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 33° 40′, W. 118° 15′.....†	29.88	758.9	56	13.3	87	NW			5		0					Sm'h	NW	Clear	Geo. H. Harrison.
S. S. Senator.																			Capt. Thos. Wallace.
S. S. State of California, Portland, Oregon.....†	30.16	766.1	51	10.6	79	NW			3		0							Clear	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal.....†	29.99	761.8	50	10.0	86	Calm			0		2							Clear	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia.																			A. Bannerman, 2d Officer.
S. S. City of New York, S. 33° 56′, E. 153° —′.....†	29.85	758.2	65	18.3	83	WSW			5		10		W	Ra	in	H'vy	W	Raining	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, San José, Guatemala...†	29.95	760.7	77	25.0	91	E			2		10ths			3 ho	urs	Sm'h		Cloudy	Capt. D. S. Austin.
S. S. City of Peking.																			Capt. G. G. Berry.
S. S. City of Sidney, N. 4° 00′, W. 164° 42′.....*†	29.86	758.4	81	27.2	78	SSE			5		10		SE	0.125	3.2	Mod.	ESE	Drizzling	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 29° 18′, E. 126° 33′.....†	29.87	758.7	75	23.9	85	SW			4		10		SW			R'gh	SW	Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 35° 52′, W. 121° 33′....†	29.97	761.2	56	13.3	81	NW			6		2		Calm	0	0	R'gh	WNW	Hazy	Capt. R. R. Searle.
S. S. Granada, San José, Guatemala...†	29.90	759.4	82	27.8	83	Calm			0		2		NE	6 ho	urs	Mod.	SSE	Clear	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. W.	30.22	767.6	54	12.2	100	NE			2		0							Clear	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland.																			Capt. Sam'l Jackson.
S. S. Nederland, N. 40° 14′, W. 62° 22′....†	29.79	756.7	68	20.0	?	WNW			5		1		WNW	2 ho	urs	Mod.	W	Fine	A. Feddersen, 2d Officer.
S. S. Rhyniand, N. 41° 43′, W. 45° 23′.....†	30.19	766.8	72	22.2	90	W			1		10		NNW	0.05	1.3	Sm'h		Hazy	Capt. Wm. Geo. Randle.
S. S. Vaderland.																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley.																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, N. 38° 03′, W. 73° 11′.....	30.11	764.8	69	20.6	61	NE	8	3.6		8ck	0	NE		0	0	Short	NE	Cloudy	Capt J. Jorgensen.
Sch'r Annie R. Lewis.																			Capt. L. L. Lewis.
Bark Carrie Heckle.																			Capt. B. F. Woodbury.
Brigantine George, Arroyo, Porto Rica.....†	30.06	763.5	80	26.7		ENE			3		8			Hea	vy	R'gh		Clearing	Capt. W H. Champlin.
U. S. F. C. S. Fish Hawk, Cherrystone, Va.....†	30.19	766.8	75	23.9	72	NE	4	1.8		0	28			0	0			Clear	
Bark Sunbeam, N. 35° 55′, W. 13° 59′....†	30.22	767.6	69	20.6	75	W			2		5		W	0	0	Sm'h		Fair	Capt. Jos. Hand.

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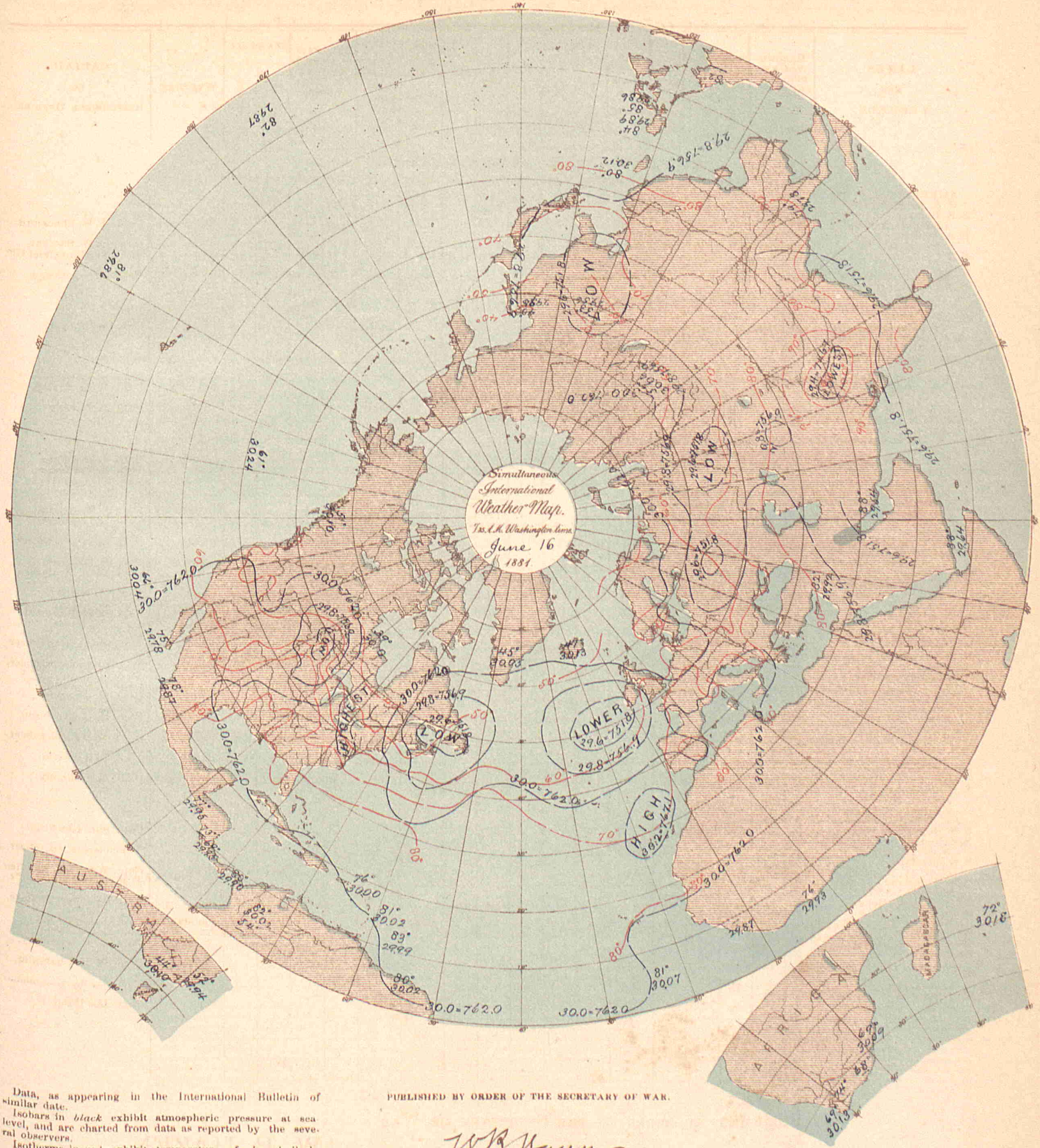
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 17, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours‡			30.01	762.2	77.0	25.0	85	N			1		2			0	0	Fair	Raynard.
Algiers‡			30.04	763.0	72.3	22.4	76	N			2		5			0	0	Cloudy	Nicolas.
La Calle‡			30.09	764.2	71.2	21.8	82	NE			4		0			0	0	Clear	Fonfrède.
Tunis‡			30.08	764.1															Jacques.
Sfax‡			30.13	765.3															Gau.
Saida‡			30.08	763.9	84.2	29.0	18	N			3		0			0	0	Clear	Dumas.
Tebessa‡			30.10	764.5	78.4	25.8	16	E			2		0			0	0	Clear	Watrin.
Geriville‡					86.4	30.2	35	ENE			1		0			0	0	Clear	Lonchamp.
Laghouat‡			30.10	764.4	93.9	34.4	11	E			1		1			0	0	Very fair	Herbin.
Biskra‡			30.10	764.4	92.8	33.8	56	SE			2		6			0	0	Cloudy	Baudassé.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.90	759.4	29.99	761.7	51.2	10.7	85	NNW	4	1.8			10					Showery	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.44	747.8	29.97	761.3	70.5	21.4	59	S			3		7			0.098	2.5	Raining	Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.22	742.3	29.98	761.5	61.5	16.4	61	NW	9.8	4.4			8			0.012	0.3		Dr. Wierzbicki.
Eperies	29.05	737.9	29.91	759.6	64.0	17.8	52	Calm			0	08	5		SE	0	0		Julius Mikolik.
Gratz‡	28.75	730.4	29.97	761.3	65.8	18.8	79	ESE			3		3			0.004	0.1	Thnd'rstorm	Andreas Rospini.
Hermannstadt	28.50	723.8	29.91	759.8	56.3	13.5	88	NNW			2		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.66	728.0	29.96	760.9	70.2	21.2	55	W			1		8			0	0		The Staff.
Lemberg	28.92	734.6	29.91	759.7	52.0	11.1	89	NW			3		10			Inap.	Inap.		Dr. T. Stanecki.
Pola	29.89	759.1	30.00	761.9	74.1	23.4	67	NNW			2		3			0	0		I. R. Hydrographic Office.
Szathmar	29.48	748.8	29.94	760.4	61.9	16.6	81	NW			3		9			0	0		Beicht Peter, S. J.
Szegedin	29.66	753.4	29.93	760.3	67.3	19.6	75	W			1		5			0	0		Karl Stancel.
Trieste	29.93	760.2	30.03	762.8	76.5	24.7	66	NW			1		10			0	0		Secco.
Vienna	29.30	744.3	30.00	762.0	68.7	20.4	50	N			2		7			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter Printed June 16, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.89	759.2	29.99	761.7	48.0	8.9	95	SE	14	6.3			10			0.655	16.6	Raining	W. Boswell.
Armagh, Observatory	29.49	749.0	29.72	754.9	59.7	15.4	72	S	8	3.6			10					Gloomy	S. Call.
Bidston, Liverpool Obs'y			29.79	756.7	62.8	17.1	79	SE	20	8.9			10					Overcast	John Hartnup.
Bolton, Sharples																			Thomas Mackereth.
Bradford, Yorkshire	29.47	748.5	29.86	758.4	62.2	16.8	80	SE			1.0		10			0.26	6.6	Overcast	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	30.00	762.0	30.03	762.7	82	27.8	79	NE			2		5					D. clouds	Corpl. J. Surgener, A.H.C
Cardington			29.88	758.9	70.0	21.1	66	S			0.6		10					Overcast	John McLaren.
Chatham, School M. E.	29.82	757.4	29.95	760.7	67.0	19.4	70	S			3		7					Gloomy	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.52	749.8	29.75	755.6	57.5	14.2	96	SSE			4		10					Raining	The Staff.
Fort Napier, Natal	27.96	710.2	30.18	766.6	68.1	20.1	52	Calm			0		2					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7				W			1		0					Blue sky	Sgt. C. E. Keane.
Galway, Queen's College			29.61	752.1	60	15.6	65	W			2		10			0.34	8.6	Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.03	762.7	30.08	764.0	73.8	23.2	82	SW			4		6					D. clouds	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.61	752.1	29.82	757.4	55.7	13.2	89	NNE			6		10k					Overcast	Harry Urquhart.
Greenwich, Royal Obs'y	29.75	755.6	29.92	760.0	66.7	19.3	73	SSW			1		10					Overcast	The Staff.
Guernsey	29.65	753.1	29.86	758.4	66	18.9	74	SE			3		5					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.89	759.2	29.92	760.0	68.1	20.1	67	S	17	7.6			9					D. clouds	The Staff.
Leicester, Museum	29.61	752.1	29.86	758.4	64.8	18.2	74	SW			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.95	760.7	30.02	762.5	70.4	21.3	81	NE			2		1					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.95	761.0	30.00	762.0	85.0	29.4	76	E			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.33	745.0	29.85	758.2	60.6	15.9	94	SSE			2		10					Raining	John Mac Email.
Oxford, Radcliffe Obs'y	29.66	753.4	29.88	758.9	62.4	16.9	82	S			4		10					Threatening	The Staff.
Plymouth	29.71	754.6	29.78	756.4	57.3	14.1	98	S			3		10					Misty	John Merrifield.
Sandwick Manse, Orkneys			30.04	763.0	52	11.1	81	SE	27	12.1			10					Misty	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.81	757.2	29.87	758.7	74.0	23.3	63	SW			1		7					D. clouds	Serg't W. H. Lyne.
Sheffield	29.61	752.1	29.88	758.9	63.9	17.7	86	S			1		10			0.12	3.0	Overcast	W. F. Cooper.
Silloth Rectory	29.76	755.9	29.79	756.7	61.3	16.3	89	SW			4		10			0	0	Overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.85	758.2	61.0	16.1	80	SE	22	9.8			10					Overcast	Rev. S. J. Perry.
Stratfield Turgiss	29.68	753.9	29.89	759.2	67.9	19.9	74	SW			1		10					Showery	Rev. C. H. Griffiths, F.M.S
Truro, Royal Institution	29.72	754.9	29.74	755.4	63	17.2	83	SW			4		10					Raining	W. Newcombe.
Valencia, Observatory	29.56	750.8	29.58	751.3	54.9	12.7	91	SE	24	10.7			10					Raining	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.					45.0	7.2		NW	6	2.7			10n					Raining	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.61	752.1	29.66	753.4	42	5.6	74	W	6	2.7			10n			0.20	5.1	Light rain	H. J. Cundall, C. E.
Chatham, N. B. *	29.58	751.3	29.64	752.8	44	6.7	67	W	10	4.5		8ck	0	W		0.03	0.8	Fair	G. A. Blair.
Chicontimi, Quebec					43.4	6.3		NW			6	0	6ks			0	0	D. clouds	Rev. V. A. Huart.
Cornwall, Ontario	29.49	749.0	29.68	758.4	51.1	10.6	75	SW			1	0	0			0	0	Blue sky	James Smith, M. A
Dalhousie, N. B.	29.57	751.1	29.60	751.8	49.0	9.4		W			1	0	0			0	0		H. A. Johnson.
Father Point, Quebec *	29.66	753.4	29.68	753.9	42	5.6	63	W	5	2.2		2cs	5ks			0.02	0.5	Fair	J. McWilliams.
Fort Garry, Manitoba *	28.71	729.2	29.50	749.3	58	14.4	74	W	15	6.7		0	5n		W	0.02	0.5	Fair	James Stewart.
Fredericton, N. B.	29.66	753.4	29.72	754.9	45.3	7.4	58	NW	10	4.5		2k	2s	NW		Inap.	Inap.	Fair	Prof. Harrison.
Granton, Ontario	28.72	729.5	29.80	756.9	55.0	12.8	100	E			1		10n			1.40	35.6	Foggy	James Grant.
Halifax, N. S. *	29.60	751.8	29.73	755.1	48	8.9	75	NW	8	3.6		2k	0	W		0	0	Fair	A. Allison.
Hamilton, Ontario	29.42	747.3	29.80	756.9	52.9	11.6	94	SW			1	10cs	0	SW		0.25	6.3	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario *	29.45	748.0	29.78	756.4	57	13.9	69	SW	2	0.9			10s		W	0	0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S.	29.62	752.3	29.66	753.4	47.0	8.3	70	NW			5	7k	0	NW		0.05	1.3	Cloudy	C. H. Rigby.
Montreal, Quebec *	29.60	751.8	29.79	756.7	57	13.9	51	NW	2	0.9		0	8k			0	0	Smoky	C. H. McLeod, C. E.
Moose Factory, Ontario	29.83	757.7	29.86	758.4	50.3	10.2	56	NE			3	2k	0			0	0	Blue sky	J. R. Nason.
Parry Sound, Ontario *	29.11	739.4	29.79	756.7	55	12.8	90	SE	9	4.0			10n		SE	0.23	5.8	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	29.06	738.1	29.78	756.4	69.7	20.9	50	Calm			0	0	5ks			0	0	Fair	J. F. Jeffers, M. A.
Port Dover, Ontario	29.11	739.4	29.79	756.7	52	11.1	100	N	5	2.2			10n			2.45	62.2	Threatening	H. Morgan.
Port Stanley, Ontario	29.15	740.4	29.78	756.4	59	15.0	99	E	5	2.2			Fg			0.85	21.6	Foggy	M. Payne.
Quebec, Quebec *	29.48	748.8	29.80	756.9	47	8.3	62	W			1	0	2s		W	0	0	Clear	Capt. Ashe, R. N.
Rockliffe, Ontario *	29.37	746.0	29.82	757.4	55	12.8	70	Calm	0	0		5c	0	W		0	0	Fair	W. H. McIntyre.
Saugeen, Ontario *	29.04	737.6	29.74	755.4	57	13.9	95	S	14	6.3			10ks			0.61	15.5	Light rain	K. Stewart.
St. Andrews, N. B.	29.67	753.6	29.74	755.4	46	7.8	76	NW	3	1.3		0	0			0.03	0.8	Clear	
St. John, N. B.	29.54	750.3	29.71	754.6	48.0	8.9	70	SW	8	3.6		7ck	0			0	0	D. clouds	G. Murdock, C. E.
Stratford, Ontario	28.52	724.4	29.78	756.4	51.5	10.8	98	SE	5	2.2			10s			0.878	22.3	D. clouds	C. J. Macgregor, M. A.
Sydney, C. B. *	29.63	752.6	29.67	753.6	47	8.3	69	SW	12	5.4		0	8ks		W	Inap.	Inap.	Raining	T. C. Hill, C. E.
Toronto, Ontario *	29.44	747.8	29.82	757.4	52	11.1	86	NE	4	1.8			10s			0.33	8.4	Cloudy	Magnetic Observatory
Windsor, N. S.	29.60	751.8	29.70	754.4	46.0	7.8	62	W	8	3.6		5k	0			0	0	Fair	
Woodstock, Ontario	28.74	730.0	29.79	756.7	51.9	11.1	99	NE	7	3.1			10s			1.14	29.0	D. clouds	Prof. Wolverton.
Yarmouth, N. S. *	29.71	754.6	29.78	756.4	48	8.9	70	S	2	0.9			Fg			0	0	Foggy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	28.92	734.6	29.17	740.9	47	8.3	93	SE	1	0.4			10s			0.43	10.9	Fair	John Delany.
St. Pierre, N. F.			29.64	752.8	53.6	12.0		SW			2					0	0		N. F. Land, Comd't.
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	30.21	767.3			65.0	18.3	88	E	13.6	6.1		7cs	0			0	0	Cloudy	John Duthie.
Cape Town, C. G. H. Obs'y	30.03	762.7	30.07	763.8	57.4	14.1		NNW	5.8	2.6		5cs				0	0		The Staff, for D. Gill.
Worcester *†.	29.07	738.4			73	22.8	45	WNW			1	3	3			0	0	Light clouds	C. Stoker.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.77	756.2	29.80	756.8	68.9	20.5	83	SE	1.6	0.7			10			0.020	0.5	Covered	M. Dechevrens, S. J.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Reduced to sea-level.		Tempera-ture of the Air.		Rel. Hum.	Wind. Direc-tion.	Velocity.		Force	Clouds. Amount and kind.		Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.22	666.0	29.94	760.5	68.0	20.0	95					908 ck	0			Inap.	Inap.	Cloudy	Amand Maison.

DANISH SERIES.

Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.

Copenhagen	30.07	763.7	30.12	764.9	64.0	17.8	52	NW	7	3			8						Oversergent Fischer.
Fanöe	30.08	764.0	30.10	764.5	65.1	18.4	60	W			4		5						Overloerer Lauridsen.
Godthaab, Greenland	30.17	766.3	30.21	767.4	50.0	10.0	64	ENE			2		10						S. Kleinschmidt.
Stykkisholm, Iceland	30.12	765.0	30.16	766.1	46.9	8.3		NW			2		8						A. O. Thorlacius.
Thorshavn	30.13	765.4	30.17	766.3	46.9	8.3	98	E	11	5			10					Foggy	Overloerer Bergh.
Vestervig	30.02	762.6	30.12	765.0	62.2	16.8	59	NNW			2		1						Loerer Oesterbol.

FRENCH SERIES.

Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.

Agen, Normal School	29.34	745.1	29.96	760.9	80.6	27	49	SE			1		2			0	0	Light clouds	M. Labroue, Director.
Alençon Normal School	29.51	749.6	30.06	763.6	70.9	21.6	82	SW			1	0	8n		SW	0	0	Very cloudy	M. Nicot, Director.
Arras, Engineer School	29.74	755.3	29.99	761.7	70.9	21.6	67	SSW			1	0	k		SSW				M. Klein, Commandant.
Avignon, Normal School	29.94	760.5	30.02	762.5	84.2	29	48	N			1		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.47	748.4	30.00	761.9	76.3	24.6	45	SSW			1	0	8kn		SW	Inap.	Inap.	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.76	755.8	30.01	762.3	75.7	24.3	60	S			1		8		SW	0.098	2.5	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.15	740.4	29.97	761.1	73.4	23	59	W			1	0	0	E		0	0		M. Gobin, Director.
Bordeaux, Observatory	29.69	754.0	29.93	760.2	82.4	28.0	49	SW			1		5			0	0	Hazy	M. Rayet, Director.
Bourges, Normal School	29.49	749.1	30.03	762.7	76.1	24.5	44	ENE			1	0	n		ENE	0.264	6.7		M. Postel, Director.
Brest, Naval Observatory	29.62	752.4	29.87	758.6	64.0	17.8	84	SSW			4		10		SW	0.012	0.3	Misty	M. de Rermaree, Dir.
Caen, Normal School	29.88	758.9	29.94	760.5	69.8	21	76	SE			1		2		SE	0.008	0.2	Slightly cl'dy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.59	751.6	29.90	759.4	79.5	26.4	51	SE			1		2			0	0	Slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.54	750.3	30.04	763.0	73.4	23	69	SW			1					0	0		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.67	728.2	29.96	761.0	76.8	24.9	53	S			1		5			0.874	22.2	½ covered	M. Alluard, Director.
Cluny, Normal School	29.21	741.9	30.01	762.3	80.6	27	49	SE			1		2		SE	0.272	6.9		M. de Villemontée, Dir.
Commercy, Normal School	29.17	740.9	30.01	762.2	77.4	25.2	40	W			1	5c	0	W		0	0	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.54	699.6	29.98	761.5	75.2	24	46	N			1		k		NW	0	0		M. Jeangirard, Director.
Grénasque, du. Rhone	28.98	736.0	30.12	765.0	82.8	28.2	39	N			1		5		SW	0	0	Foggy	M. Kina, Director.
Grenoble, Normal School	29.24	742.6	29.96	761.0	81.1	27.3	43	E			1	0	sn			0	0		M. Ablard, Director.
Guéret, Normal School	28.43	722.1	29.93	760.3	74.8	23.8	61	ESE			1	0	0	NW		0	0		M. Rivoire, Director.
Lamballe, Normal School	29.66	753.4	29.93	760.2	64.4	18	84	SE			1				SE	0.020	0.5		M. Ollitrault, Director.
Lescar, Normal School	29.37	740.1	30.02	762.6	81.3	27.4	54	N			1					0.63	16.		M. Chauvin, Director.
Lorient, Naval Observatory	29.87	758.8	29.98	761.4	63.7	17.6	84	S			4		10			0.012	0.3	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.00	736.5	30.01	762.3	78.4	25.8	45	E			1		2			0.031	0.8	Slightly cl'dy	M. André, Director.
Mans, Normal School	29.71	754.7	29.97	761.3	73.2	22.9	84	S			1		8		W	0	0	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.75	755.6	30.01	762.3	71.8	22.1	73	WNW			1		4		NW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.93	633.2	30.17	766.2	68.7	20.4	42	W	9.4	4.2			2		W	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.89	759.2	30.00	761.9	80.2	26.8	63	NE			3		0			0	0	Foggy	M. P. Galzin, Director.
Nancy, Normal School	29.23	742.4	29.97	761.2	73.4	23	59	NW			1	0	5kn			0.20	5.	Cloudy	M. Hasse.
Nantes, Observatory	29.69	754.2	29.97	761.3	73.0	22.8	64	SW			1-2		10n		SW	0	0		M. Larocque, Director.
Nice	30.01	702.3	30.05	763.2	72.0	22.2	69	SE			3		5	E	SE	0	0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.90	759.5	30.00	762.1	71.4	21.9	65	SE	5.6	2.5			0			0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.68	576.0			54.1	12.3							1		S	0	0	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.00	736.5	30.00	762.1	82.0	27.8	40	S			1		2	NE	NE	0	0	Slightly cl'dy	M. Taillieu.
Puy de Dôme Obs'y, Summit	25.25	641.5			57.2	14.0	87	SE			2		10			0.516	13 1	Misty	M. Alluard, Director.
Rochefort, Naval Obs'y	29.95	760.6	29.98	761.4	81.0	27.2	93	SE			1		8		E	0	0	¾ covered	Lt. E. Decanie, Director.
Roche-sur-Yon, N. School	29.75	756.0	29.97	761.3	76.3	24.6	71	NW			2		10			0	0	Covered	M. Mouillot, Director.
Rodez, Normal School	27.95	709.8	29.99	761.8	77.0	25	54	SE			1		0			0	0	Clear	M. Richard, Director.
Rouen, Normal School	29.90	759.4	29.98	761.6	74.8	23.8	59	SSE			1		10		SW	0.08	2.	Covered	M. Platrier, Director.
Saint Lô, Normal School	29.79	756.6	29.95	760.6	68.4	20.2	76	SSW			2		5		NW	0.35	9.	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.85	758.1	30.01	762.3	73.2	22.9	62	S			1		9		SW	0.079	2.0		M. Renou, Director.
Toulouse, Observatory	29.30	744.1	30.02	762.5	83.3	28.5	55	SSE			3		5			0	0	Cloudy	M. Baillaud, Director.
Tours	29.78	756.4	29.98	761.4	77.0	25.0	49	SE			1		8		W	0	0	¾ covered	M. de Tastes.
Versailles, Observatory Sub-Series.	29.54	750.2	30.03	762.7	72.3	22.4	62	SW			1					0	0		Dr. A. Bérigny, Director.
Paris, Montsouris Obs'y	29.74	755.4	30.03	762.8	72.7	22.6	67	SSW			1		10		W	0.240	6.1		M. Marié Davy, Director.

GERMAN SERIES.

Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.

Bamberg	29.17	741.0	30.04	762.9	75.2	24.0	40	W			1	0	2k		W	0	0		Prof. Dr. Hoh.
Berlin	29.90	759.5	30.07	763.8	66.0	18.9	49	NE			1		5			0	0		Prof. Dr. Arndt.
Breslau	29.54	750.2	30.07	763.7	61.9	16.6	53	NNW			2		7			0	0		Royal University Obs'y.
Carlsruhe	29.58	751.3	29.99	761.8	77.4	25.2	45	S			1		1	NW		0	0		Albert Senz.
Cassel	29.29	743.9	30.01	762.2	74.5	23.6	36	N			1		7	E		0	0		Dr. H. Möhl.
Frankfort on the Main	29.67	753.7	30.02	762.5	77.0	25.0	39	N			1		5			0	0		Physical Society.
Friedrichshafen	28.63	727.2	30.02	762.6	68.7	20.4	68	S			1		5	W		0	0		Wilhelm, Chief Tel.
Hamburg	30.01	762.3	30.08	764.1	67.3	19.6	54	NNE			1		7			0	0		Dr. R. Kleeman.
Kiel	30.08	764.0	30.10	764.4	61.3	16.3	58	N			3		1			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.68	753.9	30.09	764.3	69.8	20.9	47	NE			1		8			0	0		Prof. Dr. Bruhns.
Magdeburg	29.86	758.5	30.05	763.2	68.9	20.5	48	NE			2		10k		NW	0	0		Dr. Assmann.
Memel	29.94	760.4	29.98	761.6	54.5	12.5	63	NW			4	0	6k			0.098	2.5		Reinbrecht & Issermann.
Munich	28.24	717.4	30.11	764.8	72.1	22.3	37	Calm			0		5	SW		0	0		Central Station.
Neufahrwasser	30.03	762.8	30.05	763.2	52.5	11.4	73	NNE			2		1			0	0		A. Lothes.
Neustadt, Palatinate	29.47	748.6	30.00	762.0	76.3	24.6	47	ESE			1		6			0	0		Dicknether.
Stuttgart	29.00	738.2	29.91	759.8	76.5	24.7	39	N			2		3	N		0	0		Prof. Dr. Schoder.
Weissenburg, Bavaria	28.55	725.2	30.02	762.6	73.4	23.0	40	W			2		8	W		0.012	0.3		Prof. Kemlein.
Wustrow	30.08	764.0	30.11	764.7	61.2	16.2	74	NNW			2	0	3s			0	0		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.58	751.2	29.95	760.8	78.1	25.6		SW			2.0		5					½ Clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.47	748.6	29.52	749.8	88.8	31.6	80	WSW	29.0	13.0			8		WSW	0	0	Misty	
Deesa	29.07	738.4	29.53	750.0	96.3	35.7	33	WSW	20.5	9.2			4		WSW	0	0	Misty	
Bombay	29.72	754.9	29.76	755.9	85.9	29.9	76	SW	16.0	7.2			3	SW	WSW	0.15	3.8	D. clouds	
Poona, Yarrowda.	27.91	708.9	29.74	755.5	82.0	27.8	55	WSW	27.0	12.1			2		WSW	0	0	D. clouds	
Belgaum	27.27	692.7	29.80	756.8	78.4	25.8	56	WSW	12.0	5.4			4	NE	W	0	0	D. clouds	
Lahore	28.62	726.8	29.30	744.3	112.3	44.6	13	W	1.9	0.8			0			0	0	Misty	
Roorkee	28.48	723.5	29.34	745.2	96.9	36.1	44	E	3.5	1.6			2			0	0	Misty	
Agra	28.88	733.6	29.42	747.2	97.1	36.2	36	SW	8.3	3.7			9		SW	0	0		
Nagpur	28.57	725.7	29.59	751.5	91.2	32.9	50	W	4.7	2.1			6	W		0	0	D. clouds	
Jubbulpore	28.26	717.9	29.58	751.4	91.2	32.9	50	W	7.5	3.4			4	W		0	0	D. clouds	
Lucknow	29.08	738.6	29.44	747.8	93.0	33.9	48	WSW	3.3	1.5			8	SSW		0	0	Blue sky	
Allahabad	29.13	739.9	29.43	747.4	98.8	37.1	45	NW	3.4	1.5			8			0	0	D. clouds	
Patna	29.29	744.0	29.47	748.6	79.9	26.6	91	NW	3.3	1.5			10	NW	NW	1.44	36.6	Raining	
Hazaribagh	27.53	699.3	29.51	749.5	80.8	27.1	86	NW	15.4	6.9			10			0.43	10.9	Raining	
Cuttack	29.49	748.9	29.56	750.9	89.5	31.9	70	WSW	2.0	0.9			8			0	0	D. clouds	
Calcutta, Alipore	29.48	748.8	29.50	749.4	82.3	27.9	83	W	3.0	1.3			10		W	0	0	Overcast	
Dhubri	29.36	745.8	29.48	748.9	80.4	26.9	93	Calm	6.7	3.0			10			0.74	18.8	Raining	
Chittagong	29.51	749.5	29.60	751.8	78.4	25.8	91	SE	7.9	3.5			8			0	0	D. clouds	
Sibsagar	29.21	742.0	29.54	750.3	85.0	29.4	79	SE	2.6	1.2			10	W	W	0.35	8.9	D. clouds	
Zanzibar, Africa			30.04	763.0	82.6	28.1	68	SSW	8	3.6			5		SSW	0	0	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.61	752.2	30.02	762.4	75.6	24.2	50	Calm	0	0			7			0	0		Prof. Giovanni Clodig.
Milan	29.50	749.3	30.00	762.0	77.5	25.3	46	ESE	5.6	2.5			6	SSW		0	0		Prof. Schiaparelli.
Padua	29.91	759.8	30.02	762.5	75.9	24.4	55	SW	1.8	0.8			10	SSW		0.035	0.9		Prof. Dott. Lorenzoni.
Moncalieri	29.11	739.4	29.99	761.8	78.4	25.8	49	SSE	1.8	0.8			7	SW		0	0		Prof. P. F. Denza.
Genoa	29.84	758.0	30.04	762.9	69.4	20.8	65	SW	4.3	1.9			8	SW		0	0		Prof. G. M. Garibaldi.
Mondovi	28.14	714.8	29.99	761.8	72.9	22.7	53	W			2		1			0	0		Prof. D. C. Bruno.
Pesaro	29.97	761.2	30.02	762.4	69.8	21.0	61	NE	9.4	4.2			7			0	0		Prof. Luigi Guidi.
Florence	29.78	756.4	30.04	762.8	74.3	23.5	57	NW			2		10			0	0		Prof. Costantino Pitter.
Leghorn	29.97	761.3	30.06	763.4	72.5	22.5	64	WSW	1.3	0.6			9			0	0		Prof. P. Monte.
Rome	29.86	758.4	30.04	762.8	79.2	26.2	36	WSW	3.8	1.7			10			0	0		Prof. P. S. Ferrari.
Lecce	29.76	755.9	30.01	762.2	75.6	24.2	50	NNW	9.4	4.2			0			0	0		Prof. C. de Giorgi.
Cosenza	29.16	740.6	30.03	762.7	78.4	25.8	70	SE	6.9	3.1			6	E		0	0		Prof. D. Conti.
Cagliari	29.84	757.9	30.02	762.5	72.9	22.7	59	S			2		0			0	0		Prof. A. Pacinotti.
Palermo	29.82	757.5	30.07	763.8	72.9	22.7	53	NE	4.9	2.2			10			0	0		Prof. G. Ciaccatore.
Syracuse	29.95	760.7	29.99	761.8	70.9	21.6	73	ENE	6.3	2.8			6			0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.50	749.3	30.02	762.4	72.5	22.5	73	SSE	1.3	0.6			9	NE		0	0		Prof. F. Brioschi.
Stelvio	22.32	566.8			46.9	8.3	52	SE			2	0	5s		NW	0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.35	567.7			46.9	8.3	77	E			2		10kn		NW	0	0	Covered	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.76	755.9	29.78	756.4	68.0	20.0	96	SW	1.4	0.6		ck	9s			0	0	Overcast	K. Sasaki.
Kioto	29.62	752.3	29.79	756.6	68.7	20.4	96	NNW	0.8	0.4			10s			0.465	11.8	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.60	751.8	29.80	756.9	67.8	19.9	97	SW	0.7	0.3		0	0			0.130	3.3	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	29.72	754.9	29.78	756.4	72.6	22.6	96	SW	5.8	2.6			10n			1.720	43.7	Raining	The Staff.
Wakayama	29.73	755.1	29.78	756.4	70.8	21.6	94	NNW	1.3	0.6			10n			0.880	22.4	Raining	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.95	760.7	30.14	765.5	74.2	23.4	68	E	9.0	4.0		0	8		S; Var.	0	0	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.40	619.8	29.90	759.5	66.0	18.9	73	E			1	3c	5k	NE	NE	Inap.	Inap.	Very cloudy	Prof. M. Leal.
Mazatlan	29.56	750.8	29.81	757.3	77.0	25.0	86	NNE	0.9	0.4		1cs	8cn		NE	0.100	2.5	Cloudy	F. Quijano, U. E.
Mexico, Central Obs'y	23.09	586.6	30.04	763.2	56.8	13.8	85	Calm	0	0			10n			0.516	13.1	Overcast	The Staff.
Pabellon, Aguascalientes	23.95	608.1	29.91	759.8	61.3	16.3	79	NNE			1	2c	4ks		E	0.08	2.0	½ cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.31	592.1	30.07	763.9	59.2	15.1	53	Calm	0	0			10		E	0.323	8.2	Covered	Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.56	573.1	30.18	766.7	50.5	10.3		ENE	15.0	6.9			10n;s		ENE	0	0	Covered	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.00	762.1	30.00	762.1	72.0	22.2		E			2					0	0		
Groningen	29.98	761.5	30.04	762.9	68.5	20.3		ENE			1					0	0		
Helder	30.01	762.2	30.01	762.2	65.7	18.7		E			1					0	0		
Hellevoetsluis	29.99	761.7	29.99	761.7	72.5	22.5	66	ESE			1					0	0		
Utrecht	29.97	761.2	30.02	762.4	73.9	23.3	45	ESE			2		8			0	0	Very cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal erron and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.04	763.0	30.10	764.6	58.3	14.6	78	NW	8.3	3.7			0			0	0		
Christiania	29.87	758.7	30.01	762.3	75.0	23.9	33	WSW	7	3			7			0	0		
Gjæsvær	29.89	759.1	29.91	759.7	38.7	3.7		W			7		10						
Lodingen	30.06	763.4	30.10	764.6	57.7	14.3	60	S			2		5			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.91	759.6	29.96	760.9	67.1	19.5	79	NW	15.4	6.9			6			0	0		Dr. J. A. Sampaio.
Campo Major	29.10	739.0	30.07	763.8	70.7	21.5	49	WSW	3.8	1.7			10			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.12	765.1	30.21	767.3	68.9	20.5	62	SW	3.8	1.7			10			0	0		Capt. D. A. da Cunha.
Lisbon, Observatory	29.78	756.4	30.13	765.4	65.7	18.7	75	WSW	11.9	5.3			10			0.055	1.4		The Staff.
Ponta Delgada, Azores	30.03	762.8	30.10	764.6	73.0	22.8	71	NW	6.9	3.1			4			0.035	0.9		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.68	728.5	29.72	754.9	63.9	17.7	79	SSW	18	8		0	8k					Heavy cl'ds	Capt. Lasarew.
Archangel	29.95	760.7	29.97	761.2	58.8	14.9	50	N	9	4			0						Capt. Sseliwerstow.
Astrakhan	29.93	760.3	29.85	758.2	79.7	26.5	47	ENE	9	4		0	7ks;s					Light clouds	Capt. Wisganow.
Barnaul ‡	29.37	746.1	29.85	758.3	68.9	20.5	24	ENE	13	6			0						Meteorological Obs'y.
Dorpat	29.67	753.7	29.91	759.6	66.9	19.4	30	NNE	7	3		10k	0						Observatory.
Ekaterinburg	28.82	732.1	29.78	756.3	53.1	11.7	86	NW	11	5			10						Meteorological Obs'y.
Kasan	29.54	750.2	29.79	756.7	71.2	21.8	51	NNW	7	3			6						Observatory.
Kertch	29.83	757.7	29.85	758.2	68.4	20.2	79	NE	4	2			9						Lagorio & Sastyres.
Kieff	29.13	739.8	29.75	755.7	58.8	14.9	81	W	7	3			10ka;a						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.60	751.9	29.80	756.9	77.7	25.4	32	SSW	9	4			8						Meteorological Obs'y.
Moscow	29.22	742.1	29.75	755.6	63.9	17.7	65	S	7,8	3.5		0	8ks					Light rain	Meteorological Obs'y.
Nertchinsk	27.53	699.3	29.78	756.4	52.5	11.4	74	Calm	0	0			2			0.193	4.9		Meteorological Obs'y.
Nikolaiev	29.81	757.2	29.88	759.0	66.6	19.2	65	S	4	2			9n						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.54	750.4	29.63	752.6	46.9	8.3	84	E			6		10n			0	0		Lieut. Iwanow.
Pekin, China	29.48	748.7	29.62	752.3	81.5	27.5	57	SE	7	3		0	8k					Thund'rst'm	Physical Observatory.
St. Petersburg	29.88	758.9	29.89	759.3	64.6	18.1	33	ENE	9	4		10s	0						Central Physical Obs'y.
Tashkend, Laboratory	28.36	720.3	29.83	757.7	84.9	29.4	34	Calm	0	0			0						Teich, A. M.
Tiflis	28.43	722.1	29.76	755.9	82.9	28.3	38	S	2	1		0	4k						Physical Observatory.
Warsaw	29.56	750.7	29.98	761.4	55.2	12.9	73	NNW	9	4		0	8cks						Astronomical Obs'y.
Wilna	29.43	747.6	29.85	758.1	60.6	15.9	56	NW	4	2			9					Heavy cl'd's	Berg, Assistant.
Yeniseisk	29.72	755.0	30.00	762.1	66.2	19.0	33	N	18	8			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.85	758.2	61.8	16.6	80	SE			3		10ks			0.12	3.0	Overcast	Andrew Gibb.
Monach Lt. House, Hebrides			29.72	754.9	57	13.9	94	E			4		10			0.2	5.	Hazy	J. Youngclause.
North Unst, Shetland Isl'ds			30.07	763.8				E			2		Fg						Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.93	760.2	30.03	762.8	75.7	24.3	66	SSW	3.6	1.6			1			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	29.91	759.6	29.96	761.0	78.1	25.6	58	NW	2.7	1.2			10			0	0	Covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.11	688.6			71.2	21.8	45	SW	4.9	2.2			7			0	0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.85	707.3	29.98	761.4	79.2	26.2	37	SW	12.1	5.4		6	0	SW		0	0	Light clouds	The Staff.
Murcia, Met. Obs'y ‡	29.88	759.0	30.02	762.6	86.0	30.0	49	ENE	1.6	0.7		5	5			0	0	Covered	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.06	738.2	29.94	760.5	64.0	17.8	79	S	17.4	7.8			10			0.110	2.8	Covered	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I.	29.90	759.5	29.97	761.2	81.0	27.2	77	E	7.6	3.4		4c;cs	k	SE	E	0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.80	756.8	29.85	758.1	86.4	30.2	72	SE	6.6	3.0		4ck	0	E		0	0		Federico Faura, S. J.
San Fernando, Naval Obs'y	30.02	762.4	30.12	764.9	71.4	21.9	74	W	3.3	1.5			10		W	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.93	760.1	30.02	762.4	75.6	24.2	98	E	0	0		28	4km	E	E	2.354	59.8	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.71	754.6	29.85	758.3	84.3	29.1	74	WNW	2.7	1.2		0	3k		WNW	0	0	Lightly cl'd'y	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.98	761.4	30.02	762.4	63.3	17.4	27	SW			2		0			0	0		
Umea	30.00	761.9	30.05	763.2	63.0	17.2	27	S			2		2			0	0		
Hernosand	29.95	760.8	30.00	762.1	58.1	14.5	39	SSW			2		2			0	0		
Stockholm	29.84	758.0	30.02	762.5	66.6	19.2	26	NE			2		0			0	0		
Wisby	29.92	760.0	29.98	761.5	48.2	9.0	78	NNW			4		0			0	0		
Sub-Series.																			
Upsala	29.87	757.7	29.92	759.9	69.1	20.6	25	NNW	4.7	2.1			0			0	0		S. G. Fineman.
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.63	727.6	30.03	762.7	69.3	20.7	62	N			1		4			0.055	1.4	Cloudy	The Observatory.
Zurich ‡	28.44	722.4	30.01	762.2	75.6	24.2	59	W			3		4			0	0	Lightly cl'd'y	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Counbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.92	759.9	72.5	22.5	55	NW	9	4.0			8		SW	0.075	1.9		The Observatory.
Valona			30.10	764.5	73.0	22.8		W			1		2			0	0	Slightly cl'd'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.96	760.9	81.0	27.2	53	WSW			3		0			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
Albany, New York	29.76	755.9	29.84	757.9	57	13.9	69	S	6	2.7	.....	.....	10s	.....	.....	Inap.	Inap.	Cloudy..	
Alpena, Michigan	29.13	739.9	29.78	756.4	48.5	9.2	100	E	1	0.4	.....	.....	Fg	.....	.....	1.51	38.4	Dense fog....	
Atlanta, Georgia	28.92	734.6	30.07	763.8	83.0	28.3	46	SW	7	3.1	.....	0	0	.....	.....	0	0	Clear.....	
Atlantic City, New Jersey	29.80	756.9	29.81	757.2	64	17.8	89	S	14	6.3	.....	.....	10n	.....	Calm	0.03	0.8	Light rain..	
Augusta, Georgia	29.91	759.7	30.09	764.3	74.2	23.4	76	S	1	0.4	.....	5cs	Hz	.....	.....	0	0	Fair	
Baltimore, Maryland	29.76	755.9	29.81	757.2	69	20.6	85	SE	4	1.8	.....	.....	10n	.....	.....	0.58	14.7	Light rain...	
Barnegat, New Jersey	29.79	756.7	29.81	757.2	61	16.1	97	S	13	5.8	.....	.....	10n	.....	Calm	0.04	1.0	Light rain...	
Bismarck. Dakota	28.02	711.7	29.76	755.9	55	12.8	61	W	8	3.6	.....	0	0	.....	.....	0	0	Clear.....	
Boise City, Idaho	27.03	686.5	29.79	756.7	56.5	13.6	60	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear.....	
Boston, Massachusetts	29.68	753.9	29.84	757.9	59.5	15.3	52	W	4	1.8	.....	5ck	2s	.....	.....	0	0	Fair.....	
Brackettville, Texas	28.86	733.0	29.88	758.9	72	22.2	85	E	3	1.3	.....	.....	10ks	.....	E	0	0	Cloudy.....	
Brownsville, Texas	29.94	760.5	29.98	761.5	75	23.9	90	Calm	0	0	.....	2c	0	.....	.....	0	0	Clear.....	
Buffalo, New York	29.06	738.1	29.75	755.6	57	13.9	97	NE	7	3.1	.....	.....	10s	.....	.....	0.56	14.2	Cloudy.	
Burlington, Vermont	29.52	749.8	29.80	756.9	57.2	14.0	65	N	1	0.4	.....	2cs	0	W	.....	0	0	Fair.....	
Cairo, Illinois	29.65	753.1	30.04	763.0	84	28.9	71	W	2	0.9	.....	0	0	.....	.....	0	0	Clear.....	
Campo, California	27.34	694.4	29.91	759.7	37	2.8	45	SE	3	1.3	.....	0	0	.....	.....	0	0	Clear.....	
Camp Thomas, Arizona	27.13	689.1	.....	.....	65	18.3	44	Calm	.....	.....	0	2ck	0	.....	.....	0	0	Clear.....	
Cape Henry, Virginia	29.87	758.7	29.89	759.2	74	23.3	76	SW	20	8.9	.....	2ck	5s	W	.....	0	0	Fair.....	
Cape May, New Jersey	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Castroville, Texas	29.25	742.9	29.93	760.2	77	25.0	77	S	1	0.4	.....	.....	10s	.....	S	0	0	Cloudy.....	
Cedar Keys, Florida	30.07	763.8	30.09	764.3	77	25.0	82	NE	8	3.6	.....	5c	0	.....	.....	0.04	1.0	Fair.....	
Champaign, Illinois	29.18	741.2	29.94	760.5	71.2	21.8	66	W	14	6.3	.....	0	8s	.....	W	0	0	Fair...	
Charleston, S. Carolina	30.04	763.0	30.10	764.5	83	28.3	71	SW	6	2.7	.....	5c	0	Calm	.....	0	0	Fair.....	
Charlotte, N. Carolina	29.16	740.7	30.02	762.5	79.2	26.2	58	W	5	2.2	.....	5c	Hz	.....	.....	0	0	Fair...	
Chattanooga, Tennessee	29.26	743.2	30.06	763.5	76	24.4	77	SW	7	3.1	.....	0	Sk	.....	Calm	0	0	Clear.....	
Cheyenne, Wyoming	24.06	611.1	29.87	758.7	52.2	11.2	60	SW	1	0.4	.....	0	0	.....	.....	0	0	Clear.....	
Chicago, Illinois	29.22	742.2	29.90	759.4	70	21.1	63	NW	5	2.2	.....	0	0	.....	.....	0	0	Clear.....	
Chincoteague, Virginia	29.85	758.2	29.87	758.7	70	21.1	90	SW	17	7.6	.....	10k	0	SW	.....	0	0	Cloudy.....	
Cincinnati, Ohio	29.28	743.7	29.92	760.0	81	27.2	70	SW	6	2.7	.....	2ck	0	W	.....	Inap.	Inap.	Clear.	
Cleveland, Ohio	29.07	738.4	29.79	756.7	70	21.1	87	SW	14	6.3	.....	5k	2s	W	.....	0.50	12.7	Fair	
Coleman City, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Columbus, Ohio	29.02	737.1	29.84	757.9	76	24.4	77	W	7	3.1	.....	5ck	0	W	.....	0.10	2.5	Fair	
Concho, Texas	28.13	714.5	30.01	762.2	70	21.1	75	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Corsicana, Texas	29.58	751.3	30.04	763.0	80	26.7	70	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Davenport, Iowa	29.35	745.5	29.99	761.7	70	21.1	61	Calm	0	0	.....	5ks	0	Calm	.....	0.01	0.3	Fair.....	
Dayton, Washington T'y	28.28	718.3	30.03	762.7	45.8	7.7	76	S	2	0.9	.....	0	0	.....	.....	0	0	Clear.....	
Deadwood, Dakota	25.32	643.1	29.86	758.4	45	7.2	61	SW	.....	.....	.....	0	0	.....	.....	0	0	Clear.....	
Decatur, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Delaware Breakwater, Del.	29.80	756.9	29.82	757.4	66	18.9	89	S	7	3.1	.....	.....	10n	.....	S	0.03	0.8	Light rain..	
Denison, Texas	29.24	742.7	30.02	762.5	76	24.4	82	S	5	2.2	.....	0	0	.....	.....	0	0	Clear.....	
Denver, Colorado	24.75	628.6	29.82	757.4	59.3	15.2	54	S	3	1.3	.....	0	0	.....	.....	Inap.	Inap.	Clear.....	
Des Moines, Iowa	29.12	739.6	30.00	762.0	61	16.1	88	N	1	0.4	.....	0	5ks	.....	.....	0.02	0.5	Fair.....	
Detroit, Michigan	29.09	738.9	29.76	755.9	67.8	19.9	95	NW	8	3.6	.....	2cs	5s	W	SW	1.62	41.1	Cloudy.....	
Dodge City, Kansas	27.40	695.9	29.89	759.2	63.7	17.6	80	Calm	0	0	.....	2cs	0	NW	.....	0	0	Clear.....	
Dubuque, Iowa	29.26	743.2	29.94	760.5	65.3	18.5	68	NW	1	0.4	.....	0	Hz	.....	.....	0	0	Clear.....	
Duluth, Minnesota	29.11	739.4	29.79	756.7	59	15.0	76	SW	6	2.7	.....	0	0	.....	.....	0	0	Clear.....	
Eagle Pass, Texas	29.25	742.9	30.06	763.5	74.2	23.4	86	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Eagle Rock, Idaho	25.17	639.3	29.88	758.9	44	6.7	53	N	4	1.8	.....	0	0	.....	.....	0	0	Clear.....	
Eastport, Maine	29.65	753.1	29.72	754.9	51	10.6	65	W	5	2.2	.....	0	0	.....	.....	0.05	1.3	Clear.....	
El Paso, Texas	26.21	665.7	29.86	758.4	75	23.9	56	SE	1	0.4	.....	0	8s	.....	.....	0.01	0.3	Cloudy.....	
Erie, Pennsylvania	29.08	738.6	29.76	755.9	63	17.2	94	NE	6	2.7	.....	.....	Fg	.....	.....	0.85	21.6	Dense fog....	
Escanaba, Michigan	29.16	740.7	29.80	756.9	64	17.8	78	W	8	3.6	.....	0	0	.....	.....	0.34	8.6	Clear.....	
Florence, Arizona	28.29	718.6	29.89	759.2	85	29.4	21	W	2	0.9	.....	0	0	.....	.....	0	0	Clear.....	
Fort Apache, Arizona	25.02	635.5	29.80	756.9	54	12.2	49	E	3	1.3	.....	2c	Sk	Calm	Calm	0	0	Fair.....	
Fort Assinnaboine, Montana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Bennett, Dakota	28.35	720.1	29.82	757.4	52	11.1	73	NW	2	0.9	.....	1k	0	SW	.....	0	0	Clear.	
Fort Benton, Montana	27.15	689.6	29.89	759.2	40	4.4	73	NE	2	0.9	.....	.....	10s	.....	Calm	0.06	1.5	Cloudy.....	
Fort Buford, Dakota	27.90	708.6	29.82	757.4	49	9.4	78	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Fort Custer, Montana	26.68	677.7	29.77	756.1	50	10.0	65	NW	5	2.2	.....	0	0	.....	.....	0	0	Clear.	
Fort Davis, Texas	25.24	641.1	30.20	767.1	66	18.9	54	S	8	3.6	.....	0	0	.....	.....	0	0	Clear.	
Fort Elliott, Texas	27.24	691.9	30.32	770.1	63	17.2	57	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.....	
Fort Gibson, Indian T'y	29.43	747.5	29.96	761.0	79	26.1	70	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear.....	
Fort Grant, Arizona	25.24	641.1	30.04	763.0	72	22.2	30	N	4	1.8	.....	2k	2s	.....	.....	Inap.	Inap.	Fair.....	
Fort Griffin, Texas	28.74	730.0	29.94	760.5	73.2	22.9	59	S	8	3.6	.....	0	0	.....	.....	0	0	Clear.	
Fort Keogh, Montana	27.39	695.7	29.80	756.9	47	8.3	76	NE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Fort Macon, North Carolina	30.01	762.2	30.02	762.5	77	25.0	86	SW	14	6.3	.....	8cs	0	Calm	.....	0	0	Fair.....	
Fort McKavett, Texas	27.80	706.1	29.66	753.4	67.1	19.5	69	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear.....	
Fort Missoula, Montana	26.69	677.9	30.07	763.8	49	9.4	100	NW	4	1.8	.....	5k	0	NW	.....	0.31	7.9	Fair.....	
Fort St. Michaels	30.11	764.8	30.14	765.5	42	5.6	100	S	2	0.9	.....	2c	0	S	.....	0	0	.....	
Fort Shaw, Montana	26.34	669.0	29.79	756.7	48	8.9	93	SE	9	4.0	.....	.....	10n	.....	.....	0.22	5.6	Light rain...	
Fort Sill, Indian Territory	28.77	730.7	29.98	761.5	75	23.9	68	S	2	0.9	.....	5ck	0	W	.....	0	0	Fair	
Fort Stevenson, Dakota	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Verde, Arizona	.....	.....	.....	.....	60	15.6	34	SW	.....	.....	1	0	0	.....	.....	0	0	Clear.....	
Fredericksburg, Texas	28.33	719.6	29.84	757.9	72	22.2	67	W	2	0.9	.....	0	0	.....	.....	0	0	Clear.....	
Galveston, Texas	30.00	762.0	30.04	763.0	83	28.3	75	W	4	1.8	.....	Hz	0	.....	.....	0	0	Dense haze..	
Grand Haven, Michigan	29.22	742.2	29.87	758.7	64	17.8	73	W	6	2.7	.....	0	0	.....	.....	0.03	0.8	Clear.....	
Hatteras, North Carolina	30.01	762.2	30.03	762.7	77	25.0	82	SW	20	8.9	.....	2c	2s	SW	SW	0	0	Fair.....	
Helena, Montana	25.73	653.5	29.93	760.2	50	10.0	79	Calm	0	0	.....	.....	10s	.....	Calm	0.05	1.3	Cloudy.....	
Henrietta, Texas	28.98	736.1	29.85	758.2	81	27.2	63	SW	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Indianapolis, Indiana	29.11	739.4	29.88	758.9	80	26.7	70	N	5	2.2	.....	0	0	.....	.....	0	0	Clear.....	
Indianola, Texas	30.00	762.0	30.03	762.7	81.6	27.6	83	Calm	0	0	.....	Hz	Hz	.....	.....	0	0	Dense haze .	
Jacksboro, Texas	28.86	733.0	29.95	760.7	75	23.9	68	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Jacksonville, Florida	30.06	763.5	30.08	764.0	80	26.7	78	NE	3	1.3	.....	5k	0	NE	.....	0	0	Fair.....	
Keokuk, Iowa	29.34	745.2	29.96	761.0	71.0	21.7	71	NE	4	1.8	.....	.....	10s	NE	.....	Inap.	Inap.	Cloudy.....	
Key West, Florida	29.96	761.0	29.99	761.7	82.7	28.2	74	E	6	2.7	.....	2k	1ks	E	E	0	0	Fair.....	
Kittyhawk, North Carolina	29.97	761.2	29.99	761.7	77	25.0	73	SW	23	10.3	.....	8c	0	NW	.....	0	0	Fair...	
Knoxville, Tennessee	29.06	738.1	30.06	763.5	73	22.8	81	SW	5	2.2	.....	0	0	.....	.....	0	0	Clear.....	
La Crosse, Wisconsin	29.17	740.9	29.88	758.9	67.1	19.5	64	SW	5	2.2	.....	0	0	.....	.....	0	0	Clear	
La Mesilla, New Mexico	26.07	662.2	30.22	767.6	67.6	19.8	70	Calm	0	0	.....	.....	10s	.....	.....	0.23	5.8	Cloudy.....	
Laredo, Texas	29.55	750.6	29.88	758.9	77	25.0	80	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
Leavenworth, Kansas	29.04	737.6	29.91	759.7	71	21.7	80	E	4	1.8	.....	.....	10n	.....	.....	0.25	6.3	Light rain...	
Lewiston, Idaho	29.15	740.4	29.98	761.5	51	10.6	64	NE	1	0.4	.....	0	2s	.....	Calm	0.02	0.5	Clear.....	
Little Rock, Arkansas	29.70	754.4	30.01	762.2	79	26.1	87	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Los Angeles, California	29.50	749.3	29.87	758.7	53.4	11.9	86	N	2	0.9	.....	0	0	.....	.....	0	0	Clear.....	
Louisville, Kentucky	29.38	746.2	29.93	760.2	82.5	28.1	71	SW	8	3.6	.....	2k	0	.....	.....	0	0	C ear.....	
Lynchburg, Virginia	29.23	742.4	29.90	759.4	78	25.6	54	SW	1	0.4	.....	4cs	5s	.....	.....	0	0	Cloudy.....	
Madison, Wisconsin	28.92	734.6	29.90	759.4	64	17.8	73	W	8	3.6	.....	0	0	.....	.....	0	0	Clear.....	
Marquette, Michigan	29.07	738.4	29.78	756.4	66	18.9	64	W	12	5.4	.....	0	0	.....	.....	0.43	10.9	Clear..... ...	
Mason, Texas	28.42	721.9	30.11	764.8	72	22.2	71	S	4	1.8	.....	0	0	.....	.....	0	0	Clear.....	
Memphis, Tennessee	29.70	754.4	30.04	763.0	84	28.9	71	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.....	
Milwaukee. Wisconsin	29.18	741.2	29.91	759.7	66	18.9	64	NW	8	3.6	.....	1ck	0	.....	.....	Inap.	Inap.	Clear.....	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.00	762.0	30.07	763.8	80	26.7	82	NE	4	1.8	.....	5k	0	NE	.....	Inap.	Inap.	Fair...	
Montgomery, Alabama	29.84	757.9	30.06	763.5	80.6	27.0	66	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear...	
Moorhead, Minnesota	28.88	733.5	29.84	757.9	61	16.1	66	W	16	7.2	.....	0	0	.....	.....	0	0	Clear...	
Morgantown, W. Virginia	28.93	734.8	29.87	758.7	69	20.6	85	E	4	1.8	.....	.....	10n	.....	.....	0.50	12.7	Light rain...	
Mt. Washington, N. H.	23.50	596.9	29.52	749.8	28.2	— 2.1	77	NW	48	21.5	.....	2c	Sk	NW	.....	0	0	Clear...	
Nashville, Tennessee	29.49	749.0	30.01	762.2	79.8	26.6	70	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
New Haven, Connecticut	29.74	755.4	29.85	758.2	53	11.7	86	Calm	0	0	.....	.....	10n	.....	.....	0.04	1.0	Light rain...	
New London, Connecticut	29.79	756.7	29.84	757.9	53	11.7	100	N	3	1.3	.....	.....	10n	.....	Calm	0.13	3.3	Light rain...	
New Orleans, Louisiana	29.99	761.7	30.04	763.0	83.3	28.5	82	SE	1	0.4	.....	0	8s	.....	SE	0.02	0.5	Fair.....	
Newport, Rhode Island	29.82	757.4	29.87	758.7	60.0	15.6	60	W	3	1.3	.....	.....	10s	Calm	.....	0	0	Cloudy.....	
New River, N. Carolina	.....	.....	.....	.....	81	27.2	78	SW	.....	.....	2	8cs	0	W	.....	.....	.....	Cloudy.....	
New Shoreham, Rhode I'd.	29.86	758.4	29.89	759.2	56.0	13.3	75	W	10	4.5	.....	.....	10n	.....	Calm	Inap.	Inap.	Light rain...	
New York, New York	29.64	752.8	29.80	756.9	58	14.4	76	E	12	5.4	.....	.....	10n	.....	W	0.04	1.0	Light rain...	
Norfolk, Virginia	29.88	758.9	29.92	760.0	77	25.0	73	SW	12	5.4	.....	8cs;k	0	N	.....	0	0	Fair.....	
North Platte, Nebraska	27.10	688.3	29.92	760.0	59	15.0	82	SE	5	2.2	.....	0	0	.....	.....	0	0	Clear.....	
Olympia, Washington T'y	30.09	764.3	30.13	765.3	42.0	5.6	91	N	2	0.9	.....	5ck	0	N	.....	0	0	Fair.....	
Omaha, Nebraska	28.87	733.3	30.01	762.2	68	20.0	66	Calm	0	0	.....	10cs	0	W	.....	Inap.	Inap.	Cloudy	
Oswego, New York	29.46	748.3	29.78	756.4	56.8	13.8	72	S	6	2.7	.....	.....	10s	.....	.....	0.01	0.3	Cloudy.....	
Pensacola, Florida	30.03	762.7	30.06	763.5	81	27.2	91	SE	3	1.3	.....	0	Hz	.....	Calm	0	0	Clear.....	
Philadelphia, Pa	29.72	754.9	29.78	756.4	64	17.8	94	SW	14	6.3	.....	.....	10s	.....	.....	0.10	2.5	Cloudy.....	
Phœnix, Arizona	28 66	728.0	30.39	771.9	70	21.1	48	E	4	1.8	.....	0	0	.....	.....	0	0	Clear.....	
Pike's Peak, Colorado	18.00	457.2	30.20	767.1	35	1.7	27	SW	18	8.0	.....	0	0	.....	.....	0	0	Clear.....	
Ploche, Nevada	24.01	609.8	29.86	758.4	58	14.4	27	S	2	0.9	.....	0	0	.....	.....	0	0	Clear.....	
Pittsburg, Pennsylvania	29.05	737.9	29.84	757.9	68	20.0	86	W	12	5.4	.....	.....	10n	.....	W	0.80	20.3	Thnd'r str'm	
Port Eads, Louisiana	30.05	763.3	30.06	763.5	81.0	27.2	87	SE	4	1.8	.....	0	Hz	.....	Calm	0	0	Clear.....	
Port Huron, Michigan	29.10	739.1	29.76	755.9	66.5	19.2	100	W	6	2.7	.....	.....	10s	.....	Calm	1.19	30.2	Cloudy.....	
Portland, Maine	29.74	755.4	29.79	756.7	55	12.8	62	NW	1	0.4	.....	0	2s;fg	.....	Calm	0	0	Fair.....	
Portland, Oregon	30.06	763.5	30.13	765.3	50.9	10.5	83	NW	1	0.4	.....	.....	10ks	.....	SW	0	0	Cloudy.....	
Portsmouth, N. Carolina	.....	.....	.....	.....	76	24.4	86	SW	20	8.9	.....	5c	Hz	W	Calm	0	0	Fair.....	
Prescott, Arizona	24.74	628.4	29.82	757.4	53	11.7	36	SW	3	1.3	.....	0	0	.....	.....	0	0	Clear.....	
Punta Rassa, Florida	29.99	761.7	30.00	762.0	80	26.7	78	E	10	4.5	.....	1k	0	Calm	.....	Inap.	Inap.	Clear.....	
Red Bluff, California	29.47	748.5	29.80	756.9	65.5	18.6	30	NW	5	2.2	.....	0	0	.....	.....	0	0	Clear.....	
Rio Grande City, Texas	29.81	757.2	30.02	762.5	75	23.9	90	E	3	1.3	.....	0	Hz	.....	.....	0	0	Light haze...	
Rochester, New York	29.15	740.4	29.77	756.1	55	12.8	93	E	6	2.7	.....	.....	10n;fg	.....	E	0.32	8.1	Light rain...	
Roseburg, Oregon	29.56	750.8	30.12	765.0	51	10.6	72	Calm	0	0	.....	10k	0	N	.....	0	0	Cloudy.....	
Sacramento, California	29.73	755.1	29.80	756.9	58.2	14.6	76	SE	6	2.7	.....	0	0	.....	.....	0	0	Clear.....	
St. Louis, Missouri	29.41	747.0	29.99	761.7	78.2	25.7	67	W	7	3.1	.....	5cs;hz	.....	.....	.....	0	0	Fair.....	
St. Paul, Minnesota	29.66	753.4	29.90	759.4	60	15.6	77	SW	7	3.1	.....	0	0	.....	.....	0	0	Clear.....	
Salt Lake City, Utah	25.51	647.9	29.71	754.6	63	17.2	33	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.....	
San Antonio, Texas	29.36	745.7	30.05	763.3	75.0	23.9	90	Calm	0	0	.....	.....	10s	.....	SE	0	0	Cloudy	
San Diego, California	29.78	756.4	29.85	758.2	63.0	17.2	83	Calm	0	0	.....	.....	10s	.....	.....	0	0	Cloudy.....	
Sandusky, Ohio	29.13	739.9	29.79	756.7	71	21.7	90	S	15	6.7	.....	1k	0	W	.....	2.23	56.6	Clear.....	
Sandy Hook, New Jersey	29.78	756.4	29.81	757.2	61.3	16.3	94	SE	10	4.5	.....	.....	10n	.....	.....	0.02	0.5	Light rain...	
San Francisco, California	29.81	757.2	29.88	758.9	52	11.1	82	SW	11	4.9	.....	0	0	.....	.....	0	0	Clear.	
Santa Fé, New Mexico	23.36	593.3	29.88	758.9	62	16.7	22	E	3	1.3	.....	0	0	.....	.....	0	0	Clear...	
Savannah, Georgia	30.01	762.2	30.10	764.5	77	25.0	82	SW	3	1.3	.....	.....	Fg	.....	.....	0	0	Dense fog...	
Shreveport, Louisiana	29.80	756.9	30.03	762.7	82.8	28.2	83	Calm	0	0	.....	0	Hz	.....	.....	0	0	Clear.....	
Silver City, New Mexico	24.32	617.7	29.78	756.4	63	17.2	47	Calm	0	0	.....	8ck	0	Calm	.....	0	0	Fair.....	
Sitka, Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	.....	
Smithville, North Carolina	30.04	763.0	30.07	763.8	80	26.7	82	S	8	3.6	.....	5k;hz	Hz	SW	.....	0	0	Dense haze..	
Spokane Falls, Wash. Ter.	27.96	710.2	29.92	760.0	40	4.4	82	S	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Springfield, Illinois	29.33	745.0	29.99	761.7	73.5	23.1	74	NE	8	3.6	.....	5c;cs	1ks	W	NW	0.02	0.5	Fair	
Springfield, Massachusetts	29.72	754.9	29.85	758.2	55.0	12.8	73	S	4	1.8	.....	.....	10s;fg	.....	S	0	0	Cloudy.....	
Stockton, Texas	26.97	685.0	29.96	761.0	71.3	21.8	75	SE	16	7.2	.....	0	0	.....	.....	0	0	Clear.	
St. Vincent, Minnesota	28.79	731.3	29.63	752.6	57	13.9	69	W	16	7.2	.....	0	0	.....	.....	0	0	Clear.....	
Thatcher's Island, Mass	29.77	756.1	29.82	757.4	59.6	15.3	82	W	9	4.0	.....	5ck	0	W	.....	0	0	Fair.....	
Toledo, Ohio	29.11	739.4	29.79	756.7	75	23.9	90	N	5	2.2	.....	0	0	.....	.....	0.68	17.3	Clear.....	
Tucson, Arizona	27.42	696.5	29.71	754.6	74	23.3	29	S	6	2.7	.....	0	0	.....	.....	0	0	Clear.....	
Umatilla, Oregon	29.69	754.1	30.09	764.3	48.5	9.2	75	SW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Uvalde, Texas	29.08	738.6	29.87	758.7	73	22.8	85	S	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy.....	
Vicksburg, Mississippi	29.80	756.9	30.05	763.3	79	26.1	74	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear.....	
Visalia, California	29.40	746.7	29.76	755.9	63	17.2	49	N	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Washington, D. C.	29.68	753.9	29.79	756.7	69	20.6	90	S	3	1.3	.....	.....	10ks	.....	NW	0.09	2.3	Threatening	
Wickenburg, Arizona	.....	.....	.....	.....	60	15.6	20	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear.	
Wilmington, N. Carolina	29.99	761.7	30.04	763.0	78	25.6	78	SW	9	4.0	.....	5c;hz	c	Calm	.....	0	0	Fair..	
Winnemucca, Nevada	25.54	648.7	29.75	755.6	53	11.7	36	SW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Wood's Holl, Mass	29.82	757.4	29.85	758.2	62	16.7	67	SW	5	2.2	.....	5ck	Hz	NW	....	0	0	Fair.....	
Yankton, Dakota	28.73	729.7	29.99	761.7	55	12.8	68	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.....	
Yuma, Arizona	29.55	750.6	29.69	754.1	71.4	21.9	49	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear.....	
Sub-Series.																			
Bogota, U. S. Columbia	22.12	561.8	.....	.....	53.0	11.7	91	Calm	0	0	.....	.....	10n	.....	.....	0.51	13.0	Cloudy.....	Thomas Herran
Buff Bay Town, Jamaica..‡	29.75	755.6	30.06	763.5	75	23.9	85	E	.....	.....	.....	0	2k	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.97	761.2	30.02	762.5	81	27.2	95	SE	2.4	1.1	.....	8cs	0	Calm	.....	Inap.	Inap.	Cloudy.....	A. Van Caneghem, Ass't.
Kingston, Jamaica, W. I.	29.92	760.0	29.93	760.2	80.7	27.1	80	Calm	0	0	.....	8cs	2ks;s	.....	E	0	0	Cloudy.....	Robert Johnstone.
Navassa, W. I.	29.83	757.7	29.91	759.7	81	27.2	78	E	13	5.8	.....	5s	5k;n	NE	E	0	0	Squally.....	F. M. Everett.
Paramaribo, S. A.	30.05	763.3	30.05	763.3	78	25.6	86	E	.....	.....	2	5ck	4s	E	.....	0.010	0.3	Fair.....	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.48	748.8	30.03	762.7	78	25.6	89	Calm	0	0	.....	.....	10ks	.....	Calm	0.73	18.5	Cloudy.....	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	74.3	23.5	.....	W	.....	.....	1	.....	10ks	.....	W	0.24	6.	.....	Earl Flint.
Santiago de Cuba, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.82	757.4	29.87	758.7	44.0	6.7	96	E	26	11.6	.....	4k	5s	NE	E	0.07	1.8	Raining	J. Fortescue & W Wood.

BRITISH NAVAL SERIES.

Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																			Comm A. J.Errington.
H. M. S. Alert, Thursday Island, Oceania	29.92	760.0	77	25.0	80	SE			3-5		5							D. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, N. 40° 35′, E. 19° 13′	29.97	761.2	71	21.7	71	NNW			4		6	WSW				3	WNW	D. clouds	Capt. Lord Walter Kerr. Capt. Hon. W. H. Joliffe.
H. M. S. Antelope																			
H. M. S. Arab,																			Comm. R. W. Stopford.
H. M. S. Bacchante, S. 38° 55′, E. 141° 36′	29.99	761.7	55	12.8		SSW			4		1					3	SW	Blue sky	Capt. Lord C. Scott.
H. M. S. Beacon, N 24° 47′, E. 66° 59′	29.52	749.8	86	30.0	88	WSW			3-4		6	WSW						Misty.	Comm. G. W. Hand.
H. M. S. Bittern, Varna, Bosporus			70	21.1		S			1		10							Raining	Capt. E. B. Pusey.
H. M. S. Blanche, N 17° 18′, W. 62° 43′	30.05	763.3	83	28.3	87	ESE			3		9					2	SE	Squally	Capt. C. G. F. Knowles.
H. M. S. Boadicea, St. Helena, Africa	30.07	763.8	73	22.8	81	W			2		5	WSW						D. clouds	Com. F. W. Richards.
H. M. S. Champion, Monte Video, Uruguay	29.99	761.7	53	11.7	62	SSW			2		0							Blue sky	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 38° 45′, E. 118° 53′	29.64	752 8	68	20.0	94	SE			2		2	E						Misty	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruiser, N. 38° 48′, E. 10° 09′	30.04	763.0	72	22.2		SSW			1		1	SW						Blue sky	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, N. 38° 40′, W. 18° 06′	30.00	762.0	67	19.4	90	W			4		10					4	WSW	Misty	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.10	764.5	74	23.3		ENE			2		4	WNW						D. clouds	Capt C. Domville.
H. H. S. Dock-Yard, Bermuda, W.I.	30.05	763.3	76.5	24.7	76	NW			1		1							Blue sky.	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 49° 13′, W. 55° 14′	29.68	753.9	52	11.1	79	SE			2		6	SSE						D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 7° 13′, E. 72° 23′	29.81	757.2	79	26.1		SE			1-2		4							D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 14° 50′, E. 86° 00′	29.92	760.0	74	23.3		SSE			5		10	SSE				5	S	Showery	Comm. C. Johnstone.
H. M. S. Emerald, N. 5° 54′, E. 169° 43′	29.83	757.7	84	28.9	83	E			1		4	ENE						D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, S. 19° 33′, E. 54° 36′	30.10	764.5	77	25.0	69	E			3		6	ESE				1-2	ESE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Hoping Harbor, N. F	29.62	752.3	44	6.7		Calm			0		9							D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn, N. 12° 47′, E. 44° 58	29.66	753.4	88	31.1	66	SSE			2		2							D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo, N. 21° 05′, W. 83° 35′	29.97	761.2	85	29.4	83	ENE			2		2	E				2	E	D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	30.08	764.0	52	11.1	69	NW			1		5							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.81	757.2	34	1.1	79	SW			2		4	ESE						D. clouds	Capt. L. F. Jones.
H. M. S. Griffin, N. 26° 00′, W. 77° 02′	30.07	763.8	84	28.9	79	ENE			2		3	E						D. clouds	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber,																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C.P. Fitzgerald.
H. M. S. Iris, Malta, Mediterranean	30.05	763.3	73	22.8	76	NNW			2		3					1	NNW	Misty	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.09	764.3	64	17.8		ESE			1		5	NW						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.76	755.9	76	24.4		SSW			3-4		10	SSW						Overcast	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 19° 59′, E. 110° 01′	29.68	753.9	86.7	30.4	86	S			1		4							D. clouds	Capt. A. Carpenter.
H. M. S. Midge, N. 22° 16′, E. 114° 14′	29.80	756.9				SW			3		6	SW						Showery	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. N. S. Modeste, S. 25° 00′, E. 54° 25′	30.13	765.3	73	22.8	76	Calm			0		5					1	ESE	D. clouds	Capt. J. G. Mead.
H. M. S Monarch, Tunis, Tunis, Africa	30.06	763.5	70	21.1	95	N			2		1	NNW						Blue sky	Capt. G. C. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, N. 5° 16′, E. 115° 15′			81.5	27.5		W			1–2		10	W						Overcast	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.71	754.6	47	8.3	62	NNW			3		3	NNW						D. clouds	Capt. E. B. Drummond.
H. M. S. Orontes, Cape Coost Castle, Africa.*†	29.97	761.2	78.5	25.8	88	SW			1–2		10					3	SSW	Overcast	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.92	760.0	80.5	26.9	97	SSE			1		10					2	SE	Overcast	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A.C.Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.75	755.6	84	28.9		SW			3–4		5							D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 49° 18′, W. 124° 23′	30.07	763.8	58	14.4		Calm			0		0							Blue sky	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	30.05	763.5	80.3	26.8	86	SSE			3		5	SSE				Sm'h		D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Autofagasta, Chili	30.15	765.8	60	15.6	76	S			2		10	Calm				3	S	D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I			79	26.1		N			1		6							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	29.94	760.5	54	12.2	73	SW			1		6	S						Blue sky	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Abu Shehr, Persia	29.57	751.1	87.5	30.8	69	WNW			2–3							2	NW	Heavy mist	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candido dos Rios, Comd't.
Quanza, Porto Praya Cape Verd I'ds	30.11	764.7	79.0	26.1	69	NE			2		1		NE			1	NE	Blue sky	Carlos M. da Silva Costa, Comd't
RioLima																			S. C. da Silva Costa, Comd't.
Sado, Loando, Africa	29.98	761.6	75.2	24.0	67	WNW			3		2					1		D. clouds	G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.76	756.0	83.8	28.8	82	S			3		4			1	hour			Drizzling	P. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga																			Capt. M. von Krusenstierna.
H. M. Frigate Vanadis																			Com. Th. Ulner.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla.	30.13	765.3	89	31.7	66	SE	2	0.9			5		NE	0	0			Fair	
Naval Hospital, Yokahama, Japan	29.67	753.6	73.5	23.1	95	SW			5		10		SW	0.32	8.1			Raining	
Adams N. 10° 18′, W. 86° 44′	29.73	755.1	80	26.7	87	SW			2		5		SW			Mod.	SW	Fair	
Alaska, Callao, Peru	30.01	762.2	64	17.8	89	SE			1		10			0	0	Sm'h		Cloudy	
Alert, Yokohama, Japan *	29.69	754.1	74	23.3	95	SSW			3-6		10		Calm			Sm'h		Rainy	
Alliance, Hampton Roads, Va.	29.94	760.5	75	23.9	86	SW			3-5		8		N	0	0			Fair	
Ashuelot, Kobe, Japan	29.77	756.1	71	21.7	95	WSW			1		10		Calm					Rainy	
Colorado, New York, N. Y.	29.83	757.7	59	15.0	82	ESE	2	0.9			10		Calm	0.01	0.3			Rainy	
Constitution, Newport, R. I.	29.82	757.4	59	15.0	65	SW			2		10							Overcast	
Franklin, Norfolk, Va.	29.88	758.9	75	23.9	81	SSW	15	6.7			5		SW	0	0			Fair	
Galena, Lisbon, Portugal	30.10	764.5	67	19.4	84	W			2		10					Sm'h	W	Cloudy	
Independence, N. Yard, Mare I'd, Cal.	29.95	760.7	71	21.7	75	SW	1.2	0.4			0			0	0			Clear	
Jamestown, Sitka, Alaska *	30.23	767.8	49	9.4	93	NW			4		10			0	0			Cloudy	
Kearsarge, Norfolk, Va.	29.95	760.7	74	23.3	81	SW			3		8		N			Sm'h		Fair	
Lackawanna, S. 15° 38′, W. 157° 01′ †	30.12	765.0	76	24.4	95	S			4-5		10		S			Long	SE	Cloudy	
Marion, Montevideo, Uruguay *†	29.92	760.0	54	12.2	55	S			3		2		SW			Sm'h		Fair	
Michigan, Cleveland, Ohio	29.68	753.9	70	21.1	90	SW			2		8		W					Fair	
Minnesota, Newport, R. I.	29.88	758.9	63	17.2	72	W			2		10					Sm'h		Cloudy	
Monocacy, Yokohama, Japan	29.80	756.9	74	23.3	95	SSW			5		10		S					Raining	
New Hampshire, Norfolk, Va.	29.91	759.7	75	23.9	81	SSE	10	4.5			8		SE	0	0			Fair	
Nipsic, N. 48° 26′, W. 6° 06′	29.78	756.4	61	16.1	88	S			5		10		S			R'gh	S	Misty	
Onward, Callao, Peru †	30.03	762.7	64	17.8	89	SE			2		10		NW			Long	W	Cloudy	
Palos, Nagasaki, Japan	29.81	757.2	68	20.0	?	Calm			0		2							Clear	
Passaic, Washington, D. C.	29.82	757.4	69	20.6	90	SE			3		8		SE					Raining	
Pensacola, Mare Isl'd, Cal.	29.88	758.9	55	12.8	87	SW			3-4		0			0	0			Clear	
Portsmouth, Newport, R. I.	29.86	758.4	57	13.9	94	SW			2		10		SW			Sm'h	SW	Cloudy	
Quinnebaug, Tompkinsville, N. Y.	29.82	757.4	62	16.7	72	E			1		10					Sm'h		Cloudy	
Ranger, Pichelinque, Mexico *	29.74	755.4	79	26.1	59	S			2		8		S	0	0	Sm'h		Cloudy	
Richmond, Nagasaki, Japan	29.81	757.2	69	20.6	95	NE			2		10			2.02	51.3			Cloudy	
Saratoga, Newport, R. I.	29.86	758.4	55	12.8	74	SW			1		8		Calm	0	0			Cloudy	
Shenandoah, S. 34° 50′, W. 50° 25′ *	30.01	762.2	63	17.2	67	SW			4		2					Sm'h		Fair	
St. Louis, League Island, Pa.	29.38	746.2	66	18.9	89	SSW	9	4.0			10		SW	0.15	3.8			Raining	
Swatara, Shanghai, China *†	29.77	756.1	73	22.8	81	SE			2		10		Calm					Overcast	
Tennessee, Navy Yard, N. Y.	29.83	757.7	66	18.9	50	ESE	7	3.1			10		SW	0.05	1.3	Sm'h		Rain & fog	
Ticonderoga, S. 47° 05′, W. 40° 11′	29.10	739.1	42	5.6	91	WNW			6		8		W	0.01	0.3	R'gh	WNW	Cloudy	
Vandalia, Huntington, Long I'd.	29.84	757.9	59	15.0	88	SSE			2		10		Calm					Drizzling	
Wabash, Boston, Massachusetts	29.86	758.4	63	17.2	42	WSW	6	2.7			8		W	0	0			Hazy	
Wachusetts, N. Yard, Mare I'd, Cal.	29.86	758.4	57	13.9	87	SSW			4		0			0	0			Clear	
Yantic, Key West, Florida *	29.91	759.7	80	26.7	66	E			2		5		E					Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper.	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 21° 06′, W. 120° 55′	29.95	760.7	67	19.4	89	NNE			4		4							Misty	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 43° 44′, W. 21° 35′	29.71	754.6	59.1	15.1	82	W			6		10					6	WNW	Squally	Capt. W. N. Lailey.
City of Agra, N. 1° 23′, W. 26° 28′	30.06	763.5	78.5	25.8	82	ESE			4		0							Blue sky	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppenname, N. 34° 52′, W. 18° 16′	30.22	767.6	68.5	20.3	85	SW			3		3							Blue sky	Capt. A. Buchan.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 10° 59′, W. 37° 02′	30.11	764.8	79.5	26.4	78	E			2		8					Sm'h		D. clouds	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Naiad, N. 48° 16′, W. 10° 16′	29.54	750.3	59.5	15.3	94	SSW			6		9							Gloomy	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 34° 31′, W. 40° 38′	30.15	765.8	73.8	23.2	85	WNW			5	8ck	0	NW						Showery	Capt. M. Parry.
Sierra Estrella, N. 15° 12′, W. 25° 59′	30.13	765.3	74.7	23.7	82	N			5		9							Misty	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 37° 10′, E. 0° 44′	30.03	762.7	69.5	20.8	90	Calm			0		6							D. clouds	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 46° 29′, W. 52° 50′	29.84	757.9				S			3		8		S			Mod.	SW	Cloudy	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian, N. 43° 40′, W. 64° 17′	29.84	757.9	50	10.0		Calm			0		10		S			Sl't	SW	Cloudy	Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Algeria																			Capt. W. Watson.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 50° 04′, W. 23° 26′ †	29.36	745.5	56	13.3		WSW			4		2		N			Sm'h		Fair	Capt. J. W. Jennings.
S. S. Baltic, ‡ N. 40° 38′, W. 70° 53′	29.86	758.4	55	12.8	81	N			3							Sm'h		Raining	Capt. H. Parsell.
S. S. Britannic, N. 42° 07′, W. 62° 56′ †	29.82	757.4	53	11.7	100	W			6		8		WNW			Sl't	W	Misty	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England †	29.89	759.2	64	17.8	100	S			4		10		S	Sho	wers			Showery	Capt. Ch. W. Kennedy.
S. S. Republic, N. 51° 15′, W. 13° 31′ †	29.54	750 3	59	15.0	81	SE			4		5		S	12 h'rs	show's	Mod.	W	Fair	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig, N. 46° 24′, W. 37° 25′	29.98	761.6	54.0	12.2	?	E			1		10		NE			Mod.	NE	Cloudy	Capt. C. Phole.
S. S. Hermann, N. 45° 05′, W. 47° 04′	29.89	759.2	54.5	12.6		Calm			0					0	0	Mod.		Fine	Capt. H. Baur.
S. S. Hohenzollern																			
S. S. Köln, N. 50° 21′, W. 2° 43′	29.88	758.9	62.0	16.7	94	SSE			3-4		10		SSE	2 ho	urs	Sm'h	SSE	Cloudy	Capt. Th. Jüngst
S. S. Strassburg, N. 53° 22′, E. 4° 41′	30.02	762.5	59.0	15.0		E			3		10		ESE	Light 0	rain 0	Sm'h	E	Hazy	Capt. C. Helmbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Pera																			Capt. O. F. Sköldebrand.

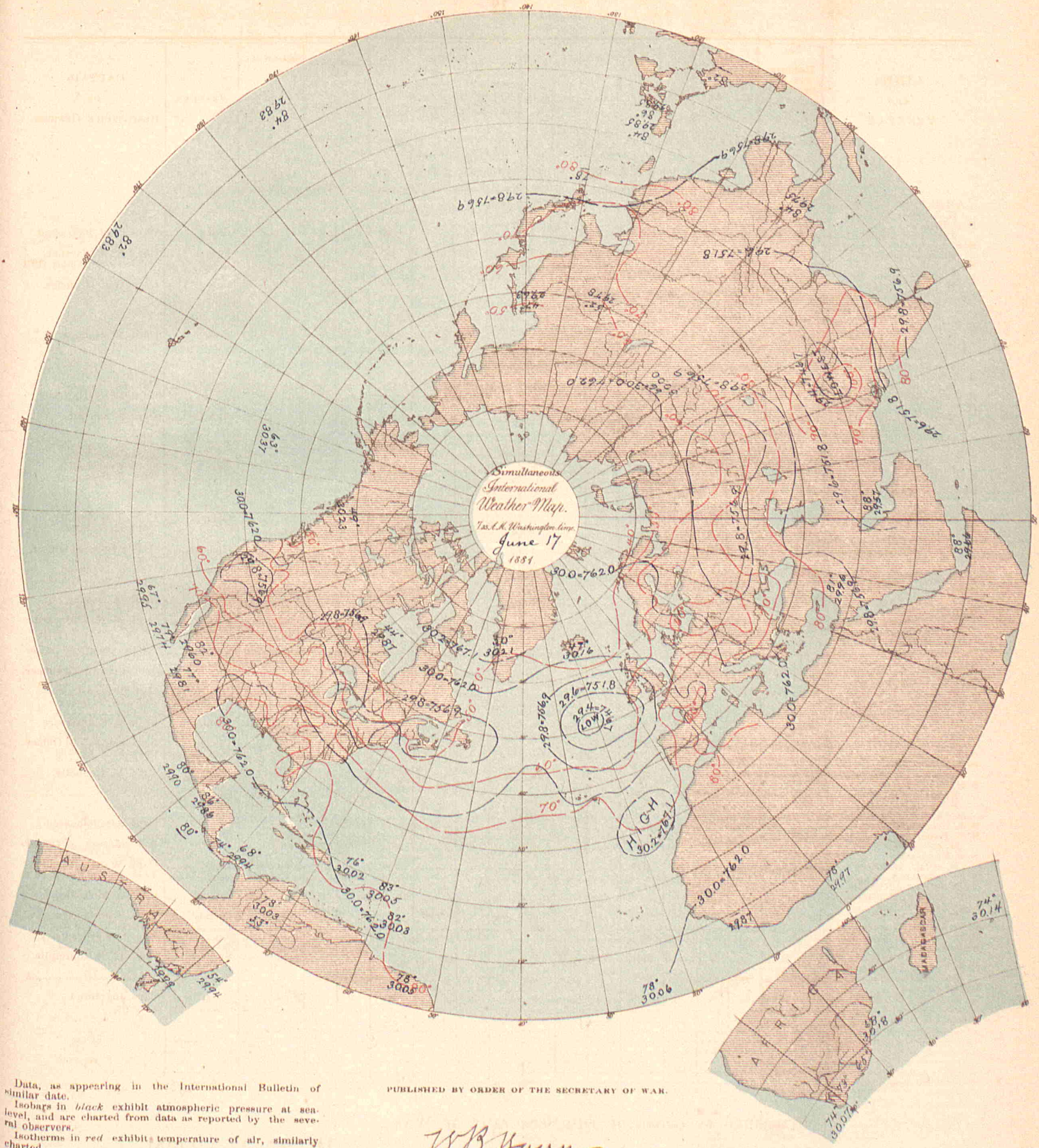
UNITED STATES MERCHANT-MARINE SERIES.

Furnished by the co-operation of the owners and agents of the respective lines and vessels.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England	29.75	755.6	65	18.3	94	SSE			3		10		SSE					Rainy	Capt. J. W. Shackford.
S. S. Indiana, Philadelphia, Pa.†	29.89	759.2	90	32.2	96	W			4		2		W	0	0			Fair	Capt. R. W. Sargent.
S. S. Ohio																			W. Shackford, Chief Off'r
S. S. Pennsylvania, N. 43° 26′, W. 38° 19′.†‡	30.05	763.3	61	16.1	100	E			2		10		E			Sm'h	E	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 25° 18′, W. 110′ 36°.†‡	29.60	751.8	82	27.8	75	SSE			2		8		SSE	0	0	G'tl	SE	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 42° 54′, W. 149° 46′.†‡	30.37	771.4	63	17.2	78	S			2		8		SW	0	0	Light	SW	Cloudy	Capt. H. Davison.
S. S. Gaelic																			Capt. W. H. Kidley.
S. S. Oceanic, N. 28° 58′, E. 129° 16′.‡	30.10	764.5	78	25.6	86	SSW			4		10		W	0	0		SW	Cloudy	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 44° 10′, W. 124° 15′.†‡	30.12	765.0	53.5	11.9	83	N			3		5		NNW			Sm'h		Fair	Capt. Fred. Bolles.
S. S. Oregon																			Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, San Francisco, Cal.†‡	29.84	757.9	51	10.6	86	NW			2		0			0	0			Clear	Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, San Francisco, Cal.†‡	29.86	758.4	52	11.1	86	W			2		0							Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 34° 25′, W. 120° 30′.†‡	29.83	757.7	56	13.3	87	NW			8		Fog		NW			Long	NW	Foggy	Geo. H. Harrison.
S. S. Senator																			Capt. Thos. Wallace.
S. S. State of California, Portland, Oregon.†‡	30.09	764.3	53	11.7	73	NW			2		8		W					Cloudy	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal.†‡	29.87	758.8	51	10.6	86	Calm			0		2							Clear	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 2d Officer.
S. S. City of New York, S. 34° —′, E. 159° 31′.†‡	29.88	758.9	66	18.9	94	SW			5		1		W	0	0	H'vy	W	Clear	Wm.H.Hawes,2d Officer.
S. S. City of Panama, N. 14° 42′, W. 94° 24′.†‡	29.90	759.4	80	26.7	87	WNW			4		10k;ks		NW	9 hours		Cross	NW;SW	Overcast	Capt. D. S. Austin.
S. S. City of Peking																			Capt. G. G. Berry.
S. S. City of Sidney, S. 0° 19′, W. 165° 05′.*†‡	29.83	757.7	82	27.8	74	SE			4		8		SE	0	0	Mod.	ESE	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 26° 57′, E. 122° 37′.†‡	29.86	758.4	81	27.2	90	SW			3		10		SW			Sm'h		Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima																			Capt. R. R. Searle.
S. S. Granada, La Libertad, San Salvador.†‡	29.86	758.4	86	30.0	84	SE			3		8		E	4 hours		R'gh	SE	Cloudy	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. Wales	30.18	766.6	55	12.8	100	NE			1		0							Clear	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, ‡ N. 40° 16′, W. 68° 09′.†‡	29.85	758.2	60	15.6	55	WSW			4		8		SW	0	0	Sm'h		Gloomy	A. Feddersen, 2d Officer.
S. S. Rhynland, N. 43° 45′, W. 39° 13′.†‡	30.18	766.6	65	18.3	88	NE			1		10		NE	0	0	Light	NE	Hazy	Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 38° 08′, W. 75° 06′	29.88	758.9	70	21.1	80	SSW	12	5.4		8ck	0	NW		0	0	Sm'h		Cloudy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, Arroyo, Porto Rica.†‡	30.03	762.7	80	26.7		ENE			6		10		E	Heavy		Mod.		Stormy	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Cherrystone, Va.†‡	29.93	760.2	74	23.3	90	SW	6	2.7		2c	5k			0	0			Fine	
Bark Sunbeam, N. 34° 50′, W. 14° 22′.†‡	30.22	767.6	69	20.6	75	WSW			4		2		W	0	0	Sm'h		Clear	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 18, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours‡			30.03	762.8	77.0	25.0	83	W			1		1			0	0	Very fair	Raynard.
Algiers‡			30.03	762.7	83.5	28.6	48	W			2		10			0	0	Covered	Nicolas.
La Calle‡			30.05	763.3	77.7	25.4	85	NE			2		0			0	0	Clear	Fonfréde.
Tunis‡			30.06	763.5															Jacques.
Sfax‡			30.20	767.1															Gau.
Saida‡			30.08	764.1	90.5	32.5	19	NNE			1		2			0	0	Fair	Dumas.
Tebessa‡			30.11	764.9	81.7	27.6	24	Calm			0		2			0	0	Fair	Watrin.
Geriville‡					86.4	30.2	35	SSE			1		0			0	0	Clear	Lonchamp.
Laghouat‡			30.11	764.7	84.6	29.2	24	S			2		2			0	0	Fair	Herbin.
Biskra‡			30.11	764.7	87.1	30.6	81	SE			1		2			0	0	Fair	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.86	758.4	29.95	760.7	42.2	5.7	81	W	8	3.6			2			0.56	14.2	Fine	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.43	747.5	29.96	760.9	75.2	24.0	60	S			3		2			0.091	2.3		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.22	742.1	29.97	761.2	65.1	18.4	46	W	5.6	2.5			8			0	0		Dr. Wierzbicki.
Eperies	29.08	738.6	29.93	760.2	67.6	19.8	55	Calm			0	0	9s		SE	0	0		Julius Mikolik.
Gratz‡	28.77	730.8	29.99	761.7	66.7	19.3	74	SE			2		1			0.087	2.2		Andreas Rospini.
Hermannstadt	28.54	724.8	29.91	759.8	70.5	21.4	50	N			2		9			0.091	2.30		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.65	727.8	29.94	760.4	73.9	23.3	66	NE			1		8			0	0		The Staff.
Lemberg	28.93	734.9	29.90	759.4	63.0	17.2	90	NW			3		7			0	0		Dr. T. Stanecki.
Pola	29.91	759.6	30.02	762.4	74.1	23.4	60	W			1		4			0	0		I. R. HydrographicOffice.
Szathmar	29.51	749.5	30.08	764.0	63.7	17.6	84	SW			2		10			0	0		Beicht Peter, S. J.
Szegedin	29.67	753.6	29.94	760.5	70.2	21.2	64	NW			2		5			0	0		Karl Stancel.
Trieste	29.93	760.1	30.03	762.7	76.5	24.7	59	W			1		2			0.094	2.4		Secco.
Vienna	29.30	744.2	30.00	761.9	69.3	20.7	50	NE			2		2			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter Printed June 17, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.

BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

Aberdeen	29.76	755.9	29.85	758.2	50.2	10.1	98	SE	15	6.7	.....	.....	10	.....	.....	0.240	6.1	Raining	W. Boswell.
Armagh, Observatory	29.33	745.0	29.55	750.6	57.2	14.0	87	SSE	22	9.8	.....	.....	10	.....	.....	.....	.....	Squally.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	29.70	754.4	67.0	19.4	.60	SE	24	10.7	.....	.....	10	.....	.....	.....	.....	Overcast.....	John Hartnup.
Bolton, Sharples	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Thomas Mackereth.
Bradford, Yorkshire	29.38	746.2	29.78	756.4	63.6	17.6	70	S	.....	.....	1.0	.....	8	.....	.....	0.04	1.0	D. clouds	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.89	759.2	29.92	760.0	84	28.9	75	NE	.....	.....	2	.....	4	.....	.....	.....	.....	D. clouds.....	Corpl.J.Surgener,A.H.C
Cardington	.....	.....	29.83	757.7	66.0	18.9	80	S	.....	.....	0.4	.....	10	.....	.....	.....	.....	Overcast.....	John McLaren.
Chatham, School M. E.	29.76	755.9	29.88	758.9	59.8	15.4	90	S	.....	.....	1	.....	10	.....	.....	Blank		Gloomy.....	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.51	749.5	29.73	755.1	62.0	16.7	73	SSW	.....	.....	4	.....	9	.....	.....	.....	.....	Overcast.....	The Staff.
Fort Napier, Natal	27.95	710.2	30.17	766.3	73.1	22.8	95	NW	.....	.....	1	.....	0	.....	.....	.....	.....	Blue sky.....	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	.....	.....	.....	W	.....	.....	1	.....	0	.....	.....	.....	.....	Blue sky.....	Sgt. C. E. Keane.
Galway, Queen's College	.....	.....	29.33	745.0	63	17.2	72	SW	.....	.....	4	.....	10	.....	.....	0.29	7.4	Showery.....	J. O'Donaghue.
Gibraltar, Mediterranean	29.99	761.7	30.04	763.0	74.6	23.7	86	W	.....	.....	3	.....	0	.....	.....	.....	.....	Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.47	748.5	29.68	753.9	63.6	17.6	73	WSW	.....	.....	5	.....	10k	.....	.....	.....	.....	Overcast.....	Harry Urquhart.
Greenwich, Royal Obs'y	29.69	754.1	29.86	758.4	62.8	17.1	83	S	.....	.....	1	.....	10	.....	.....	.....	.....	Showery.....	The Staff.
Guernsey	29.59	751.6	29.80	756.9	61	16.1	82	SE	.....	.....	4	.....	7	.....	.....	.....	.....	D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.83	757.7	29.87	758.7	65.6	18.7	72	S	17	7.6	.....	.....	10	.....	.....	.....	.....	Threatening	The Staff.
Leicester, Museum	29.57	751.1	29.82	757.4	68.3	20.2	92	SW	.....	.....	2	.....	10	.....	.....	.....	.....	Drizzling	J. E. Carryer.
Malta, Mediterranean	29.97	761.2	30.05	763.3	74.4	23.6	80	N	.....	.....	2	.....	0	.....	.....	.....	.....	Blue sky.....	F. S. Vine, A. H. C.
Nassau, Bahamas	29.95	760.7	30.00	762.0	83.0	28.3	75	E	.....	.....	2	.....	4	.....	.....	.....	.....	D. clouds.....	C. S. Duncombe.
Oscott, St. Mary's College	29.26	743.2	29.77	756.1	65.6	18.7	77	SSE	.....	.....	4	.....	9	.....	.....	.....	.....	D. clouds.....	John Mac Email.
Oxford, Radcliffe Obs'y	29.60	751.8	29.82	757.4	65.1	18.4	72	SSE	.....	.....	3	.....	10	.....	.....	.....	.....	Threatening	The Staff.
Plymouth	29.68	753.9	29.75	755.6	61.4	16.3	92	SSW	.....	.....	4	.....	10	.....	.....	.....	.....	Overcast.....	John Merrifield.
Sandwick Manse, Orkneys	.....	.....	29.90	759.4	51.8	11.0	91	SE	28	12.5	.....	.....	10	.....	.....	.....	.....	Raining.....	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.92	760.0	29.98	761.5	68.4	20.2	88	Calm	.....	.....	0	.....	7	.....	.....	Blank		Misty.....	Serg't W. H. Lyne.
Sheffield	29.52	749.8	29.80	756.9	68.3	20.2	76	S	.....	.....	3	.....	10	.....	.....	0.02	0.5	Overcast.....	W. F. Cooper.
Silloth Rectory	29.65	753.1	29.68	753.9	69.4	20.8	74	S	.....	.....	3	.....	7	.....	.....	0.129	3.3	D. clouds.....	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	29.75	755.6	65.0	18.3	67	S	28	12.5	.....	.....	10	.....	.....	.....	.....	Overcast.....	Rev. S. J. Perry.
Stratfield Turgiss	29.65	753.1	29.85	758.2	67.4	19.7	74	SW	.....	.....	1	.....	6	.....	.....	.....	.....	D. clouds.....	Rev.C.H.Griffiths,F.M.S
Truro, Royal Institution	29.76	755.9	29.77	756.1	65	18.3	58	SW	.....	.....	6	.....	6	.....	.....	.....	.....	D. clouds.....	W. Newcombe.
Valencia, Observatory	29.37	746.0	29.40	746.7	57.4	14.1	85	SSW	38	17.0	.....	.....	10	.....	.....	.....	.....	Misty.....	The Met'g'l Office.
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CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

Bathurst, N. B	.....	.....	.....	.....	45.0	7.2	.....	Calm	0	0	.....	.....	10n	.....	.....	.....	.....	Raining	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.63	752.6	29.67	753.6	49	9.4	86	SE	1	0.4	.....	.....	10n	.....	.....	.....	.....	Light rain...	H. J. Cundall, C. E.
Chatham, N. B.*	29.59	751.6	29.65	753.1	46	7.8	86	NW	2	0.9	.....	.....	10ks	.....	NW	0.01	0.3	Cloudy.....	G. A. Blair.
Chicontimi, Quebec	.....	.....	.....	.....	47.3	8.5	.....	.....	.....	.....	.....	0	2s	.....	.....	0	0	Blue sky.....	Rev. V. A. Huart.
Cornwall, Ontario	29.46	748.3	29.64	752.8	59.5	15.3	77	NW	.....	.....	3	0	7s	.....	.....	Inap.	Inap.	D. clouds.....	James Smith, M. A
Dalhousie, N. B	29.64	752.8	29.68	753.9	46.0	7.8	.....	W	.....	.....	1	0	0	.....	.....	0	0	.....	H. A. Johnson.
Father Point, Quebec*	29.59	751.6	29.61	752.1	47	8.3	98	Calm	0	0	.....	8k	2n	NW	.....	0.06	1.5	Cloudy.....	J. McWilliams.
Fort Garry, Manitoba*	28.97	735.8	29.77	756.1	56	13.3	87	W	3	1.3	.....	0	0	.....	.....	0	0	Clear.....	James Stewart.
Fredericton, N. B	29.59	751.6	29.65	753.1	51.8	11.0	75	SE	3	1.3	.....	.....	Sk	.....	.....	0	0	Smoky.....	Prof. Harrison.
Granton, Ontario	28.77	730.7	29.84	757.9	58.0	14.4	82	W	.....	.....	1	0	0	.....	.....	0.	0	Clear.....	James Grant.
Halifax, N. S*	29.57	751.1	29.70	754.4	47	8.3	98	E	2	0.9	.....	2c	Fg	.....	.....	0	0	Foggy.....	A. Allison.
Hamilton, Ontario	29.43	747.5	29.80	756.9	62.7	17.1	83	SW	.....	.....	1	0	0	.....	.....	0	0	Clear.....	Geo. Dickson, B. A.
Kingston, Ontario*	29.37	746.0	29.70	754.4	60	15.6	86	W	7	3.1	.....	8k	0	W	.....	0.02	0.5	Cloudy.....	S. Woods, M. A.
Little Glace Bay, N. S	29.69	754.1	29.73	755.1	53.0	11.7	57	SW	.....	.....	4	4ck	0	SW	.....	0	0	Fair.....	C. H. Rigby.
Montreal, Quebec*	29.43	747.5	29.62	752.3	62	16.7	58	NW	8	3.6	.....	0	Sk	.....	.....	0.01	0.3	Clear.....	C. H. McLeod, C. E.
Moose Factory, Ontario	29.66	753.4	29.70	754.4	49.2	9.6	59	N	.....	.....	3	0	0	.....	.....	0	0	Blue sky.....	J. R. Nason.
Parry Sound, Ontario*	29.10	739.1	29.78	756.4	57	13.9	82	W	9	4.0	.....	0	0	.....	.....	0.08	2.0	Clear.....	Rev. R. Moseley.
Peterboro, Ontario	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. F. Jeffers, M. A.
Port Dover, Ontario	29.17	740.9	29.84	757.9	62	16.7	94	W	7	3.1	.....	0	0	.....	.....	0	0	Clear.....	H. Morgan.
Port Stanley, Ontario	29.23	742.4	29.80	758.4	60	15.6	77	W	7	3.1	.....	0	0	.....	.....	0	0	Clear.....	M. Payne.
Quebec, Quebec*	29.31	744.5	29.63	752.6	53	11.7	80	NE	.....	.....	1	0	Hz	.....	.....	0	0	Fair.....	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.22	742.2	29.67	753.6	58	14.4	88	NW	6	2.7	.....	0	8ks	.....	NW	Inap.	Inap.	Cloudy.....	W. H. McIntyre.
Saugeen, Ontario*	29.13	739.9	29.84	757.9	52	11.1	78	SW	10	4.5	.....	0	0	.....	.....	0.01	0.3	Clear.....	K. Stewart.
St. Andrews, N .B	29.57	751.1	29.62	752.3	48	8.9	88	S	1	0.4	.....	.....	10n	.....	.....	0	0	Cloudy.....	
St. John, N. B	29.49	749.0	29.66	753.4	50.0	10.0	78	S	7	3.1	.....	.....	10ks	.....	.....	0	0	.....	G. Murdock, C. E.
Stratford, Ontario	28.61	726.7	29.87	758.7	56.5	13.6	88	NW	5	2.2	.....	2cs	0	.....	.....	0	0	Blue sky.....	C. J. Macgregor, M. A.
Sydney, C. B*	29.70	754.4	29.74	755.4	57	13.9	62	S	7	3.1	.....	8ck	0	W	.....	0	0	Fair.....	T. C. Hill, C. E.
Toronto, Ontario*	29.43	747.5	29.80	756.9	62	16.7	74	W	12	5.4	.....	0	0	.....	.....	0	0	Clear.....	Magnetic Observatory
Windsor, N. S	29.57	751.1	29.66	753.4	48.0	8.9	89	S	1	0.4	.....	.....	9ks	.....	.....	0	0	Fair.....	
Woodstock, Ontario	28.80	731.5	29.83	757.7	61.8	16.6	79	SW	11	9.4	.....	1c	0	NW	.....	0	0	Blue sky.....	Prof. Wolverton.
Yarmouth, N.S*	29.60	751.8	29.67	753.6	51	10.6	87	S	1	0.4	.....	10k	0	SW	.....	0	0	Cloudy.....	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	28.93	734.8	29.18	741.2	46	7.8	84	N	1	0.4	.....	0	0	.....	.....	0	0	Fair.....	John Delany.
St. Pierre, N. F	.....	.....	29.76	755.9	53.6	12.0	.....	SW	.....	.....	1	.....	.....	.....	.....	0	0	.....	N. F. Land, Comd't.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
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Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

Cape St. Francis Lt. House	30.06	763.5	.....	.....	74.2	23.4	52	NNW	12.8	5.7	.....	.....	10s	.....	.....	0	0	Overcast.....	John Duthie.
Cape Town, C. G. H. Obs'y.	29.96	761.0	30.00	762.0	58.0	14.4	.....	NW	4.0	1.8	.....	5c;cs	6k	.....	.....	0	0	.....	The Staff, for D. Gill.
Worcester*†	28.98	736.1	.....	.....	69	20.6	53	WSW	.....	.....	1	5	5	.....	.....	0	0	Dull.....	C. Stokes.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.67	753.6	29.70	754.3	69.3	20.7	98	ESE	2.5	1.1	.....	.....	10n	.....	.....	0.142	3.6	Raining.....	M. Marc Dechevrens, S.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
COSTA RICA SERIES. By authority of the Minister of Foreign Affairs. Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.23	666.2	29.95	760.7	65.8	18.8	95					9ck cs	0			0	0	Cloudy	Amand Maison.
DANISH SERIES. Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.02	762.5	30.07	763.7	66.0	18.9	57	NE	7	3			6						Oversergent Fischer.
Faröe	29.98	761.6	30.00	762.1	70.9	21.6	44	SSE			4		1						Overlœrer Lauridsen.
Godthaab, Greenland	30.17	766.4	30.22	767.5	50.7	10.4	72	NNE			4		1						S. Kleinschmidt.
Stykkisholm, Iceland	30.04	763.1	30.09	764.2	53.6	12.1		NW			2		0						A. O. Thorlacius.
Thorshavn	30.02	762.5	30.06	763.4	47.7	8.7	92	ENE	11	5			10					Foggy	Overlœrer Bergh.
Vestervig	29.93	760.2	30.02	762.6	66.7	19.3	59	NNW			2		1						Loearer Oesterbol.
FRENCH SERIES. Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.28	743.7	29.90	759.5	78.4	25.8	54	SSE			1	2c	6			0	0	Very cloudy	M. Labroue, Director.
Alençon Normal School	29.43	747.5	29.98	761.5	66.9	19.4	79	NE			1		10n		N	0.055	1.4	Covered	M. Nicot, Director.
Arras, Engineer School	29.63	752.6	29.88	759.0	63.3	17.4	82	N			3		n		N				M. Klein, Commandant.
Avignon, Normal School	29.94	760.5	30.02	762.5	79.9	26.6	45	SW			1		7			0	0	Lightly cov.	M. Giraud, Director.
Bar-sur-Seine	29.33	745.0	29.85	758.3	78.8	26.0	57	S			1		10			0	0	Covered	M. Saillard, Director.
Beauvais, Normal School	29.65	753.1	29.91	759.6	64.4	18	71	NW			1		10		WSW	0.031	0.8	Raining	M. Frère Eugene Marie.
Besançon, Normal School	29.05	737.8	29.85	758.2	76.5	24.7	63	SSW			1	0	cn		E	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.62	752.4	29.87	758.8	76.5	24.7	50	WSW			1		10			0	0	Covered	M. Rayet, Director.
Bourges, Normal School	29.35	745.6	29.89	759.1	79.7	26.5	53	N			1	ck	0	N		0	0		M. Postel, Director.
Brest, Naval Observatory	29.61	752.0	29.85	758.2	63.7	17.6	80	SW			3		10		SW	0.110	2.8		M. de Rermaree, Dir.
Caen, Normal School	29.82	757.4	29.89	759.2	63.7	17.6	78	NNW			2		10			0.04	1.	Light rain	M. Bétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.52	749.7	29.82	757.4	77.4	25.2	69	Calm			0		10			0	0	Covered	M. Jadot, Director.
Charleville, Normal School	29.41	747.1	29.91	759.7	71.6	22	67	NW			1					0	0		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.54	724.9	29.82	757.5	78.8	26.0	54	S			1		10			0	0	Covered	M. Allnard, Director.
Cluny, Normal School	29.08	738.7	29.90	759.4	78.8	26	55	S			2		6		S	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.08	738.5	29.87	758.7	76.6	24.8	52	SE			1	10c	0	SE		0	0	Covered	Dr. Coulet, Director.
Gap, Normal School	27.56	699.9	30.00	762.0	73.4	23	44	E			1		k		S	0.008	0.2		M. Jeangirard, Director.
Gréasque, du. Rhone	28.98	736.2	30.13	765.2	77.4	25.2	40	SE			2		8		SE	0	0	¾ covered	M. Kina, Director.
Grenoble, Normal School	29.18	741.1	29.91	759.7	75.2	24	53	NW			2	0	csk			0	0		M. Ablard, Director.
Guéret, Normal School	28.44	722.4	29.95	760.6	74.7	23.7	47	SW			2					0	0		M. Rivoire, Director.
Lamballe, Normal School	29.64	752.9	29.91	759.7	65.1	18.4	82	S			4					0	0		M. Ollitrault, Director.
Lescar, Normal School	29.36	745.7	30.00	762.0	78.4	25.8	66	SE			1		0			0	0		M. Chauvin, Director.
Lorient, Naval Observatory	29.80	756.8	29.90	759.4	65.1	18.4	84	S			2		10		S	0	0	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.91	734.2	29.92	759.9	77.9	25.5	45	SE			2		5		SE	0	0	Cloudy	M. André, Director.
Mans, Normal School	29.59	751.5	29.89	759.1	68.5	20.3	68	ESE			3		8		SW	0	0	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.75	755.7	30.02	762.4	76.8	24.9	43	SSE			1		8		NW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.88	631.9	30.11	764.9	63.5	17.5	55	SW	15.0	6.7			7		SW	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.89	759.2	30.00	761.9	68.4	20.2	85	S			3		8		E	0	0	Foggy	M. P. Galzin, Director.
Nancy, Normal School	29.17	740.9	29.90	759.5	78.4	25.8	49	SSW			1		0			0	0	Clear	M. Hasse.
Nantes, Observatory	29.60	751.9	29.92	760.0	67.8	19.9	75	E			0-1		10			0	0		M. Larocque, Director.
Nice	30.02	702.4	30.05	763.3	71.6	22.0	72	SE			2		10	E	SE	0	0	Covered	Capt. Boissière, Director.
Perpignan, Observatory	29.86	758.5	29.97	761.1	72.1	22.3	77	SE	5.6	2.5			10		E	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.63	574.7			49.3	9.6							1		S	0	0	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.00	736.6	30.03	762.7	75.2	24	46	S			1		10			0	0	Covered	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.17	639.3			59.9	15.5	65	WSW			3		10			0	0	Covered	M. Allnard, Director.
Rochefort, Naval Obs'y	29.87	758.7	29.90	759.5	73.4	23.0	96	WSW			1		10			0.016	0.4	Covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.65	753.0	29.85	758.3	69.8	21.0	68	W			1		10			0	0	Covered	M. Mouillot, Director.
Rodez, Normal School	27.86	707.7	29.94	760.5	69.1	20.6	61	E			2		10			0	0	Covered	M. Richard, Director.
Rouen, Normal School	29.81	757.1	29.89	759.3	64.4	18	69	NE			2		10		NE	0	0	Covered	M. Platrier, Director.
Saint Lô, Normal School	29.74	755.4	29.90	759.4	62.2	16.8	94	SW			1		10		NE	0.689	17.5	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.71	754.5	29.87	758.7	72.1	22.3	74	NNE			1		9		SSW	0.055	1.4		M. Renou, Director.
Toulouse, Observatory	29.26	743.3	29.99	761.7	75.4	24.1	60	SSE			3		8			0	0	Very cloudy	M. Baillaud, Director.
Tours	29.65	753.0	29.84	758.0	76.3	24.6	68	E			1		10		W	0	0	Stormy	M. de Tastes.
Versailles, Observatory	29.39	746.4	29.88	758.9	70.9	21.6	70	N			3					0.307	7.8		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.60	751.9	29.89	759.3	71.6	22.0	72	N			1		10		NNE	0.083	2.1		M. Marié Davy, Director.
GERMAN SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.09	738.8	29.95	760.6	74.7	23.7	45	W			2	0	2k		W	0	0		Prof. Dr. Hoh.
Berlin	29.85	758.2	30.02	762.4	72.9	22.7	30	E			1		2			0	0		Prof. Dr. Arndt.
Breslau	29.53	750.1	30.06	763.6	63.0	17.2	29	N			1		1			0	0		Royal University Obs'y.
Carlsruhe	29.54	750.2	29.94	760.5	80.2	26.8	50	SE			1		10			0	0		Albert Senz.
Cassel	29.21	742.0	29.93	760.2	80.6	27.0	41	SSE			1		8	SW		0	0		Dr. H. Möhl.
Frankfort on the Main	29.60	751.9	29.94	760.5	82.0	27.8	39	SW			1		8			0	0		Physical Society.
Friedrichshafen	28.56	725.5	29.94	760.5	72.7	22.6	69	SSW			2		4	WNW		0.016	0.4		Wilhelm, Chief Tel.
Hamburg	29.94	760.4	30.01	762.2	70.7	21.5	56	SE			2		3			0	0		Dr. R. Kleeman.
Kiel	30.00	761.9	30.01	762.3	66.4	19.1	54	ENE			2		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.60	751.7	30.00	762.0	73.0	22.8	44	SE			1		4			0	0		Prof. Dr. Bruhns.
Magdeburg	29.80	757.6	29.98	761.6	74.1	23.4	40	ENE			2	5cs	0	NW		0	0		Dr. Assmann.
Memel	29.97	761.3	30.02	762.5	59.0	15.0	34	NW			4								Reinbrecht & Issermann.
Munich	28.19	715.9	30.05	763.2	73.6	23.1	39	NE			1		2	N		0	0		Central Station.
Neufahrwasser	30.04	763.0	30.06	763.4	58.8	14.9	51	NNE			2		0			0	0		A. Lothes.
Neustadt, Palatinate	29.39	746.5	29.91	759.8	81.1	27.3	42	SE			1		2			0	0		Dickmether.
Stuttgart	28.98	736.1	29.82	757.5	79.7	26.5	43	W			2		3	N		0.083	2.1		Prof. Dr. Schoder.
Weissenburg, Bavaria	28.50	723.8	29.96	760.9	76.6	24.8	35	Calm			0		0	E		0	0		Prof. Kemlein.
Wustrow	30.00	762.1	30.03	762.8	66.2	19.0	62	N			2		10s			0	0		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r.	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.62	752.3	29.99	761.8	81.0	27.2		SW			1.5		0					Smoky	Schmidt & Wourtisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.47	748.4	29.52	749.7	89.3	31.8	79	SSW	27.0	12.1			7	WSW		0	0	Misty	
Deesa	29.05	737.8	29.50	749.4	96.9	36.1	33	WSW.	23.3	10.4			3	S	S	0	0	Misty	
Bombay	29.70	754.4	29.74	755.3	86.2	30.1	78	SW	15.0	6.7			8		WSW	0.04	1.0	D. clouds	
Poona, Yarrowda	27.89	708.5	29.73	755.0	83.8	28.8	48	WSW	24.0	10.7			8		WSW	0	0	D. clouds	
Belgaum	27.27	692.8	29.80	757.0	77.0	25.0	69	SW	12.0	5.4			5	SW	SW	0	0	D. clouds	
Lahore	28.63	727.2	29.33	744.9	106.3	41.3	19	W	2.6	1.2			0			0	0	Misty	
Roorkee	28.47	723.1	29.32	744.7	100.7	38.2	36	NW	4.5	2.0			0			0	0	Misty	
Agra	28.91	734.3	29.45	748.0	100.1	37.8	35	W	10.7	4.8			10		W	0	0		
Nagpur	28.56	725.5	29.57	751.1	94.7	34.8	38	SW	5.2	2.3			4	NW		0	0	D. clouds	
Jubbulpore	28.26	717.7	29.58	751.2	90.7	32.6	46	W	7.0	3.1			8			0	0	D. clouds	
Lucknow	29.08	738.6	29.44	747.8	97.0	36.1	37	NNE	3.1	1.4			0			0	0	Blue sky	
Allahabad	29.16	740.6	29.46	748.2	97.0	36.1	40	SW	6.2	2.8			10			0	0	Overcast	
Patna	29.30	744.1	29.47	748.6	85.6	29.8	84	E	3.1	1.4			10	E	E	0.02	0.5	Overcast	
Hazaribagh	27.55	699.9	29.51	749.6	86.0	30.0	64	SW	6.9	3.1			9		W	0	0		
Cuttack	29.51	749.6	29.59	751.6	91.1	32.8	68	WSW	1.5	0.7			9			0	0	D. clouds	
Calcutta, Alipore	29.53	750.0	29.55	750.5	87.5	30.8	86	SSW	7.0	3.1			7	W		1.14	29.0	D. clouds	
Dhubri	29.39	746.4	29.51	749.5	78.4	25.8	95	Calm	7.5	3.4			10			0.51	13.0	Raining	
Chittagong	29.56	750.7	29.65	753.0	78.7	25.9	92	Calm	4.7	2.1			9			0	0	D. clouds	
Sibsagar	29.21	741.8	29.54	750.2	84.2	29.0	85	NE	3.5	1.6			10	W	W	0.20	5.1	Overcast	
Zanzibar, Africa			30.06	763.5	82.7	28.2	61	S	9	4.0			2		S	0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.61	752.0	30.01	762.2	75.2	24.0	61	W	1.8	0.8			10			0	0		Prof. Giovanni Clodig.
Milan	29.47	748.4	29.97	761.1	80.8	27.1	43	W	4.3	1.9			8			0	0		Prof. Schiaparelli.
Padua	29.89	759.2	30.00	761.9	77.7	25.4	61	SSE	8.5	3.8			7	SE		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.00	736.7	29.97	761.1	79.7	26.5	50	SE	3.8	1.7			8	N		0	0		Prof. P. F. Denza.
Genoa	29.90	759.4	30.09	764.3	68.7	20.4	68	SW	3.8	1.7			10	SW		0	0		Prof. G. M. Garibaldi.
Mondovi	28.13	714.5	29.98	761.5	75.6	24.2	55	E			2		6			0	0		Prof. D. C. Bruno.
Pesaro	29.95	760.8	30.00	762.0	73.0	22.8	66	ENE	4.3	1.9			2			0	0		Prof. Luigi Guidi.
Florence	29.73	755.2	29.98	761.6	77.4	25.2	49	W			2		0			0	0		Prof. Costantino Pitter.
Leghorn	29.99	761.7	30.07	763.8	73.0	22.8	65	SW	1.3	0.6			8			0	0		Prof. P. Monte.
Rome	29.88	758.9	30.05	763.3	80.1	26.7	48	WSW	7.4	3.3			1			0	0		Prof. P. S. Ferrari.
Lecce	29.80	756.9	30.05	763.2	77.5	25.3	45	NW	0.7	0.3			0			0	0		Prof. C. de Giorgi.
Cosenza	29.17	740.9	30.04	763.0	79.5	26.4	70	ESE	3.8	1.7			5	SE		0	0		Prof. D. Conti.
Cagliari	29.84	757.8	30.02	762.6	73.8	23.2	71	S			4		0			0	0		Prof. A. Pacinotti.
Palermo	29.84	758.0	30.09	764.3	72.3	22.4	48	E	8.1	3.6			0			0	0		Prof. G. Ciacciatore.
Syracuse	29.99	761.8	30.04	762.9	76.3	24.6	54	ESE	4.9	2.2			10			0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.52	749.8	30.03	762.7	72.9	22.7	73	SW	0	0			1	W		0	0		Prof. F. Brioschi.
Stelvio	22.32	566.8			51.3	10.7	48	SE			2	5cs	0	NW		0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.36	567.9			50.0	10.0	72	N			2		10n		W	0	0	Misty	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.74	755.4	29.76	755.9	70.4	21.3	91	W	0.8	0.4		0	0			0	0	Clear	K. Sasaki.
Kioto	29.61	752.1	29.78	756.4	72.6	22.6	77	NNE	2.9	1.3		ck	6s			0	0	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.54	750.3	29.74	755.4	72.8	22.7	90	WSW	1.7	0.8			10s			0.890	22.6	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	29.76	755.9	29.83	757.7	65.1	18.4	94	NE	5.4	2.4		0	0			0.590	15.0	Clear	The Staff.
Wakayama	29.74	755.4	29.79	756.6	72.3	22.4	79	S	5.2	2.3		1ck	0	S		0	0	Fair	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.96	761.0	30.15	765.8	74.0	23.3	64	SE	10.0	4.5		0	2			0	0	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.37	619.0	29.98	761.5	63.5	17.5	79	W			1	2c	0	NW		0	0	Clear	Prof. M. Leal.
Mazatlan	29.58	751.4	29.84	757.8	82.0	27.8	83	SW	5.3	2.3		1cs	8n	Calm	WSW	0	0	Very cloudy	F. Quijano, U. E.
Mexico, Central Obs'y	23 05	585.5	30.01	762.2	55.8	13.2	88	Calm	0	0			9kh			0.047	1.2	Very cloudy	The Staff.
Pabellon, Aguascalientes	23.90	607.1	29.83	757.7	59.9	15.5	77	Calm			0	1c	1s	E		0	0	Clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.38	593.7	30.06	763.5	57.4	14.0	24	Calm	0	0		0	6		E	0.008	0.2	Cloudy	Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.53	572.3	30.14	765.7	50.0	10.0	72	E	11.0	4.8		1cs	0	E		0	0	Clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.90	759.5	29.90	759.5	70.7	21.5		WNW			3					0	0		
Groningen	29.89	759.2	29.95	760.6	72.5	22.5		E			3					0	0		
Helder	29.91	769.8	29.91	759.8	68.0	20.0		ESE			2					0.626	15.9		
Hellevoetsluis	29.88	759.0	29.88	759.0	73.9	23.3	73	ESE			2					0.004	0.1		
Utrecht	29.86	758.5	29.91	759.7	76.6	24.8	60	SE			2		8			0.307	7.8	Very cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

NORWEGIAN SERIES.

Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.

Bergen	29.92	760.0	29.98	761.6	64.0	17.8	70	NNW	3.4	1.5			0			0	0		
Christiania	29.81	757.2	29.95	760.7	75.0	23.9	33	SSW	7	3			1			0	0		
Gjæsvær	29.95	760.8	29.98	761.4	36.3	2.4		WNW			6		10						
Lodingen	30.04	763.1	30.09	754.3	44.4	6.9	57	NE			6		2			0	0		

PORTUGUESE SERIES.

Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.

Angra, Azores	29.97	761.2	29.98	761.6	68.4	20.2	77	W	4.9	2.2			4			0	0		Dr. J. A. Sampaio.
Campo Major	29.10	739.1	30.08	763.9	72.0	22.2	53	WSW	3.8	1.7			9			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.14	765.6	30.23	767.9	70.2	21.2	66	ESE	2.5	1.1			3			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.76	756.0	30.12	765.1	66.6	19.2	79	WSW	13.6	6.1			9			Blank			The Staff.
Ponta Delgada, Azores	30.10	764.4	30.17	766.2	69.4	20.8	83	WSW	2.5	1.1			3			0.024	0.6		

RUSSIAN SERIES.

Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.

Akmolinski	28.76	730.5	29.78	756.4	77.0	25.0	31	W	16	7		0	3k						Capt. Lasarew.
Archangel	29.79	756.7	29.81	757.2	56.3	13.5	49	NW	13	6			10						Capt. Sseliwerstow.
Astrakhan	29.80	756.8	29.71	754.7	80.1	26.7	53	E	2	1			9s			Blank		Light clouds	Capt. Wisganow.
Barnaul ‡	29.40	746.8	29.87	758.8	76.8	24.9	18	Calm	0	0			0						Meteorological Obs'y.
Dorpat	29.66	753.4	29.89	759.3	70.7	21.5	30	W	4	2			0						Observatory.
Ekaterinburg	28.77	730.8	29.71	754.6	61.0	16.1	82	NW	4	2			10						Meteorological Obs'y.
Kasan	29.49	749.1	29.75	755.6	74.5	23.6	42	SW	2	1			9kn						Observatory.
Kertch	29.91	759.7	29.93	760.2	66.6	19.2	97	Calm	0	0			10					Light rain	Lagorio & Sastyrez.
Kieff	29.15	740.4	29.77	756.1	62.8	17.1	52	NW	4	2		c;ck	8ks						Observatory.
Kroukowo																			Cand. Fatjanow.
Lugan	29.54	750.2	29.74	755.3	72.1	22.3	48	SSW	13	6			5					Light clouds	Meteorological Obs'y.
Moscow	29.21	742.0	29.74	755.3	67.1	19.5	60	W	4	2		0	5ks						Meteorological Obs'y.
Nertchinsk	27.64	702.0	29.89	759.1	53.4	11.9	86	Calm	0	0			7			0	0		Meteorological Obs'y.
Nikolaiev	29.82	757.4	29.89	759.2	68.9	20.5	68	NW	9	4		0	5kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.61	752.2	29.70	754.4	41.2	5.1	89	NW			2		10n			0.740	18.8	Raining	Lieut. Iwanow.
Pekin, China	29.42	747.3	29.56	750.9	80.1	26.7	81	Calm	0	0		0	8n						Physical Observatory.
St. Petersburg	29.82	757.4	29.84	757.8	68.0	20.0	41	WNW	11	5		c	1k						Central Physical Obs'y.
Tashkend, Laboratory	28.32	719.3	29.79	756.6	84.9	29.4	37	Calm	0	0			0						Teich, A. M.
Tiflis	28.50	723.9	29.86	758.5	73.0	22.8	48	NW	13	6			9ks						Physical Observatory.
Warsaw	29.56	750.8	29.97	761.3	63.1	17.3	57	NW	4	2			10cks						Astronomical Obs'y.
Wilna	29.48	748.7	29.88	759.0	67.6	19.8	40	NW	4	2			6					Heavy cl'ds	Berg, Assistant.
Yeniseisk	29.73	755.2	30.01	762.3	60.1	15.6	72	SW	7	3			0						M. O. Marks.

SCOTTISH SERIES.

Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.

Leith, Restalrig Park			29.74	755.4	66.2	19.0	76	SE			3		10ks			0.02	0.5	Overcast	Andrew Gibb.
Monach Lt. House, Hebrides			29.65	753.1	59	15.0	100	E			4	10	5	E		0.1	3.	Raining	J. Youngclause.
North Unst, Shetland Isl'ds			30.01	762.2				E			3		Fg						Robert Burnet.

SPANISH SERIES.

Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.

Barcelona, Met. Obs'y	29.91	759.7	30.01	762.3	74.5	23.6	69	S	2.9	1.3			5			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	29.87	758.8	29.93	760.2	80.6	27.0	52	NW	2.0	0.9			10			0	0	Covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.09	688.2			69.1	20.6	59	SW	5.8	2.6			5			0	0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.83	706.8	29.97	761.3	75.4	24.1	43	SW	12.8	5.7		5	0	SW		0	0	Light clouds	The Staff.
Murcia, Met. Obs'y ‡	29.84	757.9	29.98	761.5	87.1	30.6	46	ENE	2.7	1.2		5	5			0	0	Covered	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.05	737.8	29.93	760.1	64.4	18.0	81	SW	4.9	2.2			9			0.461	11.7	Almost cov'd	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	29.87	758.8	29.94	760.4	79.5	26.4	80	ENE	6.3	2.8		8c;cs	1k	W		0.008	0.2	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.77	756.2	29.82	757.5	84.4	29.1	73	SE	8.8	4.0		0	3k		E	0	0		Federico Faura, S. J.
San Fernando, Naval Obs'y	30.04	763.1	30.14	765.6	69.6	20.9	73	NW	7.5	3.2			10		W	0	0		Capt. C. Pajason, R. N., Dir.
San Juan de Porto Rico, W. I	29.92	759.9	30.01	762.2	79.5	26.4	97	SE	8.7	3.9		5k	4kn	SE	SE	0.169	4.3	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.70	754.3	29.84	758.0	87.2	30.7	63	SW	2.5	1.3		0	4ks		WSW	0	0	Partly cov'd	José L. Fastovra.

SWEDISH SERIES.

Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.

Haparanda	29.89	759.1	29.93	760.1	63.0	17.2	33	N			2		10			0	0		
Umea	29.83	757.7	29.88	759.0	72.7	22.6	29	SW			2		5			0	0		
Hernosand	29.93	760.1	29.98	761.4	70.7	21.5	46	S			2		4			0	0		
Stockholm	29.84	757.9	30.02	762.4	70.5	21.4	26	SW			2		0			0	0		
Wisby	29.91	759.6	29.97	761.1	54.7	12.6	63	NW			2		0			0	0		
SUB-SERIES.																			
Upsala	29.76	756.0	29.85	758.2	73.2	22.9	24	WSW	2.7	1.2			8			0	0		S. G. Fineman.

SWISS SERIES.

Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.

Geneva	28.56	725.4	29.94	760.5	70.5	21.4	63	N			1		10						The Observatory.
Zurich	28.36	720.4	29.92	760.0	78.4	25.8	58	NW			2		5			0.039	1.0	Hazy	The Observatory.

TURKISH SERIES.

Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.

Constantinople			30.02	762.5	67.6	19.8	82	N	3	1.5			9		SW	0.839	21.3		The Observatory.
Valona			30.14	765.5	74.1	23.4		Calm			0		Hz			0	0	Hazy	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			30.00	762.1	77.5	25.3	61	NW			1	0	2k		SE	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	BAROMETER. Corrected for instru-m'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.68	753.9	29.76	755.9	64.5	18.1	67	W	12	5.4			10s		W	0.04	1.0	Cloudy.	
Alpena, Michigan	29.22	742.2	29.87	758.7	58.5	14.7	56	NW	7	3.1		2c	0	NW		0	0	Fair.	
Atlanta, Georgia	28.84	732.5	29.99	761.7	83.2	28.4	55	NW	4	1.8		2c	0	Calm		0	0	Clear.	
Atlantic City, New Jersey	29.82	757.4	29.83	757.7	66	18.9	79	W	7	3.1		1c	0	Calm		0.13	3.3	Clear.	
Augusta, Georgia	29.78	756.4	29.96	761.0	82.3	27.9	67	Calm	0	0		0	Hz			0	0	Clear.	
Baltimore, Maryland	29.86	758.4	29.91	759.7	73	22.8	59	W	6	2.7		5c	0	W		0.11	2.8	Fair.	
Barnegat, New Jersey	29.77	756.1	29.79	756.7	67	19.4	69	NW	13	5.8		2k	0	Calm		0.26	6.6	Clear.	
Bismarck, Dakota	28.08	713.2	29.82	757.4	55	12.8	74	N	6	2.7		5k	0	W		0	0	Fair.	
Boise City, Idaho	26.94	684.3	29.70	754.4	50.3	10.2	65	W	4	1.8		0	2s		Calm	0	0	Fair.	
Boston, Massachusetts	29.54	750.3	29.68	753.9	63.7	17.6	53	W	3	1.3		1ck	0	W		0	0	Clear.	
Brackettville, Texas	28.75	730.2	29.76	755.9	73	22.8	85	E	2	0.9		0	0			0	0	Clear.	
Brownsville, Texas	29.83	757.7	29.87	758.7	77	25.0	91	Calm	0	0		0	0			0	0	Clear	
Buffalo, New York	29.13	739.9	29.82	757.4	56	13.3	96	SW	7	3.1			Fg			0.01	0.3	Dense fog.	
Burlington, Vermont	29.38	746.2	29.66	753.4	61.5	16.4	71	W	1	0.4			10s		W	0.01	0.3	Cloudy	
Cairo, Illinois	29.59	751.6	29.99	761.7	75	23.9	86	SE	2	0.9		2ck	2s	W	W	0.14	3.6	Fair	
Campo, California	27.28	692.9	29.85	758.2	36	2.2	57	S	3	1.3		0	0			0	0	Clear.	
Camp Thomas, Arizona	27.07	687.6			70	21.1	44	Calm			0	5ck;k	0			0	0	Fair.	
Cape Henry, Virginia	29.86	758.4	29.88	758.9	75	23.9	64	N	22	9.8		10c	0			0	0	Cloudy	
Cape May, New Jersey	29.83	757.7	29.86	758.4	68	20.0	79	SW	17	7.6		5k	0	W		0.06	1.5	Fair.	
Castroville, Texas	29.15	740.4	29.82	757.4	80	26.7	70	S	2	0.9			10s		S	0	0	Cloudy.	
Cedar Keys, Florida	29.98	761.5	30.00	762.0	83	28.3	75	Calm	0	0		5ck	0			0	0	Fair.	
Champaign, Illinois	29.15	740.4	29.92	760.0	67.2	19.6	89	S	7	3.1		2k	Hz	S		0	0	Fair.	
Charleston, S. Carolina	29.90	759.4	29.96	761.0	82	27.8	69	W	9	4.0		0	0			0	0	Clear.	
Charlotte, N. Carolina	29.12	739.6	29.98	761.5	81.2	27.3	48	N	2	0.9		0	0			0	0	Clear.	
Chattanooga, Tennessee	29.22	742.2	30.02	762.5	72	22.2	83	W	3	1.3		2cs	Sk	NW	Calm	0.06	1.5	Fair.	
Cheyenne, Wyoming	23.98	609.1	29.79	756.7	54.3	12.4	55	N	8	3.6		0	0			0	0	Clear	
Chicago, Illinois	29.23	742.4	29.91	759.7	70.0	21.1	61	SW	4	1.8		2c	0	W		0	0	Clear.	
Chincoteague, Virginia	29.87	758.7	29.89	759.2	72	22.2	54	NW	17	7.6		5k	0	NW		0.02	0.5	Fair.	
Cincinnati, Ohio	29.38	746.2	30.02	762.5	70	21.1	80	SE	2	0.9		4c	Fg	NW		0	0	Fair.	
Cleveland, Ohio	29.21	741.9	29.93	760.2	65	18.3	66	SW	6	2.7		0	0			0	0	Clear.	
Coleman City, Texas																			
Columbus, Ohio	29.14	740.1	29.96	761.0	66	18.9	64	NW	3	1.3		1ck	0	W		0	0	Clear.	
Concho, Texas	28.07	713.0	29.95	760.7	69	20.6	75	Calm	0	0		0	0			0	0	Clear.	
Corsicana, Texas	29.51	749.5	29.97	761.2	78	25.6	73	Calm	0	0		0	0			0	0	Clear	
Davenport, Iowa	29.25	742.9	29.89	759.2	71	21.7	80	SE	4	1.8		1cs	0	W		0	0	Clear.	
Dayton, Washington T'y	28.18	715.8	29.03	760.2	50	10.0	86	S	5	2.2			10s		Calm	0.02	0.5	Cloudy	
Deadwood, Dakota	25.34	643.6	29.89	759.2	50	10.0	72	NE				10k	c	NE		0	0	Cloudy	
Decatur, Texas	28.77	730.7	29.87	758.7	80	26.7	59	S	9	4.0		0	0			0	0	Clear	
Delaware Breakwater, Del.	29.85	758.2	29.87	758.7	69	20.6	65	NW	16	7.2		7c	0	W		0.07	1.8	Fair.	
Denison, Texas	29.15	740.4	29.93	760.2	80	26.7	70	S	6	2.7		0	0			0	0	Clear.	
Denver, Colorado	24.68	626.9	29.75	755.6	62	16.7	36	NW	4	1.8		2ck	0	S		0	0	Fair.	
Des Moines, Iowa	28.90	734.0	29.78	756.4	71	21.7	85	S	8	3.6		0	0			0	0	Clear	
Detroit, Michigan	29.22	742.2	29.89	759.2	63.8	17.7	78	W	8	3.6		0	0			Inap.	Inap.	Clear.	
Dodge City, Kansas	27.23	691.6	29.72	754.9	70.8	21.6	55	S	7	3.1		8cs	0	W		0.02	0.5	Cloudy	
Dubuque, Iowa	29.15	740.4	29.83	757.7	68.2	20.1	74	S	7	3.1		5c	Hz	SE	Calm	0	0	Fair.	
Duluth, Minnesota	29.10	739.1	29.78	756.4	62	16.7	88	SW	2	0.9			10n		SW	0.10	2.5	Th'derstorm	
Eagle Pass, Texas	29.14	740.1	29.95	760.7	76.4	24.7	82	SE	2	0.9		0	0			0	0	Clear.	
Eagle Rock, Idaho	25.08	637.0	29.79	756.7	48	8.9	63	N	10	4.5		0	0			0	0	Clear.	
Eastport, Maine	29.55	750.6	29.62	752.3	51	10.6	79	S	2	0.9			10s;sn			0	0	Cloudy	
El Paso, Texas	26.14	663.9	29.80	756.9	65	18.3	73	E	2	0.9		0	0			0	0	Clear.	
Erie, Pennsylvania	29.16	740.7	29.85	758.2	65	18.3	68	SW	6	2.7		0	0			0	0	Clear.	
Escanaba, Michigan	29.20	741.7	29.84	757.9	65	18.3	63	N	2	0.9		5c	0	W		0	0	Fair.	
Florence, Arizona	28.24	717.3	29.84	757.9	80	26.7	13	S	2	0.9		0	0			0	0	Clear	
Fort Apache, Arizona	24.96	634.0	29.74	755.4	70	21.1	40	E	5	2.2		1c	Sk	Calm	Calm	0	0	*Dense smoke*	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota	28.21	716.5	29.68	753.9	61	16.1	71	N	14	6.3		2cs	0	NW		0.03	0.8	Fair.	
Fort Benton, Montana	27.14	689.3	29.88	758.9	48	8.9	85	Calm	0	0			10s		Calm	0.24	6.1	Cloudy.	
Fort Buford, Dakota	27.94	709.7	29.86	758.4	53	11.7	80	N	8	3.6		5cs	0	SW		0	0	Fair	
Fort Custer, Montana	26.78	680.2	29.87	758.7	53	11.7	67	N	5	2.2		c	0			0	0	Clear.	
Fort Davis, Texas	25.16	639.1	30.12	765.0	69	20.6	43	S	4	1.8		0	0			0	0	Clear.	
Fort Elliott, Texas	27.15	689.6	30.22	767.6	70	21.1	57	S	20	8.9		5c	0	S		0	0	Fair.	
Fort Gibson, Indian T'y	29.36	745.7	29.89	759.2	78	25.6	73	SE	8	3.6		5c	0	W		0	0	Fair	
Fort Grant, Arizona	25.18	639.6	29.98	761.5	71	21.7	25	NE	4	1.8		2k	2ks			Inap.	Inap.	Fair.	
Fort Griffin, Texas	28.65	727.7	29.86	758.4	75.4	24.1	52	S	4	1.8		5cs	0			0	0	Fair.	
Fort Keogh, Montana	27.44	697.0	29.85	758.2	53	11.7	72	NW	2	0.9		2c	0	SW		0	0	Fair.	
Fort Macon, North Carolina	29.86	758.4	29.87	758.7	77	25.0	77	W	7	3.1		2cs	Hz	Calm	Calm	0	0	Clear.	
Fort McKavett, Texas	27.69	703.3	29.53	750.0	70.2	21.2	53	SE	3	1.3		0	0			0	0	Clear.	
Fort Missoula, Montana	26.58	675.1	29.90	761.0	48	8.9	56	W	5	2.2		8k	2s	S	W	0	0	Cloudy	
Fort St. Michaels	30.07	703.8	30.11	764.8	45	7.2	92	E	1	0.4		2c	0			0	0		
Fort Shaw, Montana	26.35	669.3	29.80	756.9	48	8.9	85	N	6	2.7			10s		E	0.01	0.3	Cloudy	
Fort Sill, Indian Territory	28.08	728.5	29.89	759.2	74	23.3	63	S	10	4.5		5c	0	W		0	0	Fair.	
Fort Stevenson, Dakota																			
Fort Verde, Arizona																			
Fredericksburg, Texas					59.2	15.1	33	W			1	0	0			0	0	Clear	
Galveston, Texas	28.25	717.5	29.75	755.6	73	22.8	72	Calm	0	0		4k	0	SW		0	0	Fair.	
Grand Haven, Michigan	29.92	760.0	29.96	761.0	83	28.3	71	S	4	1.8		0	1ks			0	0	Clear.	
Hatteras, North Carolina	29.26	743.2	29.91	759.7	66	18.9	69	SW	3	1.3		0	0			0	0	Clear.	
Helena, Montana	29.87	758.7	29.89	759.2	79	26.1	74	W	19	8.5		0	2s		W	0	0	Clear.	
Henrietta, Texas	25.74	653.8	29.94	760.5	50	10.0	79	NW	4	1.8		0	8s		Calm	0.02	0.5	Cloudy	
Indianapolis, Indiana	28.91	734.3	29.77	756.1	79	26.1	70	S	7	3.1		2ck	5s	SW		0	0	Fair.	
Indianola, Texas	29.19	741.4	29.96	761.0	72.5	22.5	69	NW	1	0.4		0	Hz		Calm	0	0	Clear.	
Jacksboro, Texas	29.92	760.0	29.95	760.7	78.8	26.0	82	SE	6	2.7		0	1ks		Calm	0	0	Clear.	
Jacksonville, Florida	28.78	731.0	29.86	758.4	77	25.0	69	S	4	1.8		1k	0	Calm		0	0	Clear.	
Keokuk, Iowa	29.96	761.0	29.98	761.5	84	28.9	71	SW	6	2.7		0	0			0	0	Clear.	
Key West, Florida	29.23	742.4	29.84	757.9	71.8	22.1	80	S	4	1.8		5c	0	SW		0	0	Fair.	
Kittyhawk, North Carolina	29.94	760.5	29.97	761.2	82.0	27.8	79	E	7	3.1		3cs;k	2ks	E	E	0.20	5.1	Fair.	
Knoxville, Tennessee	29.88	758.9	29.90	759.4	73	22.8	76	N	16	7.2		5c	Hz	NW		0	0	Fair.	
La Crosse, Wisconsin	29.03	737.3	30.03	762.7	70	21.1	90	NE	3	1.3		8cs	0	Calm		0.12	3.0	Fair	
La Mesilla, New Mexico	29.00	736.6	29.70	754.4	70	21.1	75	SE	8	3.6			10s		E	0	0	Threatening	
Laredo, Texas	26.03	661.2	30.18	766.6	64.7	18.2	78	Calm	0	0		0	1s			0	0	Clear.	
Leavenworth, Kansas	29.45	748.0	29.78	756.4	77	25.0	91	SE	2	0.9		0	0			0	0	Clear.	
Lewiston, Idaho	28.95	735.3	29.82	757.4	76	24.4	73	SE	8	3.6		5k	0	SW		0.14	3.6	Fair.	
Little Rock, Arkansas	28.98	736.1	29.81	757.2	53	11.7	68	E	2	0.9			10s		Calm	0	0	Cloudy.	
Los Angeles, California	29.04	752.8	29.95	760.7	75	23.9	90	W	4	1.8		0	0			0.03	0.8	Clear	
Louisville, Kentucky	29.48	748.8	29.86	758.4	58.1	14.5	88	SE	5	2.2			10s		Calm	0	0	Cloudy.	
Lynchburg, Virginia	29.40	746.7	29.95	760.7	74.0	23.3	76	NE	4	1.8		8c	0			Inap.	Inap.	Fair.	
Madison, Wisconsin	29.28	743.7	29.94	760.5	79	26.1	58	Calm	0	0		0	0			0.01	0.3	Clear.	
Marquette, Michigan	28.89	733.8	29.87	758.7	66	18.9	79	S	4	1.8		8c	0	W		0	0	Fair.	
Mason, Texas	29.13	739.9	29.84	757.9	60	15.6	71	W	2	0.9			10s	W		0	0	Cloudy.	
Memphis, Tennessee	28.33	719.6	30.02	762.5	72.8	22.7	76	S	2	0.9		0	0			0	0	Clear.	
Milwaukee, Wisconsin	29.66	753.4	29.98	761.5	83	28.3	71	Calm	0	0		0	0			0	0	Clear.	
	29.19	741.4	29.92	760.0	67	19.4	74	SW	5	2.2		8c;ck	0	SW		0.01	0.3	Fair.	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Velocity.		Force	Clouds. Amount and kind.		Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.93	760.2	30.00	762.0	80	26.7	62	N	2	0.9		5ck	Hz	SE		0	0	Fair	
Montgomery, Alabama	29.78	756.4	30.00	762.0	81.2	27.3	74	SW	2	0.9		0	Hz			0	0	Clear	
Moorhead, Minnesota	28.78	731.0	29.74	755.4	61	16.1	71	N	6	2.7			10s		N	0	0	Cloudy	
Morgantown, W. Virginia	28.98	736.1	29.92	760.0	73	22.8	76	W	1	0.4		2cs	0			0.08	2.0	Fair	
Mt. Washington, N. H.	23.52	597.4	29.55	750.6	34	1.1	85	NW	32	14.3			Fg		NW	0	0	Light fog	
Nashville, Tennessee	29.47	748.5	29.99	761.7	77.1	25.1	73	E	3	1.3		3ck;cs	2ks	NW	NW	0	0	Fair	
New Haven, Connecticut	29.64	752.8	29.75	755.6	68	20.0	60	NW	9	4.0		0	0			0.10	2.5	Clear	
New London, Connecticut	29.71	754.6	29.76	755.9	62	16.7	83	NE	10	4.5		0	0			0.02	0.5	Clear	
New Orleans, Louisiana	29.93	760.2	29.98	761.5	82.0	27.8	79	Calm	0	0		1c	Sk	SW		0.62	15.7	Clear	
Newport, Rhode Island	29.64	752.8	29.69	754.1	66.0	18.9	79	SW	6	2.7		1c	Sk	NW		Inap.	Inap.	Fair	
New River, N. Carolina					81	27.2	72	N			1	Hz	Hz					Hazy	
New Shoreham, Rhode I'd	29.68	753.9	29.71	754.6	62.4	16.9	83	NW	14	6.3		0	0			0.04	1.0	Clear	
New York, New York	29.62	752.3	29.79	756.7	67	19.4	64	NW	8	3.6		1cs	0			0.04	1.0	Clear	
Norfolk, Virginia	29.87	758.7	29.91	759.7	79	26.1	74	N	17	7.6		5cs	0	W		0	0	Fair	
North Platte, Nebraska	26.82	681.2	29.64	752.8	69	20.6	61	S	5	2.2		2c	2s	W	W	0	0	Fair	
Olympia, Washington T'y	29.92	760.0	29.96	761.0	43.0	6.1	92	S	2	0.9		0	1s		Calm	0	0	Clear	
Omaha, Nebraska	28.59	726.2	29.73	755.1	78.6	25.9	71	S	10	4.5		0	1ks			0	0	Clear	
Oswego, New York	29.44	747.8	29.76	755.9	53.6	12.0	92	W	4	1.8		5k	5ks	W	W	0.05	1.3	Cloudy	
Pensacola, Florida	29.97	761.2	30.00	762.0	79	26.1	82	SW	4	1.8		0	0			0	0	Clear	
Philadelphia, Pa	29.78	756.4	29.84	757.9	69	20.6	61	NW	10	4.5		0	Hz			0.36	9.1	Clear	
Phœnix, Arizona	28.64	727.4	30.38	771.6	69	20.6	52	E	3	1.3		0	0			0	0	Clear	
Pike's Peak, Colorado	17.96	456.2	30.17	766.3	35	1.7	27	SW	26	11.6		0	0			0	0	Clear	
Pioche, Nevada	23.87	606.3	29.72	754.9	60	15.6	6	S	7	3.1		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.16	740.7	29.94	760.5	66	18.9	74	W	5	2.2		0	0			Inap.	Inap.	Clear	
Port Eads, Louisiana	29.98	761.5	29.99	761.7	80.2	26.8	82	SE	6	2.7		0	Hz		Calm	0	0	Clear	
Port Huron, Michigan	29.22	742.2	29.88	758.9	63.6	17.6	68	W	8	3.6		0	0			0	0	Clear	
Portland, Maine	29.60	751.8	29.65	753.1	60	15.6	71	SW	6	2.7		0	5s		Calm	0	0	Fair	
Portland, Oregon	29.92	760.0	30.00	762.0	46.2	7.9	96	NW	1	0.4		0	1s		NW	0	0	Clear	
Portsmouth, N. Carolina					78	25.6	82	NE	18	8.0		8c	0	Calm		0	0	Cloudy	
Prescott, Arizona	24.66	626.4	29.73	755.1	47	8.3	34	SW	2	0.9		0	0			0	0	Clear	
Punta Rassa, Florida	29.96	761.0	29.97	761.2	81	27.2	76	E	6	2.7		1c	0	Calm		Inap.	Inap.	Clear	
Red Bluff, California	29.33	745.0	29.66	753.4	60.0	15.6	52	NW	1	0.4		0	0			0	0	Clear	
Rio Grande City, Texas	29.72	754.9	29.93	760.2	74	23.3	86	SE	4	1.8		0	0			0	0	Clear	
Rochester, New York	29.15	740.4	29.77	756.1	65	18.3	78	W	9	4.0		0	Hz			0.09	2.3	Clear	
Roseburg, Oregon	29.43	747.5	29.99	761.7	42.5	5.8	87	Calm	0	0		0	0			0	0	Clear	
Sacramento, California	29.63	752.6	29.70	754.4	53.6	12.0	80	S	12	5.4		0	0			0	0	Clear	
St. Louis, Missouri	29.37	746.0	29.95	760.7	72.0	22.2	85	SE	5	2.2		8c;cs	0	W		Inap.	Inap.	Fair	
St. Paul, Minnesota	28.86	733.0	29.70	754.4	63	17.2	94	N	16	7.2			1on		N	0.31	7.9	Heavy rain	
Salt Lake City, Utah	25.38	644.6	29.58	751.3	67	19.4	17	Calm	0	0		0	0			0	0	Clear	
San Antonio, Texas	29.27	743.4	29.96	761.0	77.0	25.0	86	Calm	0	0		0	7s		SE	0	0	Fair	
San Diego, California	29.75	755.6	29.82	757.4	61.0	16.1	71	S	4	1.8			10s			0	0	Cloudy	
Sandusky, Ohio	29.26	743.2	29.92	760.0	66	18.9	69	SW	10	4.5		0	0			0	0	Clear	
Sandy Hook, New Jersey	29.76	755.9	29.79	756.7	66.2	19.0	79	NW	9	4.0		0	0			0.05	1.3	Clear	
San Francisco, California	29.69	754.1	29.76	755.9	52	11.1	86	SW	7	3.1			Fg		SW	0	0	Dense fog	
Santa Fé, New Mexico	23.30	591.8	29.81	757.2	58	14.4	53	E	4	1.8		2c	0	S		0	0	Clear	
Savannah, Georgia	29.90	759.4	29.99	761.7	83	28.3	71	SW	8	3.6		0	0			0	0	Clear	
Shreveport, Louisiana	29.76	755.9	29.99	761.7	78	25.6	78	Calm	0	0		0	2s			0	0	Fair	
Silver City, New Mexico	24.26	616.2	29.72	754.9	55	12.8	68	Calm	0	0		0	0			0.29	7.4	Clear	
Sitka Alaska																0	0		
Smithville, North Carolina	29.89	759.2	29.92	760.0	79	26.1	74	SW	10	4.5		2k	Hz	SW		0	0	Fair	
Spokane Falls, Wash. Ter.	27.87	707.9	29.83	757.7	47.3	8.5	83	E	3	1.3		8k	0	W		0	0	Fair	
Springfield, Illinois	29.28	743.7	29.94	760.5	69.5	20.8	87	S	7	3.1		1c	0	W		0.01	0.3	Clear	
Springfield, Massachusetts	29.58	751.3	29.71	754.6	69.0	20.6	58	NW	10	4.5		0	0			0.08	2.0	Clear	
Stockton, Texas	26.90	683.2	29.89	759.2	68.3	20.2	79	Calm	0	0		0	0			0	0	Clear	
St. Vincent, Minnesota	28.94	735.1	29.78	756.4	56	13.3	75	NW	4	1.8		0	0			0	0	Clear	
Thatcher's Island, Mass	29.66	753.4	29.71	754.6	59.6	15.3	88	N	10	4.5			Sk			0	0	Dense smoke	
Toledo, Ohio	29.25	742.9	29.93	760.2	70	21.1	61	W	6	2.7		0	0			0	0	Clear	
Tucson, Arizona	27.37	695.2	29.66	753.4	73	22.8	24	SE	2	0.9		2k	0			0	0	Clear	
Umatilla, Oregon	29.56	750.8	29.96	761.0	54.5	12.5	62	W	12	5.4		0	5s		W	0	0	Fair	
Uvalde, Texas	28.97	735.8	29.77	756.1	72	22.2	85	E	1	0.4			8s		E	0	0	Cloudy	
Vicksburg, Mississippi	29.77	756.1	30.02	762.5	79	26.1	82	Calm	0	0		Hz	0			0	0	Clear	
Visalia, California	29.31	744.5	29.66	753.4	60	15.6	52	SW	3	1.3		0	0			0	0	Clear	
Washington, D. C.	29.83	757.7	29.94	760.5	72	22.2	62	NW	2	0.9		5c	0	NW		0.39	9.9	Fair	
Wickenburg, Arizona					58	14.4	31	N			1	0	0			0	0	Clear	
Wilmington, N. Carolina	29.85	758.2	29.91	759.7	78	25.6	73	NW	4	1.8		2ck;hz	Hz	C;NW	Calm	0	0	Fair	
Winnemucca, Nevada	25.41	645.4	29.62	752.3	49	9.4	51	SW	3	1.3		0	0			0	0	Clear	
Wood's Holl, Mass	29.65	753.1	29.68	753.9	59	15.0	94	SW	12	5.4			10s		SW	0.01	0.3	Cloudy	
Yankton, Dakota	28.47	723.1	29.73	755.1	69	20.6	65	SE	5	2.2		5ck	2ks	SW		0	0	Fair	
Yuma, Arizona	29.51	749.5	29.65	753.1	73.1	22.8	28	W	1	0.4		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.12	561.8			54.5	12.5	85	Calm	0	0			1on			0.08	2.0	Cloudy	Thomas Herran
Buff Bay Town, Jamaica ‡																			
Havana, Cuba, W. I.	29.93	760.2	29.98	761.5	81	27.2	87	Calm	0	0		8cs	0	Calm		Inap.	Inap.	Cloudy	A. Van Caneghem, Ass't.
Kingston, Jamaica, W. I.	29.92	760.0	29.93	760.2	81.2	27.3	80	Calm	0	0		3ok;cs	2s		ESE	0.14	3.6	Rainy	Robert Johnstone.
Navassa, W. I.	29.84	757 9	29.92	760.0	79	26.1	91	SE	15	6.7						1.37	34.8	Raining	F. M. Everett.
Paramaribo, S. A.	30.03	762.7	30.03	762.7	78	25.6	91	SE			2		8ks		E	0.020	0.5	Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.44	747.8	29.99	761.7	77	25.0	94	Calm	0	0			10ks		Calm	0.12	3.0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua																			
Santiago de Cuba, W. I.					74.3	23.5		NW			1	2ck	5ks		NW	4.84	123.		Earl Flint.
St. Thomas, W. I.																			Robert Mason.
York Factory, B. A.	29.48	748.8	29.53	750.0	43.0	6.1	96	NE	22	9.8		3k	2s	E	NE	0.03	0.8	Fair	G. O. Gyllich. J. Fortescue & W Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington
H M. S. Alert, Thursday Island, Oceania	29.92	760.0	77	25.0	88	SE			2-3		4							Showery	Capt. J. P. Maclear.
H. M. S. Alexandra, Valona, Turkey	30.03	762.7	71	21.7	79	N			3		6							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 24° 47′, E. 66° 59′	29.53	750.0	85	29.4	83	WSW			3-4		5	WSW						D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, Varna, Bosphorus			69	20.6		N			1-2		0							Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 18′, W. 62° 45′	30.03	762.7	84	28.9	83	SE			2		3					2.	S	D. clouds.	Capt. C. G. F. Knowles.
H. M. S. Boadicea, St. Helena Island, Africa	30.15	765.8	72	22.2	90	SSE			3-4		10	SSE						Showery	Com. F. W. Richards.
H. M. S. Champion, Monte Video, Uruguay	29.99	761.7	50	10.0	58	SSW			4-5		0					4	SW	Blue sky	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 38° 36′, E. 119° 20′	29.59	751.6	66	18.9	94	SE			3		0							Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 38° 41′, E. 11° 17′	30.08	764.0	75	23.9		S			1		0							Misty	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, N. 40° 06′, W. 16° 10′	30.00	762.0	65	18.3	94	SSE			2		10					6	NNW	Drizzling	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.03	762.7	72	22.2		Calm			0		3	WNW						D. clouds	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.95	760.7	80	26.7	86	SW			2		3	SW						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 49° 30′, W. 56° 03′	29.75	755.6	46	7.8	85	S			1		3	SW						D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 7° 13′, E. 72° 23′	29.93	760.2	79	26.1		SE			2-3		3							D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 16° 00′, E. 82° 00′	29.93	760.2	75	23.9		SSE			5		2	SE				4	ESE	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, N. 5° 54′, E. 169° 43′	29.87	758.7	83	28.3	83	E			1		8	E						D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Port Louis, Mauritius	30.10	764.5	77	25.0	82	ESE			1		2	ESE				1	ESE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Canada Harbor, N. F.	29.73	755.1	50	10.0		SSE			1		4	SSE						D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn, N. 12° 47′, E. 44° 58′	29.66	753.4	88.5	31.4	75	SSE			3		2							D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo, N. 21° 14′, W. 83° 17′	29.91	759.7	86	30.0	83	ENE			2		2	E				2	E	D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	29.92	760.0	48	8.9	92	Calm			0		5							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	30.01	762.2	37	2.8	80	WSW			3		0							Blue sky	Capt. L. F. Jones.
H. M. S. Griffon, N. 25° 52′, W. 76° 22′	30.03	762.7	84	28.9	73	ENE			2		2					1	E		Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, N. 36° 02′, E. 14° 42′	30.08	764.0	72	22.2	75	ENE			1		0					1	SSE	Blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.05	763.3	61	16.1		ESE			1		3	NW						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.82	757.4	70	21.1		NNE			1		7							D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 19° 59′, E. 110° 01′	29.65	753.1	87.6	30.9	82	Calm			0		7							Misty	Capt. A. Carpenter.
H. M. S. Midge																			Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. M. S. Modeste, S. 25° 40′, E. 53° 20′	30.42	772.7	68	20.0	100	E			4-6		5	ESE				4	ESE	Squally	Capt. J. G. Mead.
H. M. S. Monarch, Tunis, Tunis, N. Africa	30.06	763.5	75	23.9	76	ENE			1		0							Blue sky	Capt. G. Tryon, C. B

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, N. 5° 16′, E. 115° 15′			83.5	28.6		SW			1		2	SW				1	SW	D. clouds	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.68	753.9	49	9.4	90	SE			2		9							D. clouds	Capt. E. B Drummond.
H. M. S. Orontes, Cape Coast Castle, Africa*†	29.99	761.7	76.5	24.7	92	SW			1		10					3	SSW	Overcast	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.92	760.0	77	25.0	100	S			1		10					1	SE	Raining	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.78	756.4	78	25.6		Calm			0		7							D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 49° 42′, W. 124° 51′	29.95	760.7	55	12.8		NNW			3		6							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	30.08	764.0	79.3	26.3	86	SSE			3-4		3					Sm'h		D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, S. 22° 06′, W. 70° 20′	30.05	763.3	60	15.6	100	S			2		10	S				5	S	Overcast	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.			81	27.2		SE			1		7							D. clouds	Com. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	29.85	758.2	53	11.7	86	W			1		1	NW						Blue sky	Com. J. C. Wilson, A. D.C
H. M. S. Woodlark, Abu Shehr, Persia	29.54	750.3	89.5	31.9	63	WNW			5-6							5	NW	Heavy mist.	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candid dos Reis, Comd't.
Quanza, Porto Praya, Cape Verd Id's	30.00	762.1	80.2	26.8	66	NE			1		1		NE					Blue sky	Carlos M. de Silva Costa, Comd't
Rio Lima																			S. C da Silva Costa, Comd't.
Sado, St. Paul de Loando, Benguela	30.09	764.2	72.3	22.4	71	WNW			2		7					1		D. clouds	G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.76	756.0	84.2	29.0	81	S			3		2							D. clouds	P. I. de Rio Carvallio, Comd's.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga																			Capt. M. von Krusenstierna.
H. M. Frigate Vanadis																			Com. Th. Ulner.

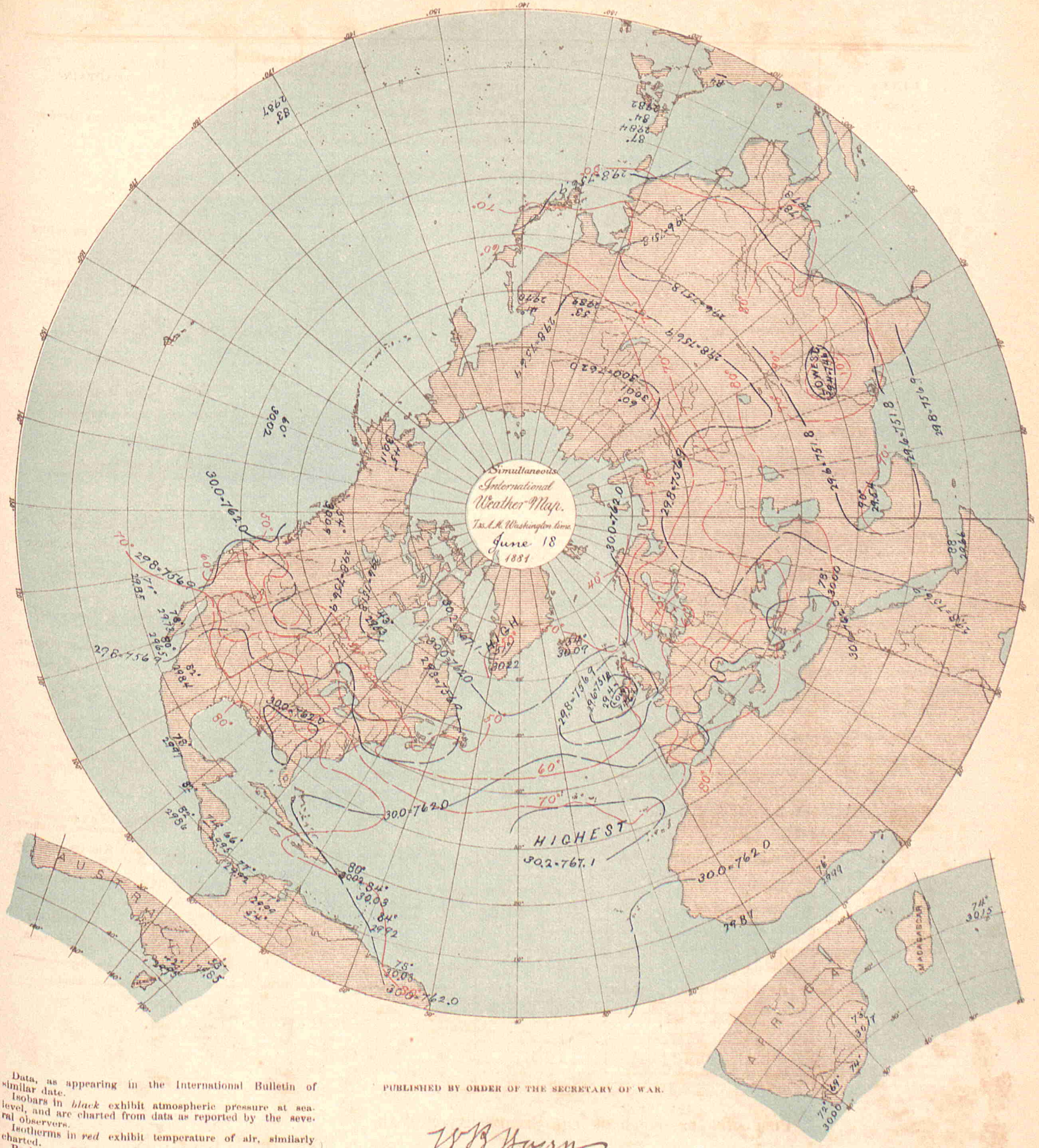
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.07	763.8	80	26.7	82	W	1	0.4			2		W	0	0			Fair	
Naval Hospital, Yokahama, Japan	29.68	753.9	67.5	19.7	92	NE			3		0			3.12	79.2			Clear.	
Adams N. 11° 36′, W. 89° 24′	29.69	754.1	80	26.7	91	WSW			3-4		8		ENE			Mod.	SW	Cloudy	
Alaska, Callao, Peru	29.97	761.2	64	17.8	89	SE			1		10			0	0	Sm'h		Cloudy	
Alert, Yokohama, Japan*	29.69	754.1	70	21.1	85	NNW			1-2		2		Calm			Mod.		Clear	
Alliance, N. 37° 20′, W. 73° 30′	29.87	758.7	68	20.0	90	N			3		8		N	Light		Sm'h		Fair	
Ashuelot, Kobe, Japan	29.77	756.1	70	21.1	100	NW			2		2		Calm					Clear	
Colorado, New York, N. Y.	29.78	756.4	70	21.1	75	NW	10	4.5			0			0.01	0.3			Hazy	
Constitution, Newport, R. I.	29.62	752.3	61	16.1	94	NW			2		2							Fair	
Franklin, Norfolk, Va	29.85	758.2	79	26.1	47	N	15.6	7.0			2		N	0	0			Fair.	
Galena. Lisbon, Portugal	30.09	764.3	69	20.6	90	W			2		8		W			Sm'h		Fair.	
Independence, N. Yard, Mare I'd, Cal.	29.97	761.2	69	20.6	95	SSW	3.6	1.6			0			0	0			Clear	
Jamestown, Sitka, Alaska*	30.09	764.3	54	12.2	93	Calm			0		2?			0	0			Overcast?	
Kearsarge. Norfolk, Va	29.90	759.4	78	25.6	78	N			3		8		N			Sm'h		Fair	
Lackawanna. S. 14° 57′, W. 160° 10′†	30.17	766.3	79	26.1	86	SE			4-5		10		SE			Mod.	SE	Cloudy	
Marion, Montevideo, Uruguay*†	29.92	760.0	49	9.4	57	SSW			5		0					Mod.	S	Clear	
Michigan, Lake Erie	29.83	757.7	66	18.9	84	SW			5		0							Clear	
Minnesota, Newport, R. I.	29.68	753.9	70	21.1	80	NW			2		1					Sm'h		Clear	
Monocacy, Yokohama, Japan	29.84	757.9	70	21.1	90	NNW			1		2		NW					Clear	
New Hampshire. Norfolk, Va	29.89	759.2	79	26.1	51	N	14	6.3			8		Calm	0	0			Fair	
Nipsic. N. 50° 08′, W. 1° 46′	29.83	757.7	57	13.9	94	SSE			5		10					Sm'h		Misty	
Onward, Callao, Peru†	30.03	762.7	64	17.8	89	Calm			0		10		NW			Long	W	Cloudy	
Palos, Nagasaki, Japan	29.76	755.9	74	23.3	95	SW			1		10							Fair	
Passaic, Washington, D. C.	29.94	760.5	70	21.1	90	W			1		2		W					Clear	
Pensacola. Mare Isl'd, Cal.	29.90	759.4	53	11.7	86	S			4-5		0			0	0			Clear	
Portsmouth. Newport, R. I.	29.70	754.4	62	16.7	100	NNW			3		2		W			Sm'h		Clear	
Powhatan. Newport, R. I	29.69	754.1	67	19.4	79	SSW			3		5							Fair	
Quinnebaug, Tompkinsville, N. Y.	29.76	755.9	66	18.9	68	WNW			2		2					Sm'h		Clear	
Ranger, Pichelinque, Mexico*	29.73	755.1	78	25.6	59	S			1		10		Calm	0	0	Sm'h		Cloudy	
Richmond, Nagasaki, Japan	29.72	754.9	78	25.6	86	WSW			1		10			0.12	3.0			Cloudy	
Saratoga, Newport, R. I.	29.67	753.6	60	15.6	100	WNW			1		2		Calm	Light				Fair	
Shenandoah, S. 33° 25′, W. 49° 10.*	30.01	762.2	64	17.8	68	WSW			4		8					Sm'h		Fair	
St. Louis, League Island, Pa	29.38	746.2	68	20.0	70	W	2	0.9			0			0.1	3.			Clear.	
Swatara, Shanghai, China*†	29.68	753.9	73	22.8	90	ESE			2		10		Calm					Raining.	
Tennessee, Navy Yard, N. Y.	29.80	756.9	76	24.4	68	NNW	4	1.8			2			0.01	0.3	Sm'h		Clear	
Ticonderoga, S. 45° 25′, W. 37° 38′.	30.31	769.9	44	6.7	92	WSW			6		5		WSW	1.05	26.7	Long H'vy	WSW	Fair	
Vandalia. Huntington, Long I'd.	29.76	755.9	65	18.3	78	W			3		0							Clear.	
Wabash, Boston, Massachusetts.	29.70	754.4	65	18.3	63	NW	4	1.8			2		N	0	0			Hazy	
Wachusetts, N. Yard, Mare I'd, Cal.			55	12.8	87	SW			4		0			0	0			Clear	
Yantic, Key West, Florida*	29.87	758.7	80	26.7	91	E			2		5		E					Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 20° 15′, W. 121° 32′	29.85	758.2	71	21.7	81	N			3		4							Misty	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 40° 34′, W. 23° 34′	30.08	764.0	62.5	16.9	77	W			3		6					2	NNW	D. clouds	W. N. Lailey.
City of Agra, S. 1° 26′, W. 27° 50′	30.01	762.2	79.0	26.1	89	ESE			4		0							Blue sky	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 32° 14′, W. 19° 00′	30.28	769.1	68.5	20.3	85	NNW			3		2							Blue sky	Capt. Jas. Buchan.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R. N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Naiad, N. 47° 24′, W. 9° 24′	29.75	755.6	59.1	15.1	91	SW			5		4							D. clouds	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 35° 47′, W. 37° 46′	30.20	767.1	74	23.3	81	WSW			5	5c	0	NW						D. clouds	Capt. M. Parry.
Sierra Estrella, N. 12° 42′, W. 25° 23′	30.03	762.7	75.6	24.2	82	N			3		8							Misty	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 36° 33′, W. 3° 33′	30.01	762.2	65.5	18.6	94	SW			4		6							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 48° 41′, W. 46° 40′	29.94	760.5				S			4		5		SW			Mod.	NE	Fair	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 48° 29′, W. 31° 54′ †	29.83	757.7	52	11.1		NNW			4		8		N			Sm'h		Cloudy	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic, N. 40° 47′, W. 70° 49′ †	29.73	755.1	54	12.2	87	W			2		5		W			Sl't	SW	Misty	Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England †	29.82	757.4	67	19.4	89	S			5		8		S	Show	ers			Showery	Capt. Ch. W. Kennedy
S. S. Republic, St. George's Channel †	29.66	753.4	55	12.8	93	SSE			5		8		S	Show	ers	Sm'h		Fair	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig, N. 48° 01′, W. 31° 06′	29.85	758.2	56.0	13.3	81	NNW			4		5		N			Mod.	NE	Cloudy	Capt. C. Phole.
S. S. Hermann, N. 42° 41′, W. 52° 49′	29.90	759.4	52.7	11.5		SE			5		0			0	0		WSW	Clear	Capt. H. Baur.
S. S. Hohenzollern																			
S. S. Köln, N. 49° 45′ W. 8° 41′	29.68	753.9	62.0	16.7	88	SW			6		5		SW	0	0	Cross	SW	Fair	Capt. Th. Jüngst.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Skoldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, Liverpool, England	29.70	754.4	67	19.4	90	SSE			6		10		SSE					Overcast	Capt. J. W. Shackford.
S. S. Indiana, Philadelphia, Pa.†	29.88	758.9	88	31.1	84	W			3		2		W	0	0			Fair	Capt. R. W. Sargent.
S. S. Ohio																			Wm. Shackford, Chief Off'r
S. S. Pennsylvania, N. 45° 42′, W. 32° 07′.....†	30.01	762.2	56	13.3	75	ENE			1		10		ENE			Sm'h	NE	Cloudy	Capt. Geo H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 23° 39′, W. 108° 18′.....†	29.65	753.1	80	26.7	87	SE			2		2		SE	0	0	G'tl	SSE	Clear	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 42° 58′, W. 154° 46′.....†	30.02	762.5	60	15.6	83	S			5		10			Ra	in	Mod.	Con.	Overcast	Capt. H. Davison.
S. S. Gaelic																			Capt. W. H. Kidley.
S. S. Oceanic, N. 32° 03′, E. 133° 54′.....	30.08	764.0	80	26.7	91	ESE			1		10		S	3.96	100.6	Sm'h		Cloudy	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, Willamette River, Or..†	29.95	760.7	51	10.6	89	N			1		0							Clear	Capt. Fred. Bolles.
S. S. Oregon																			Capt. E. Polemann.
PACIFIC COAST S. S. CO *Goodall, Perkins & Co.*																			
S. S. Arcon, N. 35° 23′, W. 121° 14′....†	29.82	757.4	53	11.7	86	NW			2		8		NW	0	0			Fair	Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, San Francisco, Cal.....†	29.74	755.4	52	11.1	86	W			3		10		W					Cloudy	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 36° 20′, W. 121° 50′.....†	29.80	756.9	54	12.2	80	NW			8		Fog		WNW			R'gh	W	Foggy	Geo. H. Harrison.
S. S. Senator																			Capt. Thos. Wallace.
S. S. State of California, N. 43° 31′, W. 124° 24′..†	30.03	762.7	53	11.7	79	NW			3		0					Sm'h	NW	Clear	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal.....†	29.74	755.5	52	11.1	79	SW			2		5?							Clear?	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 2d Officer.
S. S. City of New York, S. 34° —′, E. 164° 20′.....†	29.95	761.0	66	18.9	83	SW			2		1		W	0	0	H'vy	W	Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 15° 49′, W. 97° 51′.....†	29.97	761.2	78	25.6	82	W			2		10n		W	8 ho	urs	Mod.	W	Drizzling	Capt. D. S. Austin.
S. S. City of Peking																			Capt. G. G. Berry.
S. S. City of Sidney, S. 4° 51′, W. 167° 32′.....*†	29.83	757.7	83	28.3	70	SE			4		5		SE	0	0	H'vy	SE	Fair	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 24° 37′, E. 119° 15′.....†	29.82	757.4	80	26.7	82	SW			3		10		SW			Sm'h		Cloudy	A. L. Ritchie, 2d Officer.
S. S. Colima																			Capt. R. R. Searle.
S. S. Granada, N. 11° 54′, W. 87° 50′.....†	29.86	758.4	82	27.8	83	SSW			6		8		SSW	14 ho	urs	R'gh	SSW	Cloudy	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. W.	29.94	760.5	60	15.6	70	NE			2		2		NE					Clear	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland, N. 45° 38′, W. 33° 04′.....†	30.12	765.0	62	16.7	83	SW			2		2		E	0	0	Long	NE	Clear	Capt. Wm. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, N. 36° 21′, W. 75° 31′	29.86	758.4	76	24.4	68	N	7	3.1		5c	0			0	0	Short	N	Fair	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, Arroyo, Porto Rica.....†	30.05	763.3	80	26.7		Var.					10		E	Hea	vy	R'gh		Stormy	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Cherrystone, Va.....†	29.94	760.5	76	24.4	64	NNW	5	2.2		0	28			0	0			Fine	
Bark Sunbeam, N. 32° 58′, W. 15° 57′.....†	30.24	768.1	70	21.1	84	WNW			5		5		NW	0	0	Sm'h		Fair	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 19, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours‡			29.98	761.5	77.4	25.2	81	N			2		2			0	0	Fair	Raynard.
Algiers‡			29.98	761.6	74.1	23.4	69	NNW			2		0			0	0	Clear	Nicolas.
La Calle‡			29.98	761.5	76.3	24.6	80	WSW			1		2			0	0	Fair	Fonfréde.
Tunis‡			30.01	762.2															Jacques.
Sfax‡			30.17	766.3															Gau.
Saida‡			30.10	764.5	82.8	28.2	28	N			3		1			0	0	Very fair	Dumas.
Tebessa‡			30.06	763.5	84.6	29.2	17	Calm			0		7			0	0	Cloudy	Watrin.
Geriville‡					88.9	31.6	35	SSE			1		0			0	0	Clear	Lonchamp.
Laghouat‡			30.04	763.0	91.8	33.2	16	S			3		0			0	0	Clear	Herbin.
Biskra‡			30.04	763.1	88.2	31.2	56	SE			1		2			0	0	Fair	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.90	759.4	29.99	761.7	45.2	7.3	83	WSW	19	8.5			10			0.05	1.3	Showery	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.36	745.7	29.89	759.2	70.7	21.5	75	Calm			0		10			0.079	2.0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.17	741.0	29.92	759.9	69.8	21.0	49	E	5.6	2.5			3			0	0		Dr. Wierzbicki.
Eperies	29.05	737.8	29.89	759.3	69.4	20.8	47	Calm			0	8cs	0			0	0		Julius Mikolik.
Gratz‡	28.67	728.2	29.88	759.0	67.6	19.8	80	SSW			1		10			0.004	0.1		Andreas Rospini.
Hermannstadt	28.52	724.3	29.90	759.4	70.3	21.3	38	NNW			2		2			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.56	725.5	29.85	758.3	68.9	20.5	65	SW			2		9			0.039	1.0		The Staff.
Lemberg	28.92	734.6	29.88	758.9	66.7	19.3	47	NE			2		8			0	0		Dr. T. Stanecki.
Pola	29.84	757.8	29.94	760.5	77.9	25.5	54	S			2		5			0	0		I. R. HydrographicOffice.
Szathmar	29.43	747.6	29.89	759.1	72.0	22.2	76	NW			2		2			0	0		Beicht Peter, S. J.
Szegedin	29.63	752.7	29.90	759.5	70.9	21.6	64	SW			1		4			0	0		Karl Stancel.
Trieste	29.85	758.2	29.95	760.8	76.8	24.9	48	Calm			0		7			0.122	3.1		Secco.
Vienna	29.20	741.7	29.89	759.2	71.2	21.8	63	SSW			1		8			0.020	0.5		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter Printed June 19, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.

BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

Aberdeen	29.67	753.6	29.76	755.9	50.8	10.4	97	ESE	3	1.3			10			0.905	23.0	Raining	W. Boswell.
Armagh, Observatory	29.44	747.8	29.67	753.6	60.1	15.6	78	SE	19	8.5									S. Call.
Bidston, Liverpool Obs'y			29.74	755.4	64.8	18.2	55	SE	11	4.9			7					D. clouds	John Hartnup.
Bolton, Sharples																			Thomas Mackereth.
Bradford, Yorkshire																0	0		J.McLandsborough,F.R.S
Bridgetown, Barbadoes	30.00	762.0	30.03	762.7	86	30.0	65	NE			3		3					D. clouds	Corpl.J.Surgener,A.H.C
Cardington			29.78	756.4	69.0	20.6	65	SW			0.6		3					D. clouds	D. clouds	John McLaren.
Chatham, School M. E.	29.66	753.4	29.79	756.7	66.8	19.3	61	SW			1		6					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.55	750.6	29.77	756.1	62.7	17.1	75	SW			4		6†					Overcast?	The Staff.
Fort Napier, Natal	27.79	705.9	30.00	762.0	71.3	21.8	94	W			1		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.63	752.6	29.87	758.7				SW			1		0					Blue sky	Sgt. C. E. Keane.
Galway, Queen's College					51	10.6	81	W			2		10			0.01	0.3	Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	29.94	760.5	30.00	762.0	74.4	23.6	80	W			2		4					Blue sky	2nd Cpl. C. Baldwin.
Glasgow, Observatory	29.42	747.3	29.63	752.6	62.7	17.1	63	SSE			1		6					D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	29.65	753.1	29.82	757.4	67.3	19.6	60	WSW			1		4					D. clouds	The Staff.
Guernsey	29.62	752.3	29.84	757.9	62.5	16.9	77	SSW			2		7					Showery	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.79	756.7	29.82	757.4	65.4	18.6	56	SW	17	7.6			6					D. clouds	The Staff.
Leicester, Museum	29.51	749.5	29.76	755.9	62.5	16.9	64	SW			1		10					Drizzling	J. E. Carryer.
Malta, Mediterranean	29.96	761.0	30.04	763.0	76.8	24.9	65	N			2		0					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.94	760.5	29.98	761.5	84.0	28.9	75	E			2		5					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.26	743.2	29.77	756.1	62.9	17.2	69	SSW			2		8			Blank		D. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	29.57	751.1	29.80	756.9	65.0	18.3	56	SW			2		7					D. clouds	The Staff.
Plymouth	29.71	754.6	29.78	756.4	60.8	16.0	88	S			2		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.77	756.1	53.7	12.1	92	SE	20	8.9			10					Misty	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.85	758.4	29.92	760.0	79.0	26.1	90	NE			1		7			Blank		D. clouds	Serg't W. H. Lyne.
Sheffield	29.48	748.8	29.75	755.6	69.2	20.7	69	S			2		5			Inap.	Inap.	D. clouds	W. F. Cooper.
Silloth Rectory	29.66	753.4	29.69	754.1	63.9	17.7	70	W			1		4			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.76	755.9	61.2	16.2	66	SW	3	1.3			10					Overcast	Rev. S. J. Perry.
Stratfield Turgiss	29.61	752.1	29.82	757.4	66.4	19.1	66	SW			3		6					Squally	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	29.77	756.1	29.78	756.4	65	18.3	68	S			5		8					Gloomy	W. Newcombe.
Valencia, Observatory	29.59	751.6	29.62	752.3	59.2	15.1	77	SSW	18	8.0			7			Blank		D. clouds	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

Bathurst, N. B								S	12	5.4			10s			0	0	Cloudy	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.72	754.9	29.76	755.9	52	11.1	83	SE	5	2.2			10s		SE	0	0	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	29.62	752.3	29.68	753.9	52	11.1	93	NW			1	0	0			0	0	Blue sky	G. A. Blair.
Chicontimi, Quebec					49.1	9.5		W			2		10s			0.117	3.0	Showery	Rev. V. A. Huart.
Cornwall, Ontario	29.41	747.0	29.60	751.8	60.0	15.6	93												James Smith, M. A
Dalhousie, N. B																			H. A. Johnson.
Father Point, Quebec*	29.54	750.3	29.56	750.8	42	5.6	97	W	5	2.2			10n			0.18	4.6	Threatening	J. McWilliams.
Fort Garry, Manitoba*	29.16	740.7	29.97	761.2	57	13.9	76	N	4	1.8		2c	2ks	NW	N	0	0	Fair	James Stewart.
Fredericton, N. B	29.63	752.6	29.69	754.1	54.0	12.2	81	SE	5	2.2			10s			0	0	Threatening	Prof. Harrison.
Granton, Ontario	28.73	729.7	29.81	757.2	58.0	14.4	94	NW			1	0	0			0	0	Clear	James Grant.
Halifax, N. S.*	29.71	754.6	29.84	757.9	50	10.0	98	S	3	1.3			10n			0	0	Cloudy	A. Allison.
Hamilton, Ontario	29.38	746.2	29.76	755.9	64.3	17.9	76	W			2	0	0			0.03	0.8	Clear	Geo. Dickson, B. A.
Kingston, Ontario*	29.33	745.0	29.66	753.4	59	15.0	93	SW	7	3.1			10s		SW	0.11	2.8	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S	29.81	757.2	29.85	758.2	54.0	12.2	48	S			3		Hz			0	0	Hazy	C. H. Rigby.
Montreal, Quebec*	29.37	746.0	29.56	750.8	60	15.6	88	SW	12	5.4		8k	2ks	W		0.04	1.0	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario	29.72	754.9	29.75	755.6	40.0	4.4	91	W			3		10n					Raining	J. R. Nason.
Parry Sound, Ontario*	29.07	738.4	29.75	755.6	53	11.7	99	W	5	2.2			Fg			0.30	7.6	Foggy	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.10	739.1	29.77	756.1	60	15.6	94	Calm	0	0		0	0			0	0	Clear	H. Morgan.
Port Stanley, Ontario	29.15	740.4	29.78	756.4	63	17.2	84	NW	5	2.2		0	0			0	0	Clear	M. Payne.
Quebec, Quebec*	29.23	742.4	29.54	750.3	51	10.6	100	E			1		10n		E	0.06	1.5	Light rain	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.21	741.9	29.65	753.1	58	14.4	88	NW	5	2.2			8ks		NW	0.06	1.5	Light rain	W. H. McIntyre.
Saugeen, Ontario*	29.10	739.1	29.80	756.9	52	11.1	95	SW	3	1.3			10s			0.09	2.3	Cloudy	K. Stewart.
St. Andrews, N. B	29.67	753.6	29.72	754.9	47	8.3	97	S	3	1.3			10n			0	0	Cloudy	
St. John, N. B	29.56	750.8	29.73	755.1	52.0	11.1	89	S	9	4.0			10ks			0	0		G. Murdock, C. E.
Stratford, Ontario	28.52	724.4	29.76	755.9	59.5	15.3	88	NW	10	4.5		0	0			0.108	2.7	Blue sky	C. J. Macgregor, M. A.
Sydney, C. B.*	29.82	757.4	29.86	758.4	52	11.1	66	SW	8	3.6		0	Hz			0	0	Hazy	T. C. Hill, C. E.
Toronto, Ontario*	29.38	746.2	29.76	755.9	63	17.2	81	NW	7	3.1		0	0			0.18	4.6	Clear	Magnetic Observatory
Windsor, N. S	29.68	753.9	29.77	756.1	54.0	12.2	83	S	10	4.5			10n			0	0	Cloudy	
Woodstock, Ontario	28.74	730.0	29.77	756.1	63.3	17.4	76	NW	13	5.8		0	0			0	0	Blue sky	Prof. Wolverton.
Yarmouth, N. S.*	29.71	754.6	29.78	756.4	50	10.0	99	S	4	1.8		5c	Fg	W		0.01	0.3	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.78	756.4	30.03	762.7	45	7.2		N	4	1.8			10n					Light rain	John Delany.
St. Pierre, N. F.			29.67	753.4	48.2	9.0		NW			4					0.39	9.9		N. F. Land, Comd't

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

Cape St. Francis Lt. House	29.97	761.2			69.8	21.0	57	NW	17.7	7.9			10s			0	0	Overcast	John Duthie.
Cape Town, C. G. H. Obs'y	30.06	763.5	30.10	764.5	55	12.8		NW	5	2.2		4	5k;ks			0.550	14.0		The Staff, for D. Gill.
Worcester*†	28.94	735.1			60	15.6	75	NW			2	3	5			0	0	Overcast	C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.72	754.9	29.75	755.6	69.8	21.0	90	E	1:3	0.6		0	2			0.114	2.9	Clear	M. Marc Dechevrens, S.

STATIONS.	Barometer. Corrected for instru'tal error and temperature. Inch.	Barometer. Corrected for instru'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.21	665.7	29.93	760.2	64.8	18.2	90	SE			1	9ck	0			0	0	Cloudy	Amand Maison.

DANISH SERIES.

Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.

Copenhagen	29.84	758.0	29.89	759.2	69.3	20.7	44	S	9	4			0						Oversergent Fischer.
Fanöe	29.72	754.9	29.74	755.4	69.6	20.9	61	ESE			4		1						Overloerer Lauridsen.
Godthaab, Greenland	30.09	764.2	30.13	765.3	42.6	5.9	84	SW			4		1						S. Kleinschmidt.
Stykkisholm, Iceland	30.05	763.3	30.10	764.4	46.4	8.0		E			7		2						A. O. Thorlacius.
Thorshavn,	29.83	757.6	29.86	758.5	48.0	8.9	96	NE	9	4			10					Foggy	Overloerer Bergh.
Vestervig	29.71	754.6	29.80	757.0	71.1	21.7	42	SE			4		1						Locarer Oesterbol.

FRENCH SERIES.

Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.

Agen, Normal School	29.39	746.6	30.02	762.4	73.0	22.8	48	NNW			2	0	n;nk		W	0	0		M. Labroue, Director.
Alençon Normal School	29.41	747.1	29.97	761.1	66.2	19	86	N			1	0	skn		N	0.087	2.2	Cloudy	M. Nicot, Director.
Arras, Engineer School	29.62	752.4	29.87	758.8	62.1	16.7	70	W			3	0	kn		W				M. Klein, Commandant.
Avignon, Normal School	29.89	759.3	29.97	761.3	81.7	27.6	49	SSE			1		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.41	746.9	29.95	760.6	67.5	19.7	65	W			4		8		W	0.205	5.2	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.65	753.0	29.90	759.5	68.9	20.5	58	W			1		8	W	SW	0.16	4.	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.13	739.8	29.95	760.7	68.9	20.5	67	WSW			1		n		W	0.256	6.5		M. Gobin, Director.
Bordeaux, Observatory	29.76	755.8	30.01	762.2	72.5	22.5	57	SW			1		8		SW	0.035	0.9	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.47	748.6	30.01	762.3	67.3	19.6	61	W			1		n		W	0.106	2.7		M. Postel, Director.
Brest, Naval Observatory	29.65	753.2	29.90	759.4	67.3	19.6	73	SW			3		6		SW	0.031	0.8		M. de Rermarec, Dir.
Caen, Normal School	29.80	756.9	29.87	758.7	69.8	21	57	SSW			1		8		W	0.161	4.1	Slightlycl'dy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.58	751.3	29.89	759.2	72.3	22.4	48	NE			1		8	E	E	0.756	19.2	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.38	746.2	29.88	758.8	67.3	19.6	63	S			1					0.71	18.		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.63	727.2	29.93	760.2	75.0	23.9	53	NW			1		8		W	0.016	0.4	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.16	740.6	29.97	761.3	72.7	22.6	81	WSW			1		4			0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.09	738.9	29.93	760.2	64.8	18.2	78	W			3		8kn	W	W	0.47	12.	Very cloudy	Dr. Coulet, Director.
Gap, Normal School	27.50	698.6	29.93	760.2	77.7	25.4	39	NW			1	ck	0	W		0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.91	734.2	30.05	763.2	79.2	26.2	44	SW			2		2		S	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.16	740.7	29.89	759.1	78.3	25.7	40	NW			1	0	cs;kn			0	0		M. Ablard, Director.
Guéret, Normal School	28.45	722.5	29.98	761.4	66.7	19.3	58	SW			1		k		NE	0	0		M. Riviere, Director.
Lamballe, Normal School	29.69	754.0	29.95	760.8	65.3	18.5	78	NNE			1				NNE	0	0		M. Oilitrault, Director.
Lescar, Normal School	29.44	747.7	30.09	764.3	69.8	21	82	E			1					0	0		M. Chauvin, Director.
Lorient, Naval Observatory	29.89	759.2	29.99	761.8	64.4	18.0	71	SW			1		8		SW	0.165	4.2	¾ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.95	735.3	29.97	761.3	70.9	21.6	69	E			1		8		W	0.362	9.2	Very cloudy	M. André, Director.
Mans, Normal School	29.64	752.9	29.95	760.6	64.9	18.3	75	W			1		5		NW	0.28	7.	Cloudy	M. Piboeu, Director.
Marseille, Observatory	29.71	754.5	29.97	761.2	76.3	24.6	58	S			1		2		SW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.87	631.7	30.11	764.7	62.6	17.0	72	NW	9.4	4.2			4		E	0	0	Foggy	M. Cave, for Dr. Fines.
Montpellier, Normal School	29.84	757.9	29.95	760.6	77.0	25	69	SSW			2		0			0	0	Clear	M. P. Galzin, Director.
Nancy, Normal School	29.21	741.9	29.96	761.0	65.8	18.8	73	WNW			1	0	skn		WNW	0.295	7.5	Cloudy	M. Hasse.
Nantes, Observatory	29.80	756.9	29.96	761.0	67.1	19.5	67	WSW			1-2		9kn	WSW	W	0.165	4.2		M. Larocque, Director.
Nice	29.95	760.8	29.99	761.7	73.8	23.2	59	S			2		1	S	S	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.87	758.7	29.97	761.3	73.8	23.2	64	SE	9.4	4.2			1	W		0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.60	574.1			49.6	9.8							1		SW	0	0	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	28.91	734.3	29.92	759.9	82.4	28	41	S			1		Hazo	S	S	0	0	Hazy	M. Taillieu.
Puy de Dôme Obs'y, Summit	25.19	639.9			51.1	10.6	95	W			3		10			0.039	1.0	Foggy	M. Alluard, Director.
Rochefort, Naval Obs'y	30.07	763.8	30.10	764.6	69.8	21.0	96	SW			1		8		SW	0	0	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.74	755.4	29.95	760.8	67.6	19.8	64	W			3		10			0	0	Covered	M. Mouillot, Director.
Rodez, Normal School	27.90	708.6	29.99	761.7	68.0	20	58	W			1		10			0	0	Covered	M. Richard, Director.
Rouen, Normal School	29.80	757.0	29.88	759.0	65.8	18.8	69	SSW			2		8		S	0.31	8.	Very cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.74	755.3	29.89	759.3	67.1	19.5	60	NW			1		5		NE	0.571	14.5	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.76	755.9	29.93	760.1	69.1	20.6	62	SW			1		4		WSW	0.295	7.5		M. Renou, Director.
Toulouse, Observatory	29.33	744.9	30.05	763.3	73.4	23.0	65	NW			1		10			0	0	Covered	M. Bailland, Director.
Tours	29.75	755.6	29.95	760.6	70.9	21.6	58	SW			2		8		SW	0.008	0.2	¾ covered'	M. de Tastes.
Versailles, Observatory	29.43	747.5	29.92	760.0	68.7	20.4	58	SW			2					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.64	752.9	29.93	760.3	68.7	20.4	63	W			1		9		WSW	0.232	5.9		M. Marié Davy, Director.

GERMAN SERIES.

Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.

Bamberg	29.02	737.1	29.88	758.9	69.1	20.6	70	SSE			2	0	8n		SE	0.236	6.0		Prof. Dr. Hoh.
Berlin	29.68	753.9	29.85	758.2	66.4	19.1	73	SE			1		10					Light rain	Prof. Dr. Arndt.
Breslau	29.40	746.7	29.93	760.1	71.2	21.8	39	SE			2		9			0	0		Royal University Obs'y.
Carlsruhe	29.47	748.6	29.89	759.1	71.6	22.0	66	W			3		10	SW		0.189	4.8		Albert Senz.
Cassel	29.10	739.2	29.82	757.4	72.0	22.2	50	W			5		4	W		0.043	1.1	Thnd'r str'm	Dr. H. Möhl.
Frankfort on the Main	29.52	749.7	29.86	758.5	75.4	24.1	48	W			2		4			0.126	3.2		Physical Society.
Friedrichshafen	28.52	724.4	29.89	759.3	72.9	22.7	67	S			1		9	SW		0.035	0.9		Wilhelm, Chief Tel.
Hamburg	29.71	754.7	29.78	756.5	71.6	22.0	55	S			4		7			0	0		Dr. R. Kleeman.
Kiel	29.76	755.9	29.78	756.3	69.8	21.0	42	ESE			2		0			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.44	747.7	29.85	758.2	62.6	17.0	94	S			1		10	SW		0	0		Prof. Dr. Bruhns.
Magdeburg	29.63	752.7	29.82	757.4	56.5	13.6	95	E			1		10ks			0.201	5.1	Rain & fog	Dr. Assmann.
Memel	29.92	760.0	29.97	761.2	59.7	15.4	53	NW			3								Reinbrecht & Issermann.
Munich	28.11	714.1	29.97	761.3	70.0	21.1	60	SW			2		7	W		0.177	4.5		Central Station.
Neufahrwasser	29.91	759.8	29.93	760.2	63.7	17.6	49	NE			2		0			0	0		A. Lothes.
Neustadt, Palatinate																0.319	8.1		Dicknether.
Stuttgart	28.97	735.8	29.84	757.9	64.4	18.0	82	W			3		10			0.276	7.0	Raining	Prof. Dr. Schoder.
Weissenburg, Bavaria	28.39	721.0	29.84	757.9	68.0	20.0	62	Calm			0		8	SE		0.441	11.2		Prof. Kemlein.
Wustrow	29.82	757.5	29.85	758.2	74.5	23.6	37	ESE			2	0	3s			0	0		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Tempera-ture of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direc-tion. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.63	752.5	30.00	762.1	79.9	26.6		SW			1.0		0					Smoky	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.50	749.4	29.55	750.6	88.0	31.1	80	SW	17.0	7.6			6		WSW	0	0	Misty	
Deesa	29.11	739.3	29.57	751.0	93.8	34.3	39	S	22.5	10.0			8		S	0.05	1.3	D. clouds	
Bombay	29.71	754.7	29.75	755.7	86.3	30.2	76	SW	15.0	6.7			5			0	0	D. clouds	
Poona, Yarrowda	27.91	708.9	29.73	755.2	85.0	29.4	45	WSW	22.0	9.8			4		WSW	0	0	D. clouds	
Belgaum	27.27	692.6	29.78	756.5	79.6	26.4	58	WSW	11.0	4.9			1		SW	0	0	D. clouds	
Lahore	28.62	727.0	29.32	744.7	105.3	40.7	24	W	4.2	1.9			0			0	0	Misty	
Roorkee	28.54	724.9	29.41	747.1	86.2	30.1	58	NW	4.9	2.2			10			0.02	0.5	Misty	
Agra	28.91	734.2	29.44	747.8	103.1	39.5	30	SW	10.1	4.5			0			0	0		
Nagpur	28.58	726.0	29.59	751.6	94.5	34.7	34	W	5.7	2.6			4		NW	0	0	D. clouds	
Jubbulpore	28.27	718.0	29.59	751.7	89.0	31.7	42	W	7.3	3.3			0			0	0		
Lucknow	29.09	738.8	29.45	748.1	92.8	33.8	47	WNW	5.4	2.4			0			0	0	Blue sky	
Allahabad	29.17	740.9	29.47	748.5	99.8	37.7	37	W	6.6	3.0			7		W	0	0	D. clouds	
Patna	29.30	744.2	29.47	748.7	90.4	32.4	67	NW	4.5	2.0			10	NW	NW	0	0	Overcast	
Hazaribagh	27.57	700.3	29.52	749.8	89.0	31.7	58	W	10.4	4.6			4			0	0	Misty	
Cuttack	29.52	749.8	29.60	751.8	87.5	30.8	59	WSW	2.3	1.0			9			0	0	D. clouds	
Calcutta, Alipore	29.54	750.2	29.56	750.8	88.8	31.6	80	SSW	7.0	3.1			10			0	0	Overcast	
Dhubri	29.40	746.8	29.52	749.9	81.5	27.5	91	Calm	1.6	0.7			9			1.05	26.7	Gloomy	
Chittagong	29.58	751.4	29.67	753.6	83.2	28.4	88	S	6.0	2.7			9			0	0	D. clouds	
Sibsagar	29.20	741.5	29.52	749.9	82.3	27.9	90	SW	3.5	1.6			10	W	W	1.13	28.7	D. clouds	
Zanzibar, Africa			30.06	763.5	82.9	28.3	57	SSW	10	4.5			3		SSW	0	0	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.55	750.5	29.95	760.7	75.4	24.1	62	W	0.7	0.3			6			0.744	18.9		Prof. Giovanni Clodig.
Milan	29.41	747.1	29.91	759.8	78.1	25.6	52	SW	1.6	0.7			9	WSW		0	0		Prof. Schiaparelli.
Padua	29.82	757.4	29.93	760.1	77.7	25.4	52	SSE	4.3	1.9			3			0.004	0.1		Prof. Dott. Lorenzoni.
Moncalieri	29.04	737.5	29.92	759.9	76.1	24.5	58	E	6.5	2.9			8	N		0	0		Prof. P. F. Denza.
Genoa	29.85	758.1	30.04	763.0	69.4	20.8	78	SE	12.5	5.6			6	SE		0	0		Prof. G. M. Garibaldi.
Mondovi	28.05	712.4	29.90	759.4	73.9	23.3	60	N			4		0			0	0		Prof. D. C. Bruno.
Pesaro	29.90	759.4	29.95	760.6	74.8	23.8	61	W	5.6	2.5			4			0	0		Prof. Luigi Guidi.
Florence	29.74	755.5	30.00	761.9	78.8	26.0	48	SW			2		1			0	0		Prof. Costantino Pitter.
Leghorn	29.96	761.0	30.04	763.1	73.6	23.1	74	SW	0.7	0.3			10			0	0		Prof. P. Monte.
Rome	29.89	759.1	30.06	763.5	78.4	25.8	39	SW	7.4	3.3			6			0	0		Prof. P. S. Ferrari.
Lecce	29.78	756.3	30.02	762.6	85.1	29.5	48	SE	0.7	0.3			4			0	0		Prof. C. de Giorgi.
Cosenza	29.16	740.7	30.03	762.8	82.0	27.8	73	SE	1.8	0.8			8	SE		0	0		Prof. D. Conti.
Cagliari	29.86	758.5	30.05	763.3	76.1	24.5	52	SE			2		10			0	0		Prof. A. Paolnotti.
Palermo	29.84	757.9	30.09	764.2	73.2	22.9	52	E	4.9	2.2			10			0	0		Prof. G. Cacciatore.
Syracuse	30.00	761.9	30.04	763.0	78.1	25.6	61	SE	3.1	1.4			10			0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.53	750.1	30.04	763.1	75.0	23.9	66	SSE	0	0			10	SW		0	0		Prof. F. Brioschi.
Stelvio	22.25	565.2			47.1	8.4	65	W			1	9cs	0	SW		0.256	6.5	Misty	Prof. P. F. Denza.
Valdobbia	22.29	566.1			48.0	8.9	73	W			4		10kn		NW	0	0	Misty	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y †..	29.61	752.1	29.63	752.6	67.5	19.7	94	NNE	7.0	3.1			10s			0.645	16.4	Covered	K. Sasaki.
Kioto	29.50	749.3	29.67	753.6	68.1	20.1	92	NNE	3.3	1.5			10n			1.370	34.8	Raining	M. Tojima.
Nagasaki, I. M. Obs'y	29.42	747.2	29.61	752.1	69.9	21.1	97	E	6.6	2.9			10s			0.400	10.2	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	29.71	754.6	29.77	756.1	70.9	21.6	83	S	7.3	3.3			10n;s;c	k		2.620	66.6	Cloudy	The Staff.
Wakayama	29.55	750.6	29.60	751.8	71.8	22.1	94	SSW	25.7	11.5			10n			2.222	56.4	Raining	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	30.01	762.2	30.20	767.1				E	24.5	11.0		0	4			0.03	0.8	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.35	618.4	29.95	760.6	64.0	17.8	72	W			1	0	0			Inap	Inap.	Blue sky	Prof. M. Leal.
Mazatlan	29.62	752.2	29.87	758.7	79.5	26.4	87	ESE	0.9	0.4		0	8n		NE	0.748	19.0	Cloudy	F. Quijano, U. E.
Mexico, Central Obs'y	23.05	585.5	29.91	759.8	55.6	13.1	85	Calm	0	0		0	10pk			0	0	Overcast	The Staff.
Pabellon, Aguascalientes	23.89	606.9	29.85	758.2	62.6	17.0	67	W			1	0	1ks		NE	0	0	Clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.39	594.2	30.09	764.2	57.2	14.0	50	Calm	0	0		0	0			0.611	15.5	Clear	Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.51	571.8	30.08	763.9	54.9	12.7	71	Calm	0	0		0	0			0	0	Clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.85	758.3	29.85	758.3	63.7	17.6		W			4					1.122	28.5		
Groningen	29.71	754.6	29.76	756.0	60.4	15.8		WNW			3					0.622	15.8		
Helder	29.78	756.3	29.78	756.3	58.8	14.9		SW			3					0.205	5.2		
Hellevoetsluis	29.82	757.3	29.82	757.3	60.6	15.9	91	WSW			4					1.827	46.4		
Utrecht	29.78	756.3	29.82	757.5	63.9	17.7	84	W			2		8			0.650	16.5	Very cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.77	756.2	29.84	757.8	62.6	17.0	59	NNW	4.9	2.2			0			0	0		
Christiania	29.63	752.5	29.76	756.0	77.9	25.5	35	SSE	2	1			3			0	0		
Gjæsvær	29.80	756.8	29.82	757.4	36.0	2.2		WNW			6		10						
Lodingen	29.90	759.4	29.95	760.6	45.3	7.4	51	N			4		8			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.97	761.2	29.98	761.6	69.4	20.8	87	W	13.0	5.8			1			0	0		Dr. J. A. Sampaio.
Campo Major	29.10	739.1	30.07	763.7	75.2	24.0	39	WNW	3.1	1.4			9			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.15	765.8	30.24	768.0	71.1	21.7	70	WSW	6.3	2.8			10			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.79	756.6	30.14	765.6	68.7	20.4	70	SSW	12.5	5.6			8			Blank			The Staff.
Ponta Delgada, Azores	30.08	764.0	30.15	765.8	73.0	22.8	83	NW	6.3	2.8			3			0.039	1.0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.76	730.6	29.78	756.3	81.0	27.2	29	WSW	9	4		0	4k						Capt. Lasarew.
Archangel	29.82	757.3	29.84	757.8	48.0	8.9	52	NW	13	6			9ks						Capt. Sselliwerstow
Astrakhan	29.89	759.2	29.81	757.1	80.6	27.0	34	W	18	8		0	4k						Capt. Wisganow.
Barnaul‡	29.35	745.4	29.82	757.4	79.2	26.2	34	S	2	1			1						Meteorological Obs'y.
Dorpat	29.63	752.6	29.86	758.5	72.3	22.4	33	WNW	7	3		4c	0						Observatory.
Ekaterinburg	28.73	729.8	29.65	753.0	71.6	22.0	48	SW	9	4			10n						Meteorological Obs'y.
Kasan	29.32	744.8	29.58	751.4	64.2	17.9	76	NE	9	4			10						Observatory.
Kertch	29.91	759.7	29.93	760.2	69.8	21.0	93	S	4	2			5						Lagorio & Sastyrez.
Kieff	29.14	740.2	29.78	756.3	54.7	12.6	97	N	9	4			10ks;n					Raining	Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.56	750.8	29.76	755.9	70.9	21.6	47	WNW	22	10			8						Meteorological Obs'y.
Moscow	29.19	741.4	29.71	754.7	68.9	20.5	52	N	7.8	3.5		0	6ks						Meteorological Obs'y.
Nertchinsk	27.56	700.1	29.81	757.2	52.3	11.3	94	Calm	0	0			10			0.535	13.6		Meteorological Obs'y.
Nikolaiev	29.84	757.9	29.91	759.7	72.9	22.7	54	W	4	2		0	4kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor																			Lieut. Iwanow.
Pekin, China	29.49	749.1	29.63	752.7	69.8	21.0	74	NW	11	5			10n					Thund'r st'm	Physical Observatory.
St. Petersburg	29.75	755.7	29.77	756.1	69.1	20.6	40	NW	13	6		cs	10k					Light clouds	Central Physical Obs'y.
Tashkend, Laboratory	28.30	718.9	29.77	756.1	86.0	30.	49	Calm	0	0			0						Teich, A. M.
Tiflis	28.54	725.0	29.89	759.1	80.2	26.8	37	Calm	0	0			10ks						Physical Observatory.
Warsaw	29.53	750.0	29.94	760.4	69.3	20.7	41	ENE	2	1		0	3k						Astronomical Obs'y.
Wilna	29.48	748.9	29.89	759.2	69.1	20.6	43	WNW	4	2			3						Berg, Assistant.
Yeniseisk	29.67	753.6	29.95	760.6	69.3	20.7	49	Calm	0	0			0						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.74	755.4	62.8	17.1	64	E			2	0	0			0.03	0.8	Hazy	Andrew Gibb.
Monach Lt. House, Hebrides			29.68	753.9	60	15.6	94	SSE			3	10	5	SSE		0.3	S.	Hazy	J. Youngclause.
North Unst, Shetland Isl'ds			29.44	747.8				E			2		Fg						Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.91	759.6	30.01	762.3	72.0	22.2	73	SSE	4.0	1.8			0			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.00	761.9	30.05	763.3	76.5	24.7	48	E	2.5	1.1		3	3	W		0	0	Cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.13	689.0			66.2	19.0	54	SW	8.3	3.7			5			0	0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.83	706.8	29.97	761.1	77.0	25.0	43	SW	14.1	6.3		0	1			0	0	Almost clear	The Staff.
Murcia, Met. Obs'y‡	29.82	757.5	29.97	761.1	91.4	33.0	34	WSW	2.7	1.2		2	6	E		0	0	Hazy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.13	739.8	30.00	762.1	64.6	18.1	75	SW	2.5	1.1			9			0.150	3.8	Almost cov'd	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	29.84	757.8	29.90	759.5	80.4	26.9	87	E	5.6	2.5		6cs	4n	E	E	0.535	13.6	Cloudy	Benito Vinos, S. J.
Manilla, Philippine Islands	29.80	756.9	29.85	758.2	83.7	28.7	84	SE	2.2	1.0		0	1ks			0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.01	762.2	30.11	764.7	72.1	22.3	70	NW	12.7	5.7			10		NW	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.97	761.2	30.06	763.5	77.4	25.2	98	S	9.6	4.3		5cs	3kn	S	S	0	0	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegafao, Philippine Ids	29.71	754.6	29.85	758.3	87.3	30.7	67	SSW	6.3	3.3		0	1ks		S	0	0	Clear	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.83	757.7	29.87	758.7	54.7	12.6	34	NE			2		2			0	0		
Umea	29.80	757.0	29.85	758.3	57.2	14.0	41	E			7		2			0	0		
Hernösand	29.82	757.3	29.87	758.6	55.2	12.9	56	E			4		0			0	0		
Stockholm	29.62	752.3	29.80	756.8	75.3	24.6	43	SW			2		1			0	0		
Wisby	29.82	757.5	29.88	759.0	68.0	20.0	40	SW			4		3			0	0		
SUB-SERIES.																			
Upsala	29.61	752.0	29.69	754.2	72.5	22.5	35	N	5.4	2.4			6	WNW		0	0		S. G. Fineman.
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.55	725.2	29.92	759.9	74.5	23.6	42	SSW			4		10			0.047	1.2	Covered	The Observatory.
Zurich‡	28.35	720.1	29.96	760.9	63.7	17.6	87	W			4		7			0.142	3.6	Raining	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.97	761.2	71.8	22.1	59	NE	4	2.0			8		SW	0.079	2.0		The Observatory.
Valona			30.13	765.4	77.9	25.5		SW			1		Hz			0	0	Hazy	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			30.00	761.9	80.1	26.7	60	W			1	0	1k		SE	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.61	752.1	29.69	754.1	66	18.9	74	S	4	1.8			10s		NW	0	0	Cloudy	
Alpena, Michigan	29.17	740.9	29.82	757.4	56.8	13.8	81	NW	10	4.5		0	0			0.08	2.0	Clear	
Atlanta, Georgia	28.83	732.3	29.98	761.5	78.5	25.8	72	NW	7	3.1		5c	0	Calm		0	0	Fair	
Atlantic City, New Jersey	29.81	757.2	29.82	757.4	68	20.0	84	SW	11	4.9		2c	Hz	Calm	Calm	0	0	Fair	
Augusta, Georgia	29.76	755.9	29.94	760.5	80.7	27.1	63	Calm	0	0		0	Hz			0	0	Clear	
Baltimore, Maryland	29.78	756.4	29.83	757.7	73	22.8	72	W	4	1.8			10s		W	0	0	Cloudy	
Barnegat, New Jersey	29.76	755.9	29.78	756.4	74	23.3	72	SW	15	6.7		2cs	5s	W	W	0	0	Fair	
Bismarck, Dakota	28.20	716.3	29.94	760.5	54	12.2	86	NE	5	2.2			10s		Calm	0.22	5.6	Cloudy	
Boise City, Idaho	26.95	684.5	29.71	754.6	57.3	14.1	69	NW	1	0.4		8k	0	W		0	0	Fair	
Boston, Massachusetts	29.57	751.1	29.72	754.9	64.7	18.2	60	SW	3	1.3			10s		W	0	0	Cloudy	
Brackettville, Texas	28.70	729.0	29.71	754.6	74	23.3	76	E	4	1.8		0	0			0	0	Clear	
Brownsville, Texas	29.81	757.2	29.85	758.2	80	26.7	82	Calm	0	0		0	0			0	0	Clear	
Buffalo, New York	29.07	738.4	29.76	755.9	61.2	16.2	79	NE	1	0.4		0	0			Inap.	Inap.	Clear	
Burlington, Vermont	29.37	746.0	29.65	753.1	61.0	16.1	88	S	6	2.7			10s		W	0.10	2.5	Cloudy	
Cairo, Illinois	29.57	751.1	29.96	761.0	76	24.4	82	SW	4	1.8		0	0			0.19	4.8	Clear	
Campo, California	27.33	694.2	29.90	759.4	35.4	1.9	49	E	3	1.3		0	0			0	0	Clear	
Camp Thomas, Arizona	27.12	688.8			65.5	18.6	31	Calm			0	2ck	0			0	0	Clear	
Cape Henry, Virginia	29.87	758.7	29.89	759.2	75	23.9	52	SW	16	7.2		2ck	0			0	0	Clear	
Cape May, New Jersey	29.80	756.9	29.83	757.7	71	21.7	80	SW	13	5.8		0	Hz			0	0	Clear	
Castroville, Texas	29.13	739.9	29.79	756.7	80	26.7	66	SE	1	0.4			10s			0	0	Cloudy	
Cedar Keys, Florida	29.96	761.0	29.98	761.5	80	26.7	82	NE	6	2.7		5c	0			0	0	Fair	
Champaign, Illinois	29.10	739.1	29.85	758.2	69.1	20.6	90	SE	4	1.8			10s		SE	0.12	3.0	Cloudy	
Charleston, S. Carolina	29.88	758.9	29.94	760.5	81	27.2	58	SW	6	2.7		0	0			0	0	Clear	
Charlotte, N. Carolina	29.07	738.4	29.93	760.2	80.0	26.7	59	W	1.	0.4		10cs	Hz	W		0	0	Cloudy	
Chattanooga, Tennessee	29.16	740.7	29.96	761.0	71	21.7	90	Calm	0	0		5cs	Fg	W	Calm	0.58	14.7	Fair	
Cheyenne, Wyoming	23.97	608.8	29.78	756.4	60	15.6	82	SW	4	1.8		0	0			0.07	1.8	Clear	
Chicago, Illinois	29.18	741.2	29.86	758.4	69.3	20.7	81	N	4	1.8		10c	0			0.11	2.8	Cloudy	
Chincoteague, Virginia	29.87	758.7	29.89	759.2	70	21.1	80	SW	17	7.6			Fg		Calm	0	0	Dense fog	
Cincinnati, Ohio	29.27	743.4	29.91	759.7	73	22.8	81	SW	3	1.3		10cs	0	W		1.16	29.5	Cloudy	
Cleveland, Ohio	29.11	739.4	29.83	757.7	68	20.0	79	NW	8	3.6		2k	1s	NW	NW	0	0	Fair	
Coleman City, Texas	28.10	713.7	29.68	753.9	72	22.2	67	S	2	0.9		0	0			0	0	Clear	
Columbus, Ohio	29.01	736.8	29.83	757.7	72	22.2	71	W	5	2.2		2cs	0	W		0.03	0.8	Clear	
Concho, Texas	27.98	710.7	29.86	758.4	71	21.7	80	S	2	0.9		0	0			0	0	Clear	
Corsicana, Texas	29.48	748.8	29.94	760.5	77	25.0	77	S	4	1.8		0	0			0	0	Clear	
Davenport, Iowa	29.23	742.4	29.87	758.7	71	21.7	80	Calm	0	0			10s		Calm	0.19	4.8	Cloudy	
Dayton, Washington T'y	28.05	712.5	29.80	756.9	53	11.7	79	N	4	1.8		5c	0	Calm		0	0	Fair	
Deadwood, Dakota	25.34	643.6	29.89	759.2	52	11.1	86	NE					10n			0.06	1.5	Light rain	
Decatur, Texas	28.73	729.7	29.85	758.2	77	25.0	69	SE	8	3.6		0	0			0	0	Clear	
Delaware Breakwater, Del.	29.81	757.2	29.83	757.7	71	21.7	75	SW	25	11.2		2c	Hz	W		0	0	Fair	
Denison, Texas	29.13	739.9	29.91	759.7	79	26.1	70	S	5	2.2		0	0			0	0	Clear	
Denver, Colorado	24.66	626.4	29.73	755.1	61.4	16.3	50	S	3	1.3		0	0			0	0	Clear	
Des Moines, Iowa	29.01	736.8	29.89	759.2	66	18.9	95	NW	4	1.8			10s		NW	1.57	39.9	Cloudy	
Detroit, Michigan	29.13	739.9	29.80	756.9	66.2	19.0	79	NW	8	3.6		5k	0	N		0	0	Fair	
Dodge City, Kansas	27.21	691.1	29.70	754.4	71	21.7	49	S	10	4.5		0	0			0	0	Clear	
Dubuque, Iowa	29.18	741.2	29.86	758.4	66.5	19.2	89	S	2	0.9			10s		Calm	1.70	43.2	Cloudy	
Duluth, Minnesota	29.21	741.9	29.89	759.2	60	15.6	71	W	3	1.3		0	0			0.08	2.0	Clear	
Eagle Pass, Texas	29.10	739.1	29.91	759.7	76.4	24.7	77	SE	3	1.3		0	0			0	0	Clear	
Eagle Rock, Idaho	25.02	635.5	29.73	755.1	54	12.2	61	N	3	1.3		0	0			0	0	Clear	
Eastport, Maine	29.62	752.3	29.69	754.1	48	8.9	85	S	14	6.3			10s		S	0	0	Cloudy	
El Paso, Texas	26.10	662.9	29.75	755.6	69	20.6	52	Calm	0	0		0	0			0	0	Clear	
Erie, Pennsylvania	29.07	738.4	29.75	755.6	65	18.3	84	W	10	4.5			10ks		W	0	0	Cloudy	
Escanaba, Michigan	29.16	740.7	29.80	756.9	62	16.7	77	Calm	0	0		0	0			0.11	2.8	Clear	
Florence, Arizona	28.31	719.1	29.91	759.7	85	29.4	23	W	3	1.3		0	0			0	0	Clear	
Fort Apache, Arizona	25.00	635.0	29.78	756.4	50	10.0	39	E	3	1.3		0	Sk		Calm	0	0	Dense smoke	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota	28.29	718.6	29.76	755.9	63	17.2	62	E	16	7.2			10s		SE	0	0	Cloudy	
Fort Benton, Montana	27.23	691.6	29.97	761.2	46	7.8	100	NE	3	1.3			10n		NE	0.32	8.1	Light rain	
Fort Buford, Dakota	28.04	712.2	29.96	761.0	53	11.7	93	NE	12	5.4		10cs	0	SW		0.17	4.3	Cloudy	
Fort Custer, Montana	26.73	678.9	29.82	757.4	58	14.4	82	W	8	3.6			10s		Calm	0	0	Cloudy	
Fort Davis, Texas	25.12	638.0	30.08	764.0	67	19.4	46	W	4	1.8		0	0			0	0	Clear	
Fort Elliott, Texas	27.14	689.3	30.21	767.3	65	18.3	35	S	4	1.8		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.35	745.5	29.88	758.9	79	26.1	74	SE	2	0.9		0	0			0	0	Clear	
Fort Grant, Arizona	25.25	641.3	30.05	763.3	66	18.9	8	NE	4	1.8		2k	0			0	0	Clear	
Fort Griffin, Texas	28.60	726.4	29.82	757.4	76.2	24.6	73	SE	2	0.9		0	0			0	0	Clear	
Fort Keogh, Montana	27.38	695.4	29.79	756.7	56	13.3	80	NE	16	7.2		5cs	0	SW		0.23	5.8	Fair	
Fort Macon, North Carolina	29.92	760.0	29.93	760.2	78	25.6	91	S	10	4.5		5cs	Hz	Calm	Calm	0	0	Fair	
Fort McKavett, Texas	27.63	701.8	29.46	748.3	69.8	21.0	57	SW	4	1.8		0	0			0	0	Clear	
Fort Missoula, Montana	26.59	675.4	29.97	761.2	56	13.3	75	SE	8	3.6			10n		S	0.20	5.1	Light rain	
Fort St. Michaels	29.94	760.5	29.97	761.2	49	9.4	85	SE	2	0.9		0	0			0	0		
Fort Shaw, Montana	26.40	670.5	29.85	758.2	47	8.3	100	NE	10	4.5			10n		N	0.63	16.0	Light rain	
Fort Sill, Indian Territory	28.66	728.0	29.87	758.7	74	23.3	72	S	5	2.2		0	0			0	0	Clear	
Fort Stevenson, Dakota																			
Fort Verde, Arizona																			
Fredericksburg, Texas					58.1	14.5	27	W			1	5k	0	S		0	0	Fair	
Galveston, Texas	28.20	716.3	29.69	754.1	73	22.8	76	Calm	0	0		1k	0			0	0	Fair	
Grand Haven, Michigan	29.88	758.9	29.93	760.2	82	27.8	75	S	5	2.2		1k	0	S		0	0	Clear	
Hatteras, North Carolina	29.23	742.4	29.88	758.9	64	17.8	78	Calm	0	0		0	0			0.25	6.3	Clear	
Helena, Montana	29.93	760.2	29.95	760.7	76	24.4	86	S	6	2.7		0	2s			0	0	Clear	
Henrietta, Texas	25.74	653.8	29.94	760.5	50	10.0	72	N	5	2.2			10s		Calm	0	0	Cloudy	
Indianapolis, Indiana	28.88	733.5	29.74	755.4	81	27.2	67	SE	5	2.2		0	0			0	0	Clear	
Indianola, Texas	29.10	739.1	29.87	758.7	72	22.2	80	W	2	0.9		4c	4s	Calm	Calm	0.37	9.4	Fair	
Jacksboro, Texas	29.89	759.2	29.92	760.0	78.9	26.1	82	SE	6	2.7		0	2ks		Calm	0	0	Fair	
Jacksonville, Florida	28.74	730.0	29.82	757.4	74	23.3	76	SE	6	2.7		0	0			0	0	Clear	
Keokuk, Iowa	29.95	760.7	29.97	761.2	84	28.9	71	SW	12	5.4		0	0			0	0	Clear	
Key West, Florida	29.20	741.7	29.82	757.4	71.7	22.1	80	S	4	1.8			10ks		SW	1.02	25.9	Cloudy	
Kittyhawk, North Carolina	29.91	759.7	29.94	760.5	82.0	27.8	71	E	12	5.4			10s			0	0	Cloudy	
Knoxville, Tennessee	29.92	760.0	29.94	760.5	77	25.0	73	SW	12	5.4		1ck	Hz	SW		0	0	Clear	
La Crosse, Wisconsin	28.99	736.3	29.99	761.7	70	21.1	90	SW	1	0.4			10s		W	0.07	1.8	Cloudy	
La Mesilla, New Mexico	29.12	739.6	29.84	757.9	65.5	18.6	89	NW	4	1.8			Fg			0.23	5.8	Dense fog	
Laredo, Texas	25.98	659.9	30.14	765.5	65.8	18.8	69	Calm	0	0		2ck	1s	SW		0.20	5.1	Fair	
Leavenworth, Kansas	29.40	746.7	29.73	755.1	78	25.6	86	SE	4	1.8		0	0			0	0	Clear	
Lewiston, Idaho	29.01	736.8	29.88	758.9	75	23.9	77	NW	3	1.3		4k	0	SW		0	0	Fair	
Little Rock, Arkansas	28.96	735.6	29.79	756.7	49	9.4	77	Calm	0	0		0	2s		Calm	0	0	Clear	
Los Angeles, California	29.60	751.8	29.91	759.7	78	25.6	86	SW	2	0.9		0	0			0	0	Clear	
Louisville, Kentucky	29.54	750.3	29.91	759.7	54.1	12.3	80	NE	2	0.9		0	0			0	0	Clear	
Lynchburg, Virginia	29.37	746.0	29.92	760.0	72.0	22.2	80	SW	9	4.0			10s		W	0.37	9.4	Cloudy	
Madison, Wisconsin	29.21	741.9	29.88	758.9	76	24.4	56	Calm	0	0			10s			0	0	Cloudy	
Marquette, Michigan	28.88	733.5	29.86	758.4	65	18.3	89	NW	3	1.3		10c	0	Calm		0.44	11.2	Cloudy	
Mason, Texas	29.09	738.9	29.80	756.9	66	18.9	69	NW	4	1.8		0	0			0.09	2.3	Clear	
Memphis, Tennessee	28.29	718.6	29.98	761.5	71.5	21.9	83	Calm	0	0		0	0			0	0	Clear	
Milwaukee, Wisconsin	29.63	752.6	29.96	761.0	79.5	26.4	74	E	5	2.2		0	0			0	0	Clear	
	29.14	740.1	29.87	758.7	63	17.2	94	Calm	0	0			Fg			0.24	6.1	Dense fog	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.92	760.0	29.99	761.7	78	25.6	86	N	4	1.8		1k	o			o	o	Clear	
Montgomery, Alabama	29.76	755.9	29.98	761.5	81.2	27.3	74	W	1	0.4		2c	Hz			o	o	Clear	
Moorhead, Minnesota	28.97	735.8	29.93	760.2	59.1	15.1	76	N	4	1.8		5cs	o	NW		o	o	Fair	
Morgantown, W. Virginia	28.88	733.5	29.83	757.7	69	20.6	85	S	5	2.2		5cs	5s		W	o	o	Cloudy	
Mt. Washington, N. H.	23.54	597.9	29.58	751.3	40	4.4	100	NW	39	17.4			10n;fg		NW	0.28	7.1	Light rain	
Nashville, Tennessee	29.44	747.8	29.96	761.0	72.2	22.3	80	SE	3	1.3		8ck	o	S		0.67	17.0	Fair	
New Haven, Connecticut	29.64	752.8	29.75	755.6	66	18.9	74	Calm	o	o		10c	Hz			o	o	Cloudy	
New London, Connecticut	29.68	753.9	29.74	755.4	59	15.0	65	W	6	2.7		o	o			o	o	Clear	
New Orleans, Louisiana	29.90	759.4	29.95	760.7	80.8	27.1	83	S	2	0.9		o	Sk			o	o	Clear	
Newport, Rhode Island	29.71	754.6	29.76	755.9	66.7	19.3	72	S	6	2.7		4ck	1s	Calm	Calm	o	.o	Fair	
New River, N. Carolina					83	28.3	80	S			1	5ck	o					Fair	
New Shoreham, Rhode I'd	29.74	755.4	29.77	756.1	68.0	20.0	65	SW	18	8.0		5ck	o	Calm		o	o	Fair	
New York, New York	29.62	752.3	29.79	756.7	64	17.8	89	SW	7	3.1		8cs	o			o	o	Fair	
Norfolk, Virginia	29.87	758.7	29.91	759.7	76	24.4	60	S	9	4.0		2ck	o	W		o	o	Clear	
North Platte, Nebraska	26.89	683.0	29.71	754.6	70	21.1	90	NE	16	7.2			10s		NE	o	o	Threatening	
Olympia, Washington T'y	29.73	755.1	29.77	756.1	45.5	7.5	88	N	1	0.4		5cs	o	Calm		o	o	Fair	
Omaha, Nebraska	28.66	728.0	29.80	756.9	77	25.0	67	SE	10	4.5		o	8ks		W	0.06	1.5	Cloudy	
Oswego, New York	29.40	746.7	29.72	754.9	58.0	14.4	94	N	2	0.9		2k	o	N		0.30	7.6	Fair	
Pensacola, Florida	29.95	760.7	29.98	761.5	79	26.1	82	SW	3	1.3		o	o			o	o	Clear	
Philadelphia, Pa	29.75	755.6	29.81	757.2	70	21.1	85	W	10	4.5		10c	Fg			o	o	Cloudy	
Phœnix, Arizona	28.72	729.5	30.48	774.2	64	17.8	53	E	2	0.9		o	o			o	o	Clear	
Pike's Peak, Colorado	17.93	455.4	30.14	765.5	37	2.8	31	SW	30	13.4		o	o			Inap.	Inap.	Clear	
Ploche, Nevada	23.90	607.0	29.75	755.6	54	12.2	15	SW	6	2.7		o	o			o	o	Clear	
Pittsburg, Pennsylvania	29.02	737.1	29.82	757.4	73	22.8	72	SW	5	2.2		2c;ck	o	SW		o	o	Clear	
Port Eads, Louisiana	29.97	761.2	29.98	761.5	80.3	26.8	87	SE	1	0.4		1c	o	SE		o	o	Clear	
Port Huron, Michigan	29.17	740.9	29.83	757.7	60.7	15.9	77	NE	5	2.2		o	o			o	o	Clear	
Portland, Maine	29.63	752.6	29.68	753.9	62	16.7	83	SW	12	5.4			10n		Calm	0.10	2.5	Light rain	
Portland, Oregon	29.72	754.9	29.79	756.7	55.7	13.2	79	S	7	3.1			10n;s		E	Inap.	Inap.	Light rain	
Portsmouth, N. Carolina					75	23.9	86	SW	10	4.5		o	Hz		Calm	o	o	Clear	
Prescott, Arizona	24.72	627.9	29.79	756.7	51	10.6	34	S	1	0.4		o	o			o	o	Clear	
Punta Rassa, Florida	29.94	760.5	29.95	760.7	80	26.7	78	E	7	3.1		1c	o	W		0.13	3.3	Clear	
Red Bluff, California	29.53	750.0	29.86	758.4	52.5	11.4	79	S	5	2.2		o	2s		Calm	o	o	Clear	
Rio Grande City, Texas	29.68	753.9	29.88	758.9	75	23.9	86	SE	3	1.3		o	o			o	o	Clear	
Rochester, New York	29.13	739.9	29.75	755.6	60	15.6	90	W	2	0.9		5k	o	W		0.17	4.3	Fair	
Roseburg, Oregon	29.32	744.7	29.88	758.9	53.8	12.1	74	N	2	0.9			10ks			o	o	Cloudy	
Sacramento, California	29.82	757.4	29.89	759.2	52.1	11.2	79	S	12	5.4		o	o			o	o	Clear	
St. Louis, Missouri	29.31	744.5	29.89	759.2	72.0	22.2	85	SW	8	3.6		2cs	2n			0.12	3.0	Light rain	
St. Paul, Minnesota	29.05	737.9	29.89	759.2	64	17.8	73	NW	1	0.4		o	o			0.28	7.1	Clear	
Salt Lake City, Utah	25.43	645.9	29.63	752.6	64	17.8	34	SE	12	5.4		o	o			o	o	Clear	
San Antonio, Texas	29.23	742.4	29.92	760.0	75.3	24.1	86	Calm	o	o		o	5ks		SE	o	o	Fair	
San Diego, California	29.79	756.7	29.86	758.4	59.0	15.0	70	Calm	o	o			10s			o	o	Cloudy	
Sandusky, Ohio	29.18	741.2	29.84	757.9	68	20.0	79	NW	12	5.4		1k	o	NW		o	o	Clear	
Sandy Hook, New Jersey	29.75	755.6	29.78	756.4	68.5	20.3	82	NW	7	3.1		10cs	o			o	o	Cloudy	
San Francisco, California	29.88	758.9	29.95	760.7	52	11.1	82	NW	8	3.6		o	2s;fg		W	o	o	Fair	
Santa Fé, New Mexico	23.28	591.3	29.79	756.7	62	16.7	27	E	1	0.4		o	o			o	o	Clear	
Savannah, Georgia	29.86	758.4	29.95	760.7	84	28.9	61	SW	8	3.6		5c	o			o	o	Fair	
Shreveport, Louisiana	29.74	755.4	29.97	761.2	79	26.1	87	S	1	0.4		o	o			o	o	Clear	
Silver City, New Mexico	24.24	615.7	29.70	754.4	61	16.1	40	NW	2	0.9		o	o			o	o	Clear	
Sitka, Alaska																o	o		
Smithville, North Carolina	29.91	759.7	29.94	760.5	80	26.7	91	S	12	5.4		5c;hz	Hz			o	o	Hazy	
Spokane Falls, Wash. Ter.	27.85	707.4	29.81	757.2	45	7.2	84	E	3	1.3		o	o			0.06	1.5	Clear	
Springfield, Illinois	29.21	741.9	29.87	758.7	70	21.1	90	SE	6	2.7		o	8s;ks		W	0.67	17.0	Cloudy	
Springfield, Massachusetts	29.58	751.3	29.71	754.6	64.0	17.8	76	S	6	2.7		10cs	o	S		o	o	Cloudy	
Stockton, Texas	26.84	681.7	29.83	757.7	69.2	20.7	75	S	8	3.6		o	o			o	o	Clear	
St. Vincent, Minnesota	29.12	739.6	29.96	761.0	53	11.7	80	N	4	1.8		8c	o	W		o	o	Fair	
Thatcher's Island, Mass	29.65	753.1	29.70	754.4	59	15.0	100	SW	6	2.7			10n		SW	0.18	4.6	Light rain	
Toledo, Ohio	29.14	740.1	29.82	757.4	68	20.0	74	N	10	4.5		1k	o	N		o	o	Clear	
Tucson, Arizona	27.44	697.0	29.73	755.1	65	18.3	36	SE	3	1.3		o	o			o	o	Clear	
Umatilla, Oregon	29.45	748.0	29.85	758.2	57.0	13.9	63	N	15	6.7		5cs	o	SW		o	o	Fair	
Uvalde, Texas	28.94	735.1	29.72	754.9	74	23.3	86	SE	4	1.8			10s		SE	o	o	Cloudy	
Vicksburg, Mississippi	29.75	755.6	30.00	762.0	80	26.7	78	S	4	1.8		Hz	o			o	o	Clear	
Visalia, California	29.52	749.8	29.86	758.4	52	11.1	73	NW	3	1.3		o	o			o	o	Clear	
Washington, D. C.	29.68	753.9	29.80	756.9	71	21.7	80	Calm	o	o			10ks		NW	o	o	Cloudy	
Wickenburg, Arizona					63	17.2	15	Calm			o	o	o			o	o	Clear	
Wilmington, N. Carolina	29.86	758.4	29.91	759.7	80	26.7	87	S	4	1.8		8c	Hz	Calm	Calm	o	o	Fair	
Winnemucca, Nevada	25.40	645.1	29.61	752.1	57	13.9	10	SW	16	7.2		o	o			o	o	Clear	
Wood's Holl, Mass	29.74	755.4	29.78	756.4	63	17.2	67	SW	9	4.0		10cs	Hz	W		o	o	Cloudy	
Yankton, Dakota	28.52	724.4	29.78	756.4	74	23.3	81	E	12	5.4		o	o			0.02	0.5	Clear	
Yuma, Arizona	29.60	751.8	29.74	755.4	68.2	20.1	74	Calm	o	o		o	o			o	o	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.13	562.1			54.0	12.2	82	Calm	o	o		5ck	2ks			o	o	Cloudy	Thomas Herman
Buff Bay Town, Jamaica.‡	29.71	754.6	30.02	762.5	82	27.8	74	E				2c	o						
Havana, Cuba, W. I.	29.89	759.2	29.94	760.5	81	27.2	87	Calm	o	o			8n		Calm	0.25	6.3	Cloudy	A. Van Caneghem, Asst.
Kingston, Jamaica, W. I.	29.94	760.5	29.95	760.7	81	27.2	80	ESE	4	1.8		o	10ks		ESE	0.40	10.2	Showery	Robert Johnstone.
Navassa, W. I.	29.86	758.4	29.94	760.5	81	27.2	83	E	25	11.2		Hz	2n;k		E	0.15	3.8	Squally	F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.04	763.0	80	26.7	87	E			2	5ck	5k	E		0.120	3.0	½ Cloudy	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.43	747.5	29.98	761.5	78	25.6	89	Calm	o	o			10ks		S	o	o	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					73.4	23		SW			1	1cs	o			o	o		Earl Flint.
Santiago de Cuba, W. I.																			Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.61	752.1	29.66	753.4	42.0	5.0	96	SE	14	6.3		4k	4s	W	SE	o	o	Cloudy	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R.S., Secretary.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																			Comm A. J.Errington.
H. M. S. Alert, Thursday Island, Oceania	29.94	760.5	75.5	24.2	85	SE			3-4		8							Squally	Capt. J. P. Maclear.
H. M. S. Alexandra, N. 40° 35′, E. 19° 16′	30.04	763.0	73	22.8	71	N			1		0							Blue sky	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N 24° 47′, E. 66° 59′	29.53	750.0	85	29.4	83	WSW			2-3		7	WSW						Misty	Comm. G. W. Hand.
H. M. S. Bittern, Varna, Bosporus			70	21.1		S			1		10							Raining	Capt. E. B. Pusey.
H. M. S. Blanche, N 16° 59′, W. 61° 51′	30.08	764.0	83	28.3	83	ESE			3		3					3	ESE	D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 14° 01′, W. 7° 48′	30.15	765.8	72	22.2	85	ESE			3-4		9	SSE				2	SSE	D. clouds	Com. F. W. Richards.
H. M. S. Champion, Monte Video, Uruguay	30.10	764.5	47	8.3	70	SSW			3		2					2	S	Blue sky	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 38° 52′, E. 117° 59′	29.57	751.1	69	20.6	84	SSE			3		0							Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruiser, N. 38° 53′, E. 11° 50′	30.06	763.5	74	23.3		SE			2		1	ESE						Blue sky	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, N 41° 48′, W. 14° 07′	30.06	763.5	64	17.8	83	SSW			3		10					3	SSW	Overcast	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.10	764.5	68	20.0		WNW			1-3		4	WNW						Squally	Capt C. Domville.
H. M. S. Dock-Yard, Bermuda, W.I.	29.96	761.0	81	27.2	87	SW			1		1							Blue sky	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 49° 30′, W. 56° 03′	29.82	757.4	47	8.3	77	NNE			1		5	NE						D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 7° 13′, E. 72° 23′	29.91	759.7	80	26.7		SE			2-3		3							D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 16° 50′, E. 79° 15′	29.96	761.0	75	23.9		S			5		3	SSE				4	SE	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, N. 5° 54′, E. 169° 43′	29.85	758.2	81	27.2	87	ENE			3-4		6	ENE						Squally	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Port Louis; Mauritius	30.16	766.1	76	24.4	69	E			1		3	ESE						D. clouds	Capt. R. D. King.
H. M .S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Canada Harbor, N. F.	29.80	756.9	48	8.9		Calm			0		3							D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn																			Capt. P. Aldrich.
H. M. S. Flamingo, N. 20° 51′, W. 83° 01′	29.85	758.2	79	26.1	90	E			2-3							3	E	Thnd'rstorm	Comm. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	29.80	756.9	51	10.6	86	Calm			0		10							Showery	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	30.07	763.8	37	2.8	80	WSW			1		2							Blue sky	Capt. L. F. Jones.
H. M. S. Griffin, N. 24° 42′, W. 75° 14′	30.03	762.7	85	29.4	87	E			2										Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C.P. Fitzgerald.
H. M. S. Iris, N. 38° 46′, E. 17° 26	30.06	763.5	71	21.7	85	NNW			1		0					1	SSE	Misty	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.00	762.0	62	16.7		Calm			0		5	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.74	755.4	72	22.2		SSW			1		0							Blue sky	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 19° 59′, E. 110° 01′	29.66	753.4	85.7	29.8	78	ESE			2		7					1	E	Misty	Capt. A. Carpenter.
H. M. S. Midge																			Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. N. S. Modeste, S. 26° 30′, E. 50° 18′	29.92	760.0	68	20.0	100	E			4-6		5	ESE				5	ESE	Squally	Capt. J. G. Mead.
H. M. S Monarch, Tunis, Tunis, Africa	29.97	761.2	79	26.1	73	SE			4		1	ENE						Blue sky	Capt. G. C. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, N. 5° 16′, E. 115° 15′			80.5	26.9		SW			1		10	SW						Raining	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.76	755.9	53	11.7	86	SSE			2		10							Misty	Capt. E. B. Drummond.
H. M. S. Orontes, N. 4° 23′, W. 3° 57′ *†	30.00	762.0	78.5	25.8	88	SSW			3		9					3	SSW	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.93	760.2	78.5	25.8	97	E			1		7							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. R. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A.C.Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.75	755.6	85	29.4		WSW			3		3							D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 50° 06′, W. 125° 19′	29.83	757.7	54	12.2		Calm			0		0							Blue sky	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	30.09	764.3	79.3	26.3	86	SSE			3		3					Sm'h		D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, S. 21° 43′, W. 70° 23′	30.11	764.8	60	15.6	100	S			1		10	S				4	S	Overcast	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.			81	27.2		E			3		6							Drizzling	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	29.92	760.0	54	12.2	61	W			1		0							Blue sky	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Abu Shehr, Persia	29.54	750.3	88.5	31.4	59	WNW			5-6							4	NW	Heavy mist	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candido dos Reis, Comd't.
Quanza, Porto Praya Cape Verd I'ds	30.09	764.3	80.2	26.8	64	NE			2		4		W			2	NE	D. clouds	Carlos M. da Silva Costa, Comd't
Rio Lima																			S. C. da Silva Costa, Comd't.
Sado, Loando, Africa	30.07	763.8	72.0	22.2	73	WNW			4		2					2		D. clouds	G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.76	756.0	84.2	29.0	85	S			2									Blue sky	P. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga																			Capt. M. von Krusenstierna
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.07	763.8	79	26.1	86	NW	3	1.3		0				0	0			Clear.	
Naval Hospital, Yokahama, Japan	29.62	752.3	71	21.7	87	SW			1	10			S	0	0			Cloudy.	
Adams N. 12° 47′, W. 91° 50′	29.77	756.1	78	25.6	91	SSW			4-5	10			SW			Mod.	SW	Cloudy.	
Alaska, Callao, Peru	29.94	760.5	63	17.2	94	Calm			0	8			SW	0	0	Sm'h		Cloudy.	
Alert, Fatiyama Bay, Japan.*	29.63	752.6	75	23.9	86	SSE			1	10			SSE			Sm'h		Drizzling.	
Alliance, N. 38° 00′, W. 70° 15′	29.95	760.7	72	22.2	85	SW			3	8				0	0	Sm'h		Cloudy.	
Ashuelot, Kobe, Japan	29.62	752.3	71	21.7	75	Calm			0	2			Calm					Fair.	
Colorado, New York, N. Y.	29.78	756.4	72	22.2	71	SW	3	1.3		10				0	0			Hazy.	
Constitution, Newport, R. I.	29.71	754.6	62	16.7	88	SW			2	5			SW					Fair.	
Franklin, Norfolk, Va	29.86	758.4	76	24.4	64	SSW	9.6	4.3		0				0	0			Clear.	
Galena. Lisbon, Portugal	30.11	764.8	69	20.6	85	WSW			1	2						Sm'h	wsw	Fair.	
Independence, N. Yard, Mare I'd, Cal.	29.80	756.9	64	17.8	73	S	6.0	2.7		0				0	0			Clear.	
Jamestown, Sitka, Alaska.*	29.95	760.7	51	10.6	93	Calm			0	10				0	0			Foggy.	
Kearsarge, Norfolk, Va	29.95	760.7	73	22.8	76	SSW			2	2			Calm			Sm'h		Fair.	
Lackawanna, S. 14° 21′, W. 163° 54′.†	30.13	765.3	79	26.1	86	NE			5	2			SE			Mod.	SE	Fair.	
Marion, Montevideo, Uruguay.*†	30.00	762.0	47	8.3	55	SW			4	2						Mod.	SW	Clear.	
Michigan, Detroit, Michigan	29.80	756.9	62	16.7	?	NNW			3	2			NNW					Fair.	
Minnesota, Newport, R. I.	29.75	755.6	67	19.4	84	S			3	5						Sm'h		Fair	
Monocacy, Yokohama, Japan	29.77	756.1	73	22.8	81	S			1	10			S					Raining.	
New Hampshire, Norfolk, Va	29.91	759.7	74	23.3	72	SSW	10	4.5		5			SSW	0	0			Fair.	
Nipsic, N. 51° 20′, W. 2° 47′	29.85	758.2	58	14.4	82	S			3	2						Sm'h		D. clouds.	
Onward, Callao, Peru.†	30.01	762.2	64	17.8	94	Calm			0	8			NW			Long	W	Cloudy.	
Palos, Nagasaki, Japan	29.62	752.3	71	21.7	95	SSW			2	10								Overcast.	
Passaic, Washington, D. C.	29.85	758.2	73	22.8	90	SW			1	8			SW					Cloudy.	
Pensacola, Mare Isl'd, Cal.	29.95	760.7	54	12.2	87	SW			4	10			SW	0	0			Cloudy.	
Portsmouth, Newport, R. I.	29.76	755.9	62	16.7	100	S			2	2						Sm'h		Fair.	
Powhatan, Newport, R. I	29.78	756.4	65	18.3	73	SW			2	2			W					Fair.	
Quinnebaug, Tompkinsville, N. Y.	29.85	758.2	72	22.2	72	Calm			0	8						Sm'h		Cloudy.	
Ranger, Pichilinque, Mexico.*	29.76	755.9	80	26.7	70	S			1	0				0	0	Sm'h		Clear.	
Richmond, Nagasaki, Japan	29.60	751.8	72	22.2	95	Calm			0	10				0.68	17.3			Misty.	
Saratoga, Newport, R. I.	29.76	755.9	62	16.7	94	NW			1	5			Calm	0	0			Fair.	
Shenandoah, S. 31° 15′, W. 47° 30.*	30.06	763.5	63	17.2	67	SSW			6	8						R'gh	S	Fair.	
St. Louis, League Island, Pa.	29.49	749.0	75	23.9	81	SW	13	5.8		2				0	0			Clear.	
Swatara, Shanghai, China.*†	29.72	754.9	73	22.8	85	ENE			2	2			W	0	0			D. clouds.	
Tennessee, Navy Yard, N. Y.	29.79	756.7	70	21.1	80	SW	5	2.2		8				0	0	Sm'h		Hazy.	
Ticonderoga, S. 43° 00′, W. 36° 40′.	29.41	747.0	46	7.8	92	WSW			4	5			WSW	Inap.	Inap.	Long	wsw	Fair.	
Vandalia. Huntington, Long I'd.	29.75	755.6	69	20.6	80	WSW			2	5			WSW					Fair.	
Wabash, Boston, Massachusetts.	29.74	755.4	66	18.9	59	SSW	9	4.0		10			W	0	0			Cloudy.	
Wachusetts, N. Yard, Mare I'd, Cal.	29.86	758.4	55	12.8	87	WSW			3	5			W	0	0			Fair.	
Yantic, N. 24° 12′, W. 83° 51′.*	29.85	758.2	80	26.7	91	E			3	8			E			Mod.	E	Cloudy.	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡																			
N. 16° 49′, W. 119° 13′	29.86	758.4	71.8	22.1	77	NNE			2		10							Misty	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero																			Capt. W. N. Lailey.
City of Agra,																			
S. 4° 31′, W. 29° 14′	30.01	762.2	82.0	27.8	83	ESE			4		0							Blue sky.	Capt. T. Young.
Barque Commowyne																			Capt. W. Scott.
Barque Coppename,																			
N. 31° 08′, W. 15° 56′	30.29	769.4	70.5	21.4	80	N			3		2							Blue sky	Capt. A. Buchan.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kollett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Naiad,																			
N. 47° 27′, W. 10° 40′	29.81	757.2	58.3	14.6	94	WSW			6		5							D. clouds	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡																			
N. 38° 02′, W. 39° 27′	30.15	765.8	72.7	22.6	90	W			5		10							Showery	Capt. M. Parry.
Sierra Estrella,																			
N. 10° 05′, W. 24° 43′	30.03	762.7	80.1	26.7	85	E			4		7							Misty	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Selne																			Capt. H. Manning.
S. S. Strathleven, ‡																			
N. 36° 26′, W. 7° 18′	30.08	764.0	65.5	18.6	89	WNW			3		8							D. clouds	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE.																			
A. Schumacher & Co.																			
S. S. Buenos Ayrean,																			
N. 51° 07′, W. 40° 47′	30.07	763.8				ENE			3		8		E			Mod.	ENE	Cloudy	*
S. S. Circassian, ‡																			
N. 49° 13′, W. 66° 00′	30.00	762.0	48	8.9	85	ESE			4		10kn		NW	2 ho	urs	1	E	Overcast	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE.																			
Vernon H. Brown & Co.																			Capt. W. H. P. Hains.
S. S. Gallia																			Capt. W. Watson.
S. S. Algeria																			Capt. M. Murphy.
S. S. Scythia																			
WHITE STAR LINE.																			
Ismay, Imrie & Co.																			
S. S. Adriatic,																			
N. 46° 22′, W. 40° 07′ †	29.92	760.0	56	13.3		W			4		8		W			Sm'h		Cloudy	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic,																			
N. 40° 32′, W. 68° 22′ †	29.77	756.1	56	13.3	63	S			4		5		S	0	0	Sm'h		Fair	Capt. Benj. Gleadell.
S. S. Germanic,																			
Liverpool, England †	29.86	758.4	68	20.0	90	ESE			3		2		S	Sho	wers			Showery	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen.																			
A. Schumacher & Co.																			
S. S. Braunschweig,																			
N. 49° 11′, W. 24° 05′	29.67	753.6	61.0	16.1	71	NW			5		8		NW			Mod.	NW	Fair	Capt. C. Phole.
S. S. Hermann,																			
N. 42° 36′, W. 58° 30′	29.85	758.2	53.6	12.0		N			3		0			4 ho	urs		N	Clear	Capt. H. Baur.
S. S. Hohenzollern																			
S. S. Köln,																			
N. 49° 33′, W. 14° 02′	29.73	755.1	68.5	20.3	58	WSW			4		5		WSW	2h'rs	light	R'gh	wsw	Fair	Capt. Th. Jüngst
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, N. 51° 36′, W. 8° 32′	29.59	751.6	60	15.6	87	SW			5		2		SW					Clear	Capt. J. W. Shackford.
S. S. Indiana, Philadelphia, Pa.†	29.86	758.4	95	35.0	64	WSW			4		8		SW	0	0			Cloudy	Capt. R. W. Sargent.
S. S. Ohio, N. 39° 00′, W. 71° 59′.*†	29.94	760.5	69	20.6	95	SW			3		2		SW	0	0	Sm'll	SW	Fair	W. Shackford, Chief Off'r
S. S. Pennsylvania, N. 47° 50′, W. 25° 09′.†	29.79	756.7	56	13.3	81	NW			3		10		NW			Mod.	NW	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, Mazatlan, Mexico.†	29.67	753.6	81	27.2	87	ENE			1		8		SE	0	0	G'tl	SSE	Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 42° 58′, W. 160° 04′.†	30.23	767.8	60	15.6	83	Var.			2		8		W	0	0	Mod.	W	Cloudy	Capt. H. Davison.
S. S. Gaelic																			Capt. W. H. Kidley.
S. S. Oceanic, N. 34° 38′, E. 139° 03′	30.05	763.3	78	25.6	86	SW			2		10		SW	0.03	0.8	Sm'h		Raining	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon																			Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, N. 33° 54′, W. 118° 48′.†	29.88	758.9	57	13.9	94	SE			1		8		SE	0	0	Mod.	W	Fair	Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, San Francisco, Cal.†	29.92	760.0	52	11.1	86	NW			4		10		W					Cloudy	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator																			Capt. Thos. Wallace.
S. S. State of California, N. 37° 59′, W. 123° 10′.†	29.91	759.7	52	11.1	100	NW			3		10		W			Sm'h	NW	Overcast	Capt. G. Debney.
S. S. Victoria, N. 38° 34′, W. 123° 33′.†	29.89	759.2	50	10.0	86	NNW			3		8					Light	W	Cloudy	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 2d Officer
S. S. City of New York, S. 34° 15′, E. 170° 21′.†	30.01	762.2	63	17.2	83	N			4		5		N	0	0	Mod.	NE	Fair	Wm.H.Hawes,2d Officer.
S. S. City of Panama, Acapulco, Mexico.†	29.88	758.9	80	26.7	78	NE			1	8ck	0	E		2 hours		Sm'h		Fair	Capt. D. S. Austin.
S. S. City of Peking																			Capt. G. G. Berry.
S. S. City of Sidney, S. 9° 13′, W. 169° 02′.*†	29.85	758.2	81	27.2	82	ESE			5		5		SE	0	0	H'vy	SE	Fair	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 22° 32′, E. 115° 32′.†	29.86	758.4	80	26.7	86	SW			2		0					Sm'h		Clear	A. L. Ritchie, 2d Officer
S. S. Colima																			Capt. R. R. Searle.
S. S. Granada, Punta Arenas, Costa Rica†	29.88	758.9	80	26.7	91	NNE			2		5		NE	3 hours				Fair	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. Wales	29.89	759.2	58	14.4	53	NE			2		2		NE					Clear	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland, N. 47° 23′, W. 26° 23′.†	29.90	759.4	57	13.9	88	N			2		10		NE	0	0	Mod.	NNE	Cloudy	Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 35° 25′, W. 75° 14′	29.92	760.0	76	24.4	77	SSW	6	2.7		2ck	0			0	0	Sw'll	S	Clear	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.																			Capt. L. L. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, Arroyo, Porto Rica.†	30.12	766.0	79	26.1		Var.					10			Heavy				Stormy	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Cherrystone, Va.†	29.94	760.5	74	23.3	76	SW	4	1.8		0	28			0	0			Fine	
Bark Sunbeam, N. 31° 49′, W. 160° 45′.†	30.24	768.1	75	23.9	81	NE			2		2		W	0	0	Mod.	NW	Clear	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR,

W. B. HAZEN,

Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 20, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'or	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours ‡			29.87	758.8	75.7	24.3	79	N			1		3			0	0	Pretty fair.	Raynard.
Algiers ‡			29.91	759.6	74.1	23.4	61	NE			2		4			0	0	Cloudy	Nicolas.
La Calle ‡			29.93	760.1	75.2	24.0	80	WSW			1		1			0	0	Very fair	Fonfréde.
Tunis ‡			29.98	761.6															Jacques.
Sfax ‡			30.14	765.5															Gau.
Saida ‡			29.99	761.7	68.9	20.5	53	S			6		2			0	0	Fair	Dumas.
Tebessa ‡			30.02	762.5	90.7	32.6	12	Calm			0		4			Inap.	Inap.	Cloudy	Watrin.
Geriville ‡					89.6	32.0	58	SSE			1		8			0	0	Very cloudy	Lonchamp.
Laghouat ‡			29.97	761.1	93.6	34.2		S			4		2			0	0	Fair	Herbin.
Biskra ‡			30.02	762.5	86.4	30.2	67	SE			2		2			0	0	Fair	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.18	766.6	30.27	768.8	50.0	10.0	75	S	15	6.7			10			0.31	7.9	Dull	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.46	748.2	29.98	761.5	79.2	26.2	57	NE			3		2			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.19	741.5	29.94	760.5	66.2	19.0	72	NNE	4.9	2.2			8			0.378	9.6	Raining	Dr. Wierzbicki.
Eperies	29.08	738.5	29.93	760.3	66.6	19.2	85	Calm			0	100	0	W		0.079	2.0		Julius Mikolik.
Gratz ‡	28.76	730.5	29.96	761.0	73.2	22.9	68	SW			1		4			0.028	0.7		Andreas Rospini.
Hermannstadt	28.59	726.1	29.96	761.0	72.7	22.6	51	NW			1		10			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.65	727.7	29.93	760.3	73.8	23.2	58	NE			1		8			0.303	7.7		The Staff.
Lemberg	28.98	736.1	29.95	760.6	63.0	17.2	79	SW			2		10			Inap.	Inap.		Dr. T. Stanecki.
Pola	29.93	760.3	30.04	763.0	77.4	25.2	63	SSE			2		6			0	0		I. R. Hydrographic Office.
Szathmar	29.54	750.3	30.00	761.9	63.9	17.7	89	E			2		10			0.059	1.5		Beicht Peter, S. J.
Szegedin	29.68	753.9	29.95	760.6	75.2	24.0	77	Calm			0		3			0	0		Karl Stancel.
Trieste	29.95	760.8	30.06	763.4	77.7	25.4	64	W			1		3			0	0		Secco.
Vienna	29.28	743.8	29.97	761.3	75.0	23.9	60	E			1		3			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed June 19, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.

BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

Aberdeen	29.41	747.0	29.51	749.5	61.9	16.6	61	SSW	16	7.2			4			0.120	3.0	Blue sky	W. Boswell.
Armagh, Observatory	29.35	745.5	29.57	751.1	59.0	15.0	70	SSE	13	5.8			10					Threatening	S. Call.
Bidston, Liverpool Obs'y			29.66	753.4	58.3	14.6	75	SW	7	3.1			10					Raining	John Hartnup.
Bolton, Sharples																			Thomas Mackereth.
Bradford, Yorkshire	29.05	738.1	29.45	748.0	63.0	17.2	56	S			1.0		7			0.10	2.5	D. clouds	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.99	761.7	30.02	762.5	84	28.9	69	NE			2		3					D. clouds	Corpl. J. Surgener, A.H.C
Cardington			29.73	755.1	69.4	20.8	68	SW			1.0		8					Overcast	John McLaren.
Chatham, School M. E.	29.69	754.1	29.82	757.4	66.0	18.9	69	SW			2		7					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.47	748.5	29.70	754.4	56.6	13.7	92	SSE			5		10					Raining	The Staff.
Fort Napier, Natal	27.74	704.6	29.95	760.7	72.1	22.3	19	NE			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7				SE			1		0					Blue sky	Sgt. C. E. Keane.
Galway, Queen's College			29.47	748.5	61	16.1	82	SW			2		10			0.36	9.1	Showery	J. O'Donaghue.
Gibraltar, Mediterranean	29.91	759.7	29.97	761.2	75.3	24.1	81	SW			3		0					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.36	745.7	29.57	751.1	60.6	15.9	42	SW			6		6					D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	29.63	752.6	29.80	756.9	65.8	18.8	64	SSW			1		6					D. clouds	The Staff.
Guernsey	29.57	751.1	29.78	756.4	62.5	16.9	77	SE			2		4					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.76	755.9	29.80	756.9	65.1	18.4	58	SSW	17	7.6			9					D. clouds	The Staff.
Leicester, Museum	29.46	748.3	29.71	754.6	64.0	17.8	62	SW			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.97	761.2	30.05	763.3	75.0	23.9	74	NE			2		0					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.97	761.2	30.01	762.2	85.0	29.4	87	S			1		10					Overcast	C. S. Duncombe.
Oscott, St. Mary's College	29.20	741.7	29.71	754.6	62.0	16.7	72	S			3		9					D. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	29.53	750.0	29.76	755.9	63.2	17.3	62	WSW			3		8					Threatening	The Staff.
Plymouth	29.65	753.1	29.73	755.1	58.7	14.8	93	S			3		10					Raining	John Merrifield.
Sandwick Manse, Orkneys			29.49	749.0	53	11.7	93	WSW	10	4.5			10					Raining	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.95	760.7	30.01	762.2	75.6	24.8	71	SW			1		3					D. clouds	Serg't W. H. Lyne.
Sheffield	29.51	749.5	29.68	753.9	68.1	20.1	72	SW			3		10			0.11	2.8	Threatening	W. F. Cooper.
Silloth Rectory	29.68	753.9	29.71	754.6	62.4	16.9	82	W			3		5			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.69	754.1	62.4	16.9	56	SW	9	4.0			10					Overcast	Rev. S. J. Perry.
Stratfield Turgiss	29.58	751.3	29.80	756.9	64.6	18.1	62	SW			3-4		7					Squally	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	29.64	752.8	29.65	753.1	60	15.6	94	SE			7		10					Raining	W. Newcombe.
Valencia, Observatory	29.43	747.5	29.45	748.0	61.0	16.1	82	SE	24	10.7			9					Misty	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

Bathurst, N. B					50.0	10.0		NW	3	1.3			10n					Raining	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.63	752.6	29.67	753.6	54	12.2	80	NW	10	4.5			10n			0.635	16.1	Cloudy	H. J. Cundall, C. E.
Chatham, N. B.*	29.68	753.9	29.74	755.4	52	11.1	89	NW	10	4.5			10s		NW	0.61	15.5	Cloudy	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario	29.52	749.8	29.70	754.4	58.7	14.8	92	W			1	0	8s			0.117	2.9	Showery	James Smith, M. A
Dalhousie, N. B	29.79	756.7	29.82	757.4	60.0	15.6		E			1	0	0			0	0		H. A. Johnson.
Father Point, Quebec*	29.81	757.2	29.83	757.7	45	7.2	96	W	2	0.9			Fg			Inap.	Inap.	Foggy	J. McWilliams.
Fort Garry, Manitoba*	29.31	744.5	30.13	765.3	52	11.1	85	NE	2	0.9		5k	5ks	NE	NE	0	0	Cloudy	James Stewart.
Fredericton, N. B	29.72	764	29.78	756.4	53.9	12.2	82	W	8	3.6		0	0			0.350	8.9	Clear	Prof. Harrison.
Granton, Ontario	28.75	730.2	29.82	757.4	60.0	15.6	71	N			1	9cs	0			0	0	Fair	James Grant.
Halifax, N. S.*	29.62	752.3	29.75	755.6	56	13.3	91	W	8	3.6			10ks		W	0.141	3.6	Cloudy	A. Allison.
Hamilton, Ontario	29.41	747.0	29.79	756.7	63.7	17.6	87	W			1	0	0			0	0	Clear	Geo. Dickson, B. A.
Kingston, Ontario*	29.40	746.7	29.72	754.9	58	14.4	92	SW	8	3.6		2k	8ks	W	W	0.05	1.3	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S	29.54	750.3	29.58	751.3	59.8	15.4	83	W			6	7k	0	W		0.42	10.7	Cloudy	C. H. Rigby.
Montreal, Quebec*	29.53	750.0	29.72	754.9	64	17.8	71	SW	5	2.2		0	2ks		W	Inap.	Inap.	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario	29.73	755.1	29.77	756.1	40.8	4.9	93	NW			4		10n			0.15	3.8	Drizzling	J. R. Nason.
Parry Sound, Ontario*	29.11	739.4	29.79	756.7	55	12.8	96	Calm	0	0		2k	5ks	W	W	0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario	29.04	737.6	29.76	755.9	64.7	18.2	73	Calm	0	0		0	0			0	0	Clear	F. Jeffers, M. A.
Port Dover, Ontario	29.13	739.9	29.80	756.9	63	17.2	94	S	4	1.8		10k	0			0	0	Cloudy	H. Morgan.
Port Stanley, Ontario	29.18	741.2	29.80	756.9	64	17.8	94	NW	3	1.3			10ks			0	0	Cloudy	M. Payne.
Quebec, Quebec*	29.48	748.8	29.80	756.9	50	10.0	86	NE			3		8n		NE	0.14	3.6	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.30	744.2	29.75	755.6	59	15.0	82	NW	3	1.3		5ck	0	W		0.01	0.3	Fair	W. H. McIntyre.
Saugeen, Ontario*	29.13	739.9	29.85	758.2	50	10.0	84	W	1	0.4		2cs	0			0	0	Clear	K. Stewart.
St. Andrews, N. B	29.73	755.1	29.78	756.4	54	12.2	86	NW	2	0.9		0	Hz			0.11	2.8	Clear	
St. John, N. B	29.60	751.8	29.77	756.1	57.0	13.9	75	NW	5	2.2		0	0			0.080	2.0	Blue sky	G. Murdock, C. E.
Stratford, Ontario	28.56	725.4	29.82	757.4	56.4	13.6	84	NW	4	1.8			10s			0	0	D. clouds	C. J. Macgregor, M. A.
Sydney, C. B.*	29.57	751.1	29.61	752.1	56	13.3	93	SW	14	6.3			10n		SW	0.29	7.4	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.43	747.5	29.80	756.9	62	16.7	91	W	6	2.7			10ks		W	0.05	1.3	Light rain	Magnetic Observatory
Windsor, N. S.*	29.63	752.6	29.72	754.4	58.0	14.4	82	W	4	1.8		0	0			0.02	0.5	Light fog	
Woodstock, Ontario	28.76	730.5	29.79	756.7	61.2	16.2	77	NW	5	2.2			10ks			0	0	D. clouds	Prof. Wolverton.
Yarmouth, N. S.*	29.73	755.1	29.79	756.7	51	10.6	96	W	1	0.4		Fg	Fg			0.02	0.5	Foggy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.82	757.4	30.07	763.8	54	12.2	87	SW	1	0.4			10			1.04	26.4	Fair	John Delany.
St. Pierre, N. F.			29.63	752.6	47.5	8.6		SE			2					0.71	18.0		N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

Cape St. Francis Lt. House	30.17	766.3			60.5	15.8	92	SW	26.2	11.7			9n			0.195	5.0	Showery	John Duthie.
Cape Town, C. G. H. Obs'y	30.36	771.1	30.40	772.1	54.7	12.6		S	12.4	5.5		4	4k;ks			0	0		The Staff, for D. Gill.
Worcester*†	29.27	743.4			60.3	15.7	65	ENE			1	3	5			0.10	2.5		C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.76	756.0	29.79	756.7	73.6	23.1	91	ESE	2.7	1.2			10			0	0	Covered	M. Marc Dechevrens, S.J

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force o—10	Clouds. Amount and kind. Up'er o—10	Lo'er o—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	25.15	654.2	29.87	758.7	70.2	21.2	91	NE			1	0	3d			Inap.	Inap.	Clear	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.78	756.5	29.83	757.7	64.9	18.3	71	SW	16	7			8						Oversergent Fischer.
Fanöe	29.79	756.7	29.81	757.2	61.3	16.3	83	WSW			4		1						Overloerer Lauridsen.
Godthaab, Greenland	30.18	766.5	30.22	767.6	45.5	7.5	74	Calm			0		0						S. Kleinschmidt.
Stykkisholm, Iceland	29.97	761.2	30.01	762.3	41.0	5.0		NE			8		2						A. O. Thorlacius.
Thorshavn	29.53	750.0	29.56	750.9	47.1	8.4	88	NE	16	7			10						Overloerer Bergh.
Vestervig	29.66	753.3	29.75	755.7	60.1	15.6	86	SSW			4		6						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.23	742.4	29.84	757.9	82.8	28.2	40	SE			1	0	5k			0	0	Cloudy	M. Labroue, Director.
Alençon Normal School	29.39	746.5	29.94	760.5	68.7	20.4	63	S			1	0	5kn		S	0.008	0.2	Cloudy	M. Nicot, Director.
Arras, Engineer School	29.64	752.8	29.89	759.1	68.5	20.3	58	SW			4	0	k		SW				M. Klein, Commandant.
Avignon, Normal School	29.90	759.5	29.98	761.5	80.6	27	43	S			1					0	0		M. Giraud, Director.
Bar-sur-Seine	29.39	746.6	29.93	760.2	71.4	21.9	51	W			1	0	8kn		W	0.134	3.4	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.65	753.0	29.90	759.5	70.7	21.5	51	SSW			2		5		SW	0.484	12.3	Cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.08	738.6	29.89	759.3	72.5	22.5	58	SW			1	0	0	W		0	0		M. Gobin, Director.
Bordeaux, Observatory	29.59	751.5	29.84	757.8	77.5	25.3	46	S			2		5		SW	0	0	Cloudy	M. Rayet, Director.
Bourges, Normal School	29.41	747.1	29.95	760.6	74.3	23.5	44	SE			1		k		SE	0	0		M. Postel, Director.
Brest, Naval Observatory	29.57	751.1	29.82	757.3	61.5	16.4	87	S			3		10		SW	0	0		M. de Rermaree, Dir.
Caen, Normal School	29.77	756.1	29.84	757.9	71.6	22	54	SSW			0		5		SW	0.059	1.5	Cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.65	753.0	30.00	761.9	73.4	23.0	54	N			1		5		E	0	0	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.43	747.6	29.93	760.2	70.9	21.6	64	SW			1					0	0		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.58	726.0	29.87	758.7	78.1	25.6	43	ESE			1		2			0	0	¼ covered	M. Alluard, Director.
Cluny, Normal School	29.13	739.9	29.95	760.6	79.2	26.2	54	S			2		2			0.063	1.6		M. de Villemontée, Dir.
Commercy, Normal School	29.11	739.5	29.91	759.8	69.4	20.8	43	W			3		8kn	W	W	0.102	2.6	Very cloudy	Dr. Coulet, Director.
Gap, Normal School	27.55	699.8	29.96	761.0	79.9	26.6	53	S			3	0	k		N	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.93	734.8	30.07	763.8	81.7	27.6	35	SE			3		2		S	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.10	740.7	29.89	759.2	77.0	25	59	NW			2	0	sekn		NW	0.028	0.7		M. Abkard, Director.
Guéret, Normal School	28.35	720.1	29.85	758.3	74.7	23.7	40	SE			1	ck	0	N		0	0		M. Rivoire, Director.
Lamballe, Normal School	29.45	747.9	29.71	754.7	65.5	18.6	77	SSE			2				SSE	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.31	744.4	29.95	760.7	77.7	25.4	45	NE			3	c	0			0	0		M. Chauvin, Director.
Lorient, Naval Observatory	29.79	756.7	29.89	759.3	66.6	19.2	70	S			4		10	SW	S	0	0	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.92	734.6	29.94	760.5	75.6	24.2	49	E			1		5		S	0.008	0.2	Cloudy	M. André, Director.
Mans, Normal School	29.62	752.3	29.92	759.9	67.8	19.9	68	SSW			1		5		W	0.138	3.5	Cloudy	M. Pihoen, Director.
Marseille, Observatory	29.71	754.0	29.97	761.2	70.8	21.9	59	WSW			1		5		SW	0			M. Stephan, Director.
Montlouis l'Instituteur	24.84	631.0	30.08	764.0	64.9	18.3	51	SW	15.0	6.7			0		SW	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.87	758.6	29.97	761.3	73.4	23	74	SE			3		2	SE	SE	0	0	Slightly cl'dy	M. P. Galzin, Director.
Nancy, Normal School	29.24	742.6	29.98	761.5	69.8	21	49	W			1	0	5k		SW	0.028	0.7	Cloudy	M. Hasse.
Nantes, Observatory	29.72	755.0	29.89	759.1	72.0	22.2	45	S			0–1	0	8n		SW	0	0		M. Larocque, Director.
Nice	29.98	761.5	30.01	762.3	70.9	21.6	74	E			4		1	E	E	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.85	758.3	29.96	760.9	68.4	20.2	77	SE	9.4	4.2			10		E	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.55	572.8			51.1	10.6							10		SW	0.157	4.0	Stormy	Gen'l de Nansouty, Dir.
Privas, Normal School	28.93	734.9	29.95	760.8	77.9	25.5	45	S			1		2	S	S	0	0	Slightly cl'dy	M. Taillen.
Puy de Dôme Obs'y, Summit	25.17	639.2			54.7	12.6	75	SE			3		8		SW	0.004	0.1	¼ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	29.94	760.5	29.97	761.3	77.4	25.2	54	SE			1		2		S	0	0	¼ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.04	752.9	29.85	758.1	72.3	22.4	48	W			2		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	27.82	706.5	29.87	758.6	75.2	24	58	E			2		10		N	0	0	Covered	M. Richard, Director.
Rouen, Normal School	29.83	756.8	29.88	759.0	67.3	19.6	63	SE			2		8		SSW	0.04	1.	Very cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.65	753.2	29.81	757.2	68.4	20.2	66	W			3		8		NE	0.224	5.7	Very cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.76	756.0	29.93	760.2	70.3	21.3	55	SSW			1		8	WSW	SSW	0.004	0.1		M. Renou, Director.
Toulouse, Observatory	29.19	741.4	29.91	759.7	80.6	27.0	56	SSE			4		10			0	0	Covered	M. Baillaud, Director.
Tours	29.70	754.4	29.90	759.4	72.0	22.2	50	SE			1		2		SW	0	0	¼ covered	M. de Tastes.
Versailles, Observatory	29.44	747.7	29.93	760.2	70.5	21.4	51	SW			3					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.65	753.2	29.95	760.6	68.9	20.5	62	SSW			3		7		SW	0.004	0.1		M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.12	739.6	29.98	761.5	74.3	23.5	55	W			2	0	2k		W	0.063	1.6		Prof. Dr. Hoh.
Berlin	29.74	755.5	29.91	759.7	75.2	24.0	35	SW			3		5			0.012	0.3		Prof. Dr. Arndt.
Breslau	29.45	747.9	29.98	761.4	72.3	22.4	52	WNW			2		6			0.031	0.8		Royal University Obs'y.
Carlsruhe	29.54	750.2	29.95	760.7	72.0	22.2	68	SW			2		9	SW		0	0		Albert Senz.
Cassel	29.19	741.4	29.91	759.0	68.4	20.2	57	SW			3		8	SW		0.012	0.3	Thund'r str'm	Dr. H. Möhl.
Frankfort on the Main	29.01	752.0	29.95	760.8	75.2	24.0	49	WSW			2		8			0.120	3.2		Physical Society.
Friedrichshafen	28.56	725.5	29.95	760.7	70.3	21.3	72	S			1		2	WSW		0	0		Wilhelm, Chief Tel.
Hamburg	29.80	756.9	29.87	758.7	69.8	21.0	63	SW			5		7			0.020	0.5		Dr. R. Kleeman.
Kiel	29.83	757.7	29.85	758.1	67.8	19.9	52	SW			4		3			0.008	0.2		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.54	750.3	29.95	760.7	66.6	19.2	71	SW			2		10	WSW		0.858	21.8	Raining	Prof. Dr. Bruhns.
Magdeburg	29.71	754.7	29.89	759.2	72.9	22.7	55	S			2	0	7k;ks		SW	0.201	5.1		Dr. Assmann.
Memel	29.86	758.5	29.91	759.7	73.6	23.1	38	SSE			2	0	3kn						Reinbrecht & Issermann.
Munich	28.20	710.3	30.06	763.0	71.8	22.1	55	Calm			0		5	SW		0.083	2.1		Central Station.
Neufahrwasser	29.88	758.9	29.89	759.3	68.0	20.0	65	WSW			1		10			0.100	2.7	Light rain	A. Lothes.
Neustadt, Palatinate	29.41	746.9	29.93	760.2	74.3	23.5	40	SSW			2		5			0.04	1.		Dicknether.
Stuttgart	29.02	737.1	29.87	758.8	73.4	23.0	53	W			3		8	W		0	0		Prof. Dr. Schoder.
Weissenburg, Bavaria	28.50	723.9	29.92	760.0	72.3	22.4	48	SW			2		9	W		0.008	0.2		Prof. Kemlein.
Wustrow	29.84	757.8	29.86	758.5	65.5	18.6	69	W			3	0	3s			0	0		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.67	753.5	30.04	763.1	81.5	27.5		SW			1.5		5					½ Clear	Schmidt & Wourlisch.
INDIAN SERIES.																			
Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.54	750.4	29.59	751.6	88.9	31.6	74	SW	33.0	14.8			4	SW		0	0	Misty	
Deesa	29.13	739.8	29.59	751.5	93.5	34.2	55	W	17.8	8.0			6	S	S	0.07	1.8	D. clouds	
Bombay	29.75	755.7	29.79	756.6	86.3	30.2	78	WSW	14.0	6.3			3		SW	0.04	1.0	D. clouds	
Poona, Yarrowda	27.94	709.6	29.76	755.9	84.8	29.3	49	WSW	27.0	12.1			2		WSW	0	0	D. clouds	
Belgaum	27.28	693.0	29.80	757.0	79.2	26.2	59	SW	9.0	4.0			2	NE	SW	0	0	D. clouds	
Lahore	28.69	728.7	29.38	746.4	105.3	40.7	27	W	3.7	1.6			0			0	0	Misty	
Roorkee	28.60	726.5	29.47	748.5	93.8	34.3	42	W	3.1	1.4			8			0.06	1.5	Misty	
Agra	28.96	735.7	29.50	749.3	102.1	38.9	27	W	9.1	4.1			0			0	0		
Nagpur	28.69	726.6	29.61	752.1	96.9	36.1	29	NW	4.8	2.2			5		NW	0.12	3.0	D. clouds	
Jubbulpore	28.36	720.4	29.69	754.0	91.2	32.9	50	W	6.7	3.0			4	E		0	0	D. clouds	
Lucknow	29.17	740.9	29.53	750.2	93.2	34.0	52	NNE	4.1	1.8			0			0	0	Blue sky	
Allahabad	29.24	742.7	29.54	750.4	91.0	32.8	52	W	5.4	2.4			1			0	0	D. clouds	
Patna	29.33	744.9	29.50	749.4	92.3	33.5	67	NW	2.5	1.1			8	NW	NW	0	0	D. clouds	
Hazaribagh	27.62	701.5	29.58	751.4	85.8	29.9	56	SW	10.5	4.7			0			0	0	Blue sky	
Cuttack	29.54	750.3	29.62	752.3	90.6	32.6	57	WSW	2.0	0.9			7			0	0	D. clouds	
Calcutta, Alipore	29.57	751.0	29.59	751.5	88.9	31.6	79	SSW	2.0	0.9			9			0	0	D. clouds	
Dhubri	29.46	748.2	29.58	751.2	77.5	25.3	80	W	2.7	1.2			10			0.26	6.6	Thund'r st'm	
Chittagong	29.60	751.9	29.69	754.1	82.2	27.9	88	SSW	5.2	2.3			6			0	0	Blue sky	
Sibsagar	29.27	743.3	29.60	751.7	82.0	27.8	89	SSW	1.7	0.8			10	W	W	0.02	0.5	D. clouds	
Zanzibar, Africa			30.06	763.5	81.5	27.5	69	SSW	8	3.6			8		S	0	0	Threatening	
ITALIAN SERIES.																			
By authority of the Minister of Agriculture, Industry and Commerce.																			
Furnished by the co-operation of Prof. P. Taschini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.65	753.0	30.05	763.2	76.3	24.6	63	SW	0.7	0.3			9			0.012	0.3		Prof. Giovanni Clodig.
Milan	29.50	749.4	30.00	762.1	79.2	26.2	38	SE	3.8	1.7			7	SSW		0	0		Prof. Schiaparelli.
Padua	29.92	759.9	30.02	762.6	78.6	25.9	56	SE	4.3	1.9			8	SW		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.11	739.3	29.99	761.7	77.4	25.2	56	E	7.4	3.3			6	W		0	0		Prof. P. F. Denza.
Genoa	29.89	759.1	30.08	764.0	70.5	21.4	65	SW	6.9	3.1			11	SE		0	0		Prof. G. M. Garibaldi.
Mondovi	28.11	714.1	29.97	761.1	75.2	24.0	53	NNE			2		1			0	0		Prof. D. C. Bruno.
Pesaro	29.98	761.5	30.03	762.7	74.8	23.8	67	E	11.2	5.0			7			0	0		Prof. Luigi Guidi.
Florence	29.78	756.3	30.03	762.7	79.5	26.4	46	NW			2		0			0	0		Prof. Costantino Pitter.
Leghorn	29.97	761.2	30.05	763.3	75.9	24.4	57	SW	3.1	1.4			10			0	0		Prof. P. Monte.
Rome	29.89	759.3	30.07	763.7	80.2	26.8	39	W	4.9	2.2			10			0	0		Prof. P. S. Ferrari.
Lecce	29.79	756.7	30.04	763.0	85.8	29.9	34	WNW	3.1	1.4			7			0	0		Prof. C. de Giorgi.
Cosenza	29.16	740.7	30.03	762.8	81.3	27.4	71	SW	2.5	1.1			9	SW		0	0		Prof. D. Conti.
Cagliari	29.76	756.0	29.95	760.8	74.7	23.7	68	SSE			4		0			0	0		Prof. A. Pacinotti.
Palermo	29.82	757.5	30.07	763.8	74.7	23.7	58	NE	4.9	2.2			10			0	0		Prof. G. Ciacciatore.
Syracuse	29.97	761.3	30.02	762.4	77.9	25.5	68	S	3.1	1.4			10			0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.54	750.3	30.05	763.3	76.8	24.9	67	S	0.7	0.3			9	SE		0	0		Prof. F. Brioschi.
Stelvio	22.31	566.7			46.9	8.3	74	SW			4	rocks	0	SW		0.185	4.7	Covered	Prof. P. F. Denza.
Valdobbia	22.34	567.3			48.7	9.3	75	N			4		ron	NW		0	0	Misty	Prof. P. F. Denza.
JAPANESE SERIES.																			
Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, L M. Obs'y †..	29.66	753.3	29.67	753.6	72.8	22.7	87	NE	6.3	2.8		cs	2s			0	0	Clear	K. Sasaki.
Kioto	29.49	749.0	29.66	753.3	67.7	19.8	78	NNW	3.5	1.6		ck	5s			0.008	0.2	Fair	M. Tojima.
Nagasaki, I. M. Obs'y	29.53	750.0	29.72	754.9	69.2	20.7	98	SW	2.4	1.1		0	6s			0	0	Fair	S. Takehayashi.
Tokei Obs'y, Yeddo	29.57	751.1	29.64	752.8	63.7	17.6	98	NNE	9.7	4.3			10n			0.882	22.4	Light rain	The Staff.
Wakayama	29.61	752.1	29.66	753.3	70.3	21.3	76	N	5.2	2.3		0	0			Inap.	Inap.	Clear	Y. Kuwamura.
MAURITIUS SERIES.																			
Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	30.03	762.7	30.22	767.5	72.4	22.4	74	ESE	23.0	10.3		0	3		ESE	0.02	0.5	Squally	A. N. Figon.
MEXICAN SERIES.																			
By authority of the Secretary of Public Works.																			
Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.33	618.0	29.91	759.7	65.4	18.6	70	SW			1	0	9ks			0	0	Hazy	Prof. M. Leal.
Mazatlan	29.64	752.9	29.90	759.4	80.0	26.7	82	WSW	1.6	0.8			10cn		NE	0	0	Covered	F. Quijano, C. E.
Mexico, Central Obs'y	23.07	585.7	30.02	762.4	55.9	13.3	80	Calm	0	0		0	4s			0.024	0.6		The Staff.
Pabellon, Aguascalientes	23.91	607.4	29.82	757.3	64.9	18.3	71	WSW			1	0	1s			0	0	Clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.41	594.7	30.15	765.7	54.9	12.7	41	Calm	0	0		0	1		NE	0.190	4.8	Clear	Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.54	572.6	30.10	764.5	57.2	14.0	70	E	5.1	2.3		0	0			Inap.	Inap.	Clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES.																			
Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.89	759.3	29.89	759.3	64.0	17.8		W			4					0.098	2.5		
Groningen	29.80	756.8	29.85	758.2	66.6	19.2		SW			4					0.008	0.2		
Helder	29.85	758.2	29.85	758.2	60.8	16.0		SW			4					0	0		
Hellevoetsluis	29.87	758.7	29.87	758.7	69.1	20.6	83	SW			2					0.055	1.4		
Utrecht	29.85	758.2	29.90	759.4	70.0	21.1	63	WSW			2		5			0	0	Cloudy	H. van der Bri k

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.

NORWEGIAN SERIES.

Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.

Bergen	29.55	750.6	29.61	752.2	59.4	15.2	87	SSW	30.2	13.5			9					Raining	
Christiania	29.47	748.4	29.60	751.9	74.5	23.6	35	SSW	20	9			2			0	0		
Gjæsvær	29.66	753.3	29.68	753.9	36.5	2.5		W			2		10						
Lodingen	29.71	754.6	29.76	755.8	46.2	7.9	55	Calm			0		1			0	0		

PORTUGUESE SERIES.

Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.

Angra, Azores	29.77	756.2	29.79	756.6	71.6	22.0	81	NW	21.0	9.4			4			0	0		Dr. J. A. Sampaio.
Campo Major	28.93	734.9	30.29	769.3	76.6	24.8	33	SSE	3.8	1.7			1			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.03	762.7	30.11	764.9	74.5	23.6	65	WSW	5.6	2.5			4			0	0		Capt. D. A. da Cunha.
Lisbon, Observatory	29.63	752.7	29.99	761.7	66	18.9	65	WSW	18.6	8.3			4			0.146	3.7		The Staff.
Ponta Delgada, Azores	29.93	760.3	30.00	762.1	70.2	21.2	82	W	6.9	3.1			3	NNE		0	0		

RUSSIAN SERIES.

Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.

Akmolinski	28.59	726.2	29.58	751.4	87.3	30.7	18	SW	9	4		2cs	0						Capt. Lasarew.
Archangel	29.80	756.8	29.82	757.3	51.6	10.9	46	WNW	9	4		0	6ks						Capt. Sselliwerstow.
Astrakhan	29.95	760.6	29.85	758.5	77.0	25.0	36	SW	11	5			10s;n						Capt. Wisganow.
Barnaul ‡	29.34	745.1	29.80	756.8	85.1	29.5	41	Calm	0	0			6						Meteorological Obs'y.
Dorpat	29.03	752.6	29.86	758.5	70.5	21.4	35	W	7	3			0						Observatory.
Ekaterinburg	28.44	722.3	29.35	745.5	67.3	19.6	82	SE	4	2			10n						Meteorological Obs'y.
Kasan	29.40	746.8	29.66	753.3	70.0	21.1	34	NNW	7	3		8c	0						Observatory.
Kertch	29.99	761.7	30.01	762.2	62.8	17.1	95	Calm	0	0			10					Thund'rst'm	Lagodio & Sastyres.
Kieff	29.24	742.6	29.84	757.9	72.5	22.5	43	NNE	7	3		clc	5ks						Observatory.
Krotkowo																			Capt. Fatjanow.
Lugan	29.60	751.9	29.80	756.9	74.3	23.5	39	W	9	4			6			Bla	nk		Meteorological Obs'y.
Moscow	29.26	743.1	29.78	756.3	74.3	23.5	43	SSW	4	2		0	3ks						Meteorological Obs'y.
Nertchinsk	27.35	694.7	29.61	752.0	47.5	8.6	78	N	13	6			10			0.209	5 3		Meteorological Obs'y.
Nikolaiev	29.87	758.6	29.94	760.4	75.6	24.2	57	N	4	2			9kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.87	758.7	29.96	760.9	43.0	6.1	83	Calm			0		10n			0	0		Lieut. Iwanow.
Pekin, China	29.65	753.2	29.80	756.8	70.5	21.4	52	Calm	0	0		0	1k						Physical Observatory.
St. Petersburg	29.78	750.3	29.79	756.7	62.4	16.9	64	NW	11	5		cs	3k					Light clouds	Central Physical Obs'y.
Tashkend, Laboratory	28.25	717.0	29.70	754.4	90.5	32.5	51	Calm	0	0			0						Teich, A. M.
Tiflis	28.53	724.6	29.92	759.9	64.6	18.1	69	NW	13	6			10					Raining	Physical Observatory.
Warsaw	29.50	749.3	29.91	759.7	71.1	21.7	67	S	4	2			9cks						Astronomical Obs'y.
Wilna	29.52	749.7	29.92	759.9	72.0	22.2	57	SW	2	1			8					Light clouds	Berg, Assistant.
Yeniseisk	29.57	751.0	29.84	758.0	64.8	18.2	80	SW	4	2			10					Thund'rst'm	M. O. Marks.

SCOTTISH SERIES.

Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.

Leith, Restalrig Park			29.59	751.6	60.2	15.7	70	W			3	0	8k					Showery	Andrew Gibb.
Monach Lt. House, Hebrides			29.47	748.5	60	15.6	91	SSW			4		10			0	0	Hazy	J. Youngclause.
North Unst, Shetland Isl'ds			29.49	749.0				E			4		Fg						Robert Burnet.

SPANISH SERIES.

Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.

Barcelona, Met. Obs'y	29.87	758.6	29.97	761.2	73.4	23	71	SE	3.1	1.4			1			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	29.73	755.2	29.79	756.6	83.8	28.8	48	S	1.6	0.7		2	4	SW		0	0	Cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	26.95	684.6			74.5	23.6	54	SW	4.9	2.2			3			0	0	Lightly cl'd'y	Domingo Martin.
Madrid, Royal Obs'y	27.69	703.4	29.80	756.9	81.1	27.3	37	SW	15.4	6.9		0	0			0	0	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.78	750.4	29.93	760.1	80.6	27.0	58	ENE	5.6	2.5		3	5	W		0	0	Cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.88	733.6	29.70	756.0	63.0	17.2	70	S	15.0	6.7			10			0	0	Covered	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.83	757.6	29.89	759.2	78.5	25.8	83	ESE	10.3	4.6			10s;n		SW	0.386	9.8	Raining	Benito Vines, S. J.
Manilla, Philippine Islands	29.81	757.2	29.85	758.5	85.8	29.6	72	ESE	5.5	2.5		0	1ks			0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.91	759.7	30.01	762.2	72.0	22.2	67	W	9.1	4.1		0	0			0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.00	762.0	30.09	764.3	83.1	28.4	89	S	0	0		7cs	3k	S	S	0	0	D. clouds	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.74	755.4	29.89	759.1	87.7	30.9	62	SSW	8.3	4.3		0	1s			0	0	Clear	José L. Fastovra.

SWEDISH SERIES.

Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.

Haparanda	29.72	754.8	29.76	755.8	51.1	10.6	49	S			2		2			0	0		
Umea	29.67	753.6	29.72	754.9	59.0	15.0	49	S			4		8			0	0		
Hernosand	29.67	753.5	29.72	754.8	58.1	14.5	54	SSW			2		5			0	0		
Stockholm	29.56	750.9	29.74	755.4	70.3	21.3	41	SSW			2		0			0	0		
Wisby	29.72	755.0	29.78	759.5	72.7	22.6	43	WSW			6		0			0	0		
Sub-Series.																			
Upsala	29.50	749.4	29.59	751.6	77.4	25.2	29	S	13.2	5.9			8			0	0		S. G. Fineman.

SWISS SERIES.

Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.

Geneva	28.55	725.2	29.91	759.8	76.5	24.7	48	S			2		4			0.004	0.1	Cloudy	The Observatory.
Zurich	28.38	720.7	29.91	760.5	75.7	24.3	61	W			2		5			0.004	0.1	Cloudy	The Observatory.

TURKISH SERIES.

Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.

Constantinople			30.07	763.6	76.1	24.5	61	NE	8	3.5			3	SW		0	0		The Observatory.
Valona			30.17	766.3	76.8	24.9		Calm			0		Hz			0	0	Hazy	A. Bertraud.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.96	760.9	77.0	25.0	61	NW			1		Mist			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	Barometer. Corrected for instrumental error and temperature. Inch.	Barometer. Corrected for instrumental error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
Albany, New York	29.74	755.4	29.82	757.4	69	20.6	65	W	2	0.9			10s			0	0	Cloudy	
Alpena, Michigan	29.22	742.2	29.88	758.9	55	12.8	87	NW	13	5.8		0	2s		W	0.01	0.3	Fair	
Atlanta, Georgia	28.83	732.3	29.98	761.5	81.0	27.2	62	Calm	0	0		5k	0	Calm		0	0	Fair	
Atlantic City, New Jersey	29.88	758.9	29.89	759.2	67	19.4	79	E	5	2.2		1c	0	Calm		0	0	Clear	
Augusta, Georgia	29.78	756.4	29.90	761.0	81.0	27.2	67	W	2	0.9		0	0			0	0	Clear	
Baltimore, Maryland	29.86	758.4	29.91	759.7	78	25.6	57	W	2	0.9		8cs	0	W		0	0	Clear	
Barnegat, New Jersey	29.85	758.2	29.87	758.7	67	19.4	79	NE	4	1.8		5c	0	Calm		0	0	Fair	
Bismarck, Dakota	28.29	718.6	30.03	762.7	54	12.2	86	NE	12	5.4			10s		SE	0.08	2.0	Cloudy	
Boise City, Idaho	27.06	687.3	29.82	757.4	56.5	13.6	72	W	2	0.9		5k	0	S		0	0	Fair	
Boston, Massachusetts	29.68	753.9	29.83	757.7	70.0	21.1	56	W	1	0.4		2cs	0	W		0	0	Fair	
Brackettville, Texas	28.75	730.2	29.70	755.9	75	23.9	77	E	5	2.2		0	0			0	0	Clear	
Brownsville, Texas	29.83	757.7	29.87	758.7	77	25.0	91	Calm	0	0		0	0			0	0	Clear	
Buffalo, New York	29.11	739.4	29.80	756.9	61.3	16.3	75	W	5	2.2			10s		W	0	0	Cloudy	
Burlington, Vermont	29.49	749.0	29.77	756.1	59.5	15.3	88	S	7	3.1			10s		W	0.28	7.1	Cloudy	
Cairo, Illinois	29.57	751.1	29.90	760.0	78	25.6	82	SW	4	1.8		0	0			0	0	Clear	
Campo, California	27.41	696.2	29.98	761.5	33.5	0.8	49	S	4	1.8		0	0			0	0	Clear	
Camp Thomas, Arizona	27.17	690.1			62.5	16.9	41	Calm			0	0	0			0	0	Clear	
Cape Henry, Virginia	29.80	758.4	29.88	758.9	78	25.6	73	W	5	2.2		0	0			0	0	Clear	
Cape May, New Jersey	29.84	757.9	29.87	758.7	72	22.2	67	E	16	7.2		0	0			0.14	3.6	Clear	
Castroville, Texas	29.13	739.9	29.80	756.9	80	25.7	74	SE	2	0.9			10s			0	0	Clear	
Cedar Keys, Florida	29.95	760.7	29.97	761.2	85	29.4	72	SE	17	7.6		1ck	0			0	0	Cloudy	
Champaign, Illinois	29.11	739.4	29.87	758.7	70	21.1	95	NW	10	4.5		2k	5s	NW	NW	0.09	2.3	Clear	
Charleston, S. Carolina	29.91	759.7	29.97	761.2	85	29.4	61	SW	8	3.6		0	2s		SW	0.05	1.3	Clear	
Charlotte, N. Carolina	29.09	738.9	29.95	760.7	82.8	28.2	53	N	3	1.3		5ck	0	SW		0	0	Fair	
Chattanooga, Tennessee	29.20	741.7	30.00	762.0	75	23.9	83	W	2	0.9		1cs	Fg	Calm	Calm	0	0	Clear	
Cheyenne, Wyoming	24.08	611.6	29.88	758.9	54	12.2	87	N	8	3.6			10s		N	0	0	Cloudy	
Chicago, Illinois	29.18	741.2	29.86	758.4	60.7	15.9	83	N	10	4 5			10s			0	0	Cloudy	
Chincoteague, Virginia	29.86	758.4	29.88	758.9	74	23.3	86	NE	9	4.0		1k	0	Calm		0	0	Clear	
Cincinnati, Ohio	29.31	744.5	29.95	760.7	71	21.7	85	NE	12	5.4			10n		NE	0.18	4.6	Heavy rain	
Cleveland, Ohio	29.12	739.6	29.84	757.9	66.5	19.2	89	S	8	3.6			10n		W	0.16	4.1	Light rain	
Coleman City, Texas	28.10	713.7	29.69	754.1	71	21.7	75	S	3	1.3		0	0			0	0	Clear	
Columbus, Ohio	29.03	737.3	29.85	758.2	71	21.7	85	SW	4	1.8			10ks		SW	0	0	Threatening	
Concho, Texas	28.00	711.2	29.88	758.9	73	22.8	81	SE	6	2.7		0	0			0	0	Clear	
Corsicana, Texas	29.48	748.8	29.94	760 5	78	25.6	73	S	4	1.8		0	0			0	0	Clear	
Davenport, Iowa	29.22	742.2	29.80	758.4	70	21.1	85	S	1	0.4			10ks		W	0.58	14.7	Cloudy	
Dayton, Washington T'y	28.24	717.3	29.99	761.7	46.3	7.9	85	S	3	1.3		2ck	0	Calm		0	0	Clear	
Deadwood, Dakota	25.44	646.2	29.99	761.7	55	12.8	87	E					Fg			0.59	15.0	Dense fog	
Decatur, Texas	28.75	730.5	29.80	758.5	79	26.1	62	SE	10	4.5		0	0			0	0	Clear	
Delaware Breakwater, Del.	29.86	758.4	29.88	758.9	69	20.6	85	NE	2	0.9		2c	0			0	0	Fair	
Denison, Texas	29.13	739.9	29.91	759.7	80	26.7	74	S	4	1.8		0	0			0	0	Clear	
Denver, Colorado	24.74	628.4	29.81	757.2	62.0	16.7	56	E	2	0.9		2k	0	W		0	0	Fair	
Des Moines, Iowa	28.99	736.3	29.87	758.7	66	18.9	89	Calm	0	0			10s			3.59	91.2	Cloudy	
Detroit, Michigan	29.14	740.1	29.81	757.2	63.0	17.2	67	N	6	2.7			10s		W	0	0	Cloudy	
Dodge City, Kansas	27.22	691.4	29.71	754.6	70.9	21.6	62	SE	6	2.7		2k	0	SE		0	0	Clear	
Dubuque, Iowa	29.17	740.9	29.85	758.2	66	18.9	95	N	2	0.9			10n			0.02	0.5	Light rain	
Duluth, Minnesota	29.35	745 5	30.03	762.7	56	13.3	75	NE	16	7.2		5cs	0	Calm		0	0	Fair	
Eagle Pass, Texas	29.12	739.0	29.93	760.2	76.4	24.7	77	SE	1	0.4		0	0			0	0	Clear	
Eagle Rock, Idaho	25.13	638.3	29.84	757.9	51	10.6	72	W	7	3.1		0	0			0	0	Clear	
Eastport, Maine	29 71	754.6	29.78	756.4	58	14.4	76	NW	2	0.9		0	Fg			0.12	3.0	Fair	
El Paso, Texas	26.14	663.9	29.79	756.7	70	21.1	53	NW	12	5.4		0	0			0	0	Clear	
Erie, Pennsylvania	29.08	738.6	29.70	755.9	67	19.4	84	S	12	5.4		10k	0	SW		0	0	Cloudy	
Escanaba, Michigan	29.30	744.2	29.94	760.5	54	12.2	74	N	12	5.4		0	0			0	0	Clear	
Florence, Arizona	28.38	720.8	29.98	761.5	58	14.4	11	W	1	0.4		0	0			0	0	Clear	
Fort Apache, Arizona	25.65	636.3	29.83	757.7	49	9.4	31	NE	4	1.8		0	Sk		Calm	0	0	Dense smoke	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota	28.42	721.9	29.88	758.9	57	13.9	87	N	1	0.4			10s		SE	0.52	13.2	Cloudy	
Fort Benton, Montana	27.27	692.6	30.01	762.2	48	8.9	100	NE	5	2.2			10n		NE	0.15	3.8	Light rain	
Fort Buford, Dakota	28.13	714.5	30.05	763.3	53	11.7	100	NE	8	3.6			10n		Calm	0.54	13.7	Light rain	
Fort Custer, Montana	26.89	683.0	29.98	761.5	51	10.6	93	Calm	0	0			10s		Calm	0.36	9.1	Cloudy	
Fort Davis, Texas	25.14	638.5	30.10	764.5	70	21.1	53	W	3	1.3		0	0			0	0	Clear	
Fort Elliott, Texas	27.10	688.3	30.17	766.3	70	21.1	53	S	8	3.6		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.35	745.5	29.88	758.9	78	25.6	73	SE	2	0 9		0	0			0	0	C ear	
Fort Grant, Arizona	25.27	641.8	30.07	763.8	71	21.7	22	NW	7	3.1		0	0			0	0	Clear	
Fort Griffin, Texas	28.62	726.9	29.82	757.4	77.8	25.4	57	SE	3	1.3		0	0			0	0	Clear	
Fort Keogh, Montana	27.55	699.8	29.96	761.0	57	13.9	93	NE	6	2.7			10s		NE	1.37	34.8	Cloudy	
Fort McKavett, Texas	29.90	759.4	29.91	759.7	78	25.6	86	W	7	3.1		2k	Hz	Calm	Calm	0.64	16.3	Fair	
Fort Missoula, Montana	27.67	702.8	29.50	749.3	71.3	21.8	75	W	4	1.8		0	0			0	0	Clear	
Fort St. Michaels	26.70	678.2	30.08	764.0	53	11.7	61	E	9	4.0			10s		S	0.04	1.0	Cloudy	
Fort Shaw, Montana	30.00	762.0	30.03	762.7	48	8.9	92	SW	2	0.9		0	0			0	0		
Fort Sill, Indian Territory	26.48	672.6	29.93	760.2	45	7.2	92	NE	3	1.3			10s		NE	0.20	5.1	Cloudy	
Fort Stevenson, Dakota	28.66	728.0	29.87	758.7	55	23.9	72	SE	1	0.4		0	0			0	0	Clear	
Fort Verde, Arizona	28.28	718.3	30.00	763.5	54	12.2	93	NE	7	3.1			10n		NE	0.34	8.6	Light rain	
Fredericksburg, Texas					59.1	15.1	33	SW			1	0	0			0	0	Clear	
Galveston, Texas	28.21	716.5	29.69	754.1	72	22.2	85	Calm	0	0		0	0			0	0	Clear	
Grand Haven, Michigan	29.89	759.2	29.93	760.2	83.5	28.6	75	S	3	1.3		1k	0	S		0	0	Clear	
Hatteras, North Carolina	29.21	741.9	29.80	758.4	64	17.8	73	NE	10	4.5			10s		SW	0	0	Cloudy	
Helena, Montana	29.88	758.9	29.90	759.4	77	25.0	95	S	8	3.6		0	2s		S	Inap.	Inap.	Clear	
Henrietta, Texas	25.85	656.6	30.05	763.3	47	8.3	36	S	1	0.4			10s		Calm	0.19	4.8	Cloudy	
Indianapolis, Indiana																			
Indianola, Texas	29.05	738.1	29.83	757.7	73	22.8	81	W	2	0.9		1ck	7s	SW	W	0.49	12.4	Fair	
Jacksboro, Texas	29.88	758.9	29.91	759 7	79.9	26.6	82	S	4	1.8		0	2ks		Calm	0	0	Fair	
Jacksonville, Florida	28.74	730.0	29.81	757.2	79	26.1	62	S	8	3.6		0	0			0	0	Clear	
Keokuk, Iowa	29.94	760.5	29.96	761.0	84	28.9	71	S	12	5.4		0	0			0	0	Clear	
Key West, Florida	29.18	741.2	29.79	756.7	68.6	20.3	85	SE	11	4.9			10n		SE	2.62	66.5	Light rain	
Kittyhawk, North Carolina	29.91	759.7	29.94	760.5	80.0	26.7	82	SE	14	6.3			10s		SE	0.64	16.3	Cloudy	
Knoxville, Tennessee	29.87	758.7	29.89	759.2	79	26.1	78	W	8	3.6		0	0			0.02	0.5	Clear	
La Crosse, Wisconsin	29.00	736.6	30.00	762.0	70	21.1	90	Calm	0	0		0	Fg	Calm		0	0	Clear	
La Mesilla, New Mexico	29.12	739.6	29.84	757.9	62.3	16.8	74	NE	9	4.0			10s			0.33	8.4	Cloudy	
Laredo, Texas	26.04	661.4	30.19	766.8	62.0	16.7	32	Calm	0	0		0	0			0	0	Clear	
Leavenworth, Kansas	29.43	747.5	29.76	755.9	78	25.6	86	SE	4	1.8		0	0			0	0	Clear	
Lewiston, Idaho	28 99	736.3	29.86	758.4	76	24.4	77	S	3	1.3		5k	0	S		0	0	Fair	
Little Rock, Arkansas	29.21	741.9	30.04	763.0	54	12.2	86	E	1	0.4		0	2s		Calm	0.14	3.6	Clear	
Los Angeles, California	29.62	752.3	29.93	760.2	79	26.1	87	SW	2	0.9		0	0			0	0	Clear	
Louisville, Kentucky	29.61	752.1	29.98	761.5	48.2	9.0	85	E	4	1.8		0	0			0	0	Clear	
Lynchburg, Virginia	29.34	745.2	29.89	759.2	75.5	24.2	81	SW	4	1.8		2cs	5ks		SW	0	0	Cloudy	
Madison, Wisconsin	29.26	743.2	29.93	760.2	78	25.6	65	Calm	0	0		0	0			0	0	Clear	
Marquette, Michigan	28.89	733.8	29.87	758.7	62	16.7	88	N	6	2.7			10s		Calm	0.42	10.7	Cloudy	
Mason, Texas	29.29	744.0	30.00	762.0	52	11.1	79	NW	8	3.6		2k	0	NW		0	0	Clear	
Memphis, Tennessee	28.30	718.8	29.98	761.5	74.8	23.8	76	S	6	2.7		0	1s		W	0	0	Clear	
Milwaukee, Wisconsin	29.65	753.1	29.98	761.5	78	25.5	78	Calm	0	0		0	0			0	0	Clear	
	29.17	740.9	29.90	759.4	56	13.3	87	N	13	5.8			10s		NW	0.05	1.3	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.91	759.7	29.98	761.5	76	24.4	91	NW	3	1.3		2cs	Hz			0	0	Fair	
Montgomery, Alabama	29.76	755.9	29.98	761.5	76.2	24.6	81	N	2	0.9		1ck	Hz			0.04	1.0	Clear	
Moorhead, Minnesota	29.07	738.4	30.03	762.7	54	12.2	87	NE	8	3.6			10s			0	0	Cloudy	
Morgantown, W. Virginia	28.91	734.3	29.80	758.4	73	22.8	85	SW	4	1.8			10s		SW	0	0	Cloudy	
Mt. Washington, N. H.	23.07	601.2	29.70	754.4	40	4.4	91	NW	39	17.4			Fg		NW	0.17	4.3	Light fog	
Nashville, Tennessee	29.44	747.8	29.93	761.0	76.5	24.7	80	W	1	0.4		0	Sk			Inap.	Inap.	Dense smoke	
New Haven, Connecticut	29.74	755.4	29.85	758.2	66	18.9	69	NE	1	0.4		2cs	5s			Inap.	Inap.	Cloudy	
New London, Connecticut	29.82	757.4	29.87	758.7	65	18.3	84	N	3	1.3		7k	0	Calm		0.02	0.5	Fair	
New Orleans, Louisiana	29.89	759.2	29.94	760.5	82.8	28.2	72	SE	3	1.3		1k	Sk			0	0	Clear	
Newport, Rhode Island	29.81	757.2	29.80	758.4	68.0	20.0	70	W	1	0.4		4ck	0	Calm		0.01	0.3	Fair	
New River, N. Carolina					81	27.2	72	W			1	0	0					Clear	
New Shoreham, Rhode I'd	29.83	757.7	29.86	758.4	66.5	19.2	84	NW	3	1.3		5c	0	Calm		0	0	Fair	
New York, New York	29.70	754.4	29.87	758.7	69	20.6	65	N	1	0.4		5cs	Fg	NW		0	0	Fair	
Norfolk, Virginia	29.88	758.9	29.92	760.0	80	26.7	70	NW	2	0.9		0	0			Inap.	Inap.	Clear	
North Platte, Nebraska	27.01	686.0	29.83	757.7	64	17.8	89	NE	24	10.7			10s		NE	Inap.	Inap.	Cloudy	
Olympia, Washington T'y	29.97	761.2	30.01	762.2	52.0	11.1	93	S	2	0.9		0	8s		S	0.04	1.0	Cloudy	
Omaha, Nebraska	28.75	730.2	29.89	759.2	70	21.1	83	N	1	0.4		1ck	2s	SW		0.64	16.3	Fair	
Oswego, New York	29.40	748.3	29.78	756.4	60.7	15.9	84	E	2	0.9			10s		W	0	0	Cloudy	
Pensacola, Florida	29.94	760.5	29.97	761.2	79	26.1	87	W	2	0.9		0	0			0	0	Clear	
Philadelphia, Pa	29.83	757.7	29.89	759.2	73.2	22.9	76	E	4	1.8		5ck	Hz	W		0.03	0.8	Fair	
Phœnix, Arizona	28.79	731.3	30.59	770.2	66	18.9	54	E	3	1.3		0	0			0	0	Clear	
Pike's Peak, Colorado	17.95	455 9	30.16	766.1	37	2.8	23	SW	14	6.3		0	0			0	0	Clear	
Pioche, Nevada	23.98	609.1	29.83	757.7	52	11.1	18	S	5	2.2		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.07	738.4	29.80	758.4	67.5	19.7	92	NW	2	0.9			10s		NW	Inap.	Inap.	Cloudy	
Port Eads, Louisiana	29.95	760.7	29.96	761.0	80.2	26.8	91	NE	10	4.5		2ck;k	0	SE		0	0	Fair	
Port Huron, Michigan	29.19	741.4	29.85	758.2	53.4	11.9	90	N	14	6.3			10s		N	0	0	Cloudy	
Portland, Maine	29.75	755.6	29.80	756.9	65	18.3	73	W	1	0.4		2ck	5s	W	Calm	0.15	3.8	Fair	
Portland, Oregon	29.58	751.5	30.05	763.3	52.9	11.6	88	SE	5	2.2		10k	0	S		0.20	5.1	Cloudy	
Portsmouth, N. Carolina					78	25.6	82	W	8	3.6		5c	Hz	Calm	Calm	0.36	9.1	Fair	
Prescott, Arizona	24.77	629.1	29.84	757.9	45	7.2	31	Calm	0	0		0	0			0	0	Clear	
Punta Rassa, Florida	29.94	760.5	29.94	760.5	79	26.1	87	E	10	4.5			10n		Calm	0.01	0.3	Light rain	
Red Bluff, California	29.07	753.0	30.00	762.0	55.0	12.8	68	S	3	1.3		2k	0	W		0	0	Clear	
Rio Grande City, Texas	29.69	754.1	29.90	759.4	75	24.4	86	SE	6	2.7		0	0			0	0	Clear	
Rochester, New York	29.10	740.7	29.79	756.7	65	18.3	68	W	7	3.1		2cs	8s	W	W	0	0	Cloudy	
Roseburg, Oregon	29.52	749.8	30.08	764.0	52.5	11.4	73	Calm	0	0			10ks			0	0	Cloudy	
Sacramento, California	29.90	761.0	30.03	762.7	50.1	10.1	86	SE	9	4.0		0	0			0	0	Clear	
St. Louis, Missouri	29.34	745.2	29.92	760.0	72.5	22.5	78	S	8	3.6		10c	0	NW		0.50	12.7	Cloudy	
St. Paul, Minnesota	29.10	739.1	29.94	760.5	61	16.1	77	N	4	1.8			10ks		N	0.02	0.5	Cloudy	
Salt Lake City, Utah	25.51	647.9	29.71	754.0	61	16.1	35	E	8	3.6		0	0			0	0	Clear	
San Antonio, Texas	29.24	742.7	29.93	760.2	77.0	25.0	86	Calm	0	0		0	7s		SE	0	0	Fair	
San Diego, California	29.87	758.7	29.94	760.5	54.5	12.5	87	Calm	0	0		0	0			0	0	Clear	
Sandusky, Ohio	29.14	740.1	29.80	756.9	70	21.1	90	S	9	4.0			10s			0.36	9.1	Cloudy	
Sandy Hook, New Jersey	29.84	757.9	29.85	758.4	71.7	22.1	80	W	1	0.4		5ck	Hz	W		0	0	Fair	
San Francisco, California	30.00	762.0	30.07	763.8	51	10.6	86	W	14	6.3		0	0			0	0	Clear	
Santa Fé, New Mexico	23.37	593.6	29.88	758.9	58	14.4	27	NW	8	3.6		0	0			0	0	Clear	
Savannah, Georgia	29.90	759.4	29.99	761.7	82.5	28.1	73	SW	7	3.1		0	Sk			0.17	4.3	Clear	
Shreveport, Louisiana	29.73	755.1	29.90	760.0	79.8	26.6	82	S	1	0.4		0	0			0	0	Clear	
Silver City, New Mexico	24.30	617.2	29.76	755.9	65	18.3	26	NW	4	1.8		0	0			0	0	Clear	
Sitka Alaska	29.88	758.9	29.95	760.7	49	9.4	93	Calm	0	0			Fg			0	0	Dense fog	
Smithville, North Carolina	29.90	759.4	29.93	760.2	80	26.7	82	SW	8	3.6		8k	1s	W		0.13	3.3	Cloudy	
Spokane Falls, Wash. Ter.	27.94	709.7	29.90	759.4	48	8.9	92	NE	1	0.4		5c	5ks			0.14	3.6	Cloudy	
Springfield, Illinois	29.28	743 7	29.94	760.5	68	20.0	90	N	3	1.3			10ks		W	0.55	14.0	Cloudy	
Springfield, Massachusetts	29.70	754.4	29.82	757.4	70.9	21.6	62	S	1	0.4		4cs	0			Inap.	Inap.	Fair	
Stockton, Texas	20.85	682.0	29.84	757.9	70.2	21.2	75	S	8	3.6		0	0			0	0	Clear	
St. Vincent, Minnesota	29.26	743.2	30.10	764.5	53	11.7	93	NE	4	1.8			10s		Calm	0	0	Cloudy	
Thatcher's Island, Mass	29.79	756.7	29.84	757.9	62.0	16.7	88	SW	4	1.8		5cs	0	SW		Inap.	Inap.	Fair	
Toledo, Ohio	29.14	740.1	29.82	757.4	72	22.2	90	SW	8	3.6		2ck	8ks	SW	SW	0.30	7.6	Cloudy	
Tucson, Arizona	27.48	698.0	29.78	756.4	70	21.1	32	SW	4	1.8		0	0			0	0	Clear	
Umatilla, Oregon	29.66	753.4	30.06	763.5	54.3	12.4	61	SW	12	5.4		1cs	0			0	0	Clear	
Uvalde, Texas	28 96	735.6	29.75	755.6	73	22.8	85	SE	2	0.9			10s		S	0	0	Cloudy	
Vicksburg, Mississippi	29.75	755.6	30.00	762.0	82	27.8	79	NW	4	1.8		0	0			0	0	Clear	
Visalia, California	29.05	753.1	30.00	762.0	54	12.2	67	NW	5	2.2		0	0			0	0	Clear	
Washington, D. C.	29.80	759.9	29.91	759.7	75	23.9	77	Calm	0	0		10c	Hz	NW		0.01	0.3	Cloudy	
Wickenburg, Arizona					59	15.0	18	Calm				0	0			0	0	Clear	
Wilmington, N. Carolina	29.86	758.4	29.91	759.7	80	26.7	78	W	10	4.5	0	5c;hz	Hz	Calm	Calm	0.95	24.1	Fair	
Winnemucca, Nevada	25.57	649.5	29.78	756.4	50	10.0	26	SW	4	1.8		5ck	0	SW		0	0	Fair	
Wood's Holl, Mass	29.82	757.4	29.85	758.2	66	18.9	74	S	3	1.3		5c	1s	W	Calm	0	0	Fair	
Yankton, Dakota	28.67	728.2	29.93	760.2	61	16.1	94	NE	4	1.8			10s		NE	0.64	16.3	Cloudy	
Yuma, Arizona	29.70	754.4	29.84	757.9	66.2	19.0	59	Calm	0	0		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.14	562.3			52.5	11.4	76	Calm	0	0		0	0			0	0	Clear	Thomas Herran.
Buff Bay Town, Jamaica‡	29.70	755.9	30.07	763.8	78	25.6	86	W				0	0						
Havana, Cuba, W. I	29.88	758.9	29.92	760.0	78	25.6	90	SE	4.8	2.1			8n		E	0.42	10.7	Cloudy	A. Van Caneghem, Ass't.
Kingston, Jamaica, W. I	29.98	761.5	29.99	761.7	80.8	27.1	81	Calm	0	0		0	5ks		ESE	0	0	Fair	Robert Johnstone.
Navassa, W. I	29.90	759.4	29.98	761.5	82	27.8	83	E	20	8.9		Hz	5n;k		E	0	0	Hazy	F. M. Everett.
Paramaribo, S. A	30.06	763.5	30.07	763.8	79	26.1	87	SE			2	3c	4k	E		0.740	18.8	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.40	746.7	29.95	760.7	77	25.0	94	Calm	0	0			Fg			0	0	Foggy	Francesco J. Cisneros.
Rivas, Nicaragua					71.6	22		NW			1	0	0			0	0		Earl Flint.
Santiago de Cuba, W. I																			Robert Mason.
St. Thomas, W. I																			G. O. Gyllich.
York Factory, B. A	29.89	759.2	29.94	760.5	56.0	13.3	97	NW	9	4.0		5k	5s	N	NW	Inap.	Inap.	Raining	J. Fortescue & W Wood.

BRITISH NAVAL SERIES.

Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.	Force	Amount and kind.		Direction.							
									Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																		Comm. A. J. Errington
H M. S. Alert, Thursday Island, Oceania	29.95	760.7	76.5	24.7	84	SE		3-5		10							Squally	Capt. J. P. Maclear.
H. M. S. Alexandra, N. 40° 35′, E. 19° 16′	30.06	763.5	75.5	24.2	66	N		1		3							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																		Capt. Hon. W. H. Jolliffe.
H. M. S. Arab																		Comm. R. W. Stopford.
H. M. S. Bacchante																		Capt. Lord C. Scott.
H. M. S. Beacon, N. 24° 47′, E. 66° 59′	29.55	750.6	85	29.4	83	WSW		3		7	WSW						D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, Varna, Bosporus			72	22.2		NE		1-2		0					1	N	Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 45′	30.10	764.5	82	27.8	83	NE		1		6							D. clouds.	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 12° 10′, W. 9° 44′	30.09	764.3	76	24.4	72	ESE		4-6		5	ESE				3	ESE	D. clouds	Com. F. W. Richards.
H. M. S. Champion, Monte Video, Uruguay	30.04	763.0	45	7.2	92	SW		2		2	Calm				2	S	Showery	Capt. G. R. Hope.
H. M. S. Cockatrice																		Capt. H. T. Gerfell.
H. M. S. Comus, N. 38° 52′, E. 117° 59′	29.73	755.1	74	23.3	68	WSW		4		1							Blue sky	Capt. J. W. East.
H. M. S. Condor, N. 36° 34′, E. 13° 06′	30.09	764.3	75	23.9	74	Calm		0		0					Sm'h		Misty	Comm. F. W. Egerton.
H. M. S. Coquette																		Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 39° 03′, E. 12° 39′	30.05	763.3	75	23.9		SSE		1		3	ESE						D. clouds	Capt. F. A. Wethernll.
H. M. S. Curacoa																		Capt. S. Long.
H. M. S. Danae, N. 43° 54′, W. 11° 34′	29.55	750.6	64	17.8	94	S		6		10					7	SSE	Overcast	Capt. J. C. Parvis.
H. M S. Daring																		Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.33	770.4	63	17.2		SE		3-4		3	SSW						Squally	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.96	761.0	80	26.7	86	WNW		1		1							Blue sky	Capt. J. Barnardiston.
H. M. S. Dragon																		Capt. Hulton.
H. M. S. Druid, N. 49° 30′, W. 56° 03′	29.82	757.4	45	7.2	96	ENE		1		10							Overcast	Capt. W. R. Kennedy.
H. M. S. Dryad																		Capt. John Hext.
H. M. S. Eclipse, S. 7° 13′, E. 72° 23′	29.90	759.4	80	26.7		SE		1-2		3							D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 17° 42′, E. 75° 50′	29.99	761.7	75	23.9		SSE		5		2	SSE				4	SSE	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, N. 5° 54′, E. 169° 43′	29.86	758.4	84	28.9	91	ENE		1-3		4	SE						D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																		Capt. L. Ching.
H. M. S. Euryalus, Port Louis, Mauritius	30.24	768.1	76	24.4	64	E		3-5		2	ESE						D. clouds	Capt. R. D. King.
H. M. S. Falcon																		Comm. W. H. C. Selby.
H. M. S. Fantome, N. 50° 45′, W. 56° 02′	29.78	756.4	44	6.7		N		2-3		7	N						Raining	Capt. W. C. Karslake.
H. M. S. Fawn, N. 12° 47′, E. 44° 58′	29.65	753.1	89.5	31.9	63	SSE		1		3							D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo, N. 20° 43′, W. 83° 44′	29.85	758.2	86	30.0	79	E		4-6							5	S	Squally	Comm. R. N. Custance.
H M. S. Flying Fish																		Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd	29.96	761.0	56	13.3	80	SW		3		6							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.42	747.3	40	4.4	82	W		3		3							Snowing	Capt. L. F. Jones.
H. M. S. Griffon, N. 24° 42′, W. 76° 14′	30.03	762.7	84	28.9	91	ESE		1									Blue sky	Comm. J. Ingles.
H. M. S. Hecla																		Capt. T. L. H. Ward.
H. M. S. Humber																		Capt. J. L. Way.
H. M. S. Inconstant																		Capt. C. C. P. Fitzgerald.
H. M. S. Iris																		Capt. E. H. Seymour.
H. M. S. Iron Duke																		Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.03	762.7	60	15.6		S		1		6	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																		Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.63	752.6	65	18.3		N		3		10							Raining	Capt. S. Grove.
H. M. S. London																		Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 19° 59′, E. 110° 01′	29.72	754 9	86	30.0	75	E		1		3					1	ENE	D. clouds	Capt. A. Carpenter.
H. M. S. Midge																		Capt. W. N. Lang.
H. M. S. Minotaur																		Capt. H. H. Rawson.
H. M. S. Modeste, S. 27° 40′, E. 47° 00′	30.15	765.8	69	20.6	90	ENE		4-5		3	ENE				4	ESE	Squally	Capt. J. G. Mead.
H. M. S. Monarch, Tunis, Tunis, N. Africa	30.01	762.2	78	25.6	86	SE		3		2	SSE						D. clouds	Capt. G. Tryon, C. B

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, N. 5° 16′, E. 115° 15′			84.5	29.		SW			1		1	SW						Blue sky	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.68	753.9	57	13.9	87	WNW			2		7	WNW						Misty	Capt. E. B Drummond.
H. M. S. Orontes, N. 4° 30′, E. 7° 03′ *†	29.98	761.5	78.5	25.8	93	SW			4		10					2	SSW	Raining	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.90	759.4	79	26.1	97	NW			1		3							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.75	755.6	81	27.2		W			3		6							D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 50° 30′, W. 125° 47′	29.89	759.2	54	12.2		WNW			1		0							Blue sky	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	30.09	764.3	80.3	26.8	86	SSE			1		2					Sm'h		D. clouds	Capt. C. E. Foot.
H. M. S. Salamis.																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, S. 20° 15′, W. 70° 20′	30.15	765.8	62	16.7	94	Calm			0		10	Calm				4	SW	Overcast	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.			83	28.3		ESE			1		4							D. clouds	Com. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	29.99	761.7	50	10.0	64	S			2		0							Blue sky	Com. J. C. Wilson, A. D.C
H. M. S. Woodlark, Abu Shehr, Persia	29.51	749.5	88.5	31.4	59	NW			4-6							4	NW	Heavy mist	Capt. T. P. Nesham.
H M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES. Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candid dos Reis, Comd't.
Quanza, Porto Praya, Cape Verd Id's	30.06	763.4	79.7	26.5	66	NE			1		2		NW			1	SW	D. clouds	Carlos M. de Silva Costa, Comd't
Rio Lima																			S. C da Silva Costa, Comd't.
Sado., St. Paul de Loando, Benguela	30.10	764.6	68.4	20.2	83	NW			5		2					1		D. clouds	G. A de Brito Capello, Comd't.
Tamega, Macao, China	29.82	757.3	85.1	29.5	82	SSE			2									Blue sky	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES. Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H M. Corvette Saga																			Capt. M. von Krusenstierna.
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.15	765.8	79	26.1	86	N	2	0.9			5		SW	0	0			Fair	
Naval Hospital, Yokahama, Japan	29.49	749.0	64.5	18.1	98	N			5		10		N	2.28	57.9			Light rain	
Adams N. 13° 59′, W. 94° 38′	29.66	753.4	78	25.6	91	W			2-3		10		SW			Mod.	W	Cloudy	
Alaska, Callao, Peru	29.94	760.5	64	17.8	89	SSE			1		10			0	0	Sm'h		Misty	
Alert. Fatiyama Bay, Japan.*	29.49	749.0	68	20.0	90	NNW			2-5		10		NNW			Sm'h		Rainy	
Alliance, N. 39° 10′, W. 63° 50′	29.95	760.7	73	22.8	95	SSE			2-3		2		S	0	0			Clear	
Ashuelot, Kobe, Japan	29.62	752.3	69	20.6	100	NE			6		10		NE					Raining	
Colorado, New York, N. Y	29.88	758.9	70	21.1	70	Calm	0	0			8			0	0			Foggy	
Constitution, Newport, R. I	29.81	757.2	65	18.3	78	Calm			0		8							Fair	
Franklin, Norfolk, Va	29.83	757.7	77	25.0	82	WSW	3.6	1.6			0			0	0			Clear	
Galena. N. 38° 38′, W. 9° 23′	29.96	761.0	66	18.9	84	WSW			2		5					Sm'h	wsw	Fair	
Independence, N. Yard, Mare I'd, Cal	29.99	761.7	65	18.3	78	WSW	3.6	1.6			2		WSW	0	0			Clear	
Jamestown, Sitka, Alaska	30.00	762.0	50	10.0	93	Calm			0		10			0	0	Sm'h		Foggy	
Kearsarge. Norfolk, Va	29.94	760.5	76	24.4	82	W			1		2					Sm'h		Clear	
Lackawanna. S. 14° 06′, W. 167° 22′	30.12	765.0	79	26.1	91	ESE			5		2		ESE			Mod	SE	Fair	
Marion, Montevideo, Uruguay	30.01	762.2	46	7.8	84	SW			4		10		Calm			Mod.	SW	Cloudy	
Michigan, Detroit, Michigan	29.75	755.6	62	16.7	72	NE			3		8		NE					Fair	
Minnesota. Newport, R. I	29.88	758.9	66	18.9	84	Calm			0		2		WNW			Sm'h		Clear	
Monocacy, Yokohama, Japan	29.63	752.6	66	18.9	94	N			2		10		N					Showery	
New Hampshire. Norfolk, Va	29.91	759.7	76	24.4	86	SW	7	3.1			5		SW	0	0			Fair	
Nipsic. Antwerp, Belgium	29.89	759.2	68	20.0	65	W			2		8					Sm'h		D. clouds	
Onward, Callao, Peru †	30.01	762.2	64	17.8	89	SSE			2		10		N			Long	W	Cloudy	
Palos, Nagasaki, Japan	29.74	755.4	72	22.2	?	Calm			0		5							Fair	
Passaic, Washington, D. C	29.91	759.7	74	23.3	90	NE			1		0							Clear	
Pensacola. Mare Isl'd, Cal	30.06	763.5	53	11.7	86	W			1-2		2			0	0			Clear	
Portsmouth. Newport, R. I	29.74	755.4	63	17.2	100	Calm			0		5					Sm'h		Fair	
Powhatan. Newport, R. I	29.82	757.4	67	19.4	74	Calm			0		8?							Clear?	
Quinnebaug, Tompkinsville, N. Y	29.85	758.2	73	22.8	67	Calm			0		8					Sm'h		Cloudy	
Ranger, Pichilinque, Mexico	29.82	757.4	79	26.1	82	SW			2		5		Calm	0	0	Sm'h		Cloudy	
Richmond, Nagasaki, Japan	29.73	755.1	75	23.9	86	SE			1		2		SE	0.03	0.8			Clear	
Saratoga, Newport, R. I	29.83	757.7	64	17.8	83	Calm			0		2		Calm	0	0			Fair	
Shenandoah, S. 29° 35′, W. 46° 20.	30.17	766.3	63	17.2	62	WSW			5		10					Long	SW	Cloudy	
St. Louis, League Island, Pa	29.53	750.0	73	22.8	67	Calm	0	0			2			0	0			Clear	
Swatara. Shangbai, China †	29.74	755.4	75	23.9	90	NE			2		10		Calm					Raining	
Tennessee, Navy Yard, N. Y	29.88	758.9	67	19.4	55	Calm	0	0			5		Calm	0	0	Sm'h		Smoky	
Ticonderoga, S. 40° 33′, W. 36° 40′	29.76	755.9	48	8.9	78	W			4		5		W	Inap.	Inap.	Mod.	wsw	Fair	
Vandalia. New London, Conn	29.85	758.2	67	19.4	89	SW			1		8		Calm					Fair	
Wabash, Boston, Massachusetts	29.84	757.9	69	20.6	56	W	2	0.9			2		NW	0	0			Clear	
Wachusetts, N. Yard, Mare I'd, Cal	29.97	761.2	57	13.9	75	SW			2		2		S	0	0			Fair	
Yantic, N. 23° 20′, W. 86° 40′	29.71	754.6	79	26.1	95	SE			3		5		SE			Mod.	E	Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Force	Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.			Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire,																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 15° 12′, W. 118° 47′	29.87	758.7	75.2	24.0	83	NNE			2		5							Showery	Capt. E. J. Molony.
Chin Yang																			Capt. N. Youlden.
S. S. Cipero, N. 34° 30′, W. 28° 21′	30.17	766.3	70.2	21.2	88	W			4		10					3	WNW	Overcast	Capt. W. N. Lailey.
City of Agra, S. 6° 53′, W. 30° 01′	30.02	762.5	81.0	27.2	91	ESE			3		6							D. clouds	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N 29° 29′, W. 21° 07′	30.22	767.6	70.3	21.3	85	W			3		7							D. clouds	Capt. Jas. Buchan.
Denbigshire																			Capt. H. Y. Murdoch.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gom																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 10° 59′, W. 37° 02′	30.26	768.6	78.0	25.6	91	ESE			2		9							Showery	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randell.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt E. W. Turner.
Naiad, N. 46° 26′, W. 11° 19′	29.43	747.5	61.5	16.4	99	WSW			6		10							Showery	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria, ‡ N. 40° 13′, W. 37° 29′	30.00	762.0	70	21.1	90	W			5		5							D. clouds	Capt. M. Parry.
Sierra Estrella, N. 8° 53′, W. 24° 55′	30.04	763.0	81.2	27.3	85	SE			2		9							Showery	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 39° 04′, W. 9° 28′	29.91	759.7	66	18.9	89	SW			3		8							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 50° 57′, W. 34° 27′	29.91	759.7				NNE			3		10		NE			Mod.	ENE	Cloudy	
S. S. Circassian, ‡ N. 49° 41′, W. 59° 40′	29.96	761.0	49	9.4	85	ENE			5		10kn			0	0	2	E	Overcast	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Gallia																			
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			Capt. M. Murphy.
S. S. Adriatic, N. 43° 58′, W. 47° 15′	29.87	758.7	52	11.1		W			3		2		W			Mod.	NW	Clear	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 41° 25′, W. 60° 42′	29.88	758.9	72	22.2	90	SW			5		8		WSW	0	0	Mod.	SW	Fair	Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England	29.66	753.4	67	19.4	89	SSE			3		5		S	Sho	wers			D. clouds	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig, N. 49° 42′, W. 166° 38′	29.22	742.2	60.0	15.6	82	SSE			4		10		S			Mod.	SSW	Raining	Capt. H. Baur.
S. S. Hermann, N. 41° 27′, W. 63° 59′	29.82	757.4	64.4	18.0		S			2		10		W	5 ho	urs			Fair	
S. S. Hohenzollern																			Capt. Th. Jüngst.
S. S. Köln, N. 49° 15′, W. 19° 35′	29.83	745.0	60.0	15.6	88	WNW			4-5		10		WNW	Sho	wers	Cross	WNW	Cloudy	Capt. F. Pfeiffer.
S. S. Leipzig																			Capt. C. Heimbourh.
S. S. Strassburg																			
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. C. F. Skoldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 50° 41′, W. 160° 16′.....	29.23	742.4	59	15.0	88	S	.....	.....	5	.....	10	.....	SW	.....	.....	Mod.	SSW	Rainy.....	Capt. J. W. Shackford.
S. S. Indiana, Philadelphia, Pa.....†	29.86	758.4	87	30.6	45	WSW	.....	.....	4	.....	8	.....	SW	0	0	.....	.....	Cloudy.....	Capt. R. W. Sargent.
S. S. Ohio, N. 29° 23′, W. 64° 56′.....*†	30.02	762.5	72	22.2	95	SW	.....	.....	3	.....	2	.....	SW	0	0	Sm'll	SW	Fair.....	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, N. 49° 40′, W. 17° 39′.....†	29.27	743.4	62	16.7	77	NW	.....	.....	2	.....	10	.....	NW	.....	.....	Sm'h	W	Cloudy.....	Capt. Geo H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 23° 00′, W. 109° 02′.....†	29.69	754.1	78	25.6	91	SSW	.....	.....	3	.....	5	.....	SW	0	0	G'tl	SSW	Fair.....	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 42° 58′, W. 165° 46′.....†	29.87	758.7	59	15.0	76	SSE	.....	.....	4	.....	8	.....	S	0	0	Mod.	SW	Cloudy.....	Capt. H. Davison.
S. S. Gaelic.....																			Capt. W. H. Kidley.
S. S. Oceanic, Yokohama, Japan.....†	29.92	760.0	76	24.4	86	SW	.....	.....	3	.....	10	.....	SW	1.67	42.4	.....	.....	Cloudy.....	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia.....																			Capt. Fred. Bolles.
S. S. Oregon.....																			Capt. E. Polemann.
PACIFIC COAST S. S. CO *Goodall, Perkins & Co.*																			
S. S. Anton, N. 32° 38′, W. 117° 16′....†	29.97	761.2	61	16.1	88	E	.....	.....	1	.....	0	.....	.....	.....	.....	Mod.	W	Fine.....	Capt. J. N. Ingalls.
S. S. Dakota.....																			Capt. H. G. Morse.
S. S. Idaho, San Francisco, Cal.....†	30.06	763.5	51	10.6	93	NW	.....	.....	3	.....	0	.....	.....	.....	.....	.....	.....	Clear.....	C. E. Lyons, 1st Officer.
S. S. Orizaba.....																			Geo. H. Harrison.
S. S. Senator.....																			Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal.....†	30.03	762.7	50	10.0	100	NW	.....	.....	4	.....	5	.....	W	.....	.....	.....	.....	Fair.....	Capt. G. Debney.
S. S. Victoria, N. 41° 53′, W. 124° 35′....†	30.11	764.7	52	11.1	86	Calm	.....	.....	0	.....	2	.....	.....	.....	.....	Sm'h	.....	Clear.....	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia.....																			A. Bannerman, 2d Officer.
S. S. City of New York, S. 35° —′, E. 175° —′.....†	30.13	765.3	59	15.0	88	N	.....	.....	4	.....	5	.....	N	0	0	Mod.	NE	Fair.....	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 18° 00′, W. 102° 55′....†	29.91	759.7	81	27.2	83	N	.....	.....	1	8ck	0	N	.....	6 hours		Mod.	WSW	Cloudy	Capt. D. S. Austin.
S. S. City of Peking.....																			Capt. G. G. Berry.
S. S. City of Sidney, S. 13° 51′, W. 170° 40′....*†	29.96	761.0	80	26.7	66	ESE	.....	.....	5	.....	2	.....	SE	0	0	H'vy	SE	Fair.....	Capt. H. C. Dearborn.
S. S. City of Tokio, Hong Kong, China.....†	29.93	760.2	85	29.4	87	Calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	Clear	A. L. Ritchie, 2d Officer.
S. S. Colima.....																			Capt. R. R. Searle.
S. S. Granada, N. 7° 22′, W. 82° 52′.....†	29.86	758.4	81	27.2	91	Calm	.....	.....	0	.....	2	.....	NE	4 hours		.....	.....	Clear.....	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. W.....	29.91	759.7	57	13.9	53	NE	.....	.....	2	.....	2	.....	NE	.....	.....	.....	.....	Clear.....	.....
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland.....																			Capt. Sam'l Jackson.
S. S. Nederland.....																			A. Feddersen, 2d Officer.
S. S. Rhynland, N. 49° 04′, W. 180° 59′.....†	29.34	745.2	65	18.3	90	WNW	.....	.....	6	.....	10	.....	NNW	0.1	3.	Mod.	WNW	Cloudy.....	Capt. Wm. Geo. Randle.
S. S. Vaderland.....																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley.....																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, N. 35° 25′, W. 75° 14′.....	29.88	758.9	76	24.4	82	WSW	.....	.....	5	.....	Sk	.....	.....	0.[illegible]8		.....	S	Smoky.....	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.....																			Capt. L. L. Lewis.
Bark Carrie Heckle.....																			Capt. B. F. Woodbury.
Brigantine George, Arroyo, Porto Rica.....†	30.13	765.3	80	26.7	.....	NE	.....	.....	3	.....	2	.....	.....	Showers		Mod.	.....	Clearing.....	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Cherrystone, Va.....†	29.94	760.5	78	25.6	86	NW	1	0.4	.....	0	28	.....	.....	1.01	25.7	.....	.....	Clear.....	.....
Bark Sunbeam, N. 30° 22′, W. 180° 55′.....†	30.22	767.6	72	22.2	85	WNW	.....	.....	5	.....	2	.....	NW	0	0	Mod.	NW	Clear.....	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 21, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind. Up'er	Clouds. Amount and kind. Lo'er	Clouds. Direction. Upper.	Clouds. Direction. Lower	Rain-fall or melted snow in the past 24 hours		Weather	Observers.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours‡			29.87	758.8	76.6	24.8	74	W			2		1			0	0	Very fair	Raynard.
Algiers‡			29.92	760.0	77.0	25.0	71	W			2		0			Inap.	Inap.	Clear	Nicolas.
La Calle‡			29.93	760.3	83.5	28.6	69	WSW			2		3			0	0	Pretty fair	Fonfrède.
Tunis‡			30.02	762.5															Jacques.
Sfax‡			30.11	764.9															Gau.
Saida‡			29.92	759.9	83.2	28.8	31	N			4		1			0	0	Very fair	Dumas.
Tebessa‡			30.05	763.3	90.3	32.4	15	SE			2		8			0	0	Very cloudy	Watrin.
Geriville‡					91.4	33.0	16	SSE			2		4			0	0	Cloudy	Lonchamp.
Laghouat‡			29.96	760.9	94.3	34.6	11	S			6		4			0	0	Cloudy	Herbin.
Biskra‡			30.05	763.3	100.0	37.8	49	SE			4		4			0	0	Cloudy	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.25	768.3	30.35	770.9	42.5	5.8	95	SW	6	2.7			1			0	0	Fine	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.48	748.9	30.01	762.2	81.0	27.2	45	S			3		0			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.25	743.0	29.99	761.7	76.5	24.7	56	SE	8.1	3.6			10			0.055	1 4	Raining	Dr. Wierzbicki.
Eperies	29.17	741.0	30.02	762.4	75.7	24.3	66	S			3		10cs	0		0	0		Julius Mikolik.
Gratz‡	28.83	732.2	30.02	762.4	75.3	24.6	60	S			3		1			0	0		Andreas Rospini.
Hermannstadt	28.68	728.4	30.04	762.9	79.5	26.4	49	NNE			2		1			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.58	725.9	29.85	758.2	75.6	24.8	73	SE			1		9			0	0		The Staff.
Lemberg	29.09	738.8	30.04	762.9	74.1	23.4	59	SW			2		5			0	0		Dr. T. Stanecki.
Pola	29.97	761.1	30.07	763.8	81.0	27.2	66	SSE			1		2			0	0		I. R. Hydrographic Office.
Szathmar	29.63	752.7	30.09	764.2	79.9	26.6	79	S			1		5			0	0		Belcht Peter, S. J.
Szegedin	29.70	756.0	30.03	762.7	80.6	27.0	60	S			2		6			0	0		Karl Stancel.
Trieste	30.00	761.9	30.10	764.5	76.3	24.6	66	NW			1		3			0	0		Secco.
Vienna	29.25	742.9	29.93	760.3	77.7	25.4	64	SE			3		3			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter Printed June 20, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.24	742.7	29.34	745.2	54.0	12.2	89	SSE	21	9.4			9			0.030	0.8	Squally	W. Boswell.
Armagh, Observatory	28.93	734.8	29.16	740.7	60.0	15.6	71	SSE	19	8.5			10					Squally	S. Call.
Bidston, Liverpool Obs'y			29.38	746.2	60.0	15.6	72	S	24	10.7			10					Raining	John Hartnup.
Bolton, Sharples																			Thomas Mackereth.
Bradford, Yorkshire	28.99	736.3	29.39	746.5	63.0	17.2	70	SW			1.0		7			0.05	1.3	D. clouds	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.90	701.0	29.99	761.7	86	30.0	63	NE			2		3					D. clouds	Corpl. J. Sargener, A. H. C
Cardington			29.52	749.8	71.0	21.7	53	SW			4.0		5					D. clouds	John McLaren.
Chatham, School M. E.	29.52	749.8	29.64	752.8	68.5	20.3	76	SW			3		7					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.25	743.2	29.49	749.0	61.5	16.4	80	SSW			5		8					Overcast	The Staff.
Fort Napier, Natal	27.81	706.4	30.02	762.5	59.3	15.2	81	E			1		4?					Overcast?	Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7				SW			1		3					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			29.02	737.1	60	15.6	88	SW			2		10			0.08	2.0	Showery	J. O'Donaghue.
Gibraltar, Mediterranean	29.95	760.7	30.00	762.0	74.9	23.8	79	SW			2		3					Blue sky	2nd Cpl. C. Baldwin.
Glasgow, Observatory	29.06	738.1	29.27	743.4	60.9	16.1	68	S			5		9k					Overcast	Harry Urquhart.
Greenwich, Royal Obs'y	29.43	747.5	29.60	751.8	69.5	20.8	63	SSW			6		6					D. clouds	The Staff.
Guernsey	29.38	746.2	29.60	751.8	66.5	19.2	26	SSW			2		3					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.56	750.8	29.60	751.8	66.9	19.4	57	SW	25	11.2			6					D. clouds	The Staff.
Leicester, Museum	29.23	742.4	29.47	748.5	65.5	18.6	68	SW			3		9					Overcast	J. E. Carryer.
Malta, Mediterranean	30.00	762.0	30.08	764.0	75.0	23.9	68	E			2		0					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.92	760.0	29.97	761.2	84.0	28.9	79	S			1		10			Blank		Overcast	C. S. Duncombe.
Oscott, St. Mary's College	28.95	735.3	29.45	748.0	67.1	19.5	65	S			4		7			Blank		Squally	John Mac Emall.
Oxford, Radcliffe Obs'y	29.31	744.5	29.54	750.3	67.2	19.6	56	S			7		6					Squally	The Staff.
Plymouth	29.46	748.3	29.53	750.0	62.9	16.7	84	S			4		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.31	744.5	54	12.2	92	SE	33	14.8			10					Showery	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	30.02	762.5	30.08	764.0	82.4	28.0	37	NE			2		0					Hazy	Serg't W. H. Lyne.
Sheffield	29.18	741.2	29.45	748.0	71.4	21.9	69	SSW			2		6					D. clouds	W. F. Cooper.
Silloth Rectory	29.34	745.2	29.37	746.0	62.4	16.9	75	S			6		2			0.100	2.5	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.41	747.0	67.0	19.4	52	SW	26	11.6			8			Blank		D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	29.38	746.2	29.59	751.6	66.8	19.3	64	SW			4-5		7					Squally	Rev C.H.Griffiths, F.M.S.
Truro, Royal Institution	29.50	749.3	29.52	749.8	65	18.3	63	SW			7		6					D. clouds	W. Newcombe.
Valencia, Observatory	29.20	741.7	29.22	742.2	56.5	13.6	85	W	13	5.8			8			Blank		D. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B					48.0	8.9		SE	2	0.9			10n					Raining	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.65	753.1	29.69	754.1	50	10.0	89	SE	1	0.4			10n			0.118	3.0	Cloudy	H. J. Cundall, C. E.
Chatham, N. B. *	29.61	752.1	29.67	753.6	47	8.3	96	NE	3	1.3			10n		NE	0.20	5.1	Light rain	G. A. Blair.
Chicontimi, Quebec					48.1	8.9		NW			3		9ks			0	0	D. clouds	Rev. V. A. Huart.
Cornwall, Ontario	29.57	751.1	29.76	755.9	50.5	10.3	77	NW			1	0	4s			0	0	Blue sky	James Smith, M. A
Dalhousie, N. B	29.69	754.1	29.72	754.9	47.0	8.3		E			1	0	0			0	0		H. A. Johnson.
Father Point, Quebec *	29.65	753.1	29.67	753.6	43	6.1	93	NE	2	0.9			Fg			0.81	20.6	Foggy	J. McWilliams.
Fort Garry, Manitoba *	29.40	740.7	30.23	767.8	51	10.6	86	Calm	0	0		5k	5ks	N	N	0	0	Cloudy	James Stewart.
Fredericton, N. B	29.61	752.1	29.68	753.9	51.1	10.6	93	W	1	0.4			10n			0.240	6.1	Misty	Prof. Harrison.
Granton, Ontario	28.92	734.6	30.02	762.5	48.0	8.9	92	N			1	0	0			0	0	Clear	James Grant.
Halifax, N. S *	29.59	751.6	29.72	754.9	53	11.7	91	SE	8	3.6			10ks			0	0	Cloudy	A. Allison.
Hamilton, Ontario	29.56	750.8	29.95	760.7	56.7	13.7	76	SE			1	8ck	0	SE		0	0	Cloudy	Geo. Dickson, B. A.
Kingston, Ontario *	29.49	749.0	29.82	757.4	52	11.1	71	W	6	2.7		0	0			Inap.	Inap.	Clear	S. Woods, M. A.
Little Glace Bay, N. S	29.70	754.4	29.74	755.4	48.3	9.1	83	Calm			0		10n			0	0	Cloudy	C. H. Rigby.
Montreal, Quebec *	29.54	750.3	29.73	755.1	54	12.2	69	NW	4	1.8			10ks		NW	0.18	4.6	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario	29.93	760.2	29.97	761.2	40.5	4.7	95	N			3		10n			0.29	7.4	Raining	J. R. Nason.
Parry Sound, Ontario *	29.28	743.7	29.98	761.5	46	7.8	77	N	14	6.3		5k	0	NW		0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario	29.17	740.9	29.91	759.7	53.7	12.1	64	N			1	0	0			0	0	Clear	J. F. Jeffers, M. A.
Port Dover, Ontario	29.25	742.9	29.94	760.5	52	11.1	86	N	9	4.0		0	0			Inap.	Inap.	Clear	H. Morgan.
Port Stanley, Ontario	29.31	744.5	29.90	761.0	52	11.1	82	NW	4	1.8		0	0			0	0	Clear	M. Payne.
Quebec, Quebec *	29.40	746.7	29.73	755.1	48	8.9	78	W			1	0	2s		W	0.01	0.3	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario *	29.42	747.3	29.88	758.9	48	8.9	82	NW	6	2.7			8ks		NW	0	0	Cloudy	W. H. McIntyre.
Saugeen, Ontario *	29.27	743.4	29.99	761.7	46	7.8	62	NW	13	5.8		0	0			0	0	Clear	K. Stewart.
St. Andrews, N. B	29.60	751.8	29.65	753.1	51	10.6	93	SE	1	0.4			Fg			0.16	4.1	Foggy	
St. John, N. B	29.48	748.8	29.65	753.1	53.0	11.7	93	SW	2	0.9			10s			0.200	5.1	D. clouds	G. Murdock, C. E.
Stratford, Ontario	28.69	728.7	29.98	761.5	48.0	8.9	89	NE	5	2.2		10s	0			Inap.	Inap.	Blue sky	C. J. Macgregor, M. A.
Sydney, C. B *	29.72	754.9	29.76	755.9	50	10.0	86	E	3	1.3			10s		S	0	0	Cloudy	T. C. Hill, C. E.
Toronto, Ontario *	29.57	751.1	29.95	760.7	53	11.7	66	NW	10	4.5		0	0			0.05	1.3	Clear	Magnetic Observatory
Windsor, N. S	29.58	751.3	29.67	753.6	54.5	12.5	84	S	4	1.8		0	2n			0	0	Clear	
Woodstock, Ontario	28.90	734.0	29.96	761.0	53.8	12.1	74	NW	6	2.7		0	0			0	0	Blue sky	Prof. Wolverton.
Yarmouth, N. S *	29.59	751.6	29.66	753.4	57	13.9	89	Calm	0	0		8x	2s	SW	SE	0	0	Cloudy	Lt. F. E. Wilmot, R. N.
Sub-Series.																			
St. Johns, Newfoundland	29.63	752.6	29.88	758.9	50	10.0	86	SW	0	0		5k	5s			0	0	Fair	John Delany.
St. Pierre, N. F			29.64	752.8	50.0	10.0		W			3					1.42	36.1		N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

Cape St. Francis Lt. House	30.38	771.6			63.6	17.6	79	S	27.2	12.2		0	3k			0.610	15.5		John Duthie.
Cape Town, C. G. H. Obs'y	30.33	770.4	30.37	771.4	44.5	6.9		S	3	1.3		0	1k			0	0	Vapory	The Staff, for D. Gill.
Worcester *†	29.37	746.0			63.9	17.7	61	S			1	0	1			0	0	Fine	C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.88	759.0	29.91	759.6	69.6	20.9	91	S	0.9	0.4			10			0.220	5.6	Covered	M. Marc Dechevrens, S.J

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the MINISTER OF FOREIGN AFFAIRS.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.19	665.2	29.91	759.7	70.7	21.5	91	NE			1	3c	1d			0	0	Hazy.	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.91	759.6	29.95	760.8	68.5	20.3	57	S	20	9			0						Oversergent Fischer.
Fanöe	29.73	755.1	29.75	755.6	73.4	23.0	54	S			6		5						Overlœrer Lauridsen.
Godthaab, Greenland																			S. Kleinschmidt.
Stykkisholm, Iceland	29.73	755.1	29.77	756.2	45.1	7.3		E			4		0						A. O. Thorlacius.
Thorshavn	29.44	747.7	29.47	748.6	47.3	8.5	91	NE	20	9			10						Overlœrer Bergh.
Vestervig	29.67	753.5	29.70	755.9	71.6	22.0	67	SW			2		4						Lœarer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.19	741.4	29.80	756.9	79.9	26.6	49	SSE			2	2c	0	W		0	0	Slightly cl'dy	M. Labroue, Director.
Alençon Normal School	29.23	742.4	29.78	756.4	68.4	20.2	87	SW			2	0	5k		SW	0.047	1.2	Cloudy	M. Nicot, Director.
Arras, Engineer School	29.46	748.3	29.71	754.6	73.0	22.8	66	SW			4	0	lm		SW				M. Klein, Commandant.
Avignon, Normal School	29.89	759.2	29.97	761.2	84.2	29	48	SSW			1		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.20	743.2	29.79	756.6	81.1	27.3	37	S			1		2			0	0	Slightly cl'dy	M. Saillard, Director.
Beauvais, Normal School	29.48	748.8	29.73	755.2	75.7	24.3	56	SW			2		8		SW	0.181	4.6	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.00	736.6	29.80	757.0	81.0	27.2	37	SSW			2		0			0	0		M. Gobin, Director.
Bordeaux, Observatory	29.50	749 4	29.75	755.7	84.6	29.2	41	SW			1		5		SW	0	0	Cloudy	M. Rayet, Director.
Bourges, Normal School	29.28	743.8	29.81	757.2	80.6	27	39	SSW			1	0	lk		SSW	0	0		M. Postel, Director.
Brest, Naval Observatory	29.43	747.4	29.67	753.6	66.2	19.0	73	SW			4		6		SW	0.031	0.8		M. de Rermarec, Dir.
Caen, Normal School	29.61	752.1	29.68	753.9	71.1	21.7	67	S			4		8		SW	0.103	2.7	Very cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.49	749.0	29.79	756.7	82.8	28.2	41	NE			1		2		NE	0.031	0.8	Slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.30	744.1	29.78	756.5	78.4	25.8	68	SE			1					0.098	2.5		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.49	723.7	29.76	755.9	85.1	29.5	33	S			3	0	5k			0.008	0.2	½ covered	M. Allnard, Director.
Cluny, Normal School	29.03	737.3	29.82	757.5	80.0	30	34	S			2		0			0	0		M. de Villemontée, Dir.
Commercy, Normal School	28 99	736.3	29.78	756.5	79.9	26.6	34	SW			3	2c	0	SW		0	0	Slightly cl'dy	Dr. Coulet, Director.
Gap, Normal School	27.60	701.0	30.00	762.0	82.4	28	33	SW			2	0	0	W		0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.94	735.0	30.08	764.0	83.7	28.7	36	S			3		2		S	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.13	740.0	29.85	758.4	79.7	26.5	52	NW			3	clk	0			0	0		M. Ablard, Director.
Guéret, Normal School	28.27	718.0	29.77	756.2	79.0	26.1	34	SSW			1	clk	0	NNE		0	0		M. Rivoire, Director.
Lamballe, Normal School	29.51	749.5	29.78	756.3	61.7	16.5	83	SSE			2				SSE	0	0		M. Ollifrault, Director.
Lescar, Normal School	29.19	741.5	29.82	757.5	83.3	28.5	82	NE			1	0	8			0	0		M Chauvin, Director.
Lorient, Naval Observatory	29.63	752.0	29.73	755.2	64.4	18.0	80	S			3		10		S	0.008	0.2	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.85	732.9	29.80	758.5	80.2	25.8	90	SSE			4		2		NNW	0	0	Slightyel'dy.	M. André, Director.
Mans, Normal School	29.45	748.1	29.75	755.0	72.1	22.3	59	W			4		5		SW	0.43	11.	Cloudy	M Piboen, Director.
Marseille, Observatory	29.70	754.3	29.92	760.9	82.9	28.3	42	SE			2		4		SW	Inap.	Inap.		M. Stephan, Director.
Montlouis l'Instituteur	24.83	630.7	30.07	763.7	68.4	20.2	77	W	20.6	9.2			4		SW	0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.88	758 9	29.98	761.6	74.8	23.8	70	SE			4		2	E	SE	0	0	Slightly cl'dy	M. P. Galzin, Director.
Nancy, Normal School	29.11	739.3	29.83	757.7	80.6	27	37	SSW			2	8c	0			0	0	Very cloudy	M. Hasse.
Nantes, Observatory	29.60	751.7	29.70	755.8	71.2	21.8	58	S			1-3		10n	SW	WSW	0.154	3.9		M. Larocque, Director.
Nice	30.00	762.0	30.04	762.9	73.0	22.8	59	E			8		Haze	E	E	0	0	Hazy	Capt. Boissière, Director.
Perpignan, Observatory	29.82	757.4	29.92	760.6	71.4	21.9	73	SE	9.4	4.2			7	W	E	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.56	573.0			50.2	10.1							1		SW	0	0	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	28.92	734.5	29.95	760.6	71.6	22	52	S			1		5	NE	NE	0	0	Cloudy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.14	638.0			63.1	17.3	71	SSE			3	0	5k			0.254	6.7	½ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	29.85	758.2	29.88	759 0	81.3	27.4	54	S			1		5		S	0.079	2.0	½ covered	Lt. E. Decanio, Director.
Roche-sur-Yon, N. School	29.53	750.0	29.73	755.2	72.7	22.6	60	SW			1		5		SW	0	0	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.78	705.7	29.85	758.2	72.3	22.4	54	E			3		10			0	0	Covered	M. Richard, Director.
Rouen, Normal School	29.01	752.1	29.70	754.3	75.0	24.2	55	SSW			3		2		S	0.20	5.	Slightly cl'dy	M. Platrier, Director.
Saint Lô, Normal School	29.55	750.6	29.71	754.0	69.4	20.8	59	SW			4		2		E	0	0	Slightly cl'dy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.59	751.6	29 76	755.8	77.5	25.3	52	SSW			2		5	SW	SW	0	0		M. Renou, Director.
Toulouse, Observatory	29.18	741.1	29.90	759.4	79.2	26.2	54	SSE			4		0			0.071	1.8	Clear	M. Baillaud, Director.
Tours	29.59	751.6	29.79	756.6	80.2	26.8	45	S			2		8		SW	0	0	¼ covered	M. de Tastes.
Versailles, Observatory	29.27	743.5	29.73	756.0	78.8	26.0	47	SW			4					0.138	3.5		Dr. A. Bérigny, Director.
SUB-SERIES.																			
Paris, Montsouris Obs'y	29.47	748.5	29.76	755.9	79.3	26.3	49	S			3		7		SSW	0	0		M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.06	738.2	29.93	760.1	79.9	26.6	52	W			1	0	6k		W	0.079	2.0		Prof. Dr. Hoh.
Berlin	29.73	755.2	29.89	759.3	82.4	28.0	38	E			3		5			0	0		Prof. Dr. Arndt.
Breslau	29.48	748.8	30.01	762.3	79.7	26.5	41	SE			1		1			0	0		Royal University Obs'y.
Carlsruhe	29.43	747.5	29.83	757.7	84.2	29.0	35	SW			2		0	SW		0	0		Albert Senz.
Cassel	29.12	739.7	29.84	757.9	81.3	27.4	36	SW			7		8	SW		0	0		Dr. H. Möhl.
Frankfort on the Main	29.52	749.8	29.85	758.4	84.2	29.0	26	SSW			3		4			0	0		Physical Society.
Friedrichshafen	28.52	724.3	29.88	759.0	75.2	24.0	68	SSW			2		5	W		0	0		Wilhelm, Chief Tel.
Hamburg	29.74	755.5	29.82	757.3	77.5	25.3	45	S			4		3			0.016	0.4		Dr. R. Kleeman.
Kiel	29.79	756.7	29.81	757.1	72.5	22.5	53	SW			2		2			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.48	748.9	29.88	759.0	81.7	27.6	52	S			2		7	SW		0.343	8.7		Prof. Dr. Bruhns.
Magdeburg	29.67	753.7	29.85	758 2	79.9	26.6	55	S			4		10ks		SW	0.232	5.9		Dr. Assmann.
Memel	30.05	763.2	30.10	764.4	72.5	21.5	57	SW			2	cs	8n						Reinbrecht & Issermann.
Munich	28.15	715.0	30.01	762.2	79.7	26.5	42	NW			1		3	SW		0	0		Central Station.
Neufahrwasser	30.00	762.0	30.02	762.4	75.6	24.8	49	SSE			2		8			0	0		A. Lothes.
Neustadt, Palatinate	29.31	744.5	29.84	757.8	83.7	28.7	38	SSW			2		2			0	0		Dicknether.
Stuttgart	28.99	735.6	29.80	756.9	81.1	27.3	42	S			2		2	W		0.016	0.4		Prof. Dr. Schoder.
Weissenburg, Bavaria	28.46	722.9	29.92	760.0	80.1	26.7	41	W			2		4	W		0	0		Prof. Kemlein.
Wustrow	29.87	758.8	29.90	759.5	78.3	25.7	54	SE			4	0	8ks			0	0		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.70	754.4	30.08	763.9	86.5	30.3		NE			1.5		0					Smoky	Schmidt & Wourlisch.
INDIAN SERIES.																			
Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.62	752.3	29.59	751.6	89.1	31.7	75	SSW	35.0	15.6			2	W		0	0	Misty	
Deesa	29.18	741.2	29.64	752.8	92.5	33.6	45	SSW	16.2	7.2			9		SW	0	0	D. clouds	
Bombay	29.78	756.4	29.82	757.4	87.2	30.7	73	WSW	11.0	4.9			4		WSW	0	0	D. clouds	
Poona, Yarrowda.	27.94	709.6	29.75	755.6	90.6	32.6	31	W	17.0	7.6			1		W	0	0	D. clouds	
Belgaum	27.29	693.1	29.80	757.0	80.4	26.9	59	WSW	11.0	4.9			2	NE	SW	0	0	D. clouds	
Lahore	28.77	730.8	29.47	748.5	105.9	41.1	25	SW	3.5	1.6			6			0	0	Misty	
Roorkee	28.65	727.8	29.52	749.8	93.0	33.9	48	N	2.4	1.1			10			0	0	Misty	
Agra	28.99	736.3	29.52	749.8	104.6	40.3	27	W	7.1	3.2			0			0	0		
Nagpur	28.62	726.9	29.63	752.6	93.2	34.0	39	NNW	5.5	2.5			9		W	0	0	Thunder	
Jubbulpore	28.30	718.9	29.62	752.3	93.7	34.3	37	NW	4.9	2.2			4	E		0	0	D. clouds	
Lucknow	29.18	741.1	29.54	750.2	97.0	36.1	44	WSW	4.3	1.9			3	SW		0	0	D. clouds	
Allahabad	29.24	742.6	29.54	750.2	98.7	37.1	39	SW	4.4	2.0			5	W		0	0	D. clouds	
Patna	29.36	745.8	29.54	750.2	92.5	33.6	66	NW	2.5	1.1			6	NW	NW	0	0	D. clouds	
Hazaribagh	27.61	701.3	29.56	750.8	90.8	32.7	50	NW	9.0	4.0			0			0	0	Blue sky	
Cuttack	29.56	750.8	29.64	752.9	86.2	30.1	65	SW	1.0	0.4			10			0	0	Thunder	
Calcutta, Alipore	29.57	751.2	29.60	751.7	81.6	27.6	75	SSE	3.0	1.3			10			0	0	Overcast	
Dhubri	29.45	748.0	29.57	751.0	78.3	25.7	92	Calm	2.1	0.9			9	SW		0.27	6.9	D. clouds	
Chittagong	29.56	750.9	29.65	753.2	83.3	28.5	84	SW	3.9	1.7			8			0	0	D. clouds	
Sibsagar	29.29	744.0	29.62	752.5	81.6	27.6	91	SW	1.6	0.7			10	W	W	0	0	Overcast	
Zanzibar, Africa			30.06	763.5	83.5	28.6	59	S	6	2.7			2			0	0	Blue sky	
ITALIAN SERIES.																			
By authority of the Minister of Agriculture, Industry and Commerce.																			
Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.68	753.9	30.08	763.9	78.1	25.6	60	SW	0.7	0.3			3			0	0		Prof. Giovanni Clodig.
Milan	29.54	750.3	30.04	762.8	81.0	27.2	43	S	3.1	1.4			7	WSW		0	0		Prof. Schiaparelli.
Padua	29.95	760.8	30.05	763.5	80.1	26.7	54	S	3.8	1.7			3	WNW		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.17	740.9	30.04	763.1	75.7	24.3	54	WNW	4.3	1.9			8	N		0	0		Prof. P. F. Denza.
Genoa	29.92	760.0	30.11	764.7	74.8	23.8	58	SW	4.9	2.2			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.20	716.2	30.04	763.0	76.1	24.5	44	NNW			2		3	SSW		0.012	0.3		Prof. D. C. Bruno.
Pesaro	30.02	762.5	30.07	763.7	75.9	24.4	60	NE					0			0	0		Prof. Luigi Guidi.
Florence	29.81	757.2	30.06	763.4	83.3	28.5	40	SSW			2		0			0	0		Prof. Costantino Pitter.
Leghorn	29.99	761.8	30.08	763.9	79.0	26.1	30	W	3.6	1.6			0			0	0		Prof. P. Monte.
Rome	29.93	760.2	30.10	764.5	83.8	28.8	37	SSW	4.9	2.2			0			0	0		Prof. P. S. Ferrari.
Lecce	29.84	757.9	30.08	764.0	82.4	28.0	34	SSE	4.9	2.2			6			0	0		Prof. C. de Giorgi.
Cosenza	29.22	742.2	30.07	763.8	83.5	28.6	72	SE	2.5	1.1			8	ESE		0	0		Prof. D. Conti.
Cagliari	29.81	757.2	30.00	762.0	77.0	25.0	62	SE			4		2	W		0	0		Prof. A. Pacinotti.
Palermo	29.78	756.3	30.02	762.5	77.9	25.5	46	NE	6.3	2.8			3			0	0		Prof. G. Ciacciatore.
Syracuse	30.04	763.1	30.09	764.2	74.7	23.7	76	E	6.9	3.1			10	SW		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.56	750.9	30.07	763.7	81.0	27.2	59	SW	0	0			0			0	0		Prof. F. Brioschi.
Stelvio	22.36	568.0			47.1	8.4	57	SW			6	4cs	0	N		0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.40	568.9			47.1	8.4	80	N			2		10n	SW		0	0	Covered	Prof. P. F. Denza.
JAPANESE SERIES.																			
Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y†	29.63	752.6	29.64	752.8	72.2	22.3	89	SSE	0.6	0.3		ck	7s			0	0	Cloudy	K. Sasaki.
Kioto	29.47	748.5	29.63	752.6	69.3	20.7	74	N	2.4	1.1		2ck	0			0	0	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.56	750.8	29.76	755.9	70.5	21.4	77	WSW	4.6	2.1		0	6s			0	0	Fair	S. Takehayashi.
Tokei Obs'y, Yeddo	29.50	749.3	29.57	751.1	71.2	21.8	87	SSE	6.8	3.0		3ck	5s;ks		SE	0	0	Cloudy	The Staff.
Wakayama	29.59	751.6	29.04	752.8	71.6	22.0	84	Calm	0	0		0	0			0	0	Clear	Y. Kuwamuca.
MAURITIUS SERIES.																			
Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	30.01	762.2	30.20	767.2	73.0	22.7	64	E	20.0	8.9		2	6	NNW	E	0.03	0.8	Cloudy	A. N. Figon.
MEXICAN SERIES.																			
By authority of the Secretary of Public Works.																			
Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.37	619.0	29.96	760.9	65.6	18.7	70	NW			1	4c	0	NW		0	0	Hazy	Prof. M. Leal.
Mazatlan	29.02	752.3	29.87	758.8	81.2	27.3	85	WSW	5.3	2.3			10cn		W	0	0	Covered	F. Quijano, U. E.
Mexico, Central Obs'y	23 07	585.9	29.96	761.1	56.8	13.8	76	Calm	0	0		3ck	0			0	0	Clear	The Staff.
Pabellon, Aguascalientes	23.91	607.4	29.82	757.3	62.8	17.1	71	Calm			0	1cs	0			0	0	Clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.41	594.8	30.17	766.4	53.6	12.0	50	Calm	0	0		0	0			0.03	0.7	Clear	Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.53	572.2	30.07	763.8	58.8	14.9	76	SW	0.9	0.4		0	1ks			Inap.	Inap.	Clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES.																			
Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	29.70	754.3	29.70	754.3	71.1	21.7		SSW			5					0	0		
Groningen	29.66	753.3	29.71	754.7	74.7	23.7		S			4					0	0		
Helder	29.67	753.5	29.67	753.5	66.6	19.2		S			4					0.201	5.1		
Hellevoetsluis	29.69	754.2	29.69	754.2	72.1	22.3	81	S			4					0	0		
Utrecht	29.65	753.2	29.70	754.4	73.9	23.3	68	S			4		S			0.500	12.7	Very cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the last 24 hours. Inch.	Rain-fall or melted snow in the last 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.61	752.0	29.67	753.6	63.0	17.2	64	S	28.6	12.8	.....	.....	9	.....	.....	0.091	2.3	.....	
Christiania	29.60	751.7	29.74	755.3	70.2	21.2	49	SSW	11	5	.....	.....	3	.....	.....	0	0	.....	
Gjæsvær	29.60	751.7	29.62	752.3	39.2	4.0	.....	WNW	.....	.....	2	.....	10	.....	.....	.....	.....	.....	
Lodingen	29.55	750.6	29.60	751.8	46.6	8.1	56	NE	.....	.....	3	.....	3	.....	.....	0	0	.....	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	29.79	756.6	29.80	757.0	67.5	19.7	81	N	5.6	2.5	.....	.....	5	.....	.....	0.106	2.7	.....	Dr. J. A. Sampaio.
Campo Major	28.91	734.4	29.88	758.9	74.1	23.4	28	SSW	5.6	2.5	.....	.....	8	.....	.....	0	0	.....	Dr. A. M. R. dos Santos.
Funchal, Madeira	29.94	760.4	30.02	762.6	73.0	22.8	74	W	13.6	6.1	.....	.....	5	.....	.....	0	0	.....	Capt. D. A. de Cunha.
Lisbon, Observatory	29.58	751.2	29.93	760.2	66.4	19.1	90	SSW	18.1	8.1	.....	.....	10	.....	.....	0.067	1.7	Light rain...	The Staff.
Ponta Delgada, Azores	29.88	758.9	29.95	760.7	71.6	22.0	59	NW	12.5	5.6	.....	.....	4	.....	.....	0.035	0.9	.....	
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.47	723.2	29.47	748.6	80.4	26.9	31	WNW	13	6	.....	.....	9k	.....	.....	.....	.....	.....	Capt. Lasarow.
Archangel	29.80	756.8	29.82	757.3	58.1	14.5	71	SSE	9	4	.....	.....	10	.....	.....	.....	.....	.....	Capt. Sseliwerstow.
Astrakhan	30.04	763.0	29.96	760.9	77.7	25.4	41	NW	11	5	.....	0	8ks	.....	.....	.....	.....	.....	Capt. Wisganow.
Barnaul	29.19	741.5	29.65	753.1	86.9	30.5	29	NE	4	2	.....	.....	1	.....	.....	.....	.....	.....	Meteorological Obs'y.
Dorpat	29.71	754.6	29.94	760.4	73.4	23.0	48	WSW	9	4	.....	0	4k	.....	.....	.....	.....	.....	Observatory.
Ekaterinburg	28.78	731.1	29.72	755.0	58.6	14.8	54	NNE	18	8	.....	0	7k;n	.....	.....	.....	.....	.....	Meteorological Obs'y.
Kasan	29.62	752.4	29.87	758.8	79.2	26.2	28	NW	7	3	.....	0	2k	.....	.....	.....	.....	.....	Observatory.
Kertch	30.11	764.7	30.13	765.2	69.4	20.8	85	S	4	2	.....	.....	6	.....	.....	.....	.....	Light rain...	Lagorio & Sastyrez.
Kieff	29.43	747.6	30.02	762.5	74.3	23.5	43	N	4	2	.....	ck	8ks	.....	.....	.....	.....	.....	Observatory.
Krotkowo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cand. Fatjanow.
Lugan	29.81	757.2	30.01	762.2	75.4	24.1	43	W	9	4	.....	.....	8	.....	.....	Blank		.....	Meteorological Obs'y.
Moscow	29.47	748.4	29.99	761.7	71.8	22.1	59	SW	4	2	.....	0	8ks	.....	.....	.....	.....	.....	Meteorological Obs'y.
Nertchinsk	27.31	693.6	29.56	750.8	47.8	8.8	74	NW	7	3	.....	.....	10	.....	.....	0	0	.....	Meteorological Obs'y.
Nikolaiev	30.06	763.5	30.13	765.3	79.0	26.1	57	Calm	0	0	.....	0	5kn	.....	.....	.....	.....	.....	Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.60	751.7	29.68	753.9	49.1	9.5	95	SE	.....	.....	7	.....	10n	.....	.....	0.299	7.6	Raining	Lieut. Iwanow.
Pekin, China	29.54	750.3	29.68	753.9	77.4	25.2	41	Calm	0	0	.....	2cs	0	.....	.....	.....	.....	.....	Physical Observatory.
St. Petersburg	29.87	758.6	29.88	759.0	69.8	21.0	53	WNW	11	5	.....	cs	10k;n	.....	.....	.....	.....	Heavy cl'ds	Central Physical Obs'y.
Tashkend, Laboratory	28.19	715.9	29.62	752.4	93.2	34.	50	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	Teich, A. M.
Tiflis	28.61	726.6	29.97	761.2	74.3	23.5	33	NW	45	20	.....	0	2k	.....	.....	.....	.....	.....	Physical Observatory.
Warsaw	29.63	752.5	30.03	762.7	77.0	25.0	54	E	4	2	.....	3ck	0	.....	.....	.....	.....	.....	Astronomical Obs'y.
Wilna	29.65	753.0	30.05	763.2	72.3	22.4	47	WSW	4	2	.....	.....	2	.....	.....	.....	.....	.....	Berg, Assistant.
Yeniseisk	29.57	751.0	29.84	758.0	66.2	19.0	58	Calm	0	0	.....	.....	0	.....	.....	.....	.....	.....	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park	.....	.....	29.32	744.7	65.9	18.8	60	SW	.....	.....	4	0	5k	.....	.....	0.09	2.3	Showery.....	Andrew Gibb.
Monach Lt. House, Hebrides	.....	.....	29.12	739.6	56	13.3	94	SSE	.....	.....	4	.....	10	.....	.....	0.4	10.	Hazy.....	J. Youngclause.
North Unst, Shetland Isl'ds	.....	.....	29.49	749.9	.....	.....	.....	E	.....	.....	4	.....	Fg	.....	.....	.....	.....	.....	Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.82	757.5	29.93	760.1	72.3	22.4	75	ESE	3.8	1.7	.....	4ck	0	.....	.....	0	0	.....	Antonio Rave, Director.
Bilbao, Met. Obs'y	29.71	754.6	29.76	756.0	79.9	26.6	62	S	1.8	0.8	.....	6	4	W	.....	0	0	Covered.....	Prof. Manuel de Naveran
Burgos, Met. Obs'y	26.95	684.6	.....	.....	74.5	23.6	34	SW	9.4	4.2	.....	.....	4	.....	.....	0	0	Cloudy.....	Domingo Martin.
Madrid, Royal Obs'y	27.71	703.7	29.83	757.6	79.0	26.1	34	SW	13.4	6.0	.....	0	1	.....	.....	0	0	Almost clear	The Staff.
Murcia, Met. Obs'y	29.74	755.3	29.88	759.0	84.2	29.0	64	ENE	3.1	1.4	.....	5	5	.....	.....	0	0	Hazy.....	Olayo Diaz, Director.
Santiago, Met. Obs'y	28.86	733.1	29.74	755 5	63.3	17.4	81	SSW	15.4	6.9	.....	.....	9	.....	.....	0.697	17.7	Almost cov'd	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.87	758.6	29.93	760.2	78.7	25.9	85	S	8.1	3.6	.....	4ck	6k;s	W	WSW	0.236	6.0	Cloudy.....	Benito Vines, S. J.
Manilla, Philippine Islands	29.79	756.7	29.84	758.0	85.6	30.3	75	SSW	11.0	5.0	.....	0	4k	.....	E	0	0	.....	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.91	759.7	30.01	762.2	73.0	22.8	66	W	5.6	2.5	.....	0	4	.....	W	0	0	.....	Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.95	760.8	30.04	763.1	81.7	27.6	88	SE	5.4	2.4	.....	5cs	4k	SE	SE	0	0	D. clouds....	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.77	756.1	29.91	759.8	87.6	30.9	69	WNW	3.6	1.9	.....	0	4k	.....	WNW	0	0	Partly cld'y	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.57	751.1	29.61	752.0	50.7	10.4	88	SE	.....	.....	2	.....	10	.....	.....	0.134	3.4	.....	
Umea	29.52	749.8	29.57	751.1	52.5	11.4	69	SW	.....	.....	4	.....	7	.....	.....	0	0	.....	
Hernosand	29.53	750.0	29.58	751.3	75.7	24.3	39	SW	.....	.....	4	.....	6	.....	.....	0	0	.....	
Stockholm	29.65	753.0	29.82	757.5	67.3	19.6	49	SSW	.....	.....	6	.....	6	.....	.....	0	0	.....	
Wisby	29.81	757.2	29.87	758.7	66.9	19.4	58	WSW	.....	.....	4	.....	0	.....	.....	0	0	.....	
Sub-Series.																			
Upsala	29.60	751.8	29.69	754.0	67.1	19.5	45	WSW	19.0	8.5	.....	.....	8	.....	W	0	0	.....	S. G. Fineman.
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Genova	28.52	724.5	29.87	758.7	82.0	27.8	44	W	.....	.....	1	.....	1	.....	.....	0	0	Clear.....	The Observatory.
Zurich	28.33	719.6	29.87	758.8	84.2	29.0	43	S	.....	.....	1	.....	4	.....	.....	0	0	Fair.....	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople	.....	.....	30.15	765.7	78.8	26.0	31	NE	13	6.0	.....	.....	0	.....	.....	0	0	.....	The Observatory.
Valona	.....	.....	30.21	767.3	79.3	26.3	.....	Calm	.....	.....	0	.....	Hz	.....	.....	0	0	Hazy.....	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria	.....	.....	29.94	760.4	79.0	26.1	60	NW	.....	.....	1	.....	Mist	.....	.....	0	0	.....	Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.64	752.8	29.72	754.9	67	19.4	60	NE	8	3.6		2k	Hz	NW		Inap.	Inap.	Fair	
Alpena, Michigan	29.40	746.7	30.05	763.3	48.5	9.2	78	NW	8	3.6		0	0			0	0	Clear	
Atlanta, Georgia	28.73	729.7	29.88	758.9	80.0	26.7	61	NW	4	1.8		5c	0	Calm		0	0	Fair	
Atlantic City, New Jersey	29.67	753.6	29.68	753.9	69	20.6	80	N	13	5.8		3ck	0	NW		0.01	0.3	Fair	
Augusta, Georgia	29.65	753.1	29.83	757.7	81.8	27.7	71	SW	1	0.4		0	Hz			0	0	Clear	
Baltimore, Maryland	29.71	754.6	29.76	755.9	72	22.2	62	NW	8	3.6		5cs ck	0	N		2.16	54.9	Fair	
Barnegat, New Jersey	29.65	753.1	29.67	753.6	67	19.4	79	N	18	8.0		8k	0	SW		0.9	2.3	Fair	
Bismarck, Dakota	28.32	719.3	30.06	763.5	54	12.2	73	E	10	4.5			10s		E	0	0	Cloudy	
Boise City, Idaho	27.38	695.4	30.14	765.5	49.8	9.9	57	W	2	0.9		5k	0	W		0	0	Fair	
Boston, Massachusetts	29.51	749.5	29.66	753.4	63.7	17.6	84	N	4	1.8		8k	0	N		0.07	1.8	Clearing	
Brackettville, Texas	28.69	728.7	29.69	754.1	75	23.9	81	E	8	3.6		0	0			0	0	Clear	
Brownsville, Texas	29.80	756.9	29.84	757.9	77	25.0	91	Calm	0	0		2ck	0	Calm		0	0	Clear	
Buffalo, New York	29.21	741.9	29.90	759.4	54	12.2	60	NW	5	2.2		1cs	0			0.23	5.8	Clear	
Burlington, Vermont	29.44	747.8	29.72	754.9	57.0	13.9	78	N	6	2.7		5k	0	NW		0.28	7.1	Fair	
Cairo, Illinois	29.49	749.0	29.88	758.9	77	25.0	82	E	9	4.0		5ck	0	W		0.02	0.5	Fair	
Campo, California	27.41	696.2	29.98	761.5	33.6	0.9	66	S	3	1.3		0	0			0	0	Clear	
Camp Thomas, Arizona	27.17	690.1			59	15.0	43	Calm				0	0			0	0	Clear	
Cape Henry, Virginia	29.70	754.4	29.72	754.9	76	24.4	86	NW	12	5.4		10ck	0	N		0.20	5.1	Cloudy	
Cape May, New Jersey	29.65	753.1	29.68	753.9	70.2	21.2	85	N	24	10.7			10ks		SW	0.50	12.7	Cloudy	
Castroville, Texas	29.10	739.1	29.77	756.1	75	23.9	77	Calm	0	0			10s		S	0	0	Cloudy	
Cedar Keys, Florida	29.89	759.2	29.91	759.7	82	27.8	75	S	7	3.1		1cs	5s		S	0	0	Fair	
Champaign, Illinois	29.14	740.1	29.93	760.2	55.3	12.9	81	NE	16	7.2		0	0			0.05	1.3	Clear	
Charleston, S. Carolina	29.79	756.7	29.85	758.2	85	29.4	76	SW	9	4.0		0	0			0	0	Clear	
Charlotte, N. Carolina	28.97	735.8	29.83	757.7	83.0	28.3	53	W	3	1.3		5c	Hz			Inap.	Inap.	Fair	
Chattanooga, Tennessee	29.08	738.6	29.88	758.9	74.5	23.6	86	Calm	0	0		2ck	Hz	S	Calm	0	0	Fair	
Cheyenne, Wyoming	24.14	613.1	29.95	760.7	55.2	12.9	87	SE	4	1.8			10s			0	0	Cloudy	
Chicago, Illinois	29.33	745.0	30.01	762.2	52.0	11.1	73	N	9	4.0		2c	0			0.39	9.9	Clear	
Chincoteague, Virginia	29.68	753.9	29.70	754.4	73	22.8	85	NW	14	6.3		8k	0	NW		0.04	1.0	Cloudy	
Cincinnati, Ohio	29.30	744.2	29.94	760.5	67	19.4	69	NE	6	2.7		4c	0	N		0.60	15.2	Fair	
Cleveland, Ohio	29.24	742.7	29.96	761.0	59	15.0	64	N	11	4.9		0	0			0.01	0.3	Clear	
Coleman City, Texas	28.07	713.0	29.66	753.4	71	21.7	75	SW	5	2.2		0	0			0	0	Clear	
Columbus, Ohio	29.11	739.4	29.93	760.2	61	16.1	66	N	8	3.6		0	0			0.43	10.9	Clear	
Concho, Texas	27.95	709.9	29.83	757.7	72	22.2	80	Calm	0	0		0	0			0	0	Clear	
Corsicana, Texas	29.45	748.0	29.91	759.7	78	25.6	78	S	4	1.8		0	0			0	0	Clear	
Davenport, Iowa	29.38	746.2	30.02	762.5	56	13.3	63	NE	6	2.7			10s		Calm	0	0	Cloudy	
Dayton, Washington T'y	28.38	720.8	30.13	765.3	50.7	10.4	78	S	8	3.6			10s		Calm	0.36	9.1	Cloudy	
Deadwood, Dakota	25.43	645.9	29.98	761.5	57	13.9	75	SE				0	0			0.12	3.0	Clear	
Decatur, Texas	28.70	729.0	29.78	756.4	85	29.4	54	SE	10	4.5		0	0			0	0	Clear	
Delaware Breakwater, Del.	29.67	753.6	29.69	754.1	69	20.6	95	NW	18	8.0			10s		NW	0.05	1.3	Cloudy	
Denison, Texas	29.08	738.6	29.86	758.4	81	27.2	74	S	8	3.6		0	0			0	0	Clear	
Denver, Colorado	24.81	630.2	29.88	758.9	62.6	17.0	69	S	6	2.7		0	0			0	0	Clear	
Des Moines, Iowa	29.07	738.4	29.95	760.7	61	16.1	88	SE	10	4.5			10n			0.23	5.8	Light rain	
Detroit, Michigan	29.30	744.2	29.96	761.0	52.1	11.2	73	NW	14	6.3		c	0			0	0	Clear	
Dodge City, Kansas	27.26	692.4	29.75	755.6	66.8	19.3	67	E	20	8.9		0	0			0	0	Clear	
Dubuque, Iowa	29.36	745.7	30.04	763.0	57.7	13.2	65	E	4	1.8			10s		E	0.25	6.3	Cloudy	
Duluth, Minnesota	29.42	747.3	30.10	764.5	51	10.6	86	NE	4	1.8		0	0		Calm	0	0	Clear	
Eagle Pass, Texas	29.08	738.6	29.89	759.2	78.1	25.6	78	SE	1	0.4		0	0			0	0	Clear	
Eagle Rock, Idaho	25.27	641.7	29.98	761.5	50	10.0	52	SW	23	10.3		0	0			0	0	Clear	
Eastport, Maine	29.58	751.3	29.65	753.1	53	11.7	93	Calm	0	0			Fg			0.14	3.6	Dense fog	
El Paso, Texas	26.17	664.7	29.82	757.4	67	19.4	50	W	2	0.9		0	0			0	0	Clear	
Erie, Pennsylvania	29.20	741.7	29.90	759.4	57	13.9	69	NE	8	3.6		0	0			Inap.	Inap.	Clear	
Escanaba, Michigan	29.44	747.8	30.08	764.0	50	10.0	65	N	10	4.5		0	0			0	0	Clear	
Florence, Arizona	28.36	720.3	29.96	761.0	60	15.6	39	Calm	0	0		0	0			0	0	Clear	
Fort Apache, Arizona	25.06	636.5	29.84	757.9	49	9.4	44	NE	3	1.3		0	Sk		Calm	0	0	Dense smoke	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota	28.47	723.1	29.94	760.5	60	15.6	77	NE	5	2.2		2cs	0			0	0	Fair	
Fort Benton, Montana	27.24	691.9	29.98	761.5	52	11.1	100	NE	3	1.3			10n		NE	0.27	6.9	Light rain	
Fort Buford, Dakota	28.12	714.2	30.04	763.0	54	12.2	93	E	10	4.5			10n		S	0.10	2.5	Light rain	
Fort Custer, Montana	26.86	682.2	29.95	760.7	56	13.3	94	SW	2	0.9			10s		Calm	0.09	2.3	Cloudy	
Fort Davis, Texas	25.14	638.5	30.10	764.5	70	21.1	53	W	10	4.5		0	0			0	0	Clear	
Fort Elliott, Texas	27.09	688.1	30.16	766.1	74	23.3	51	S	12	5.4		2k	0	S		0	0	Clear	
Fort Gibson, Indian T'y	29.26	743.2	29.79	756.7	80	26.7	74	SE	8	3.6		0	0			0	0	Clear	
Fort Grant, Arizona					70	21.1	24	NE	8	3.6		0	0			0	0	Clear	
Fort Griffin, Texas	28.58	725.9	29.78	756.4	76.2	24.6	60	Calm	0	0		0	0			0	0	Clear	
Fort Keogh, Montana	27.56	700.0	29.91	759.7	55	12.8	93	NE	9	4.0			10s		NE	0.84	21.3	Cloudy	
Fort Macon, North Carolina	29.77	756.1	29.78	756.4	79	26.1	91	SW	9	4.0		2c	Hz	Calm	Calm	0	0	Fair	
Fort McKavett, Texas	27.63	701.8	29.46	748.3	72.1	22.3	76	S	6	2.7		0	0			0	0	Clear	
Fort Missoula, Montana	26.75	679.4	30.13	765.3	56	13.3	81	S	3	1.3			10n		S	0.45	11.4	Light rain	
Fort St. Michaels	30.00	762.0	30.03	762.7	51	10.6	100	Calm	0	0		0	0			0	0		
Fort Shaw, Montana	26.44	671.6	29.89	759.2	47	8.3	85	NW	2	0.9			10s		N	0.18	4.2	Cloudy	
Fort Sill, Indian Territory	28.59	726.2	29.80	756.9	77	25.0	65	S	3	1.3		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.31	719.1	30.09	764.3	54	12.2	87	E	10	4.5			10s		E	0.02	0.5	Cloudy	
Fort Verde, Arizona					53	11.7	25	S			1	Hz	Hz	Calm	Calm	0	0	Dense haze	
Fredericksburg, Texas	28.17	715.5	29.66	753.4	74	23.3	83	S	2	0.9		0	0			0	0	Clear	
Galveston, Texas	29.86	758.4	29.90	759.4	83	28.3	79	NW	5	2.2		0	Hz			0	0	Clear	
Grand Haven, Michigan	29.37	746.0	30.02	762.5	53	11.7	67	NE	7	3.1		0	0			0	0	Clear	
Hatteras, North Carolina	29.76	755.9	29.78	756.4	78	25.6	95	SW	28	12.5			10s		SW	0	0	Cloudy	
Helena, Montana	25.83	656.1	30.03	762.7	51	10.6	79	Calm	0	0		0	0			0.72	18.3	Clear	
Henrietta, Texas																			
Indianapolis, Indiana	29.13	739.9	29.90	759.4	66.5	19.2	77	NE	4	1.8		5k	0	NE		0.21	5.3	Fair	
Indianola, Texas	29.86	758.4	29.89	759.2	80.6	27.0	82	Calm	0	0		0	1ks		Calm	0	0	Clear	
Jacksboro, Texas	28.70	729.0	29.77	756.1	77	25.0	73	SE	5	2.2		0	0			0	0	Clear	
Jacksonville, Florida	29.88	758.9	29.90	759.4	83	28.3	75	SW	8	3.6		5cs	0	SW		0	0	Fair	
Keoknk, Iowa	29.35	745.5	29.99	761.7	59.3	15.2	82	NE	21	9.4			10s		NE	Inap.	Inap.	Threatening	
Key West, Florida	29.90	759.4	29.93	760.2	80.0	26.7	88	S	15	6.7			10s		S	2.06	52.3	Cloudy	
Kittyhawk, North Carolina	29.74	755.4	29.76	755.9	78	25.6	82	W	14	6.3		1k	0	W		0.42	10.7	Clear	
Knoxville, Tennessee	28.90	734.0	29.90	759.4	70.5	21.4	90	S	2	0.9		8cs	0	NW		0.19	4.8	Fair	
La Crosse, Wisconsin	29.28	743.7	30.01	762.2	58	14.4	70	E	5	2.2			10s			0	0	Cloudy	
La Mesilla, New Mexico	26.05	661.7	30.20	767.1	64.3	17.9	39	Calm	0	0		0	0			0	0	Clear	
Laredo, Texas	29.38	746.2	29.70	754.4	79	26.1	82	SE	4	1.8		0	0			0	0	Clear	
Leavenworth, Kansas	28.90	734.0	29.77	756.1	70	21.1	86	SW	11	4.9			10s		NW	0.94	23.9	Cloudy	
Lewiston, Idaho	29.24	742.7	30.07	763.8	57	13.9	93	SW	1	0.4			10n		Calm	0.12	3.0	Light rain	
Little Rock, Arkansas	29.53	750.0	29.84	757.9	79	26.1	82	S	4	1.8		0	0			0	0	Clear	
Los Angeles, California	29.60	751.8	29.97	761.2	52.1	11.2	85	SW	2	0.9		0	0			0	0	Clear	
Louisville, Kentucky	29.30	744.2	29.85	758.2	71.5	21.9	85	N	6	2.7		5k	0			0.01	0.3	Fair	
Lynchburg, Virginia	29.11	739.4	29.78	756.4	79	26.1	58	NW	4	1.8		0	8s		SW	0	0	Fair	
Madison, Wisconsin	29.06	738.1	30.04	763.0	53	11.7	67	E	6	2.7			10s		Calm	0	0	Cloudy	
Marquette, Michigan	29.40	746.7	30.11	764.8	51	10.6	72	N	7	3.1		0	0			0	0	Clear	
Mason, Texas	28.26	717.8	29.93	760.2	76.2	24.6	73	Calm	0	0		0	0			0	0	Clear	
Memphis, Tennessee	29.54	750.3	29.87	758.7	85	29.4	72	Calm	0	0		0	0			0	0	Clear	
Milwaukee, Wisconsin	29.34	745.2	30.07	763.8	49	9.4	71	N	11	4.9		8c	1s			0	0	Cloudy	

JUNE 21, 1881.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.82	757.4	29.89	759.2	83	28.3	83	E	2	0.9	.....	5k	0	E	.....	0	0	Fair	
Montgomery, Alabama	29.66	753.4	29.88	758.9	81	27.2	74	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Moorhead, Minnesota	29.12	739.6	30.08	764.0	53	11.7	80	NE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Morgantown, W. Virginia	28.91	734.3	29.86	758.4	65	18.3	64	NE	7	3.1	.....	Hz	0	.....	.....	0.46	11.7	Clear	
Mt. Washington, N. H.	23.55	598.2	29.58	751.3	34.2	1.2	90	NW	24	10.7	.....	0	5s;sk	.....	NW	0.51	13.0	Clear.	
Nashville, Tennessee	29.33	745.0	29.85	758.2	75.7	24.3	83	W	4	1.8	.....	5ck	0	NW	.....	0.59	15.0	Fair	
New Haven, Connecticut	29.55	750.6	29.66	753.4	66	18.9	69	N	10	4.5	.....	5ck	0	W	.....	Inap.	Inap.	Fair	
New London, Connecticut	29.62	752.3	29.67	753.6	68	20.0	84	E	2	0.9	.....	5cs	0	Calm	.....	0.38	9.7	Fair	
New Orleans, Louisiana	29.81	757.2	29.86	758.4	83.8	28.8	72	S	2	0.9	.....	0	Sk	.....	.....	0	0	Clear.	
Newport, Rhode Island	29.61	752.1	29.66	753.4	64.5	18.1	87	SW	1	0.4	.....	.....	10s	.....	Calm	0.01	0.3	Cloudy	
New River, N. Carolina	.....	.....	.....	.....	81	27.2	74	W	.....	.....	1	0	0	.....	.....	.....	.....	Clear.	
New Shoreham, Rhode I'd	29.62	752.3	29.65	753.1	64.5	18.1	89	S	4	1.8	.....	2ck	5ks	NW	SE	0.01	0.3	Fair	
New York, New York	29.54	750.3	29.71	754.6	68	20.0	74	N	5	2.2	.....	8cs	0	W	.....	0	0	Fair	
Norfolk, Virginia	29.71	754.6	29.75	755.6	80	26.7	74	N	5	2.2	.....	5cs	0	W	.....	0.06	1.5	Fair	
North Platte, Nebraska	27.10	688.3	29.92	760.0	61	16.1	94	NE	10	4.5	.....	0	2s	.....	NE	1.30	33.0	Clear.	
Olympia, Washington T'y	30.16	766.1	30.20	767.1	49.0	9.4	93	S	1	0.4	.....	2cs	0	Calm	.....	0.04	1.0	Fair	
Omaha, Nebraska	28.79	731.3	29.93	760.2	66	18.9	89	NE	13	5.8	.....	.....	10s	.....	NE	1.56	39.6	Cloudy	
Oswego, New York	29.52	749.8	29.84	757.9	52.3	11.3	77	N	6	2.7	.....	0	0	.....	.....	0.34	8.6	Clear.	
Pensacola, Florida	29.85	758.2	29.88	758.9	81	27.2	78	SW	2	0.9	.....	0	Hz	.....	Calm	0	0	Clear	
Philadelphia, Pa	29.68	753.9	29.74	755.4	67.8	19.9	60	N	8	3.6	.....	.....	10ks	.....	W	0.08	2.0	Cloudy	
Phœnix, Arizona	28.76	730.5	30.54	775.7	60	15.6	44	W	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.98	456.7	30.19	766.8	37	2.8	31	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Pioche, Nevada	24.06	611.1	29.91	759.7	50	10.0	14	W	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Pittsburg, Pennsylvania	29.11	739.4	29.90	759.4	58	14.4	70	NW	5	2.2	.....	0	0	.....	.....	0.13	3.3	Clear	
Port Eads, Louisiana	29.86	758.4	29.87	758.7	82.2	27.9	83	E	11	4.9	.....	0	8s	.....	E	0	0	Fair	
Port Huron, Michigan	29.32	744.7	29.98	761.5	50.2	10.1	83	N	10	4.5	.....	0	0	.....	.....	Inap.	Inap.	Clear.	
Portland, Maine	29.62	752.3	29.67	753.6	61	16.1	77	NE	3	1.3	.....	2k	5s	NW	Calm	0.01	0.3	Fair	
Portland, Oregon	30.19	766.8	30.26	768.6	54.6	12.6	82	S	4	1.8	.....	.....	10ks	.....	NW	0.17	4.3	Cloudy	
Portsmouth, N. Carolina	.....	.....	.....	.....	79	26.1	87	W	20	8.9	.....	5c	Hz	Calm	Calm	0.65	16.5	Fair	
Prescott, Arizona	24.80	629.9	29.87	758.7	43	6.1	21	SW	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	29.87	758.7	29.88	758.9	78	25.6	89	SE	13	5.8	.....	.....	10s	.....	SE	0.56	14.2	Threatening	
Red Bluff, California	29.76	755.9	30.09	764.3	58.5	14.7	54	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Rio Grande City, Texas	29.76	755.9	29.97	761.2	77	25.0	86	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Rochester, New York	29.27	743.4	29.89	759.2	54	12.2	67	N	12	5.4	.....	0	0	.....	.....	0.25	6.3	Clear	
Roseburg, Oregon	29.73	755.1	30.29	769.4	47	8.3	92	Calm	0	0	.....	0	0	.....	.....	0.01	0.3	Clear	
Sacramento, California	30.01	762.2	30.08	764.0	54.0	12.2	87	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
St. Louis, Missouri	29.32	744.7	29.90	759.4	62.4	16.9	85	NE	12	5.4	.....	.....	10s	.....	.....	0.20	5.1	Cloudy	
St. Paul, Minnesota	29.20	741.7	30.04	763.0	56	13.3	75	NE	6	2.7	.....	5cs	0	NW	.....	0	0	Fair	
Salt Lake City, Utah	25.64	651.2	29.84	757.9	60	15.6	44	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
San Antonio, Texas	29.20	741.7	29.89	759.2	73.3	22.9	90	Calm	0	0	.....	.....	9s	.....	SE	0	0	Cloudy	
San Diego, California	29.85	758.2	29.92	760.0	56.5	13.6	87	Calm	0	0	.....	.....	10s	.....	.....	0	0	Cloudy	
Sandusky, Ohio	29.30	744.2	29.96	761.0	59	15.0	65	N	16	7.2	.....	0	0	.....	.....	0.03	0.8	Clear	
Sandy Hook, New Jersey	29.67	753.6	29.70	754.4	66.2	19.0	84	N	11	4.9	.....	10k	Hz	NW	.....	0.03	0.8	Cloudy	
San Francisco, California	30.05	763.3	30.11	764.8	53	11.7	83	SW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Santa Fé, New Mexico	23.34	592.8	29.85	758.2	54	12.2	26	E	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Savannah, Georgia	29.78	756.4	29.87	758.7	84.5	29.2	68	SW	11	4.9	.....	0	0	.....	.....	0	0	Clear	
Shreveport, Louisiana	29.69	754.1	29.92	760.0	79.8	26.6	78	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Silver City, New Mexico	24.30	617.2	29.96	761.0	64	17.8	30	N	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Sitka, Alaska	30.00	762.0	30.07	763.8	48	8.9	85	W	9	4.0	.....	.....	10s	.....	.....	0	0	Cloudy	
Smithville, North Carolina	29.80	756.9	29.83	757.7	81	27.2	87	SW	15	6.7	.....	8k	Hz	SW	.....	0	0	Cloudy	
Spokane Falls, Wash. Ter.	28.01	711.4	29.97	761.2	53	11.7	86	SW	4	1.8	.....	.....	10s	.....	.....	0.04	1.0	Cloudy	
Springfield, Illinois	29.28	743.7	29.94	760.5	57	13.9	75	NE	6	2.7	.....	.....	10s	.....	W	0.14	3.6	Cloudy	
Springfield, Massachusetts	29.55	750.6	29.68	753.9	69.3	20.7	60	N	5	2.2	.....	1c	0	W	.....	Inap.	Inap.	Clear	
Stockton, Texas	26.84	681.7	29.83	757.7	68.9	20.5	65	S	8	3.6	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	29.34	745.2	30.18	766.6	51	10.6	79	NE	4	1.8	.....	.....	10s	.....	Calm	0	0	Cloudy	
Thatcher's Island, Mass	29.61	752.1	29.66	753.4	61.0	16.1	88	NE	7	3.1	.....	.....	10s	.....	NE	0	0	Cloudy	
Toledo, Ohio	29.31	744.5	29.99	761.7	55	12.8	68	N	8	3.6	.....	0	0	.....	.....	0.01	0.3	Clear	
Tucson, Arizona	27.47	697.7	29.76	755.9	66	18.9	23	S	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.80	756.9	30.20	767.1	57.0	13.9	63	SW	20	8.9	.....	.....	10s	.....	W	0.11	2.8	Cloudy	
Uvalde, Texas	28.92	734.6	29.70	754.4	74	23.3	86	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Vicksburg, Mississippi	29.67	753.6	29.92	760.0	83	28.3	83	NE	1	0.4	.....	Hz	0	.....	.....	0	0	Clear	
Visalia, California	29.66	753.4	30.02	762.5	55.5	13.1	60	NW	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C.	29.66	753.4	29.77	756.1	71	21.7	71	NW	8	3.6	.....	.....	10ks	.....	NW	0.22	5.6	Cloudy	
Wickenburg, Arizona	.....	.....	.....	.....	66	18.9	19	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	29.74	755.4	29.79	756.7	81	27.2	78	W	10	4.5	.....	Hz	0	Calm	.....	Inap.	Inap.	Clear	
Winnemucca, Nevada	25.69	652.5	29.90	759.4	43	6.1	43	NE	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Wood's Holl, Mass	29.61	752.1	29.65	753.1	62	16.7	88	S	2	0.9	.....	.....	10s	.....	W	0.01	0.3	Cloudy	
Yankton, Dakota	28.73	729.7	29.99	761.7	64	17.8	78	NE	5	2.2	.....	0	0	.....	.....	0.47	11.9	Clear	
Yuma, Arizona	29.68	753.9	29.82	757.4	79.8	26.6	53	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.11	561.6	.....	.....	51.2	10.7	73	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	Thomas Herran
Buff Bay Town, Jamaica.‡	29.76	755.9	30.06	763.5	78	25.6	72	E	.....	.....	.....	Hz	Hz	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.92	760.0	29.97	761.2	80	26.7	91	Calm	0	0	.....	.....	8n	.....	S	0.013	0.3	Cloudy	A. Van Caneghem, Ass't.
Kingston, Jamaica, W. I.	29.97	761.2	29.98	761.5	82.4	28.0	74	SE	9	4.0	.....	10c	0	.....	.....	0	0	Fair	Robert Johnstone.
Navassa, W. I.	29.90	759.4	29.98	761.5	81	27.2	83	E	20	8.9	.....	Hz	2km	.....	E	0	0	Hazy	F. M. Everett.
Paramaribo, S. A.	30.08	764.0	30.08	764.0	78	25.6	91	E	.....	.....	2	.....	10n	E	.....	1.770	45.0	Raining	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.34	745.2	29.89	759.2	84	28.9	68	Calm	0	0	.....	5c	0	.....	.....	0	0	Clear	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	77.0	25	.....	NW	.....	.....	1	0	0	.....	.....	0	0	.....	Earl Flint.
Santiago de Cuba, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.93	760.2	29.98	761.5	64.0	17.8	92	N	10	4.5	.....	2c	2s	NW	N	0	0	Cloudy	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	Up'er 0—10	Lo'er 0—10	Upper. From.	Lower. From.	Inch.	Mill.				
H. M. S. Albatross																			Comm A. J.Errington.
H. M. S. Alert, Thursday Island, Oceania	29.95	760.7	76	24.4	88	SE			3-5		10							Showery	Capt. J. P. Maclear.
H. M. S. Alexandra, N. 41° 36′, E. 19° 30′	30.11	764.8	75	23.9	70	NNW			1		2					Sm'h		Misty	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab,																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N 24° 47′, E. 66° 59′	29.64	752.8	85	29.4	79	SW			4-5		5	SW						Misty	Comm. G. W. Hand.
H. M. S. Bittern, Valona, Turkey			74	23.3		NE			1-2		0					1	N	Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N 17° 00′, W. 61° 45′	30.08	764.0	83	28.3	79	ENE			1		6							D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 10° 17′, W. 11° 51′	30.07	763.8	77	25.0	77	SSE			3-4		2	SSE				2	SSE	D. clouds	Com. F. W. Richards.
H. M. S. Champion, Monte Video, Uruguay	30.21	767.3	49	9.4	71	SW			1		2	Calm						D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 38° 27′, E. 12° 48′	29.67	753.6	74	23.3	68	WSW			2									Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. Le Barr
H. M. S. Cruiser, N. 38° 27′, E. 12° 48′	30.09	754.3	75	23.9		ENE			2		2	ENE						D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, N. 46° 14′, W. 9° 12′	29.54	750.3	65	18.3	83	SSW			5		4					4	SSE	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.40	772.1	64	17.8		SE			2-5		0							Blue sky	Capt C. Domville.
H. M. S. Dock-Yard, Bermuda, W.I.	29.92	760.0	83	28.3	87	WNW			2-3		2	WNW						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 49° 30′, W. 56° 03′	29.62	752.3	42	5.6	89	SW			1		10							Overcast	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 7° 13′, E. 72° 23′	29.90	759.4	79	26.1		SE			3-4		8							Raining	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 19° 08′, E. 71° 56′	30.00	762.0	73	22.8		SE			6		2	SE				6	ESE	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, N. 5° 54′, E. 169° 43′	29.89	759.2	82	27.8	87	NNE			1-2		3							D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Port Louis; Mauritius	30.30	769.6	74	23.3	68	ESE			2		4	ESE						D. clouds	Capt. R. D. King.
H. M .S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Rouge Harbor, N. F	29.54	750.3	41	5.0		NW			2		7	NW						Raining	Capt. W. C. Karslake.
H. M. S. Fawn, N. 12° 47′, E. 44° 58′	29.68	753.9	88.5	31.4	69	SSE			1		2							D. clouds	Capt. P. Aldrich.
H. M. S. Flamingo, N. 20° 15′, W. 82° 26′	29.94	760.5	86	30.0	83	SE			3-4							3	SE	Overcast	Comm. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	30.16	766.1	56	13.3	74	W			2		9							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	28. 44	722.4	40	4.4	91	NNW			6		6							Squally	Capt. L. F. Jones.
H. M. S. Griffin, N. 23° 58′, W. 75° 30′	30.06	763.5	83	28.3	87	SE			2		10							D. clouds	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber,																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C.P. Fitzgerald.
H. M. S. Iris,																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.94	760.5	61	16.1		Calm			0		3	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.54	750.3	74	23.3		SSW			1		8							D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 15′, E. 109° 53′	29.74	755.4	83.8	28.8	83	E			3-4		9	E				1	E	Misty	Capt. A. Carpenter.
H. M. S. Midge																			Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. N. S. Modeste, S. 28° 50′, E. 44° 20′	30.14	765.5	71	21.7	80	E			2		0?					3	E	Showery?	Capt. J. G. Mead.
H. M. S Monarch, Tunis, Tunis, Africa	30.03	762 7	78	25.6	85	SE			3		3	SSE						D. clouds	Capt. G. C. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, West Coast of Borneo			83.5	28.6		S			1		1	S						Blue sky	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.70	754.4	55	12.8	80	SE			3									Misty	Capt. E. B. Drummond.
H. M. S. Orontes, N. 5° 13′, W. 100° 40′ *†	29.96	761.0	76.5	24.7	88	SSW			4		9	ENE				3	SSW	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 48′, W. 79° 32′	29.84	757.9	82.5	28.1	95	NW			1		4							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, N. 18° 25′, W. 75° 26′	29.93	760.2	83	28.3	83	ENE			3		7					4	E	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A.C.Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.72	754.9	81	27.2		SE			1-3		4							D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 50° 54′, W. 126° 15′	30.10	764.5	52	11.1		WSW			1		4							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	30.09	764.3	80.3	26.8	86	SSE			1		2					Sm'h		D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull,																			Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon,																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis,																			Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Iquique, Peru	30.00	762.0	59	15.0	70	S			2-3		5	Calm						D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.			84	28.9		SE			1		5							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	30.15	765.8	55	12.8	68	SW			1-3		3	SW						Squally	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Abu Shehr, Persia	29.61	752.1	85.5	29.7	68	WNW			2-3							3	NW	Heavy mist.	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candido dos Reis, Comd't.
Quanza, Brava Cape Verd I'ds	30.00	762.0	77.9	25.5	70	WSW			1		8		W			1	NE	D. clouds	Carlos M. da Silva Costa, Comd't
Rio Lima																			S. C. da Silva Costa, Comd't.
Sado, Loando, Africa	30.06	763.5	67.8	19.9	78	W			4		3		W			2	W	D. clouds	G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.84	758.0	83.3	28.5	85	SSE			2		10		S	2 h	ours			Showery	F. I de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga																			Capt. M. von Krusenstierna
H. M Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.			Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.	Force	Amount and kind.		Direction				Character.	Dir'n from.		
									Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla.	29.94	760.5	82	27.8	93	NE	1	0.4			0			0	0			Clear.
Naval Hospital, Yokahama, Japan.	29.40	746.7	72	22.2	90	Calm			0		8		W	0.02	0.5			Fair.
Adams. N. 15° 22′, W. 97° 38′.	29.65	753.1	83	28.3	83	WNW			1		8		WNW			Long	SW	Cloudy.
Alaska, Callao, Peru.	29.90	759.4	63	17.2	94	Calm			0		10			0	0	Sm'h		Misty.
Alert. Fatiyama Bay, Japan.*	29.46	748.3	73	22.8	85	WSW			1-2		8		Calm			Sm'h		Rainy
Alliance, N. 40° 43′, W. 61° 16′.	29.78	756.4	73	22.8	95	SE			2		8		E	0	0	Sm'h		Cloudy.
Ashuelot. Kobe, Japan	29.65	753.1	74	23.3	72	Calm			0		2		Calm					Fair.
Colorado, New York, N. Y.	29.61	752.1	68	20.0	79	WNW	5	2.2			8		SW	0	0			Cloudy.
Constitution. Newport, R. I.	29.60	751.8	65	18.3	89	Calm			0		10							Misty.
Franklin, Norfolk, Va.	29.68	753.9	77	25.0	82	NNW	7	3.1			2		N	0.15	3.8			Fair
Galena, N. 41° 17′, W. 9° 15′.	29.77	756.1	65	18.3	100	SE			1		10					Long	NW	Cloudy.
Independence, N. Yard, Mare I'd, Cal.	30.12	765.0	70	21.1	57	SW	9.6	4.3			2		SW	0	0			Clear.
Jamestown, Sitka, Alaska.*	30.03	762.7	51	10.6	93	WNW			3		10			0	0			Foggy.
Kearsarge, Norfolk, Va.	29.77	756.1	77	25.0	82	NW			1		8		NW			Sm'h		Fair.
Lackawanna. S. 13° 52′, W. 170° 38′.†	30.15	765.8	80	26.7	91	ESE			4		2		SE			Mod.	SE	Fair.
Marion, Montevideo, Uruguay.*†	30.11	764.8	48	8.9	63	WSW			3		8					Mod.	SW	Cloudy.
Michigan, Detroit, Michigan.	29.91	759.7	56	13.3	87	NE			4		0							Clear.
Minnesota, Newport, R. I.	29.66	753.4	63	17.2	100	Calm			0		10					Sm'h		Overcast.
Monocacy, Yokohama, Japan.	29.59	751.6	74	23.3	85	Calm			0		10		Calm					Overcast.
New Hampshire, Norfolk, Va.	29.71	754.6	76	24.4	85	WNW	8	3.6			5		SW	0	0			Fair.
Nipsic, Antwerp, Belgium	29.70	754.4	69	20.6	70	SW			3		10		S					D. clouds
Onward, Callao, Peru.†	30.04	763.0	64	17.8	89	Calm			0		10					Long	W	Cloudy.
Palos, Nagasaki, Japan.	29.76	755.9	72	22.2	85	WSW			1		10							Overcast.
Passaic, Washington, D. C.	29.76	755.9	71	21.7	90	NW			3		8		NW					Cloudy.
Pensacola. Mare Isl'd, Cal.	30.01	762.2	56	13.3	87	SW			1-2		0			0	0			Clear.
Portsmouth, Newport, R. I.	29.64	752.8	63	17.2	?				1		10?					Sm'h		Clear?
Powhatan. Newport, R. I.	29.59	751.6	61	16.1	94	Calm			0		10							Cloudy.
Ranger, N. 24° 33′, W. 108° 51′.*	29.75	755.9	84	28.9	87	SE			1		5		Calm	0	0	Long	SE	Fair.
Richmond, N. 33° 08′, E. 129° 21′.	29.76	755.9	72	22.2	76	W			3		10			0	0	Sm'h	W	Cloudy.
Saratoga, Newport, R. I.	29.66	753.4	62	16.7	94	Calm			0		10		Calm	Moderate				Cloudy.
Shenandoah, S. 27° 40′, W. 45° 36.*	30.16	766.1	64	17.8	78	SE			5		10					Mod.	SE	Cloudy.
St. Louis, League Island, Pa.	29.33	745.0	68	20.0	70	N	12	5.4			8		N	0.11	2.8			Cloudy.
Swatara, Shanghai, China.*†	29.86	758.4	74	23.3	76	NE			1		10		Calm					Overcast.
Tennessee, Navy Yard, N. Y.	29.71	754.6	68	20.0	84	N	7	3.1			10		WNW	0	0	Sm'h		Cloudy.
Ticonderoga, S. 38° 42′, W. 36° 00′.	30.10	764.5	54	12.2	80	WNW			2		2		WNW	0.03	0.8	Sm'h	wsw	Clear.
Yandalia. New London, Conn.	29.64	752.8	65	18.3	94	N			1		8		Calm					Fair.
Wabash, Boston, Massachusetts.	29.68	753.9	67	19.4	79	NNE	5	2.2			8		NE	0.1	3.			Hazy
Wachusetts, N. Yard, Mare I'd, Cal.	30.08	764.0	60	15.6	82	SW			2		0			0	0			Clear.
Yantic, N. 22° 40′, W. 88° 28′.*	29.80	756.9	80	26.7	96	SW			2		5		S			Mod.	SE	Fair.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and Kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 13° 50′, W. 118° 22′	29.84	757.9	76.5	24.7	87	SE			1		10							D. clouds	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 31° 20′, W. 30° 42′	30.23	767.8	72.3	22.4	90	W			4		6					3	WNW	D. clouds	W. N. Lailey.
City of Agra, S. 10° 23′, W. 31° 11′	30.06	763.5	81.0	27.2	85	ESE			5		7					High	S	D. clouds	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 27° 44′, W. 22° 28′	30.20	767.1	71.5	21.9	80	W			3		1							Blue sky	Capt. Jas. Buchan.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamports																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee																			Capt J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Naiad, N. 45° 16′, W. 11° 09′	29.60	751.8	59.5	15.3	94	S			6		7							Squally	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 41° 11′, W. 33° 34′	30.07	763.8	64	17.8	78	NNE			5		10							Showery	Capt. M. Parry.
Sierra Estrella, N. 8° 24′, W. 24° 50′	30.03	762.7	78.0	25.6	91	E			1		10							Showery	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 42° 45′, W. 9° 24′	29.73	755.1	64	17.8	89	S			2		10							Overcast	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N 54° 13′, W. 27° 26′	29.79	756.7				N			3		5		N			Mod.	ENE	Fair	
S. S. Circassian, ‡ N. 51° 58′, W. 53° 15′	29.75	755.6	43	6.1	100	N			4		10k			2 hours		3	ENE	Foggy	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian, N. 45° 47′, W. 58° 29′	29.81	757.2	45	7.2		NNE			3		Mist					Sm'h		Misty	Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia																			Capt. W. H. P. Haines.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 42° 30′, W. 53° 57′ †	29.76	755.9	54	12.2		S			3		Fog					Sm'h		Foggy	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 41° 56′, W. 52° 58′ †	29.77	756.1	57	13.9	69	SSW			5		10		SW	0	0	Sm'h		Foggy	Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England †	29.50	749.3	66	18.9	94	S			3		8		S	Showers				Showery	Capt. Ch. W. Kennedy
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig, N. 49° 49′, W. 9° 08′	29.24	742.7	62.0	16.7	77	W			6		5		W			Long	SW	Fair	Capt. C. Phole.
S. S. Hermann, N. 39° 22′, W. 64° 16′	29.62	752.3	68.0	20.0		Calm			0		10		W	8 hours		Mod.		Fair	Capt. H. Baur.
S. S. Hohenzollern																			
S. S. Köln, N. 48° 25′, W. 25° 30′	29.84	757.9	63.0	17.2	75	NNW			5-6		10		NNW	12hrs	rain	Cross	NW	Cloudy	Capt. Th. Jüngst.
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Skoldebrand

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mil.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, N. 49° 17′, W. 24° 30′....*†	29.74	755.4	56	13.3	93	N			6		5		N			Mod.	N	Overcast	Capt. J. W. Shackford.
S. S. Indiana, Philadelphia, Pa.....†	29.78	756.4	80	26.7	33	NNW			4		2		NNW	0	0			Clear	Capt. R. W. Sargent.
S. S. Ohio, N. 39° 43′, W. 58° 00′....*†	29.92	760.0	75	23.9	95	SW			2		5		SW	Showers		Sm'll	SW	Fair	W. Shackford, Chief Off'r
S. S. Pennsylvania, N. 51° 22′, W. 10° 05′.....†	29.24	742.7	59	15.0	82	W			4		10		W			Sm'h	SW	Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern. Magdalena Bay, Mexico.†	29.85	758.2	70	21.1	85	W			1		5		W	0	0			Fair	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 42° 47′, W. 170° 44′...†	30.05	763.3	60	15.6	83	SW			2		[illegible]			Rain		Mod.	SW	Overcast	Capt. H. Davison.
S. S. Gaelic																			Capt. W. H. Kidley.
S. S. Oceanic, Yokohama, Japan.....	29.85	758.2	72	22.2	95	S			2		2		S					Fine	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, N. 40° 10′, W. 124° 30′..†	30.23	767.8	52.5	11.4	?	NW			3		2		NW			Mod.	NW	Fair	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, N. 33° 32′, W. 118° 03′..†	29.95	760.7	61	16.1	88	W			1		0			0	0			Fine	Capt. J. N. Ingalls.
S. S. Dakota, N. 47° 10′, W. 124° 53′.....†	30.21	767.3	55	12.8	87	SSW			3		10		SW	0	0	Sm'h	SW	Overcast	Capt. H G. Morse.
S. S. Idaho, N. 38° 43′, W. 123° 46′.....†	30.12	765.0	50	10.0	93	NW			5		0					H'vy	NW	Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator																			Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal.....†	30.09	764.3	50	10.0	93	Calm			0		2		W					Clear	Capt. G. Debney.
S. S. Victoria, N. 45° 23′, W. 124° 55′...†	30.25	768.7	56	13.3	87	NW			2		2					Sm'h		Clear	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 2d Officer
S. S. City of New York, Auckland, New Zealand†	29.94	760.5	62	16.7	94	NNE			4		2		NE	0	0	Mod.	NE	Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, Manzanillo, Mexico ....†	29.91	759 7	77	25.0	91	NE			1	ck	0	N		6 hours		Sm'h		Cloudy	Capt. D. S. Austin.
S. S. City of Peking																			Capt. G. G. Berry.
S. S. City of Sidney, S. 18° 28′, W. 172° 41′...*†	30.04	763.0	77	25.0	69	ENE			3		2		NW	0	0	Mod.	E	Clear	Capt. H. C. Dearborn.
S. S. City of Tokio, Hong Kong, China.....†	29.96	761.0	85	29.4	83	SW			1		0							Clear	A. L. Ritchie, 2d Officer
S. S. Colima																			Capt. R. R. Searle.
S. S. Granada, Panama Bay, Panama†	29.91	759.7	81	27.2	87	NNE			3		5		N	3 hours				Fair	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. Wales.....	29.90	759.4	60	15.6	48	E			3		0?							Cloudy ?	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland. N. 49° 23′, W. 11° 09′.....†	29.34	745.2	62	16.7	88	SSW			6		8		SSW	0	0	Long	SSW	Cloudy	Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 35° 25′, W. 75° 14′.....	29.73	755.1	78	25.6	82	SW	14	6.3		5ck	0			0	0	R'gh	SW	Fair	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.																			Capt. L. L. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, Arroyo, Porto Rica.....†	30.12	765.0	84	28.9		ENE			6		5			0	0	Mod.		Clearing	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Cherrystone, Va.....†	29.79	756.7	76	24.4	86	NW	2	0.9		2c	5s			0.05	1.3			Fine	
Bark Sunbeam, N. 28° 53′, W. 20° 53′.....†	30.17	766.3	73	22.8	90	WNW			4		2		NW	0	0	Mod.	NW	Clear	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO. 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 22, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instru-m'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind. Up'er	CLOUDS. Amount and kind. Lo'er	CLOUDS. Direction. Upper.	CLOUDS. Direction. Lower	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours‡			29.93	760.2	77.9	25.5	73	W			1		0			0	0	Clear	Raynard.
Algiers‡			30.00	762.1	73.4	23.0	78	NNE			3		0			0	0	Clear	Nicolas.
La Calle‡			29.99	761.8	84.6	29.2	69	ESE			1		0			0	0	Clear	Fonfrède.
Tunis‡			30.09	764.2															Jacques.
Sfax‡			30.15	765.7															Gau.
Saida‡			30.01	762.2	64.8	18.2	75	N			1		0			0	0	Clear	Dumas.
Tebessa‡			30.10	764.4	90.0	32.2	12	S			2		0			0	0	Clear	Watrin.
Geriville‡					93.2	34.0	13	SW			1		0			0	0	Clear	Lonchamp.
Laghouat‡			29.99	761.8	93.9	34.4	11	E			4		3			0	0	Pretty fair	Herbin.
Biskra‡			30.09	764.2	95.0	35.0	22	SE			5		3			0	0	Pretty fair	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.31	769.9	30.40	772.1	44.3	6.8	90	SE	3	1.3			1			0	0	Fine	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.47	748.5	29.99	761.7	84.2	29.0	41	SW			2		0			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.28	743.8	30.01	762.2	83.5	28.6	51	S	7.4	3.3			6			0	0		Dr. Wierzbicki.
Eperies	29.22	742.1	30.06	763.6	72.7	22.6	64	N			3	100	0	E		0	0		Julius Mikolik.
Gratz‡	28.87	733.3	30.06	763.5	80.1	26.7	60	SW			2		0			0	0		Andreas Rospini.
Hermannstadt	28.70	729.0	30.05	763.2	83.3	28.5	44	S			3		8			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.65	727.6	29.91	759.7	81.1	27.3	68	NE			2		2			0	0		The Staff.
Lemberg	29.10	739.0	30.04	762.9	79.2	26.2	56	SW			2		8			0	0		Dr. T. Stanecki.
Pola	29.98	761.6	30.09	764.3	84.0	28.9	55	SE			1		3			0	0		I. R. Hydrographic Office.
Szathmar	29.61	752.2	30.07	763.7	86.0	30.0	70	SE			2		0			0	0		Beicht Peter, S. J.
Szegedin	29.74	755.4	30.00	762.1	82.8	28.2	70	S			1		5			0	0		Karl Stancel.
Trieste	30.02	762.5	30.12	765.1	78.8	26.0	67	WNW			1		5			0	0		Secco.
Vienna	29.32	744.8	30.00	762.1	81.0	27.2	58	ESE			2		0			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed June 21, 1882.

BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper.	Lower.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Aberdeen	29.29	744.0	29.39	746.5	62.0	16.7	56	SSW	17	7.6			3			0.005	0.1	Blue sky	W. Boswell.
Armagh, Observatory	29.25	742.9	29.48	748.8	58.0	14.4	68	SW	12	5.4			8					D. clouds	S. Call.
Bidston, Liverpool Obs'y			29.57	751.1	56.4	13.6	73	SW	17	7.6			8					Overcast	John Hartnup.
Bolton, Sharples																			Thomas Mackereth.
Bradford, Yorkshire	29.17	740.9	29.57	751.1	57.8	14.3	99	SW			1.0		10			0.06	1.5	Overcast	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.94	760.5	29.98	761.5	82	27.8	83	NE			2		9					Overcast	Corpl.J.Surgener,A.H.C
Cardington			29.65	753.1	71.0	21.7	53	SW			4.0		6					Showery	John McLaren.
Chatham, School M. E.	29.62	752.3	29.74	755.4	66.3	19.1	68	SW			4		6					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.53	750.0	29.76	755.9	61.8	16.6	65	WSW			4		4					D. clouds	The Staff.
Fort Napier, Natal	27.70	703.6	29.92	760.0	66.2	19.0	28	Calm			0		0					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.88	758.9				SE			1		2					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			29.52	749.8	60	15.6	65	S			2		10					Showery	J. O'Donaghue.
Gibraltar, Mediterranean	29.98	761.5	30.04	763.0	76.9	24.9	84	SW			3		2					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.23	742.4	29.44	747.8	59.3	15.2	62	SSW			7		6					D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	29.56	750.8	29.72	754.9	67.2	19.6	58	SW			4		6					D. clouds	The Staff.
Guernsey	29.58	751.3	29.79	756.7	62.5	16.9	72	WSW			4		0					Blue sky	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.69	754.1	29.72	754.9	66.8	19.3	55	SW	27	12.1			5					D. clouds	The Staff.
Leicester, Museum	29.44	747.8	29.69	754.1	65.0	18.3	59	SW			3		1					Blue sky	J. E. Carryer.
Malta, Mediterranean	30.02	762.5	30.10	764.5	76.4	24.7	73	NE			2		0					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	29.89	759.2	29.94	760.5	78.5	25.8	92	S			2		10					Drizzling	C. S. Duncombe.
Oscott, St. Mary's College	29.10	739.1	29.61	752.1	64.0	17.8	62	SSW			4		7					D. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	29.45	748.0	29.68	753.9	61.9	16.6	71	SSW			7		8					Showery	The Staff.
Plymouth	29.66	753.4	29.73	755.1	63.8	17.7	74	SW			4		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.29	744.0	55.9	13.3	81	WSW	19	8.5			10					Light clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	30.01	762.2	30.08	764.0	79.0	26.1	47	ENE			2		1					Blue sky	Serg't W. H. Lyne.
Sheffield	29.38	746.2	29.66	753.4	61.0	16.1	85	SW			4		9			0.02	0.5	Overcast	W. F. Cooper.
Silloth Rectory	29.50	749.3	29.53	750.0	61.5	16.4	81	SW			6		4			0	.0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.58	751.3	55.5	13.1	82	WSW	14	6.3			10					Thund'r st'm	Rev. S. J. Perry.
Strathfield Turgiss	29.50	749.3	29.71	754.6	65.1	18.4	64	SW			3		5					Squally	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	29.78	756.4	29.79	756.7	62	16.7	66	W			6		5					D. clouds	W. Newcombe.
Valencia, Observatory	29.59	751.6	29.61	752.1	58.6	14.8	92	WNW	15	6.7			6			Blank		D. clouds	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers:

Bathurst, N. B					49.0	9.4		N	3	1.3			10n					Raining	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.31	744.5	29.35	745.5	49	9.4	92	NW	10	4.5			10n			0.835	21.2	Light rain	H. J. Cundall, C. E.
Chatham, N. B.*	29.46	748.3	29.52	749.8	49	9.4	89	W	8	3.6			10s		W	0.01	0.3	Cloudy	G. A. Blair.
Chicontimi, Quebec					49.1	9.5		NW			4		10n			0.28	7.1	Raining	Rev. V. A. Huart.
Cornwall, Ontario	29.68	753.9	29.87	758.7	51.1	10.6	73	NW			1		10s			0.123	3.1	D. clouds	James Smith, M. A
Dalhousie, N. B	29.48	748.8	29.51	749.5	48.0	8.9		W			1	0	0			0.90	22.9		H. A. Johnson.
Father Point, Quebec*	29.61	752.1	29.64	752.8	45	7.2	89	NW	2	0.9			10n			0.22	5.6	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.33	745.0	30.16	766.1	48	8.9	83	NE	4	1.8		0	Hz			0	0	Hazy	James Stewart.
Fredericton, N. B	29.52	749.8	29.58	751.3	52.0	11.1	72	NW	15	6.7			9s			0	0	Cloudy	Prof. Harrison.
Granton, Ontario	28.93	734.8	30.04	763.0	44.0	6.7	100	Calm			0	0	0			0	0	Clear	James Grant.
Halifax, N. S.*	29.34	745.2	29.47	748.5	51	10.6	92	NW	12	5.4			10n		NW	0.332	8.4	Cloudy	A. Allison.
Hamilton, Ontario	29.62	752.3	30.01	762.2	53.5	11.9	80	SW			1	0	0			0	0	Clear	Geo. Dickson, B. A.
Kingston, Ontario*	29.61	752.1	29.94	760.5	51	10.6	78	NW	1	0.4		2cs	0			0	0	Clear	S. Woods, M. A.
Little Glace Bay, N. S	29.19	741.4	29.23	742.4	45.4	7.4	97	SE			4		10n			0.64	16.3	Raining	C. H. Rigby.
Montreal, Quebec*	29.64	752.8	29.83	757.7	54	12.2	73	W	12	5.4		2ck	8ks	N	NW	0.07	1.8	Cloudy	C. H. McLeod, C. E
Moose Factory, Ontario	29.97	761.2	30.00	762.0	39.2	4.0	96	NW			3		10n			0.06	1.5	Raining	J. R. Nason.
Parry Sound, Ontario*	29.32	744.7	30.01	762.2	50	10.0	79	NW	4	1.8		2k	0	N		0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario	29.24	742.7	29.98	761.5	51.7	10.9	72	NW			1	0	7ks			0	0	Fair	J. F. Jeffers, M. A.
Port Dover, Ontario	29.31	744.5	30.00	762.0	49	9.4	85	N	2	0.9		0	0			0	0	Clear	H. Morgan.
Port Stanley, Ontario	29.36	745.7	30.01	762.2	46	7.8	93	N	6	2.7		0	0			0	0	Clear	M. Payne.
Quebec, Quebec*	29.40	746.7	29.72	754.9	52	11.1	79	W			3	2cs	2ks	NW	W	0.02	0.5	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.51	749.5	29.97	761.2	49	9.4	75	NW	5	2.2			8ks		NW	0.03	0.5	Cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.32	744.7	30.03	762.7	47	8.3	91	NE	6	2.7		0	Hz			0	0	Hazy	K. Stewart.
St. Andrews, N. B	29.55	750.6	29.60	751.8	50	10.0	78	NW	7	3.1		0	0			0.30	7.6	Clear	
St. John, N. B	29.40	746.7	29.56	750.8	51.0	10.6	79	NW	19	8.5		0	7k			0.790	20.1	D. clouds	G. Murdock, C. E.
Stratford, Ontario	28.72	729.5	30.01	762.2	45.0	7.2	90	Calm	0	0		0	0			0	0	Blue sky	C. J. Macgregor, M. A.
Sydney, C. B*	29.25	742.9	29.29	744.0	47	8.3	98	NE	1	0.4			10n			0.91	23.1	Light rain	T. C. Hill, C. E.
Toronto, Ontario*	29.64	752.8	30.02	762.5	52	11.1	79	NW	4	1.8		0	0			0	0	Clear	Magnetic Observatory
Windsor, N. S	29.38	746.2	29.47	748.5	50.5	10.3	89	W	10	4.5			10ks			0	0	Cloudy	
Woodstock, Ontario	28.94	735.1	30.00	762.0	50.7	10.4	78	NW	3	1.3		0	0			0	0	Blue sky	Prof. Wolverton.
Yarmouth, N. S*	29.58	751.3	29.64	752.8	48	8.9	85	W	16	7.2		0	0			0.12	3.0	Clear	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.64	752.8	29.89	759.2	44	6.7	100	E	2	0.9			10n			0.42	10.7	Raining	John Delany.
St. Pierre, N. F			29.32	744.7	44.6	7.0		E			3					1.58	40.1		N. F. Land, Comd't

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

Cape St. Francis Lt. House	30.06	763.5			64.0	17.8	89	NW	13.2	5.9			6s			0	0		John Duthie.
Cape Town, C. G. H. Obs'y	29.93	760.2	29.97	761.2	54.3	12.4		SW				0	0			0	0		The Staff, for D. Gill.
Worcester*†	28.94	735.1			65.9	18.8	52	W			1	0	0			0	0	Fine	C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.87	758.6	29.89	759.2	72.9	22.7	84	S	1.3	0.6			10			0	0	Covered	M. Marc Dechevrens, S.J

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.16	664.5	29.88	758.9	68.0	20.0	86	SE			1	8cs	1d			0	0	Cloudy	Amand Maison.

DANISH SERIES.

Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.

Copenhagen	29.82	757.4	29.87	758.6	76.1	24.5	55	SSE	16	7			6						Oversergent Fischer.
Fanöe	29.79	756.6	29.81	757.1	61.0	16.1	94	SW			4		9						Overloerer Lauridsen.
Godthaab, Greenland																			S. Kleinschmidt.
Stykkisholm, Iceland	29.66	753.4	29.71	754.5	45.3	7.4		E			6		0						A. O. Thorlacius.
Thorshavn	29.24	742.7	29.28	743.6	48.6	9.2	76	N	22	10			10						Overloerer Bergh.
Vestervig	29.66	753.4	29.76	755.8	62.6	17.0	91	SSW			4		9						Loerarer Oesterbol.

FRENCH SERIES.

Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.

Agen, Normal School	29.34	745.2	29.96	761.0	76.6	24.8	58	WSW			1	0	nk			0	0		M. Labroue, Director.
Alençon Normal School	29.39	746.5	29.94	760.5	70.5	21.4	82	SW			2	0	5k		SW	0.220	5.6	Cloudy	M. Nicot, Director.
Arras, Engineer School	29.60	751.9	29.85	758.2	68.7	20.4	66	SW			3	0	k		SW				M. Klein, Commandant.
Avignon, Normal School	29.87	758.7	29.95	760.7	88.7	31.5	41	W			1		1		SSW	0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.41	746.9	29.94	760.4	73.6	23.1	56	SW			1	0	8kn		SW	Inap.	Inap.	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.64	752.8	29.89	759.2	71.6	22	59	WSW			3		8		W	0.425	10.8	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.05	737.9	29.86	758.5	80.2	26.8	50	SSW			2	c	0	SW		0	0		M. Gobin, Director.
Bordeaux, Observatory	29.72	755.0	29.98	761.5	70.3	21.3	65	ENE			1		10			0.031	0.8	Covered	M. Rayet, Director.
Bourges, Normal School	29.44	747.7	29.97	761.3	71.6	22	61	SW			1	0	kn		SW	0.08	2.		M. Postel, Director.
Brest, Naval Observatory	29.66	753.3	29.90	759.5	66.2	19.0	72	SW			3		10		SW	0.020	0.5		M. de Rermaree, Dir.
Caen, Normal School	29.76	756.0	29.84	757.8	66.9	19.4	68	N			3		2		WSW	0.04	1.	Slightlycl'dy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.62	752.4	29.93	760.2	72.3	22.4	65	S			1		8		SW	0.098	2.5	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.39	746.6	29.89	759.2	72.0	22.2	64	SW			1					0.024	0.6		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.59	726.1	29.94	760.4	81.7	27.6	51	S			1		8			0	0	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.10	739.1	29.91	759.8	84.6	29.2	41	NE			2		1			0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.07	738.4	29.87	758.6	75.2	24	54	W			4	0	5kn	W	W	0.102	2.6	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.56	699.9	29.94	760.5	85.5	29.7	27	SW			1	0	cn		W	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.92	734.5	30.06	763.5	88.2	31.2	23	SE			4		5		SE	0	0	Foggy	M. Kina, Director.
Grenoble, Normal School	29.18	741.2	29.90	759.5	82.2	27.9	47	NW			3	cs	n			0	0		M. Ablard, Director.
Guéret, Normal School	28.42	721.8	29.95	760.7	65.7	18.7	75	W			1	0	n		NE	0	0		M. Rivoire, Director.
Lamballe, Normal School	29.60	751.8	29.87	758.6	64.4	18	80	W			4				W	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.28	743.8	29.92	760.0	80.6	27	69	W			1	0	s			0	0		M. Chauvin, Director.
Lorient, Naval Observatory	29.84	757.9	29.94	760.5	65.5	18.6	66	WSW			3		8		WSW	0	0	¾ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.88	733.6	29.89	759.1	86.4	30.2	92	SSW			4		8		S	0	0	Very cloudy	M. André, Director.
Mans, Normal School	29.61	752.2	29.92	759.9	65.7	18.7	84	SW			3		5		SW	0.217	5.5	Cloudy	M. Piboen, Director.
Marseille, Observatory	29.67	753.5	29.93	760.1	86.7	30.4	28	SE			4		5		SW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.88	631.9	30.11	764.9	65.3	18.5	74	E	16.8	7.5			6		E	0	0	Foggy	M. Cave, for Dr. Fines.
Montpellier, Normal School	29.85	758.2	29.96	761.0	75.6	24.2	69	S			3		2		SE	0	0	Slightly cl'dy	M. P. Galzin, Director.
Nancy, Normal School	29.19	741.5	29.92	760.0	80.6	27	49	SW			1	0	5kn			0	0	Cloudy	M. Hasse.
Nantes, Observatory	29.80	756.9	29.96	761.0	67.3	19.6	65	WSW			2-3	0	6n		WSW	0.150	3.8		M. Larocque, Director.
Nice	29.98	761.4	30.01	762.3	75.6	24.2	44	E			8		Haze	E	E	c	0	Hazy	Capt. Boissière, Director.
Perpignan, Observatory	29.83	757.6	29.93	760.2	74.3	23.5	70	SE	5.6	2.5			9		W	0.008	0.2	Foggy	Dr. Fines.
Pic-du-Midi, Plantade	22.61	574.3			51.8	11.0							1		SW	0	0	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	28.90	734.0	29.91	759.6	82.4	28	27	S			1		5	N	N	0	0	Cloudy	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.21	640.4			59.5	15.3	78	WSW			2		8			0	0	¾ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.03	762.8	30.06	763.6	66.9	19.4	70	SSW			1		10		SW	0	0	Covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.73	755.2	29.95	760.6	75.2	24.0	69	SW			1		10			0.28	7.	Covered	M. Mouillot, Director.
Rodez, Normal School	27.88	708.1	29.94	760.4	74.5	23.6	61	W			3		10			0	0	Covered	M. Richard, Director.
Rouen, Normal School	29.76	756.0	29.85	758.2	72.7	22.6	55	SSW			3		5		SSW	0.16	4.	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	29.69	754.2	29.85	758.2	66.9	19.4	59	SW			3		5		E	0.280	7.1	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.77	756.1	29.93	760.3	68.5	20.3	66	SSW			2		10		SW	0.146	3.7		M. Renou, Director.
Toulouse, Observatory	29.29	744.0	30.02	762.4	74.1	23.4	72	SSE			1		10			0	0	Covered	M. Bailland, Director.
Tours	29.76	756.0	29.96	761.0	67.7	19.8	72	SW			1		10		W	0.295	7.5	Covered	M. de Tastes.
Versailles, Observatory	29.44	747.8	29.94	760.4	70.2	21.2	61	SW			2					0.496	12.6		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.65	753.1	29.94	760.5	67.3	19.6	74	SW			2		10		SSW	0.307	7.8		M. Marié Davy, Director.

GERMAN SERIES.

Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.

Bamberg	29.06	738.0	29.92	759.9	86.0	30.0	50	S			1	2c	0	S		0.606	15.4		Prof. Dr. Hoh.
Berlin	29.69	754.1	29.85	758.2	88.9	31.6	33	S			1		6			0	0		Prof. Dr. Arndt.
Breslau	29.48	748.7	30.01	762.2	85.3	29.6	42	SSE			1		0			0	0		Royal University Obs'y.
Carlsruhe	29.42	747.2	29.81	757.2	89.2	31.8	43	S			8		9	SW		0.039	1.0		Albert Senz.
Cassel	29.13	740.0	29.46	748.3	87.1	30.6	38	SW			5		7	SW		0.035	0.9	Thnd'r str'm	Dr. H. Möhl.
Frankfort on the Main	29.51	749.6	29.85	758.2	90.0	32.2	32	SSW			2		3			0	0		Physical Society.
Friedrichshafen	28.49	723.6	29.82	757.5	84.9	29.4	41	S			1		6	WNW		0.008	0.2	Hazy	Wilhelm, Chief Tel.
Hamburg	29.76	755.9	29.83	757.7	77.0	25.0	64	WSW			3		10			0	0		Dr. R. Kleeman.
Kiel	29.81	757.1	29.82	757.5	70.7	21.5	75	WNW			3		10			0.098	2.5		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.47	748.4	29.86	758.4	88.2	31.2	45	SE			3		4			0.675	1.9		Prof. Dr. Bruhns.
Magdeburg	29.65	753.1	29.82	757.5	88.9	31.6	39	S			4	0	4k		S	0	0		Dr. Assmann.
Memel	30.00	762.1	30.05	763.3	81.1	27.3	50	SW			2-3	0	48					Thnd'r str'm	Reinbrecht & Issermann.
Munich	28.16	715.3	30.02	762.6	86.2	30.1	32	E			3		0			0	0		Central Station.
Neufahrwasser	29.97	761.2	29.98	761.6	84.9	29.4	41	S			2		0			0	0		A. Lothes.
Neustadt, Palatinate	29.48	748.8	30.01	762.2	86.4	30.2	42	W			3		2			0	0		Dicknether.
Stuttgart	28.92	734.6	29.74	755.4	90.1	32.3	29	SW			2		5	W		0.539	13.7		Prof. Dr. Schoder.
Weissenburg, Bavaria	28.46	722.9	29.93	760.1	85.3	29.6	34	SE			4		5	SE		0	0		Prof. Kemlein.
Wustrow	29.81	757.1	29.84	757.8	81.5	27.5	60	S			2	0	8ks			0.197	5.0	Thunder	Brandes & Reimer.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r.	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

GREEK SERIES.

Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.

Athens	29.68	753.9	30.05	763.3	86.7	30.4	.....	NE	.....	.....	4.0	.....	0	.....	.....	.....	.....	Clear	Schmidt & Wourlisch.

INDIAN SERIES.

Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.

Kurrachee	29.58	751.4	29.63	752.6	87.3	30.7	78	SW	32.0	14.3	.....	7		SW	.....	0	0	D. clouds	
Deesa	29.14	740.0	29.59	751.6	96.3	35.7	37	WSW	20.9	9.3	.....	4		.....	SW	0	0	D. clouds	
Bombay	29.73	755.1	29.77	756.0	86.8	30.4	67	WSW	9.0	4.0	.....	3		SW	SW	0	0	D. clouds	
Poona, Yarrowda.	27.90	708.7	29.91	754.6	88.5	31.4	35	W	19.0	8.5	.....	2		.....	W	0	0	D. clouds	
Belgaum	27.27	692.7	29.78	756.5	80.0	26.7	62	WSW	15.0	6.7	.....	2		SW	SW	0	0	D. clouds	
Lahore	28.70	729.0	29.40	746.7	105.3	40.7	22	W	4.0	1.8	.....	4		.....	.....	0	0	Misty	
Roorkee	28.55	725.1	29.41	746.9	97.3	36.3	40	W	4.2	1.9	.....	0		.....	.....	0	0	Misty	
Agra	28.93	734.9	29.47	748.4	103.1	39.5	28	W	5.2	2.3	.....	0		.....	.....	0	0		
Nagpur	28.56	725.5	29.57	751.0	97.2	36.2	31	NW	6.4	2.9	.....	9		.....	W	0	0	D. clouds	
Jubbulpore	28.26	717.7	29.56	750.9	94.9	34.9	35	NW	5.1	2.3	.....	3		E	.....	0	0	D. clouds	
Lucknow	29.13	740.0	29.50	749.2	94.0	34.4	40	NNE	6.3	2.8	.....	2		NE	.....	0	0	D. clouds	
Allahabad	29.17	740.8	29.46	748.4	101.6	38.7	31	NW	4.9	2.2	.....	6		W	.....	0	0	D. clouds	
Patna	29.30	744.2	29.48	748.6	87.6	30.9	78	NW	3.5	1.6	.....	5		NW	NW	0	0	D. clouds	
Hazaribagh	27.55	699.8	29.50	749.3	88.6	31.4	52	NW	7.9	3.5	.....	10		.....	.....	0	0		
Cuttack	29.50	749.3	29.58	751.4	87.1	30.6	66	SW	0.9	0.4	.....	9		.....	.....	0.01	0.3	Drizzling	
Calcutta, Alipore	29.52	749.8	29.54	750.4	85.5	29.7	79	SSE	5.0	2.2	.....	10		.....	.....	0	0	Overcast	
Dhubri	29.44	747.8	29.56	750.9	76.4	24.7	94	Calm	1.0	0.4	.....	5		W	.....	0.97	24.6	D. clouds	
Chittagong	29.53	750.2	29.62	752.4	83.7	28.7	84	SSW	3.8	1.7	.....	5		.....	.....	0	0	Blue sky	
Sibsagar	29.30	744.1	29.63	752.5	80.7	27.1	91	NE	2.4	1.1	.....	10		W	W	0.52	13.2	Gloomy	
Zanzibar, Africa	.....	.....	30.04	763.0	81.7	27.6	64	SSW	5	2.2	.....	9		.....	S	0	0	Gloomy	

ITALIAN SERIES.

By authority of the MINISTER OF AGRICULTURE, INDUSTRY AND COMMERCE.

Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.

Udine	29.70	754.4	30.10	764.4	79.3	26.3	59	W	0.7	0.3	.....	2		.....	.....	0	0		Prof. Giovanni Clodig.
Milan	29.58	751.3	30.07	763.8	82.8	28.2	41	SW	6.9	3.1	.....	9		NW	.....	0	0		Prof. Schiaparelli.
Padua	29.98	761.5	30.09	764.2	82.4	28.0	59	SW	1.8	0.8	.....	4		WSW	.....	0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.20	741.7	30.08	763.9	79.2	26.2	44	ESE	4.3	1.9	.....	6		E	.....	0	0		Prof. P. F. Denza.
Genoa	29.95	760.8	30.14	765.5	78.4	25.8	26	SW	3.1	1.4	.....	2		.....	.....	0	0		Prof. G. M. Garibaldi.
Mondovi	28.25	717.6	30.10	764.4	76.3	24.6	40	NNE	.....	.....	2	6		SSW	.....	0	0		Prof. D. C. Bruno.
Pesaro	30.06	763.4	30.10	764.6	77.7	25.4	54	E	.....	.....	.....	3		.....	.....	0	0		Prof. Luigi Guidi.
Florence	29.83	757.7	30.08	763.9	86.0	30.0	30	S	.....	.....	2	2		.....	.....	0	0		Prof. Costantino Pitter.
Leghorn	30.02	762.5	30.10	764.6	82.0	27.8	39	SSW	1.3	0.6	.....	0		.....	.....	0	0		Prof. P. Monte.
Rome	29.94	760.5	30.11	764.8	85.3	29.6	23	SW	3.8	1.7	.....	0		.....	.....	0	0		Prof. P. S. Ferrari.
Lecce	29.83	757.6	30.07	763.7	84.2	29.0	28	N	9.8	4.4	.....	0		.....	.....	0	0		Prof. C. de Giorgi.
Cosenza	29.22	742.3	30.08	763.9	84.9	29.4	72	ESE	1.3	0.6	.....	0		.....	.....	0	0		Prof. D. Conti.
Cagliari	29.85	758.2	30.04	763.0	78.1	25.6	56	S	.....	.....	4	0		.....	.....	0	0		Prof. A. Pacinotti.
Palermo	29.89	759.3	30.14	765.5	77.5	25.3	42	NE	7.4	3.3	.....	0		.....	.....	0	0		Prof. G. Cincciatore.
Syracuse	30.05	763.2	30.09	764.3	78.1	25.6	75	E	3.1	1.4	.....	4		S	.....	0	0		Prof. Vincenzo Guiliano.
SUB-SERIES.																			
Naples, S. R	29.60	751.7	30.10	764.4	82.8	28.2	51	SSE	0	0	.....	6		.....	.....	0	0		Prof. F. Brioschi.
Stelvio	22.44	569.9	.....	.....	53.2	11.8	59	SW	.....	.....	2	0		18	S	0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.46	570.6	.....	.....	50.5	10.3	80	W	.....	.....	1	10		SW	.....	0	0	Covered	Prof. P. F. Denza.

JAPANESE SERIES.

Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I. M. Obs'y.....†	29.76	755.9	29.78	756.4	68.2	20.1	79	NNE	4.6	2.1	.....	ck	2s	.....	.....	0	0	Clear	K. Sasaki.
Kioto	29.58	751.3	29.75	755.6	70.2	21.2	60	NNW	1.2	0.5	.....	0	0	.....	.....	0	0	Clear	M. Tojima.
Nagasaki, I. M. Obs'y	29.65	753.1	29.85	758.2	66.3	19.1	80	SW	0.8	0.4	.....	0	3s	.....	.....	0	0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	29.70	754.4	29.76	755.9	68.4	20.2	88	ENE	4.0	1.8	.....	0	4ks	.....	NE	0	0	Fair	The Staff.
Wakayama	29.71	754.6	29.76	755.9	74.4	23.6	76	SW	2.1	0.9	.....	0	0	.....	.....	0	0	Clear	Y. Kuwamuca.

MAURITIUS SERIES.

Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	30.01	762.2	30.20	767.0	72.6	22.6	63	E	18.5	8.3	.....	6	2	NNW	ESE	0	0	Cloudy	A. N. Figon.

MEXICAN SERIES.

By authority of the SECRETARY of PUBLIC WORKS.

Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanajuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez.
Leon	24.37	619.0	29.93	760.1	68.0	20.0	78	NW	.....	.....	1	3c	0	.....	.....	0	0	Hazy	Prof. M. Leal.
Mazatlan	29.61	752.2	29.87	758.7	80.6	27.0	82	WSW	0.9	0.4	.....	0	7cn	.....	ESE	0.875	22.2	Cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	23.09	586.6	29.99	761.9	57.6	14.2	84	Calm	0	0	.....	4cs	0	.....	.....	0	0	Clear	The Staff.
Pabellon, Aguascalientes	23.90	607.0	29.80	756.9	64.6	18.1	75	WSW	.....	.....	1	1c	0	.....	.....	0	0	Clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.40	594.5	30.04	763.1	60.8	16.0	39	Calm	0	0	.....	0	8	.....	SW	0	0	Cloudy	Prof. P. Spina.
San Luis Potosi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Barroeta, M. D.
Tlacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	22.54	572.7	30.07	765.8	61.0	16.1	63	Calm	0	0	.....	1cs	0	.....	.....	0.098	2.5	Clear	J. A. Bonilla, M. E.

NETHERLANDS SERIES.

Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	29.84	757.9	29.84	757.9	67.8	19.9	.....	SSW	.....	.....	4	.....	.....	.....	.....	0.756	19.2	.....	
Groningen	29.78	756.3	29.83	757.7	63.3	17.4	.....	S	.....	.....	2	.....	.....	.....	.....	0.646	16.4	.....	
Helder	29.78	756.5	29.78	756.5	63.9	17.7	.....	SSW	.....	.....	5	.....	.....	.....	.....	0.016	0.4	.....	
Hellevoetsluis	29.82	757.3	29.82	757.3	65.5	18.6	82	SSW	.....	.....	4	.....	.....	.....	.....	1.083	27.5	.....	
Utrecht	29.81	757.1	29.85	758.3	67.1	19.5	76	SSW	.....	.....	3	.....	8	.....	.....	0.102	2.6	Very cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind 0—10 Up'er	Clouds. Amount and kind 0—10 Lo'er	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.48	748.7	29.54	750.3	64.8	18.2	69	S	35.3	15.8			6			0.224	5.7		
Christiania	29.55	750.5	29.69	754.1	64.8	18.2	75	S	13	6			9			0.087	2.2		
Gjæsvær	29.69	754.2	29.72	754.8	45.9	7.7		SE			2		10						
Lodingen	29.47	748.4	29.51	749.6	54.9	12.7	55	Calm			0		10			0.394	10.0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.04	763.1	30.05	763.5	67.3	19.6	74	SE	7.4	3.3			4			0	0		Dr. J. A. Sampaio.
Campo Major	29.01	736.8	29.99	761.7	68.0	20.0	87	WNW	5.6	2.5			10	SSW		0.142	3.6	Raining	Dr. A. M. R. dos Santos.
Funchal, Madeira	29.98	761.6	30.07	763.8	72.3	22.4	77	SSW	2.5	1.1			7			0.157	4.0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.68	753.8	30.03	762.7	69.6	20.9	71	SSW	4.3	1.9			9			Blank			The Staff.
Ponta Delgada, Azores	30.14	765.6	30.21	767.4	69.4	20.8	57	NE	4.9	2.2			4			0.028	0.7		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.58	725.9	29.61	752.2	63.9	17.7	43	N	22	10		3cs	0						Capt. Lasarew.
Archangel	29.81	757.1	29.83	757.6	64.6	18.1	62	SW	4	2		0	8ks						Capt. Sselliwerstow.
Astrakhan	30.17	766.2	30.08	764.1	80.8	27.1	31	NW	2	1		0	2s;k						Capt. Wisganow.
Barnaul ‡	29.00	736.7	29.47	748.5	78.6	25.9	40	SW	9	4			10						Meteorological Obs'y.
Dorpat	29.86	758.5	30.09	764.3	79.3	26.3	42	S	4	2		0	2k						Observatory.
Ekaterinburg	29.06	738.0	30.00	762.0	59.9	15.5	38	NNW	11	5		10c	0					Light clouds	Meteorological Obs'y.
Kasan	29.83	757.6	30.09	764.2	72.9	22.7	28	S	2	1			0						Observatory.
Kertch	30.20	767.0	30.22	767.5	71.2	21.8	89	S	4	2			2					Light clouds	Lagorio & Sastyrez.
Kieff	29.52	749.8	30.12	765.0	81.0	27.2	37	SE	7	3		ck	3ks						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.89	759.2	30.09	764.2	80.8	27.1	40	NW	13	6			5						Meteorological Obs'y.
Moscow	29.58	751.3	30.11	764.7	72.5	22.5	61	NNW	4	2			9ks					Raining	Meteorological Obs'y.
Nertchinsk	27.46	697.5	29.71	754.6	50.7	10.4	84	Calm	0	0			5			0	0		Meteorological Obs'y.
Nikolaiev	30.13	765.3	30.20	767.1	81.3	27.4	54	NNE	4	2		0	5k						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.69	754.2	29.78	756.4	48.4	9.1	84	NE			3		10n			0	0		Lieut. Iwanow.
Pekin, China	29.34	745.3	29.48	748.9	79.9	26.6	52	Calm	0	0		0	4k						Physical Observatory.
St. Petersburg	30.05	763.3	30.07	763.7	67.8	19.9	57	NW	13	6		cs	1k					Light clouds	Central Physical Obs'y.
Tashkend, Laboratory	28.05	712.4	29.48	748.8	92.7	33.7	24	NNW	13	6			10						Teich, A. M.
Tiflis	28.69	728.8	30.05	763.2	80.1	26.7	30	NE	2	1		0	3k						Physical Observatory.
Warsaw	29.62	752.3	30.01	762.3	84.6	29.2	46	SE	9	4		3ck	0						Astronomical Obs'y.
Wilna	29.71	754.6	30.11	764.7	81.0	27.2	37	S	7	3			4						Berg, Assistant.
Yeniseisk	29.43	747.6	29.71	754.6	70.9	21.6	49	ESE	2	1			2						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.45	748.0	63.8	17.7	48	SW			3	0	5k			0.09	2.3	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			29.39	746.5	58	14.4	94	NE			3		10			0.3	8.	Hazy	J. Youngclause.
North Unst, Shetland Isl'ds			29.22	742.2				S			6		Fg						Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.83	757.6	29.93	760.2	75.2	24.	74	SSE	4.3	1.9			3						Antonio Rave, Director.
Bilbao, Met. Obs'y	29.97	701.3	30.03	762.7	69.4	20.8	75	NW	1.8	0.8			10			0	0	Covered	Prof. Manuel de Na veran
Burgos, Met. Obs'y	27.68	687.7			72.3	22.4	54	SW	8.7	3.9			6			0	0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.78	705.6	29.90	759.4	80.6	27.0	43	SW	15.7	7.0		0	4			0	0	Cloudy	The Staff.
Murcia, Met. Obs'y ‡	29.75	755.6	29.89	759.2	90.5	32.5	39	SE	5.4	2.4		3	5	SE		0	0	Cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.09	738.9	29.97	761.1	66.6	19.2	78	WNW	0	0			8			0.205	5.2	Almost cov'd	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.83	757.6	29.89	759.3	80.6	27.0	87	S	8.1	3.6		10ck	0	W		0.091	2.3	Cloudy	Benito Vines, S. J.
Manilla, Philippine Islands	29.84	758.0	29.89	759.3	86.0	30.0	79	E	4.4	2.0		0	4cs		E	0	0		Federico Faura, S. J.
San Fernando, Naval Obs'y	29.98	761.4	30.07	763.8	73.0	22.8	69	SW	8.9	4.0		5	4	W	W	0	0		Capt. C. Fujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.94	760.5	30.03	762.8	82.8	28.2	91	S	0	0		3ks	4k	S	S	0	0	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.76	756.0	29.91	759.7	88.0	31.1	66	SSE	0.2	0.1		0	1ks		SSE	0	0	Fair	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	29.83	757.6	29.87	758.6	56.8	13.8	65	S			4		5			0.079	2.0		
Umea	29.79	756.6	29.84	757.9	56.5	13.6	67	SW			4		9			0	0		
Hernosand	29.76	756.0	29.82	757.3	55.9	13.3	70	S			4		8			0	0		
Stockholm	29.67	753.7	29.85	758.2	71.6	22.0	50	S			4		10			0	0		
Wisby	29.82	757.5	29.88	759.0	81.0	27.2	41	SW			6		0			0	0		
Sub-Series.																			
Upsala	29.63	752.5	29.71	754.7	67.6	19.8	75	SSE	16.1	7.2			10		SW	0.039	1.0	Raining	S. G. Fineman.
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.55	725.1	29.89	759.3	82.2	27.9	32	N			2		2			0	0	Clear	The Observatory.
Zurich ‡	28.33	719.5	29.87	758.7	83.5	28.6	56	W			2		4			0.307	7.8	Cloudy	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.15	765.8	73.8	23.2	53	ENE	34	15.0			0			0	0		The Observatory.
Valona			30.21	767.3	79.5	26.4		Calm			0		2			0	0	Slightly cld'y	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.86	758.4	80.6	27.0	72	NE			2		0			0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.

UNITED STATES SERIES.

By authority of the Secretary of War.

Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

Albany, New York	29.84	757.9	29.92	760.0	57	13.9	58	W	8	3.6		0	Hz			Inap.	Inap.	Clear	
Alpena, Michigan	29.41	747.0	30.06	763.5	47	8.3	77	NW	5	2.2		0	2s			0	0	Fair	
Atlanta, Georgia	28.63	727.2	29.78	756.4	74.0	23.3	72	NW	5	2.2		0	0			0	0	Clear	
Atlantic City, New Jersey	29.95	760.7	29.96	761.0	58	14.4	58	N	7	3.1		8cs	0	Calm		0	0	Fair	
Augusta, Georgia	29.58	751.3	29.76	755.9	80.0	26.7	78	NW	9	4.0		5ck	0	W		0.07	1.8	Fair	
Baltimore, Maryland	29.93	760.2	29.98	761.5	62	16.7	46	NE	6	2.7			10s		W	0	0	Cloudy	
Barnegat, New Jersey	29.93	760.2	29.95	760.7	58	14.4	64	N	8	3.6		5cs	0	SW		0	0	Fair	
Bismarck, Dakota	28.22	716.8	29.96	761.0	53	11.7	86	E	12	5.4			10s		Calm	0.22	5.6	Cloudy	
Boise City, Idaho	27.32	693.9	30.08	764.0	49.2	9.6	61	NW	1	0.4		0	0			0	0	Clear	
Boston, Massachusetts	29.70	754.4	29.85	758.2	54.5	12.5	55	W	7	3.1		0	0			0.07	1.8	Clear	
Bracketville, Texas	28.65	727.7	29.65	753.1	76	24.4	73	E	2	0.9		0	0			0	0	Clear	
Brownsville, Texas	29.74	755.4	29.78	756.4	83	28.3	75	SE	2	0.9		2c	0			0	0	Clear	
Buffalo, New York	29.28	743.7	29.96	761.0	51.3	10.7	77	NE	1	0.4		0	Sk			0	0	Clear	
Burlington, Vermont	29.58	751.3	29.86	758.4	52.5	11.4	66	NW	12	5.4		2ck	5s	N	NW	0.03	0.8	Fair	
Cairo, Illinois	29.57	751.1	29.96	761.0	66	18.9	84	NE	14	6.3			10s		NE	0.38	9.7	Cloudy	
Campo, California	27.33	694.2	29.90	759.4	37.5	3.1	71	S	3	1.3		1c	0	W		0	0	Clear	
Camp Thomas, Arizona	27.12	688.8			55	12.8	33	SE			1	0	0			0	0	Clear	
Cape Henry, Virginia	29.87	758.7	29.89	759.2	67	19.4	69	NE	28	12.5			10s		N	0	0	Cloudy	
Cape May, New Jersey	29.91	759.7	29.94	760.5	59	15.0	59	NE	10	4.5			10ks		NW	0	0	Cloudy	
Castroville, Texas	29.04	737.6	29.71	754.6	72	22.2	76	Calm	0	0			10s		S	0	0	Cloudy	
Cedar Keys, Florida	29.77	756.1	29.79	756.7	83	28.3	75	W	15	6.7		0	4ks		W	0	0	Fair	
Champaign, Illinois	29.20	741.7	29.99	761.7	55.4	13.0	81	NE	10	4.5		0	0			0.02	0.5	Clear	
Charleston, S. Carolina	29.68	753.9	29.74	755.4	85	29.4	76	SW	5	2.2		0	2s		Calm	Inap	Inap.	Clear	
Charlotte, N. Carolina	28.94	735.1	29.80	756.9	73.0	22.8	68	NE	8	3.6			10s		NE	0	0	Cloudy	
Chattanooga, Tennessee	29.02	737.1	29.82	757.4	72	22.2	90	Calm	0	0		2k	Fg	N	Calm	0.19	4.8	Fair	
Cheyenne, Wyoming	24.10	612.1	29.91	759.7	52.2	11.2	35	NE	6	2.7		0	0			0	0	Clear	
Chicago, Illinois	29.36	745.7	30.04	763.0	53.0	11.7	69	N	10	4.5		0	0			0	0	Clear	
Chincoteague, Virginia	29.90	759.4	29.92	760.0	62	16.7	83	NE	18	8.0		8k	0	SW		0	0	Cloudy	
Cincinnati, Ohio	29.34	745.2	29.98	761.5	60	15.6	60	N	8	3.6		0	0			0.03	0.8	Clear	
Cleveland, Ohio	29.27	743.4	29.99	761.7	55.3	12.9	57	E	3	1.3		1k	0			0	0	Clear	
Coleman City, Texas																			
Columbus, Ohio	29.14	740.1	29.96	761.0	56	13.3	57	NE	5	2.2		0	0			0	0	Clear	
Concho, Texas	27.92	709.2	29.80	756.9	73	22.8	72	Calm	0	0		0	0			0	0	Clear	
Corsicana, Texas	29.40	746.7	29.86	758.4	77	25.0	69	S	4	1.8		0	0			0	0	Clear	
Davenport, Iowa	29.40	746.7	30.04	763.0	55	12.8	56	NE	4	1.8		0	0			0	0	Clear	
Dayton, Washington T'y	28.42	721.9	30.17	766.3	53.4	11.9	79	S	2	0.9		5ck	0	S		0	0	Fair	
Deadwood, Dakota	25.44	646.2	29.99	761.7	50	10.0	65	NW				0	0			0.34	8.6	Clear	
Decatur, Texas	28.64	727.4	29.73	755.1	78	25.6	61	SE	12	5.4		8ck	0	SW		0	0	Fair	
Delaware Breakwater, Del.	29.93	760.2	29.95	760.7	61	16.1	71	NE	18	8.0		8ck	1s	W		0	0	Cloudy	
Denison, Texas	29.03	737.3	29.81	757.2	82	27.8	60	S	6	2.7		5ck	0	Calm		0	0	Fair	
Denver, Colorado	24.80	629.9	29.87	758.7	57.3	14.1	65	S	5	2.2		0	0			0	0	Clear	
Des Moines, Iowa	29.18	741.2	30.06	763.5	60	15.6	82	SE	1	0.4		0	0			0.02	0.5	Clear	
Detroit, Michigan	29.33	745.0	30.00	762.0	49.9	9.9	72	N	9	4.0		0	0			0	0	Clear	
Dodge City, Kansas	27.40	695.9	29.90	759.4	60.1	15.6	91	NE	14	6.3			10n			Inap.	Inap.	Light rain	
Dubuque, Iowa	29.37	746.0	30.05	763.3	53.7	12.1	61	SE	1	0.4		0	0			0	0	Clear	
Duluth, Minnesota	29.42	747.3	30.10	764.5	49	9.4	85	NE	6	2.7		2k	0	Calm		0	0	Clear	
Eagle Pass, Texas	29.03	737.3	29.84	757.9	77.0	25.0	73	SE	3	1.3		0	0			0	0	Clear	
Eagle Rock, Idaho	25.37	644.4	30.08	764.0	42	5.6	58	SW	5	2.2		0	0			0	0	Clear	
Eastport, Maine	29.53	750.0	29.60	751.8	53	11.7	67	NW	17	7.6		1k	0	NW		0.20	5.1	Clear	
El Paso, Texas	26.10	662.9	29.76	755.9	75	23.9	4	NW	6	2.7		0	0			0	0	Clear	
Erie, Pennsylvania	29.27	743.4	29.97	761.2	54	12.2	67	E	4	1.8		0	0			0	0	Clear	
Escanaba, Michigan	29.44	747.8	30.08	764.0	48	8.9	78	N	6	2.7		0	0			0	0	Clear	
Florence, Arizona	28.32	719.3	29.92	760.0	52	11.1	35	W	1	0.4		0	0			0	0	Clear	
Fort Apache, Arizona	25.00	635.0	29.78	756.4	42	5.6	34	NE	4	1.8		0	Sk		Calm	0	0	Dense smoke	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota	28.43	722.1	29.90	759.4	60	15.6	94	W	8	3.6			10n			0.64	16.3	Light rain	
Fort Benton, Montana	27.18	690.4	29.92	760.0	32	0.0	100	NE	28	12.5			10n		NE	0.92	23.4	Light rain	
Fort Buford, Dakota	27.99	710.9	29.91	759.7	55	12.8	100	SW	11	4.9			10n		SE	0.70	17.8	Light rain	
Fort Custer, Montana	26.86	682.2	29.95	760.7	49	9.4	64	E	5	2.2		0	0			0.82	20.8	Clear	
Fort Davis, Texas	25.12	638.0	30.08	764.0	77	25.0	38	W	7	3.1		0	0			0	0	Clear	
Fort Elliott, Texas	27.12	688.8	30.19	766.8	66	18.9	89	E	8	3.6			10s		E	0	0	Cloudy	
Fort Gibson, Indian T'y	29.27	743.4	29.80	756.9	76	24.4	82	Calm	0	0		0	2s		S	0	0	Fair	
Fort Grant, Arizona					64	17.8	8	NE	5	2.2		0	0			0	0	Clear	
Fort Griffin, Texas	28.54	724.9	29.74	755.4	75.0	23.9	52	Calm	0	0		0	0			0	0	Clear	
Fort Keogh, Montana	27.51	698.7	29.92	760.0	51	10.6	93	SW	4	1.8		0	0			1.00	25.4	Clear	
Fort Macon, North Carolina	29.76	755.9	29.77	756.1	73	22.8	95	Calm	0	0			10s		NE	1.64	41.7	Cloudy	
Fort McKavett, Texas	27.61	701.3	29.42	747.3	73.7	23.2	72	SE	3	1.3		0	0			0	0	Clear	
Fort Missoula, Montana	26.82	681.2	30.20	767.1	48	8.9	85	N	1	0.4			10s			0.03	0.8	Cloudy	
Fort St. Michaels	30.07	763.8	30.10	764.5	54	12.2	73	W	4	1.8			10ks			0	0	Cloudy	
Fort Shaw, Montana	26.39	670.3	29.84	757.9	46	7.8	100	W	1	0.4			10n			0.56	14.2	Light rain	
Fort Sill, Indian Territory	28.52	724.4	29.72	754.9	78	25.6	65	S	4	1.8		0	0			0	0	Clear	
Fort Stevenson, Dakota	28.16	715.3	29.94	760.5	53	11.7	93	E	14	6.3			10n		Calm	0.62	15.7	Light rain	
Fort Verde, Arizona					52.9	11.6	36	W			1	2cs	0	NW		0	0	Fair	
Fredericksburg, Texas																			
Galveston, Texas	29.81	757.2	29.85	758.2	81	27.2	83	W	6	2.7		Hz	Hz			0	0	Dense haze	
Grand Haven, Michigan	29.41	747.0	30.06	763.5	53	11.7	67	N	8	3.6		0	0			0	0	Clear	
Hatteras, North Carolina	29.81	757.2	29.83	757.7	72	22.2	80	NE	16	7.2			10n		NE	0.05	1.3	Light rain	
Helena, Montana	25.86	656.8	30.05	763.5	50	10.0	58	S	4	1.8		2k	0	Calm		0.36	9.1	Fair	
Henrietta, Texas																			
Indianapolis, Indiana	29.19	741.4	29.96	761.0	62	16.7	61	E	4	1.8		1c	0	Calm		Inap.	Inap.	Clear	
Indianola, Texas	29.82	757.4	29.85	758.2	80.4	26.9	82	Calm	0	0		0	0			0	0	Clear	
Jacksboro, Texas	28.69	728.7	29.75	755.6	82	27.8	52	SW	6	2.7		5ck	0	S		0	0	Fair	
Jacksonville, Florida	29.72	754.9	29.74	755.4	83	28.3	75	SW	8	3.6		0	0			0	0	Clear	
Keokuk, Iowa	29.37	746.0	30.01	762.2	57.3	14.1	69	NE	5	2.2		0	0			0.41	10.4	Clear	
Key West, Florida	29.83	757.7	29.86	758.4	82.0	27.8	87	SW	20	8.9			10n;s		SW	0.78	19.8	Threatening	
Kittyhawk, North Carolina	29.85	758.2	29.87	758.7	70	21.1	77	E	20	8.9			10ks		W	0	0	Cloudy	
Knoxville, Tennessee	28.83	732.3	29.83	757.7	68	20.0	95	SW	5	2.2			10n		W	0.39	9.9	Light rain	
La Crosse, Wisconsin	29.27	743.4	30.00	762.0	58	14.4	82	S	8	3.6		0	5s		S	0	0	Fair	
La Mesilla, New Mexico	25.99	660.1	30.14	765.5	57.5	14.2	47	Calm	0	0		0	0			0	0	Clear	
Laredo, Texas	29.35	745.5	29.67	753.6	78	25.6	82	SE	2	0.9		0	0			0	0	Clear	
Leavenworth, Kansas	29.15	740.4	30.02	762.5	61	16.1	77	E	5	2.2		1cs	0			0	0	Clear	
Lewiston, Idaho	29.31	744.5	30.14	765.5	55	12.8	79	Calm	0	0			10s		Calm	0.24	6.1	Cloudy	
Little Rock, Arkansas	29.52	749.8	29.83	757.7	76	24.4	86	NE	4	1.8		5cs	0	N		0	0	Fair	
Los Angeles, California	29.52	749.8	29.89	759.2	54.3	12.4	80	E	3	1.3		0	0			0	0	Clear	
Louisville, Kentucky	29.35	745.5	29.90	759.4	63.0	17.2	62	N	12	5.4		0	0			Inap.	Inap.	Clear	
Lynchburg, Virginia	29.25	742.9	29.92	760.0	63	17.2	78	NE	5	2.2			10n			0.08	2.0	Heavy rain	
Madison, Wisconsin	29.08	738.6	30.06	763.5	52	11.1	66	E	3	1.3		0	0			0	0	Clear	
Marquette, Michigan	29.38	746.2	30.09	764.3	49	9.4	78	NW	8	3.6		5k	0	NW		0	0	Fair	
Mason, Texas	28.24	717.3	29.91	759.7	76.6	24.8	62	S	3	1.3		0	0			0	0	Clear	
Memphis, Tennessee	29.54	750.3	29.87	758.7	73	22.8	95	N	6	2.7			10s		N	0.84	21.3	Cloudy	
Milwaukee, Wisconsin	29.36	745.7	30.09	764.3	49	9.4	78	N	11	4.9		0	1s			0	0	Clear	

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Reduced to sea-level.		Tempera-ture of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
								Direc-tion.	Velocity.		Force	Amount and kind.		Direction,					
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.74	755.4	29.81	757.2	83	28.3	83	NW	2	0.9		Hz	Hz			0	0	Light haze.	
Montgomery, Alabama	29.58	751.3	29.80	756.9	78.2	25.7	77	N	2	0.9		2c	0			0	0	Clear.	
Moorhead, Minnesota	29.05	737.9	30.01	762.2	56	13.3	75	NE	6	2.7			10s		NE	0	0	Cloudy.	
Morgantown, W. Virginia	28.94	735.1	29.89	759.2	64	17.8	63	N	5	2.2		0	Hz			0	0	Clear.	
Mt. Washington, N. H.	23.45	595.6	29.48	748.8	28	— 2.2	100	NW	42	18.8			Fg		NW	0.22	5.6	Dense fog.	
Nashville, Tennessee	29.33	745.0	29.85	758.2	69.6	20.9	81	N	6	2.7		8ck	2ks	NW	NW	0.34	8.6	Cloudy.	
New Haven, Connecticut	29.81	757.2	29.92	760.0	55	12.8	56	W	5	2.2		0	0			0	0	Clear.	
New London, Connecticut	29.89	759.2	29.94	760.5	60	15.6	65	NE	5	2.2		0	0			0	0	Clear.	
New Orleans, Louisiana	29.76	755.9	29.81	757.2	84.0	28.9	81	W	5	2.2		0	Sk			0	0	Clear.	
Newport, Rhode Island	29.85	758.2	29.90	759.4	59.1	15.1	59	W	10	4.5		0	0			0	0	Clear.	
New River, N. Carolina																			
New Shoreham, Rhode I'd	29.88	758.9	29.91	759.7	59.0	15.0	65	NW	12	5.4		0	0			0	0	Clear.	
New York, New York	29.79	756.7	29.96	761.0	58	14.4	58	N	4	1.8		0	Hz			0	0	Clear.	
Norfolk, Virginia	29.85	758.2	29.89	759.2	68	20.0	65	NE	8	3.6			10ks		W	0	0	Cloudy.	
North Platte, Nebraska	27.04	686.8	29.86	758.4	61	16.1	82	SE	10	4.5		5c	5s	W	SE	0.07	1.8	Cloudy.	
Olympia, Washington T'y	30.15	765.8	30.19	766.8	54.0	12.2	87	W	1	0.4			10s		Calm	0.01	0.3	Cloudy.	
Omaha, Nebraska	28.91	734.3	30.05	763.3	63	17.2	80	SE	4	1.8			10s			0	0	Cloudy.	
Oswego, New York	29.63	752.6	29.95	760.7	53.2	11.8	72	N	5	2.2		Hz	0			0	0	Clear.	
Pensacola, Florida	29.77	756.1	29.80	756.9	82	27.8	87	SW	2	0.9		0	0			0	0	Clear.	
Philadelphia, Pa	29.93	760.2	29.99	761.7	59.7	15.4	44	NE	4	1.8		2c	Fg			0	0	Fair	
Phœnix, Arizona	28.67	728.2	30.43	772.9	61	16.1	40	E	1	0.4		0	0			0	0	Clear	
Pike's Peak, Colorado	17.95	455.9	30.16	766.1	37	2.8	31	SW	12	5.4		0	0			0	0	Clear	
Ploche, Nevada	24.06	611.1	29.91	759.7	52	11.1	23	S	6	2.7		0	0			0	0	Clear.	
Pittsburg, Pennsylvania	29.17	740.9	29.96	761.0	57	13.9	69	NE	5	2.2		0	0			0	0	Clear.	
Port Eads, Louisiana	29.81	757.2	29.82	757.4	81.3	27.4	96	N	5	2.2		0	Hz		Calm	0	0	Dense haze.	
Port Huron, Michigan	29.36	745.7	30.02	762.5	49.5	9.7	79	N	5	2.2		0	0			0	0	Clear.	
Portland, Maine	29.72	754.9	29.77	756.1	55	12.8	62	NW	7	3.1		0	0			0.30	7.6	Clear.	
Portland, Oregon	30.13	765.3	30.20	767.1	49.3	9.6	94	Calm	0	0			Fg			0	0	Dense fog.	
Portsmouth, N. Carolina					73	22.8	85	NE	32	14.3			10s		NE	0.83	21.1	Cloudy.	
Prescott, Arizona	24.75	628.6	29.82	757.4	47	8.3	21	SW	3	1.3		0	0			0	0	Clear.	
Punta Rassa, Florida	29.78	756.4	29.79	756.7	82	27.8	81	W	15	6.7		8ck;k	0	W;C		0.39	9.9	Fair.	
Red Bluff, California	29.64	752.8	29.97	761.2	63.0	17.2	57	N	3	1.3		0	0			0	0	Clear.	
Rio Grande City, Texas	29.62	752.3	29.83	757.7	76	24.4	86	SE	2	0.9		0	0			0	0	Clear.	
Rochester, New York	29.35	745.5	29.97	761.2	50	10.0	86	W	2	0.9		0	0			0	0	Clear.	
Roseburg, Oregon	29.66	753.4	30.22	767.6	44	6.7	92	Calm	0	0		0	0			0	0	Clear.	
Sacramento, California	29.91	759.7	29.98	761.5	57.3	14.1	81	SE	2	0.9		0	0			0	0	Clear.	
St. Louis, Missouri	29.42	747.3	30.00	762.0	55.0	12.8	77	N	9	4.0		5c	0	N		0.32	8.1	Fair.	
St. Paul, Minnesota	29.18	741.2	30.02	762.5	59	15.0	70	E	4	1.8		0	0			0	0	Clear.	
Salt Lake City, Utah	25.69	652.5	29.89	759.2	55	12.8	39	Calm	0	0		0	0			0	0	Clear.	
San Antonio, Texas	29.16	740.7	29.85	758.2	76.7	24.8	82	Calm	0	0		0	5s		SE	0	0	Fair.	
San Diego, California	29.78	756.4	29.85	758.2	61.1	16.2	88	Calm	0	0			Fg			0	0	Dense fog.	
Sandusky, Ohio	29.33	745.0	29.99	761.7	58	14.4	70	N	12	5.4		5k	0	N		0	0	Fair.	
Sandy Hook, New Jersey	29.92	760.0	29.96	761.0	57.9	14.4	58	NW	4	1.8		0	0			0	0	Fair	
San Francisco, California	29.96	761.0	30.02	762.5	52	11.1	86	S	6	2.7		0	0			0	0	Clear.	
Santa Fé, New Mexico	23.28	591.3	29.79	756.7	58	14.4	37	E	3	1.3		0	0			0	0	Clear.	
Savannah, Georgia	29.65	753.1	29.74	755.4	80	26.7	74	SW	3	1.3		2k	5ks	SW	SW	0.06	1.5	Fair.	
Shreveport, Louisiana	29.63	752.6	29.86	758.4	81.5	27.5	70	Calm	0	0		0	Hz			0	0	Clear	
Silver City, New Mexico	24.24	715.7	29.70	754.4	56	13.3	14	NW	3	1.3		0	0			0	0	Clear.	
Sitka Alaska	30.10	764.5	30.17	766.3	49	9.4	85	Calm	0	0			Fg			0	0	Dense fog.	
Smithville, North Carolina	29.73	755.1	29.76	755.9	77	25.0	86	NE	12	5.4		8k	1s	NE		Inap.	Inap.	Cloudy.	
Spokane Falls, Wash. Ter.	28.11	714.0	30.07	763.8	53	11.7	96	E	3	1.3			10s			0.42	10.7	Cloudy.	
Springfield, Illinois	29.35	745.5	30.01	762.2	52	11.1	79	NE	6	2.7		0	0			0.24	6.1	Clear.	
Springfield, Massachusetts	29.77	756.1	29.90	759.4	62.9	17.2	52	NW	4	1.8		0	0			0	0	Clear.	
Stockton, Texas	26.80	680.7	29.79	756.7	70.8	21.6	70	S	8	3.6		2cs	0	SW		0	0	Fair.	
St. Vincent, Minnesota	29.25	742.9	30.09	764.3	49	9.4	85	E	2	0.9		2cs	0	Calm		0	0	Fair.	
Thatcher's Island, Mass.	29.80	756.9	29.85	758.2	57.2	14.0	87	NW	13	5.8		2cs	2s	W	W	0	0	Fair.	
Toledo, Ohio	29.33	745.0	30.01	762.2	52	11.1	79	N	8	3.6		0	0			0	0	Clear.	
Tucson, Arizona	27.42	696.5	29.71	754.6	59	15.0	23	SE	5	2.2		0	0			0	0	Clear	
Umatilla, Oregon	29.82	757.4	30.22	767.6	50	10.0	84	NE	1	0.4		0	0			0	0	Clear.	
Uvalde, Texas	28.87	733.3	29.66	753.4	72	22.2	85	Calm	0	0		0	0			0	0	Clear.	
Vicksburg, Mississippi	29.61	752.1	29.86	758.4	81	27.2	78	Calm	0	0		Hz	Hz			0	0	Light haze.	
Visalia, California	29.56	750.8	29.91	759.7	57	13.9	75	NW	2	0.9		0	0			0	0	Clear.	
Washington, D. C.	29.88	758.9	29.99	761.7	60	15.6	60	N	4	1.8			10s		NW	0	0	Cloudy.	
Wickenburg, Arizona					65	18.3	18	Calm			0	1c	0			0	0	Clear.	
Wilmington, N. Carolina	29.70	754.4	29.75	755.6	75	23.9	90	E	4	1.8			10s		Calm	0.52	13.2	Cloudy.	
Winnemucca, Nevada	25.70	652.8	29.90	759.4	48	8.9	36	NE	12	5.4		0	0			0	0	Clear	
Wood's Holl, Mass.	29.85	758.2	29.89	759.2	56	13.3	63	NW	15	6.7		0	0			0.30	7.6	Clear	
Yankton, Dakota	28.74	730.0	30.00	762.0	63	17.2	78	S	2	0.9		2c	2s			0	0	Fair.	
Yuma, Arizona	29.58	751.3	29.72	754.9	68.6	20.3	65	NW	2	0.9		0	0			0	0	Clear.	
Sub-Series.																			
Bogota, U. S. Columbia	22.10	561.3			54.2	12.3	74	Calm	0	0		8k	0			0	0	Cloudy.	Thomas Herran
Buff Bay Town, Jamaica. ‡	29.82	757.4	30.14	765.5	77	25.0	82	E				2k	2k						
Havana, Cuba, W. I.	29.88	758.9	29.93	760.2	82	27.8	91	S	2.4	1.1			8ks		Calm	0.05	1.3	Cloudy.	A. Van Caneghem, Ass't
Kingston, Jamaica, W. I.	29.92	760.0	29.93	760.2	83.9	28.8	74	SE	12	5.4		10cs	0			0	0		Robert Johnstone
Navassa, W. I.	29.85	758.2	29.93	760.2	81	27.2	83	E	56	25.0		5s	5k;n		E	0	0	Hazy.	F. M. Everett.
Paramaribo, S. A.	30.08	764.0	30.09	764.3	79	26.1	87	SE			2	5ck	4s	E		0.080	2.0	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.25	742.9	29.90	759.4	82	27.8	72	Calm	0	0		10cs	0	N		0	0	Cloudy.	Francesco J. Cisneros.
Rivas, Nicaragua					77.9	25.5		E			1	0	5ks		E	0.04	1.		Earl Flint.
Santiago de Cuba, W. I.																			Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.90	759.4	29.95	760.7	61.0	16.1	91	W	2	0.9		2c	1s	SW	W	0	0	Fair.	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																			Comm. A. J. Errington
H M. S. Alert, Thursday Island, Oceania	29.93	760.2	77	25.0	86	SE			3-5		9							Squally	Capt. J. P. Maclear.
H. M. S. Alexandra, Ragusa, Dalmatia, Austria	30.10	764.5	77.5	25.3	80	W			1		0							Misty	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab																			Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 24° 47′, E. 66° 59′	29.60	751.8	85	29.4	79	SW			3		10	WSW						Misty	Comm. G. W. Hand.
H. M. S. Bittern, Valona, Turkey			74	23.3		NE			2		2	NE				1-2	NE	D. clouds	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 45′	30.06	763.5	83	28.3	83	ENE			3		7							D. clouds.	Capt. C. G. F. Knowles.
H. M. S. Boadicea, S. 7° 54′, W. 14° 26′	30.05	763.3	77	25.0	69	SSE			4		2	SSE				1-2	SSE	D. clouds	Com. F. W. Richards.
H. M. S. Champion, Monte Video, Uruguay	30.21	767.3	41	5.0	83	N			5		2	Calm				2	NW	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 38° 50′, E. 119° 40′	29.54	750.3	70	21.1	79	S			4									Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 38° 25′, E. 13° 11′	30.12	765.0	80	26.7		N			1		0							Misty	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, N. 48° 05′, W. 6° 12′	29.84	757.9	61	16.1	82	WSW			4							3	SSW	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Eliott.
H. M. S. Dido, Simon's Bay, Cape Colony	29.97	761.2	70	21.1		Calm			0		0							Blue sky	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.95	760.7	83	28.3	83	SSW			2-3		2	SSW						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 49° 30′, W. 56° 01′	29.54	750.3	43.5	6.4	96	NE			3-4		10					1	NE	Squally	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 7° 13′, E. 72° 23′	29.92	760.0	80	26.7		SE			2-3		5							D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 20° 10′, E. 68° 00′	30.12	765.0	73	22.8		SE			5		3	SE				4	ESE	Squally	Comm. C. Johnstone.
H. M. S. Emerald, N. 5° 43′, E. 168° 40′	29.87	758.7	82	27.8	87	NE			3-4		4	NE				2	ESE	D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Port Louis, Mauritius	30.30	769.6	75	23.9	64	E			3-4		4	ESE						D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, N. 50° 36′, W. 55° 43′	29.55	750.6	42	5.6		NNE			2		8	NNE						D. clouds	Capt. W. C. Kurslake.
H. M. S. Fawn, N. 12° 47′, E. 44° 58′	29.63	752.6	88.5	31.4	72	SSE			4		4							Squally	Capt. P. Aldrich.
H. M. S. Flamingo, N. 19° 32′, W. 80° 20′	29.94	760.5	85	29.4	83	SE			2		3	SE				2-3	SE	D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	30.17	766.3	55	12.8	80	Calm			0		2							Misty	Comm. E. G. Bourke.
H. M. S. Garnet, Sandy Point, Patagonia	29.12	739.6	35	1.7	70	WNW			4		4							Squally	Capt. L. F. Jones.
H. M. S. Griffon, N. 24° 03′, W. 74° 33′	30.01	762.2	82	27.8	87	SE			3		10					3	SE	D. clouds	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.02	762.5	60	15.6		Calm			0		6	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.68	753.9	74	23.3		E			1		3							D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 15′, E. 109° 53′	29.76	755.9	85.9	29.9	83	E			2		6					1	E	Misty	Capt. A. Carpenter.
H. M. S. Midge																			Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. M. S. Modeste, S. 29° 20′, E. 42° 30′	30.05	763.3	69	20.6	79	Var.			1-4		10					1-2	ENE	Thnd'rstorm	Capt. J. G. Mead.
H. M. S. Monarch, Tunis, Tunis, N. Africa	30.04	763.0	80	26.7	100	SE			3		1	ESE						Blue sky	Capt. G. Tryon, C. B

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force.	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, West Coast of Borneo	.....	.....	80.5	26.9	.....	SE	.....	.....	1	.....	10	.....	.....	.....	.....	2-3	SW	Raining	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.40	746.7	52	11.1	79	WNW	.....	.....	4	.....	9	WNW	.....	.....	.....	.....	.....	D. clouds	Capt. E. B Drummond.
H. M. S. Orontes, N. 8° 18′, E. 13° 40′ *†	29.98	761.5	81.5	27.5	81	SSW	.....	.....	2	.....	4	ENE	.....	.....	.....	1	SSW	Squally	Capt. R. P. Kinahan.
H. M. S. Pegasus	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 48′, W. 79° 32′	29.81	757.2	81	27.2	97	NW	.....	.....	1	.....	7	.....	.....	.....	.....	.....	.....	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. A. C. Paget.
H. M. S. Phœnix, N. 19° 38′, W. 73° 56	29.92	760.0	83	28.3	79	E	.....	.....	2-3	.....	7	.....	.....	.....	.....	2	E	D. clouds	Capt. H. H. Greenfel.
H. M. S. Rambler	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Hon. A. C. Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.71	754.6	78	25.6	.....	SSW	.....	.....	1	.....	10	.....	.....	.....	.....	.....	.....	Raining	Comm. W. H. Edwards.
H. M. S. Rifleman	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 51° 18′, W. 126° 43′	30.19	766.8	48	8.9	.....	WSW	.....	.....	1	.....	6	.....	.....	.....	.....	.....	.....	D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	30.06	763.5	79.3	26.3	90	SSE	.....	.....	2	.....	5	S	.....	.....	.....	Sm'h	.....	D. clouds	Capt. C. E. Foot.
H. M. S. Salamis.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. A. Fitz George.
H. M. S. Sea Gull,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Comm. W. Byles.
H. M. S. Seraphis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. G. O. Twiss.
H. M. S. Shannon,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. J. D'Arcy.
H. M. S. Superb	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. T. L. H. Ward.
H. M. S. Tenedos	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. C. G. Fane.
H. M. S. Thetis, S. 22° 10′, W. 158° 50′	30.13	765.3	76	24.4	81	NE	.....	.....	5	.....	5	.....	.....	.....	.....	3	NE	D. clouds	Capt. P. W. Stephens.
H. M. S. Thunderer	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. P. H. Colomb.
H. M. S. Triumph, Iquique, Peru	30.04	763.0	60	15.6	70	WSW	.....	.....	2	.....	10	Calm	.....	.....	.....	.....	.....	Overcast	Capt. A. H. Markham.
H. M. S. Turquoise	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. M. B. Medlycott.
H. M. S. Tweed	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
H. M. S. Tyne,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.	.....	.....	84	28.9	.....	SE	.....	.....	2	.....	4	.....	.....	.....	.....	.....	.....	D. clouds	Com. W. S. Brown.
H. M. S. Wild Swan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	30.17	766.3	55	12.8	73	S	.....	.....	2-4	.....	9	S	.....	.....	.....	.....	.....	Showery	Com. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Abu Shehr, Persia	29.61	752.1	84.5	29.2	71	WSW	.....	.....	2-3	.....	.....	.....	.....	.....	.....	2	NW	Heavy mist	Capt. T. P. Nesham.
H. M. S. Zephyr	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lt. Comm. G. W. Pollard

GERMAN NAVAL SERIES.

Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.

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PORTUGUESE NAVAL SERIES.

Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.

Bengo	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Carlos Candid dos Reis, Comd'
Quanza, Brava, Cape Verd Id's	30.03	762.8	77.9	25.5	70	NE	.....	.....	1	.....	6	.....	W	.....	.....	1	NE	D. clouds	Carlos M. de Silva Costa, Comd't
Rio Lima	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. C da Silva Costa, Comd't.
Sado,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Paul de Loando, Benguela	30.01	762.3	75.6	24.2	68	W	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	Blue sky	G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.85	758.2	85.1	29.5	82	SE	.....	.....	2	.....	1	.....	S	.....	.....	.....	.....	D. clouds	P. I. de Rio Carvalho, Comd't.
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SWEDISH NAVAL SERIES.

Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.

H M. Corvette Saga	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. M. von Krusenstierna.
H. M. Frigate Vanadis	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Com. Th. Ulner.
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UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

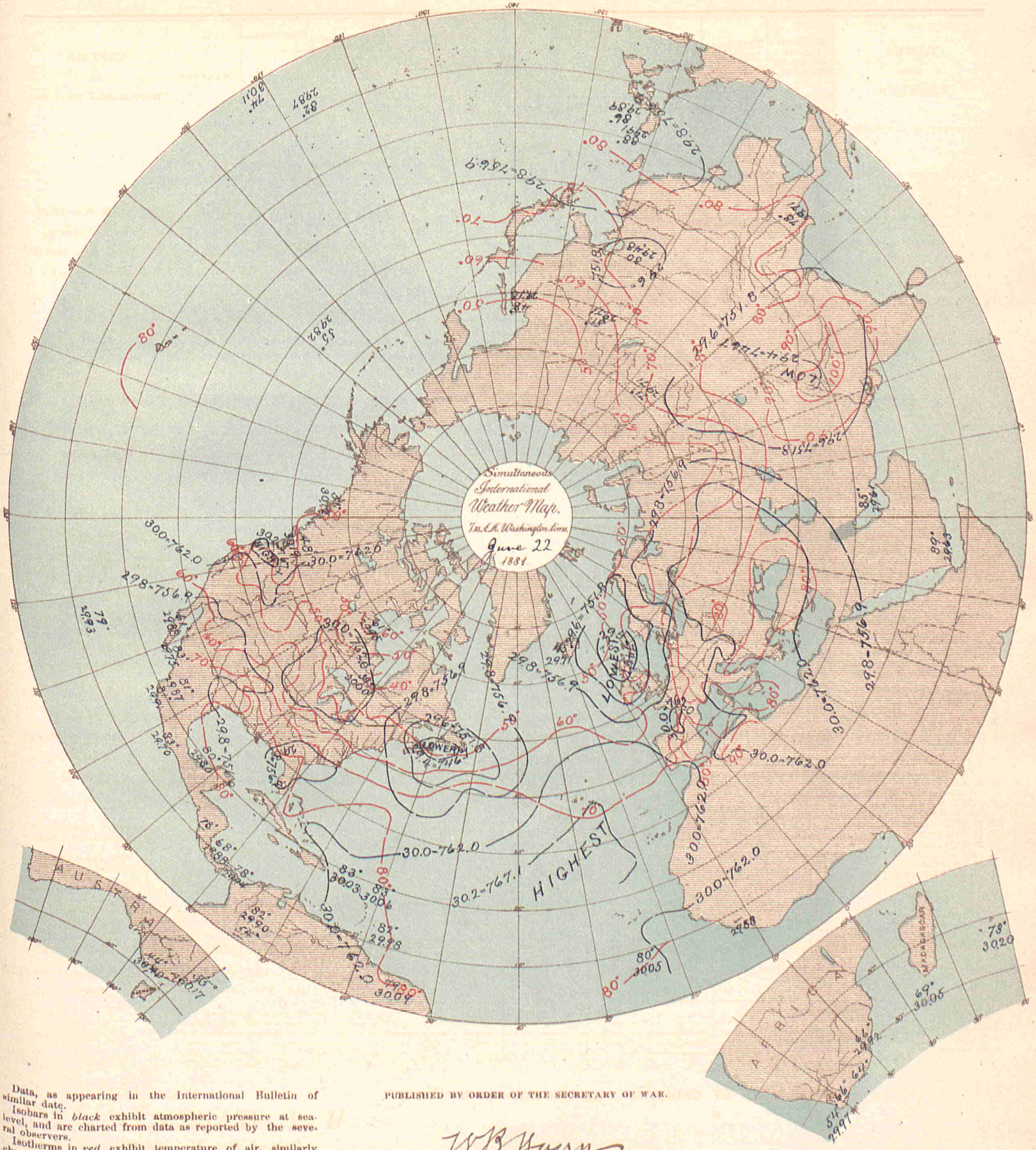
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	29.87	758.7	94	34.4	55	NW	7	3.1			0			0	0			Clear.	
Naval Hospital, Yokahama, Japan	29.55	750.6	71	21.7	90	Calm			0		10		W	Slig	ht			Threatening	
Adams, N. 16° 38′, W. 99° 35′	29.70	754.4	83	28.3	83	E			2		2		SW			Long	W	Fair	
Alaska, Callao, Peru	29.93	760.2	62	16.7	94	SSE			1		10			0	0	Sm'h		Misty	
Alert, Fatiyama Bay, Japan.*	29.59	751.6	74	23.3	90	Calm			0		8		Calm			Sm'h		Cloudy	
Alliance, N. 42° 30′, W. 56° 30′	29.52	749.8	66	18.9	94	WSW			5		8		WSW	Lig	ht	Sm'h		Fair	
Ashuelot, Kobe, Japan	29.71	754.6	75	23.9	76	W			1		8		W					Cloudy	
Colorado, New York, N. Y	29.94	760.5	59	15.0	70	NW	2	0.9			0			0	0			Clear.	
Constitution, Newport, R. I	29.84	757.9	55	12.8	62	NW			2		2							Clear	
Franklin, Norfolk, Va	29.84	757.9	67	19.4	64	ENE	14.4	6.4			10		ENE	0	0			Cloudy	
Galena, Vigo, Spain	30.00	762.0	67	19.4	84	W			2		5		WNW			Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	30.05	763.3	76	24.4	53	SSW	2.4	1.1			0			0	0			Clear	
Jamestown, Sitka, Alaska.*	30.12	765.0	51	10.6	93	Calm			0		10			0	0			Cloudy	
Kearsarge, Norfolk, Va	29.90	759.4	68	20.0	70	ENE			3		10		SW			Sm'h		Cloudy.	
Lackawanna, Apia, Samoa Id's, Oceania	30.11	764.8	74	23.3	90	ENE			1-2		2		E					Fair	
Marion, Montevideo, Uruguay.*†	30.08	764.0	40	4.4	73	NNW			4		8		Calm			Sm'h		Fair	
Michigan, Detroit, Michigan	29.96	761.0	53	11.7	80	NE			4		0							Clear.	
Minnesota, Newport, R. I	29.93	760.2	57	13.9	69	NW			3		1					Sm'h		Clear	
Monocacy, Yokohama, Japan	29.72	754.9	72	22.2	90	ESE			1		10		Calm					Cloudy	
Nipsic, Antwerp, Belgium	29.83	757.7	65	18.3	84	SW			1		10					Sm'h		D. clouds	
Onward, Callao, Peru†.	30.06	763.5	63	17.2	89	SSE			1		10		N			Long	W	Cloudy	
Palos, Nagasaki, Japan	29.86	758.4	68	20.0	90	NE			1		2							Fair	
Passaic, Washington, D. C	29.98	761.5	61	16.1	94	NE			2		10		NE					Cloudy	
Pensacola, Mare Isl'd, Cal	30.04	763.0	56	13.3	87	W			2		0			0	0			Clear	
Portsmouth, Newport, R. I	29.88	758.9	54	12.2	100	NW			3		2		NW			Sm'h		Clear	
Powhatan, Newport, R. I	29.87	758.7	59	15.0	70	NW			2		0							Clear	
Quinnebaug, Navy Yard, New York	29.89	759.2	64	17.8	62	NE			1		2							Hazy	
Ranger, N. 25° 53′, W. 110° 02′.*	29.75	755.6	83	28.3	87	SE			2		8			0	0	Sm'h		Cloudy	
Richmond, N. 33° 50′, E. 132° 32′	29.77	756.1	71	21.7	75	NW			2		0			0	0	Sm'h		Clear	
Saratoga, Newport, R. I	29.86	758.4	55	12.8	100	NNW			2		2		Calm	0	0			Fair	
Shenandoah, S. 25° 50′, W. 44° 15.*	30.14	765.5	67	19.4	89	SSW			3		10					R'gh	SSE	Rainy	
St. Louis, League Island, Pa	29.54	750.3	59	15.0	65	NW	1	0.4			2		N	0	0			Clear	
Swatara, Shanghai, China.*†	29.86	758.4	77	25.0	77	WNW			1		10		Calm					Overcast	
Tennessee, Navy Yard, N. Y	29.95	760.7	58	14.4	70	NNW	6	2.7			2		Calm	0	0	Sm'h		Clear	
Ticonderoga, S. 38° 02′, W. 35° 38′	30.34	770.6	56	13.3	87	E			2		2		ESE	0	0	Sm'h	SSW	Clear	
Vandalia. New London, Conn	29.93	760.2	56	13.3	81	WNW			3		1		N					Clear	
Wabash, Boston, Massachusetts	29.84	757.9	57	13.9	58	WNW	9	4.0			0			0.5	13.			Clear	
Wachusetts, N. Yard, Mare I'd, Cal	30.02	762.5	59	15.0	82	SW			3		0			0	0			Clear	
Yantic, N. 20° 42′, W. 90° 50′.*	29.80	756.9	80	26.7	96	Calm			0		8					Sm'h		Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 13° 26′, W. 119° 20′	29.93	760.2	78.8	26.0	85	N			2		4							Showery	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 28° 19′, W. 33° 18′	30.34	770.6	73	22.8	81	WNW			1		1					2	NNW	Blue sky.	Capt. W. N. Lailey.
City of Agra, S. 13° 19′, W. 32° 12′	30.16	766.1	80.0	26.7	82	SE			4		3							D. clouds	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 26° 10′, W. 23° 56′	30.25	768.3	72.5	22.5	81	NNW			3		3							Blue sky	Capt. A. Buchan.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 10° 59′, W. 37° 02′	30.15	765.8	78.7	25.9	86	ESE			2		3							D. clouds	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Merlota																			Capt. E. W. Turner.
Naiad, N. 43° 07′, W. 11° 15′	30.04	763.0	61.4	16.3	91	WSW			3		3							D. clouds	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 41° 36′, W. 32° 38′	30.11	764.8	66	18.9	74	S			3	9ck	0	WNW						Overcast	Capt. M. Parry.
Sierra Estrella, N. 7° 26′, W. 24° 21′	30.05	763.3	80.1	26.7	85	SSE			1		7							Showery	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 46° 06′, W. 7° 13′	29.90	759.4	60.5	15.8	94	WNW			4		6							D. clouds	Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 54° 53′, W. 20° 16′	29.84	757.9				N			3		3		N			R'gh	NE	Fair	
S. S. Circassian, ‡ N. 53° 15′, W. 47° 30′	29.72	754.9	45	7.2	100	NE			2		10k			0	0	2	E	Misty	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian, Off Cape Spear, Newf'dland	29.52	749.8	42	5.6		E			3		10		NE			Sl't	SSW	Misty	Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Algeria																			Capt. W. Watson.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 41° 52′, W. 60° 41′ †	29.52	749.8	58	14.4		W			6		2		W			Mod.	W	Clear	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 43° 43′, W. 46° 09′ †	29.59	751.6	65	18.3	78	S			4		10		SW	0	0	Sm'h		Foggy	Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England †	29.70	754.4	59	15.0	88	WSW			3		5		WSW	Sho	wers			Showery	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig, N. 50° 24′, W. 1° 31′	29.73	755.1	62.0	16.7	74	SW			5		2		SW			Mod.	W	Fair	Capt. C Phole.
S. S. Hermann, N. 37° 15′, W. 74° 48′	29.86	758.4	62.6	17.0		NE			4		8?		SW	0	0	Mod	NE	Clear?	Capt. H. Baur.
S. S. Hohenzollern																			
S. S. Köln, N. 47° 11′, W. 31° 25′	29.95	760.7	65.0	18.3	81	SW			3-4		8		SW	0	0	Mod.	SW	Cloudy	Capt. Th. Jüngst
S. S. Strassburg																			Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 47° 24′, W. 31° 47′	29.84	757.9	61	16.1	88	SSW			4		10		SSW			Sm'h	W	Overcast.	Capt. J. W. Shackford.
S. S. Indiana, Philadelphia, Pa †	30.00	762.0	75	23.9	44	NNW			4		2		NW	0	0			Clear	Capt. R. W. Sargent.
S. S. Ohio, N. 40° 00′, W. 50° 21′ *†	29.84	757.9	77	25.0	95	SSW			2		5		SW	Sho	wers	Sm'll	SW	Fair	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, Point Lynas, Wales †	29.53	750.0	54	12.2	93	SW			3		5		SW			Sm'h	SW	Fair	Capt. Geo H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 26° 18′, W. 113° 54′ †	29.88	758.9	61	16.1	88	NW			4		10		NW	0	0	G'tl	WNW	Cloudy	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 41° 57′, W. 174° 39′ †	29.82	757.4	55	12.8	81	WSW			6		8		WSW	0	0	High	WSW	Cloudy	Capt. H. Davison.
S. S. Gaelic																			Capt. W. H. Kidley.
S. S. Oceanic, Yokohama, Japan	30.02	762.5	67	19.4	79	E			2		5		SW					Fine	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Olerendorp.*																			
S. S. Columbia, Willamette River, Or †	30.21	767.3	52	11.1	93	NNE			1									Foggy	Capt. Fred. Bolles.
S. S. Oregon, N. 44° 30′, W. 124° 25′ †	30.23	767.8	56.0	13.3	84	NNW			3		8		NNW			Mod.	NNW	Cloudy	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, N. 34° 15′, W. 120° 20′ †	29.88	758.9	59	15.0	65	NW			3		0			0	0			Fine	Capt. J. N. Ingalls.
S. S. Dakota, N. 44° 30′, W. 124° 45′ †	30.18	766.6	60	15.6	88	NNW			4		2		NW	0	0	Mod.	NW	Fair	Capt. H. G. Morse.
S. S. Idaho, N. 40° 24′, W. 124° 31′	30.14	765.5	54	12.2	93	NW			5		10		NW			H'vy	NW	Cloudy	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator																			Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal †	30.00	762.0	51	10.6	86	Calm			0		0							Clear	Capt. G. Debney.
S. S. Victoria, N. 48° 19′, W. 124° 50′ †	30.14	765.6	55	12.8	94	W			1		5							Fair	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 2d Officer.
S. S. City of New York, S. 33° —′, E. 177° —′ †	29.97	761.2	65	18.3	88	NW			3		2		NW	0	0	Mod.	NE	Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 21° 14′, W. 105° 35′ †	29.91	759.7	81	27.2	83	NW			2		10ks		NW	5 ho	urs	Sm'h	NW	Cloudy	Capt. D. S. Austin.
S. S. City of Peking																			Capt. G. G. Berry.
S. S. City of Sidney, S. 23° 09′, W. 173° 08′ *†	30.03	762.7	72	22.2	67	NW			2		8		NW	0	0	Mod.	NE	Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio, Hong Kong, China †	29.98	761.5	85	30.0	79	SSW			2		0							Clear	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 35° 17′, W. 121° 48′ †	30.07	763.8	57	13.9	87	NW			5		2		NW	0	0	R'gh	NW	Fair	Capt. R. R. Searle.
S. S. Granada, Panama Bay, Panama †	29.94	760.5	78	25.6	95	NW			2		5		NW	4 ho	urs			Fair	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. W	29.95	760.7	61	16.1	40	E			4		0?							Cloudy?	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland, N. 50° 13′, W. 3° 36′ †	29.83	757.7	64	17.8	83	WSW			6		2		WSW	0.05	1.3	Mod.	SSW	Clear	Capt. Wm. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, N. 34° 25′, W. 76° 10′	29.75	755.6	78	25.6	82	ESE			4		10ks		E	0.34	8.6	Mod.	NE	Squally	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, Arroyo, Porto Rico †	30.13	765.3	85	29.4		ENE			7		2			0	0	Mod.		Clear	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Cherrystone, Va †	29.90	759.4	66	18.9	79	ENE	4	1.8		5c	2s			0	0			Cloudy	
Bark Sunbeam, N. 26° 56′, W. 22° 51′ †	30.22	767.6	74	23.3	85	WNW			5		8		NW	0	0	Mod.	NW	Cloudy	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST. BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 23, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours	‡		29.97	761.1	78.8	26.0	82	W			1		1			0	0	Very fair	Raynard.
Algiers	‡		30.04	762.9	75.2	24.0	77	N			4		0			0	0	Clear.	Nicolas.
La Calle	‡		30.04	762.9	78.1	25.6	76	WSW			2		3			0	0	Pretty fair.	Fonfréde.
Tunis	‡		30.10	764.5															Jacques.
Sfax	‡		30.20	767.0															Gau.
Saida	‡		30.02	762.6	74.3	23.5	48	N			1		0			0	0	Clear	Dumas.
Tebessa	‡		30.13	765.4	88.2	31.2	13	S			3		0			0	0	Clear	Watrin.
Geriville	‡				93.6	34.2	21	WSW			1		0			0	0	Clear	Lonchamp.
Laghouat	‡		30.04	763.1	88.5	31.4	11	E			4		0			0	0	Clear	Herbin.
Biskra	‡		30.15	765.7	93.6	34.2	23	SE			6		0			0	0	Clear	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.28	769.1	30.37	771.4	46.9	8.3	90	SSW	1	0.4			3			0.01	0.3	Fine	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.50	749.3	30.02	762.4	85.5	29.7	48	NE			3		0			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.30	744.2	30.02	762.6	85.6	29.8	48	SW	3.1	1.4			2			0	0		Dr. Wierzbicki.
Eperies	29.19	741.5	30.02	762.6	82.4	28.0	60	S			2	cs	2s		W	0	0		Julius Mikolik.
Gratz	28.92	734.5	30.11	764.8	79.5	26.4	71	S			2		3			0	0		Andreas Rospini.
Hermannstadt	28.69	728.7	30.04	762.9	82.0	27.8	51	SE			3		6			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.79	731.3	30.07	763.8	77.2	25.1	57	W			1		3			0.846	21.5		The Staff.
Lemberg	29.09	738.8	30.02	762.5	81.0	27.2	52	SE			1		3			0	0		Dr. T. Stanecki.
Pola	29.95	760.7	30.06	763.4	83.5	28.6	51	NNW			1		4			0	0		I. R. Hydrographic Office.
Szathmar	29.63	752.5	30.08	763.9	82.6	28.1	76	SE			2		2			0	0		Beicht Peter, S. J.
Szegedin	29.76	756.0	30.02	762.6	84.6	29.2	59	S			1		2			0	0		Karl Stancel.
Trieste	29.98	761.6	30.09	764.2	84.9	29.4	61	NW			1		5			0	0		Secco.
Vienna	29.40	746.8	30.08	764.0	84.9	29.4	41	NW			1		1			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed June 21, 1882.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

Aberdeen	29.84	757.9	29.94	760.5	55.5	13.1	57	NW	20	8.9	.....	.....	7	.....	.....	0	0	D. clouds.....	W. Boswell.
Armagh, Observatory	29.89	759.2	30.12	765.0	57.5	14.2	59	NW	7	3.1	.....	.....	8	.....	.....	.....	.....	D. clouds.....	S. Call.
Bidston, Liverpool Obs'y	.....	.....	30.12	765.0	56.7	13.7	68	W	20	8.9	.....	.....	8	.....	.....	.....	.....	Overcast.....	John Hartnup.
Bolton, Sharples	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Thomas Mackereth.
Bradford, Yorkshire	29.66	753.4	30.06	763.5	58.0	14.4	83	NW	.....	.....	1.0	.....	6	.....	.....	0	0	D. clouds.....	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	30.03	762.7	30.06	763.5	86	30.0	68	NE	.....	.....	2	.....	6	.....	.....	.....	.....	Gloomy.....	Corpl. J. Surgener, A. H.C
Cardington	.....	.....	30.11	764.8	67.0	19.4	52	NW	.....	.....	1.0	.....	9	.....	.....	.....	.....	Overcast.....	John McLaren.
Chatham, School M. E.	30.02	762.5	30.14	765.5	66.4	19.1	53	SW	.....	.....	1	.....	6	.....	.....	.....	.....	D. clouds.....	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.98	761.5	30.21	767.3	60.5	15.8	56	WNW	.....	.....	1	.....	8	.....	.....	.....	.....	Overcast.....	The Staff.
Fort Napier, Natal	27.52	699.0	29.74	755.4	70.2	21.2	74	NE	.....	.....	1	.....	0	.....	.....	.....	.....	Blue sky...	Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.64	752.8	29.88	758.9	87	30.6	80	SW	.....	.....	1	.....	4	.....	.....	.....	.....	D. clouds.....	Sgt. C. E. Keane.
Galway, Queen's College	.....	.....	30.11	764.8	58	14.4	58	NW	.....	.....	2	.....	10	.....	.....	0.11	2.8	Overcast ...	J. O'Donaghue.
Gibraltar, Mediterranean	29.96	761.0	30.02	762.5	75.0	23.9	83	W	.....	.....	4	.....	3	.....	.....	.....	.....	Blue sky.....	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.81	757.2	30.01	762.2	56.4	13.6	54	W	.....	.....	5	.....	5	.....	.....	.....	.....	D. clouds.....	Harry Urquhart.
Greenwich, Royal Obs'y	29.95	760.7	30.12	765.0	69.7	20.9	49	WSW	.....	.....	1	.....	7	.....	.....	.....	.....	D. clouds.....	The Staff.
Guernsey	29.94	760.5	30.16	766.1	62.5	16.9	69	NW	.....	.....	2	.....	0	.....	.....	.....	.....	Blue sky.....	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.10	764.5	30.14	765.5	66.1	18.9	46	W	12	5.4	.....	.....	7	.....	.....	.....	.....	D. clouds.....	The Staff.
Leicester, Museum	29.82	757.4	30.07	763.8	61.0	16.1	52	W	.....	.....	2	.....	10	.....	.....	.....	.....	Overcast.....	J. E. Carryer.
Malta, Mediterranean	30.07	763.8	30.15	765.8	82.4	28.0	60	NW	.....	.....	2	.....	0	.....	.....	.....	.....	Blue sky.....	F. S. Vine, A. H. C.
Nassau, Bahamas	29.93	760.2	29.97	761.2	85.0	29.4	80	SW	.....	.....	2	.....	5	.....	.....	.....	.....	D. clouds.....	C. S. Duncombe.
Oscott, St. Mary's College	29.60	751.8	30.12	765.0	60.1	15.6	63	W	.....	.....	3	.....	8	.....	.....	.....	.....	D. clouds.....	John Mac Email.
Oxford, Radcliffe Obs'y	29.91	759.7	30.14	765.5	61.3	16.3	53	W	.....	.....	3	.....	10	.....	.....	.....	.....	Overcast.....	The Staff.
Plymouth	30.10	764.5	30.18	766.6	65.0	18.3	63	WNW	.....	.....	2	.....	10	.....	.....	.....	.....	Overcast.....	John Merrifield.
Sandwick Manse, Orkneys	.....	.....	29.94	760.5	49	9.4	80	NW	28	12.5	.....	.....	8	.....	.....	.....	.....	D. clouds.....	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.93	760.2	29.99	761.7	78.0	25.6	59	NNE	.....	.....	3	.....	1	.....	.....	.....	.....	Blue sky.....	Serg't W. H. Lyne.
Sheffield	29.85	758.2	30.12	765.0	62.7	17.1	70	W	.....	.....	5	.....	5	.....	.....	0	0	D. clouds.....	W. F. Cooper.
Silloth Rectory	30.05	763.5	30.10	764.5	60.0	15.6	69	SW	.....	.....	4	.....	7	.....	.....	0	0	D. clouds.....	Rev. F. Redford, M. A.
Stonyhurst, Observatory	.....	.....	30.12	765.0	54.6	12.6	64	WNW	13	5.8	.....	.....	7	.....	.....	.....	.....	D. clouds.....	Rev. S. J. Perry.
Straffield Turgiss	29.93	760.2	30.15	765.8	65.9	18.8	54	W	.....	.....	2	.....	4	.....	.....	.....	.....	D. clouds.....	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.22	767.6	30.23	767.8	65	18.3	54	NW	.....	.....	2	.....	6	.....	.....	.....	.....	D. clouds.....	W. Newcombe.
Valencia, Observatory	30.15	765.8	30.18	766.6	59.5	15.3	61	SW	12	5.4	.....	.....	4	.....	.....	Blank		D. clouds.....	The Met'g'l Office.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
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CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

Bathurst, N. B.	.....	.....	.....	.....	56.0	13.3	.....	Calm	0	0	.....	8k	0	.....	.....	Inap.	Inap.	D. clouds.....	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.82	757.4	29.86	758.4	54	12.2	88	SW	2	0.9	.....	0	2s	.....	.....	0.155	3.9	Fair.....	H. J. Cundall, C. E.
Chatham, N. B.*	29.79	756.7	29.85	758.2	53	11.7	86	SW	2	0.9	.....	5c	0	SW	.....	0.09	2.3	Fair.....	G. A. Blair.
Chicontimi, Quebec	.....	.....	.....	.....	52.2	11.2	.....	NW	.....	.....	4	.....	9n	.....	.....	0.03	0.8	Raining	Rev. V. A. Huart.
Cornwall, Ontario	29.81	757.2	30.00	762.0	50.5	10.3	86	N	.....	.....	1	.....	10s	.....	.....	0	0	D. clouds.....	James Smith, M. A
Dalhousie, N. B.	29.79	756.7	29.82	757.4	56.0	13.3	.....	NW	.....	.....	1	0	0	.....	.....	0	0	.....	H. A. Johnson.
Father Point, Quebec*	29.86	758.4	29.86	758.4	48	8.9	89	NW	1	0.4	.....	2cs	0	.....	.....	0	0	Clear.....	J. McWilliams.
Fort Garry, Manitoba*	29.25	742.9	30.08	764.0	51	10.6	82	E	5	2.2	.....	2c	2s	E	E	0	0	Fair.....	James Stewart.
Fredericton, N. B.	29.80	758.4	29.92	760.0	56.0	13.3	75	NW	7	3.1	.....	0	0	.....	.....	0	0	Clear.....	Prof. Harrison.
Granton, Ontario	28.97	735.8	30.08	764.0	47.0	8.3	100	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear.....	James Grant.
Halifax, N. S.*	29.80	756.9	29.92	760.0	53	11.7	91	SW	2	0.9	.....	5k	0	NW	.....	0	0	Fair.....	A. Allison.
Hamilton, Ontario	29.69	754.1	30.08	764.0	52.5	11.4	84	SW	.....	.....	1	8ck	0	SW	.....	0	0	Cloudy.....	Geo. Dickson, B. A.
Kingston, Ontario*	29.70	754.4	30.04	763.0	52	11.1	80	NW	5	2.2	.....	10ck	0	.....	.....	Inap.	Inap.	Cloudy.....	S. Woods, M. A.
Little Glace Bay, N. S.	29.78	756.4	29.82	757.4	52.0	11.1	94	W	.....	.....	3	7k	0	W	.....	0.30	7.6	Fair.....	C. H. Rigby.
Montreal, Quebec*	29.79	756.7	29.99	761.7	54	12.2	72	NW	4	1.8	.....	.....	10s	.....	N	0	0	Cloudy..	C. H. McLeod, C. E.
Moose Factory, Ontario	30.15	765.8	30.19	766.8	36.3	2.4	92	N	.....	.....	3	.....	10n	.....	.....	.....	.....	Raining.....	J. R. Nason.
Parry Sound, Ontario*	29.41	747.0	30.11	764.8	49	9.4	86	N	3	1.3	.....	5k	5ks	NE	NE	Inap.	Inap	Cloudy.....	Rev. R. Mosoley.
Peterboro, Ontario	29.31	744.5	30.06	763.5	55.9	13.3	78	E	.....	.....	1	0	2ks	.....	.....	0.	0	Fair	J. F. Jeffers, M. A.
Port Dover, Ontario	29.38	746.2	30.08	764.0	51	10.6	93	N	7	3.1	.....	5ck	0	W	.....	0	0	Fair.....	H. Morgan.
Port Stanley, Ontario	29.44	747.8	30.08	764.0	52	11.1	87	NE	2	0.9	.....	8ck	0	W	.....	0	0	Cloudy.....	M. Payne.
Quebec, Quebec*	29.62	752.3	29.94	760.5	54	12.2	80	NW	.....	.....	1	2cs	2ks	NW	NW	0	0	Fair.....	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.61	752 1	30.06	763.5	51	10.6	72	NW	4	1.8	.....	.....	8s	.....	N	0	0	Cloudy.....	W. H. McIntyre.
Saugeen, Ontario*	29.39	746.5	30.10	764.5	52	11.1	78	NE	4	1.8	.....	5k	2ks	.....	.....	0	0	Cloudy.....	K. Stewart.
St. Andrews, N. B.	29.86	758.4	29.91	759.7	53	11.7	83	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear.....	
St. John, N. B.	29.76	755.9	29.92	760.0	57.0	13.9	69	S	3	1.3	.....	0	0	.....	.....	0	0	Blue sky.....	G. Murdock, C. E.
Stratford, Ontario	28.81	731.8	30.10	764.5	47.0	8.3	89	N	3	1.3	.....	2cs	0	.....	.....	0	0	Blue sky.....	C. J. Macgregor, M. A.
Sydney, C. B.*	29.84	757.9	29.88	758.9	52	11.1	83	W	7	3.1	.....	0	8ks	.....	NW	0.09	2.3	Cloudy.....	T. C. Hill, C. E.
Toronto, Ontario*	29.71	754.6	30.09	764.3	53	11.7	75	N	4	1.8	.....	.....	10ks	.....	NW	0	0	Cloudy... ...	Magnetic Observatory
Windsor, N. S.	29.79	756.7	29.88	758.9	56.0	13.3	81	S	2	0.9	.....	0	3k	.....	.....	0.89	22.6	Fair...	
Woodstock, Ontario	29.02	737.1	30.08	764.0	49.7	9.8	80	NW	5	2.2	.....	0	18	.....	.....	0	0	Blue sky.....	Prof. Wolverton.
Yarmouth, N. S.*	29.84	757.9	29.91	759.7	52	11.1	86	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.....	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.68	753.9	29.93	760.2	48	8.9	78	W	4	1.8	.....	5k	5s	.....	.....	0	0	Fair.....	John Delany.
St. Pierre, N. F.	.....	.....	29.72	754.9	48.2	9.0	.....	NW	.....	.....	3	.....	.....	.....	.....	0	0	.....	N. F. Land, Comd't.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
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Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

Cape St. Francis Lt. House	29.63	752.6	..	.....	72.0	22.2	58	NW	12.8	5.7	.....	.....	8s	.....	.....	0	0	Cloudy... ...	John Duthie.
Cape Town, C. G. H. Obs'y	29.68	753.9	29.72	754.9	48.7	9.3	.....	N	21.0	9.4	.....	5	5n	.....	.....	0.901	22.9	Raining	The Staff, for D. Gill.
Worcester*†.	28.58	725.9	.....	.....	59.7	15.4	58	W	.....	.....	2	5	5	.....	.....	0	0	Threatening	C. Stokes.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.82	757.4	29.84	758.0	73.4	23.0	92	SE	2.2	1.0	.....	.....	10	.....	.....	0.087	2.2	Covered	M. Marc Dechevrens, S.J
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.21	665.7	29.93	760.2	68.9	20.5	95	NE			1		108			0	0	Cloudy	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.00	762.0	30.05	763.2	67.8	19.9	50	W	18	8			5						Oversergent Fischer.
Faröe	29.98	761.6	30.00	762.1	59.2	15.1	83	WSW			6		9						Overlooerer Lauridsen.
Godthaab, Greenland																			S. Kleinschmidt.
Stykkisholm, Iceland	29.72	755.0	29.77	756.1	48.4	9.1		SE			4		8						A. O. Thorlacius.
Thorshavn	29.91	759.7	29.95	760.6	46.0	7.8	65	NE	13	6			7						Overlooerer Bergh.
Vestervig	29.84	757.8	29.93	760.2	60.3	15.7	81	SW			6		8						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.48	748.9	30.12	765.1	64.0	17.8	86	NW			1		10			0.08	2.	Raining	M. Labroue, Director.
Alençon Normal School	29.68	753.9	30.23	767.9	63.3	17.4	87	SW			1	0	2k		S	0	0	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	29.93	760.3	30.19	766.7	63.9	17.7	63	W			2	0	k		W				M. Klein, Commandant.
Avignon, Normal School	29.96	761.0	30.04	763.0	86.0	30	40	N			1	0	2n		SSW	0	0	Slightly cl'dy	M. Giraud, Director.
Bar-sur-Seine	29.62	752.4	30.16	766.1	72.1	22.3	55	ESE			1	0	5kn		W	0	0	Cloudy	M. Saillard, Director.
Beauvais, Normal School	29.95	760.6	30.21	767.2	67.5	19.7	48	WNW			2		8		WNW	0.24	6.	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.31	744.5	30.14	765.6	68.0	20	81	NE			1	0	n		E	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.91	759.6	30.17	766.2	64.8	18.2	74	NE			1		10		WSW	0.047	1.2	Raining	M. Rayet, Director.
Bourges, Normal School	29.65	753.2	30.20	767.0	71.6	22	50	NE			1	ck	0	NE		0	0		M. Postel, Director.
Brest, Naval Observatory	30.01	762.2	30.25	768.3	62.6	17.0	85	SW			1		10		SW	0	0		M. de Kermaree, Dir.
Caen, Normal School	30.10	764.6	30.13	765.4	69.8	21	57	WNW					2		W	0	0		M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.88	758.9	30.19	766.9	71.8	22.1	58	SW			1		8	E	W	0	0	Slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.67	753.6	30.17	766.4	70.5	21.4	55	E			1					0	0	Very cloudy	M. Grimard, Director.
Clermont-Ferrand Obs'y	28.79	731.3	30.12	765.1	65.7	18.7	88	N			1		10			0.177	4.5	Covered	M. Allnard, Director.
Cluny, Normal School	29.35	745.4	30.17	766.2	72.7	22.6	71	E			3		8		SW	1.717	43.6		M. de Villemontée, Dir.
Commercy, Normal School	29.33	744.9	30.17	766.2	73.9	23.3	46	W			1	0	2k		W	0	0	Slightly cl'dy	Dr. Coulet, Director.
Gap, Normal School	27.63	701.8	30.02	762.4	86.0	30	21	SE			1	0	k		SW	0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	29.00	736.6	30.14	765.6	91.8	33.2	28	N			1		5		SW	0	0	½ covered	M. Kina, Director.
Grenoble, Normal School	29.37	746.1	30.11	764.9	75.2	24	67	NW			1	0	8k			0	0		M. Ablard, Director.
Guéret, Normal School	28.60	726.4	30.14	765.5	66.0	18.9	73	E			1		10n		W	0.012	0.3	Raining	M. Rivoire, Director.
Lamballe, Normal School	30.02	762.6	30.29	769.4	64.4	18	63	N			2				N	0	0		M. Ollitranit, Director.
Lescar, Normal School	29.45	747.9	30.11	764.7	62.6	17	78	W			1	0	n			0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.17	766.4	30.28	769.0	66.9	19.4	51	SW			1		2	W	SW	0	0	¼ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.09	738.8	30.13	765.3	64.8	18.2	94	NNE			2		10		SW	0.110	2.8	Covered	M. André, Director.
Mans, Normal School	29.89	759.3	30.20	767.1	65.7	18.7	59	NW			2		2		N	0.016	0.4	Slightly cl'dy	M. Pihoen, Director.
Marseille, Observatory	29.76	755.8	30.02	762.4	82.6	28.1	41	WNW			1		3		SW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.98	634.6	30.22	767.6	57.2	14.0	92	SE	5.6	2.5			9		E	0	0	Foggy	M. Cave, for Dr. Fines.
Montpellier, Normal School	29.94	760.4	30.04	763.1	81.7	27.6	61	N			2		5		SW	0	0	Cloudy	M. P. Galzin, Director.
Nancy, Normal School	29.39	746.4	30.12	765.1	78.4	25.8	36	WSW			1	0	5k		WSW	0.059	1.5	Cloudy	M. Hasse.
Nantes, Observatory	30.05	763.3	30.21	767.4	68.9	20.5	53	SW			0-1	0	8kn		SW	0	0		M. Larocque, Director.
Nice	30.04	762.9	30.07	763.7	77.0	25.0	53	E			3		Haze	E	E	0	0	Hazy	Capt. Boissière, Director.
Perpignan, Observatory	29.95	760.8	30.05	763.4	77.2	25.1	54	SE	3.8	1.7			8		SW	0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.69	576.4			53.1	11.7							10		S	0.264	6.7	Rainy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.05	738.1	30.10	764.4	71.6	22	66	NE			1		5	NE	NE	0	0	Cloudy	M. Taillieu.
Puy de Dôme Obs'y, Summit	25.35	643.8			52.3	11.3	99	SE			3		10			0.469	11.9	Raining	M. Allnard, Director.
Rochefort, Naval Obs'y	30.14	765.5	30.17	766.3	72.3	22.4	63	NNE			1		8	SW	NE	0	0	¾ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.99	761.7	30.16	766.1	69.8	21.0	59	WSW			1		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	28.02	711.8	30.13	765.2	66.6	19.2	80	W			1		10					Raining	M. Richard, Director.
Rouen, Normal School	30.14	765.6	30.23	767.8	67.6	19.8	68	WNW			4		8		W	0	0	Very cloudy	M. Platrier, Director.
Saint Lô, Normal School	30.05	763.2	30.21	767.2	63.1	17.3	69	NW			2		5		E	0.913	23.2	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.03	762.8	30.20	767.0	69.3	20.7	43	W			1		3	SW	WSW	0.008	0.2		M. Renou, Director.
Toulouse, Observatory	29.44	747.8	30.17	766.3	72.3	22.4	79	NW			2		10			0.024	0.6	Covered	M. Baillard, Director.
Tours	30.00	762.0	30.20	767.0	68.4	20.2	53	NE			1		8		S	0.087	2.2	Covered	M. de Tastes.
Versailles, Observatory	29.71	754.6	30.20	767.1	66.2	19.0	41	NW			1					0	0	¾ covered	Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.92	760.0	30.21	767.4	67.3	19.6	49	S			1		7	SSW	NW	0.031	0.8		M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.25	743.1	30.12	765.1	77.4	25.2	55	WSW			2	0	3k		W	0	0		Prof. Dr. Hoh.
Berlin	29.93	760.1	30.09	764.3	75.2	24.0	54	SW			3		6			0.157	4.0		Prof. Dr. Arndt.
Breslau	29.59	751.5	30.12	765.0	76.1	24.5	66	NW			2		9			0	0		Royal University Obs'y.
Carlsruhe	29.73	755.2	30.15	765.7	77.0	25.0	63	SW			1		9	SW		0.020	0.5		Albert Senz.
Cassel	29.40	746.8	30.12	765.1	75.9	24.4	33	W			3		4	SW		0	0		Dr. H. Möhl.
Frankfort on the Main	29.80	756.9	30.15	765.7	78.8	26.0	39	SW			1		4			0	0		Physical Society.
Friedrichshafen	28.73	729.8	30.11	764.7	76.3	24.6	69	SW			2	10	0	SW		0.154	3.9		Wilhelm, Chief Tel.
Hamburg	30.04	762.9	30.11	764.7	70.2	21.2	53	SW			5		4			0.165	4.2		Dr. R. Kleeman.
Kiel	30.01	762.3	30.03	762.7	66.2	19.0	53	W			4		6			0.299	7.6		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.69	754.2	30.10	764.4	75.0	23.9	67	NW			1		9	SW		0.469	11.9		Prof. Dr. Bruhns.
Magdeburg	29.90	759.5	30.08	764.1	73.2	22.9	61	Calm			0	0	7k		W	0.461	11.7		Dr. Assmann.
Memel	29.97	761.2	30.02	762.4	77.9	25.5	81	SW			3	0	6kn						Reinbrecht & Issermann.
Munich	28.38	720.9	30.26	768.6	74.3	23.5	57	E			2		2	W		0.055	1.4	Hazy	Central Station.
Neufahrwasser	30.04	763.1	30.06	763.5	70.5	21.4	80	WNW			1		10			0.043	1.1	Raining	A. Lothes.
Neustadt, Palatinate	29.59	751.6	30.12	765.1	78.4	25.8	46	W			1		7			0	0		Dicknether.
Stuttgart	29.23	742.4	30.10	764.4	72.5	22.5	66	W			2		7	W		0.016	0.4		Prof. Dr. Schoder.
Weissenburg, Bavaria	28.70	729.0	30.17	766.4	71.6	21.7	69	E			4		5	W		0.949	24.1		Prof. Kemlein.
Wustrow	30.04	763.0	30.06	763.6	65.5	18.6	69	W			2	0	3s			0.039	1.0		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Barometer. Reduced to sea-level.		Tempera-ture of the Air.		Rel. Hum.	Wind. Direc-tion.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.62	752.4	30.00	761.9	85.1	29.5	.....	NE	.....	.....	2.5	.....	0	.....	.....	.....	.....	Clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.60	751.9	29.65	753.2	87.9	31.1	76	WSW	30.0	13.4	.....	.....	2	WSW	.....	0.04	1.0	Misty	
Deesa	29.08	738.6	29.54	750.2	95.4	35.2	43	S	20.0	8.9	.....	.....	5	.....	SSW	0	0	D. clouds	
Bombay	29.68	753.7	29.71	754.7	82.1	27.8	83	SW	5.0	2.2	.....	.....	10	.....	SW	0.09	2.3	Overcast	
Poona, Yarrowda.	27.88	708.1	29.73	755.0	79.3	26.3	59	SW	31.0	13.8	.....	.....	9	.....	W	0	0	D. clouds	
Belgaum	27.24	691.8	29.78	756.4	73.3	22.9	76	SSW	16.0	7.2	.....	.....	9	.....	SW	0	0	D. clouds	
Lahore	28.67	728.2	29.36	745.8	106.3	41.3	21	SW	4.0	1.8	.....	.....	0	.....	.....	0	0	Misty	
Roorkee	28.54	724.8	29.39	746.5	98.9	37.2	33	NW	4.6	2.1	.....	.....	0	.....	.....	0	0	Misty	
Agra	28.93	734.8	29.46	748.3	103.6	39.8	28	SW	9.3	4.2	.....	.....	0	.....	.....	0	0	.....	
Nagpur	28.55	725.1	29.55	750.5	97.4	36.3	27	NW	5.8	2.6	.....	.....	8	W	.....	0	0	D. clouds	
Jubbulpore	28.25	717.5	29.55	750.5	97.7	36.5	31	NW	5.1	2.3	.....	.....	2	N	.....	0	0	D. clouds	
Lucknow	29.12	739.5	29.48	748.7	97.0	36.1	37	NNE	5.5	2.5	.....	.....	0	.....	.....	0	0	Blue sky	
Allahabad	29.16	740.7	29.46	748.2	101.8	38.8	29	NW	6.0	2.7	.....	.....	0	.....	.....	0	0	Misty	
Patna	29.36	745.7	29.54	750.2	83.1	28.4	83	E	6.2	2.8	.....	.....	10	E	E	•0.07	1.8	Overcast	
Hazaribagh	27.57	700.3	29.52	749.7	90.6	32.6	58	ESE	9.4	4.2	.....	.....	9	.....	.....	0	0	.....	
Cuttack	29.48	748.9	29.56	750.9	90.3	32.4	65	SSW	0.8	0.4	.....	.....	8	.....	.....	0.09	2.3	D. clouds	
Calcutta, Alipore	29.56	750.7	29.58	751.3	82.5	28.1	87	SE	1.0	0.4	.....	.....	8	.....	NE	0.79	20.1	D. clouds	
Dhubri	29.49	749.0	29.61	752.1	74.2	23.4	96	ESE	2.6	1.2	.....	.....	10	.....	.....	0.65	16.5	Overcast	
Chittagong	29.54	750.3	29.63	752.5	83.2	28.4	86	SW	3.5	1.6	.....	.....	10	.....	.....	.....	.....	Drizzling	
Sibsagar	29.30	744.3	29.64	752.8	80.9	27.2	87	SE	2.8	1.2	.....	.....	10	W	W	1.51	38.4	D. clouds	
Zanzibar, Africa	.....	.....	30.01	762.2	81.6	27.6	72	SW	4	1.8	.....	.....	4	.....	SW	0	0	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.68	753.9	30.08	763.9	82.6	28.1	56	Calm	0	0	.....	.....	3	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.57	751.0	30.06	763.5	85.6	29.8	38	SW	6.9	3.1	.....	.....	10	.....	.....	0	0	.....	Prof. Schiaparelli.
Padua	29.95	760.8	30.06	763.5	85.8	29.9	40	W	7.4	3.3	.....	.....	4	SW	.....	0	0	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.20	741.7	30.08	763.9	81.9	27.7	43	SE	3.1	1.4	.....	.....	5	SE	.....	0	0	.....	Prof. P. F. Denza.
Genoa	29.95	760.6	30.13	765.3	79.5	26.4	35	SW	3.8	1.7	.....	.....	0	.....	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	28.24	717.4	30.09	764.2	77.5	25.3	39	N	.....	.....	2	.....	8	.....	.....	0	0	.....	Prof. D. C. Bruno.
Pesaro	30.04	762.9	30.08	764.1	79.2	26.2	51	N	.....	.....	.....	.....	1	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.83	757.6	30.07	763.8	87.1	30.6	30	W	.....	.....	2	.....	0	.....	.....	0	0	.....	Prof. Costantino Pitter.
Leghorn	30.02	762.5	30.10	764.6	83.1	28.4	41	SW	1.3	0.6	.....	.....	0	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.91	759.6	30.08	763.9	91.0	32.8	27	W	9.4	4.2	.....	.....	6	.....	.....	0	0	.....	Prof. P. S. Ferrari.
Lecce	29.78	756.4	30.02	762.5	84.6	29.2	47	NW	9.4	4.2	.....	.....	0	.....	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.19	741.4	30.04	763.0	87.8	31.0	67	SE	3.8	1.7	.....	.....	0	.....	.....	0	0	.....	Prof. D. Conti.
Cagliari	29.86	758.5	30.05	763.3	77.4	25.2	64	SE	.....	.....	4	.....	3	S	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	29.86	758.4	30.10	764.6	80.6	27.0	49	E	2.5	1.1	.....	.....	0	.....	.....	0	0	.....	Prof. G. Ciacciatore.
Syracuse	29.98	761.5	30.02	762.6	77.7	25.4	61	NE	9.8	4.4	.....	.....	2	WSW	.....	0	0	.....	Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.55	750.5	30.04	763.1	82.8	28.2	64	S	0	0	.....	.....	0	.....	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	22.48	571.1	.....	.....	54.7	12.6	55	S	.....	.....	1	0	58	.....	SW	0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.50	571.6	.....	.....	55.2	12.9	76	N	.....	.....	1	.....	10	SW	.....	0	0	Covered	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y †	29.85	758.2	29.86	758.4	70.1	21.2	93	NNE	2.9	1.3	.....	0	4s	.....	.....	0	0	Gloomy	K. Sasaki.
Kioto	29.72	754.9	29.89	759.2	69.8	21.0	70	NW	2.0	0.9	.....	ck	4s	.....	.....	0	0	Fair	M. Tojima.
Nagasaki, I. M. Obs'y	29.72	754.9	29.92	759.9	70.8	21.6	78	WSW	1.4	0.6	.....	.....	10s	.....	.....	0	0	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	29.85	758.2	29.92	759.9	68.8	20.4	87	S	2.5	1.1	.....	ck	4s	.....	.....	0	0	Fair	The Staff.
Wakayama	29.84	757.9	29.89	759.2	71.3	21.8	82	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.99	761.7	30.18	766.6	73.1	22.8	62	E	17.0	7.6	.....	0	2	.....	ESE	0.10	2.5	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanajuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez.
Leon	24.37	619.0	29.94	760.5	67.0	19.4	79	N	.....	.....	1	9c	0	W	.....	0.032	0.8	Very cloudy	Prof. M. Leal.
Mazatlan	29.63	752.7	29.89	759.2	80.5	26.9	85	S	0.9	0.4	.....	2cs	4n	.....	ESE	0	0	½ cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	23.10	586.8	30.06	763.5	57.6	14.2	81	Calm	0	0	.....	3c	0	.....	.....	0.901	22.9	Clear	The Staff.
Pabellon, Aguascalientes	23.92	607.5	29.82	757.4	64.0	17.8	84	WSW	.....	.....	1	2c	1s	.....	.....	0.43	10.9	Clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.41	594.7	30.08	764.1	59.0	15.0	46	Calm	0	0	.....	0	8	.....	S	0.178	4.5	Cloudy	Prof. P. Spina.
San Luis Potosi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Barroeta, M. D.
Tlacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	22.55	573.0	30.11	764.8	57.6	14.2	59	Calm	0	0	.....	0	0	.....	.....	0.097	2.5	Clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.17	766.3	30.17	766.3	65.8	18.8	.....	W	.....	.....	4	.....	.....	.....	.....	0	0	.....	
Groningen	30.05	763.2	30.10	764.6	65.1	18.4	.....	W	.....	.....	5	.....	.....	.....	.....	0	0	.....	
Helder	30.08	764.1	30.08	764.1	60.4	15.8	.....	SW	.....	.....	4	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	30.14	765.6	30.14	765.6	62.4	16.9	78	WSW	.....	.....	6	.....	.....	.....	.....	0.020	0.5	.....	
Utrecht	30.11	764.7	30.15	765.9	66.7	19.3	66	WSW	.....	.....	4	.....	5	.....	.....	0	0	Cloudy	H. van der Bruk.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.

NORWEGIAN SERIES.

Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.

Bergen	29.62	752.3	29.68	753.9	55.8	13.2	87	SSW	31.8	14.2			10			0.366	9.3	Raining	
Christiania	29.57	751.1	29.72	754.8	59.2	15.1	59	SW	18	8			10			0.075	1.9	Raining	
Gjæsvær	29.44	747.7	29.46	748.3	61.7	16.5		SE			2		4						
Lodingen	29.43	747.4	29.47	748.6	55.9	13.3	73	SW			4		10			0.803	20.4	Raining	

PORTUGUESE SERIES.

Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.

Angra, Azores	30.08	764.0	30.10	764.4	68.4	20.2	89	W	8.1	3.6			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.04	737.7	30.00	762.1	79.2	26.2	47	Calm	0	0			7			0.177	4.5		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.08	764.0	30.17	766.2	72.1	22.3	64	SW	8.7	3.9			10			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.75	755.7	30.11	764.7	69.6	20.9	53	NNW	16.8	7.5			1			0	0		The Staff.
Ponta Delgada, Azores	30.22	767.6	30.29	769.4	72.0	22.2	62	S	4.9	2.2			4			0	0		

RUSSIAN SERIES.

Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.

Akmolinski	28.56	725.5	29.60	751.8	63.5	17.5	27	W	18	8		1ck	0						Capt. Lasarew.
Archangel	29.95	760.7	29.97	761.2	74.5	23.6	43	S	2	1		0	8ks						Capt. Sselivverstow.
Astrakhan	30.14	765.5	30.06	763.4	82.9	28.3	29	NNE	9	4		0	4ks						Capt. Wisganow.
Barnaul	29.18	741.1	29.66	753.3	64.2	17.9	44	NW	4	2			7					Light clouds	Meteorological Obs'y.
Dorpat	29.73	755.2	29.97	761.1	86.5	30.3	46	W	9	4		0	8k						Observatory.
Ekaterinburg	28.91	734.4	29.84	758.0	68.9	20.5	39	N	18	8		0	6k;ks						Meteorological Obs'y.
Kasan	29.70	754.4	29.96	761.0	66.9	19.4	76	ENE	2	1			10					Light rain	Observatory.
Kertch	30.12	765.0	30.14	765.5	77.0	25.0	58	S	2	1			0						Lagorio & Sastyrez.
Kieff	29.52	749.7	30.11	764.9	80.8	27.1	46	N	2	1		c;ck	8ks						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.89	759.2	30.09	764.2	81.9	27.7	43	E	2	1			8						Meteorological Obs'y.
Moscow	29.61	752.2	30.13	765.4	76.6	24.8	45	Calm	0	0		0	3ks						Meteorological Obs'y.
Nertchinsk	27.58	700.6	29.82	757.3	55.9	13.3	75	W	2	1			6			0	0		Meteorological Obs'y.
Nikolaiev	30.11	764.8	30.18	766.6	85.3	29.6	45	E	4	2		0	3kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.80	756.9	29.89	759.1	48.4	9.1	81	Calm			0	2ck	0			0	0		Lieut. Iwanow.
Pekin, China	29.44	747.8	29.58	751.4	83.8	28.8	33	NW	11	5			9n					Thunder	Physical Observatory.
St. Petersburg	29.97	761.3	29.99	761.7	82.6	28.1	42	S	16	7		0	2k;ks						Central Physical Obs'y.
Tashkend, Laboratory	28.33	719.5	29.84	757.9	71.1	21.7	71	Calm	0	0			10						Teich, A. M.
Tiflis	28.73	729.8	30.10	764.5	75.6	24.2	44	SE	4	2			9ks						Physical Observatory.
Warsaw	29.61	752.1	30.00	762.1	88.0	30.0	49	S	7	3		2ck	0						Astronomical Obs'y.
Wilna	29.64	752.9	30.04	762.9	85.6	29.8	40	S	11	5			2						Berg, Assistant.
Yeniseisk	29.44	747.7	29.71	754.7	72.9	22.7	41	SE	2	1			3						M. O. Marks.

SCOTTISH SERIES.

Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.

Leith, Restalrig Park			30.01	762	60.0	15.6	55	W			2	0	5k			0	0	Fine	Andrew Gibb.
Monach Lt. House, Hebrides			30.07	763.8	54	12.2	93	NW			3	10	5	NW		0	0		J. Youngclause.
North Unst, Shetland Isl'ds			29.60	751.8				N			4		Fg						Robert Burnet.

SPANISH SERIES.

Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.

Barcelona, Met. Obs'y	29.93	760.2	30.03	762.8	75.2	24	75	S	2.9	1.3			6			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.14	765.6	30.20	767.0	67.6	19.8	83	SE	1.6	0.7		2	7	W		0.252	6.4	Almost cov'd	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.17	690.0			66.0	18.9	72	NE	23.3	10.4			3			0.413	10.5	Lightly cld'y	Domingo Martin.
Madrid, Royal Obs'y	27.82	706.6	29.91	759.8	86.0	30.0	39	SW	6.5	2.9		0	6			0	0	Cloudy	The Staff.
Murcia, Met. Obs'y	29.85	758.2	29.99	761.8	84.2	29.0	54	ENE	4.5	2.0		0	3			0	0	Clouds	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.20	741.6	30.07	763.8	66.0	18.9	73	N	15.4	6.9			7			0	0	Cloudy,	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.88	758.8	29.94	760.5	80.6	27.0	87	SSW	3.4	1.5		8ck	28	W	SW	0	0	Cloudy	Benito Vines, S. J.
Manilla, Philippine Islands	29.83	757.7	29.88	759.0	86.8	30.4	66	NE	3.3	1.5		0	18			0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.99	761.6	30.08	764.1	73.9	23.3	73	SW	11.7	5.3		0	9		W	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.94	760.4	30.03	762.7	82.4	28.0	92	SE	0	0		3ks	4k	SE	SE	0.453	11.5	Cloudy	Enrique Cadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.76	755.8	29.90	759.5	87.2	30.7	56	SSE	2.9	1.3		0	8			0	0	Fair	José L. Fastovra.

SWEDISH SERIES.

Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.

Haparanda	29.60	751.9	29.64	752.9	54.3	12.4	98	SW			4		10			0	0		
Umea	29.60	751.8	29.65	753.1	52.9	11.6	84	SW			6		10			0	0		
Hernosand	29.57	751.0	29.62	752.3	65.7	18.7	55	S			7		5			0	0		
Stockholm	29.68	753.8	29.85	758.3	66.9	19.4	68	W			4		7			0.382	9.7		
Wisby	29.83	757.6	29.89	759.1	62.6	17.0	84	W			2		7			0.051	1.3		
Sub-Series.																			
Upsala	29.64	752.8	29.72	755.0	68.2	20.1	56	SW	14.5	6.5			8	WSW	W	Inap.	Inap.		S. G. Fineman.

SWISS SERIES.

Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.

Geneva	28.73	729.7	30.09	764.3	77.0	25.0	51	NNE			2		10			0	0	Covered	The Observatory.
Zurich	28.54	724.9	30.11	764.7	75.9	24.4	68	W			2		6			0.130	3.3	Cloudy	The Observatory.

TURKISH SERIES.

Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.

Constantinople			30.09	764.2	72.0	22.2	66	NE	27	12.0		2		NE		0	0		The Observatory.
Valona			30.13	765.4	79.3	26.3		Calm			0	0				0	0	Clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.84	757.9	81.5	27.5	58	N			1		0			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.96	761.0	30.04	763.0	60	15.6	60	NE	4	1.8		0	Hz			0	0	Clear.	
Alpena, Michigan	29.51	749.5	30.16	766.1	48.8	9.3	78	NW	4	1.8		5ck	2s	NW		0	0	Fair.	
Atlanta, Georgia	28.80	731.5	29.96	761.0	65.0	18.3	73	NE	13	5.8		0	0			0	0	Clear	
Atlantic City, New Jersey	29.97	761.2	29.98	761.5	62	16.7	72	SE	4	1.8		1c	0	Calm		0	0	Clear	
Augusta, Georgia	29.81	757.2	29.99	761.7	69.6	20.9	70	NE	10	4.5		5k	0	N		Inap.	Inap.	Fair.	
Baltimore, Maryland	29.96	761.0	30.01	762.2	66	18.9	64	N	5	2.2		8c	0	W		0	0	Fair.	
Barnegat, New Jersey	29.95	760.7	29.97	761.2	60	15.6	71	NW	6	2.7		0	0			0	0	Clear	
Bismarck, Dakota	28.17	715.5	29.91	759.7	57	13.9	93	N	4	1.8			10s		Calm	0	0	Cloudy.	
Boise City, Idaho	27.28	692.9	30.04	763.0	51.3	10.7	66	W	2	0.9		0	0			0	0	Clear.	
Boston, Massachusetts	29.84	757.9	29.99	761.7	57.0	13.9	60	NW	6	2.7		5ck	0	NW		0	0	Fair	
Brackettville, Texas	28.68	728.5	29.69	754.1	74	23.3	81	E	4	1.8		0	0			0	0	Clear.	
Brownsville, Texas	29.78	756.4	29.82	757.4	81	27.2	87	Calm	0	0		0	0			0	0	Clear	
Buffalo, New York	29.36	745.7	30.05	763.3	51.7	10.9	83	NW	2	0.9		10ck	0	W		0	0	Cloudy.	
Burlington, Vermont	29.72	754.9	30.00	762.0	52.5	11.4	79	N	1	0.4		5ck	2s	W		0	0	Fair.	
Cairo, Illinois	29.68	753.9	30.07	763.8	65	18.3	73	NE	6	2.7		5c	0	N		0	0	Fair.	
Campo, California	27.32	693.9	29.89	759.2	38.4	3.6	71	S	3	1.3		0	0			0	0	Clear	
Camp Thomas, Arizona	27.12	688.8			50.2	10.1	36	SE			1	0	0			0	0	Clear.	
Cape Henry, Virginia	29.96	761.0	29.98	761.5	65	18.3	63	N	8	3.6		0	0			0.26	6.6	Clear	
Cape May, New Jersey	29.96	761.0	29.99	761.7	63	17.2	72	W	7	3.1		2k	0			0	0	Clear.	
Castroville, Texas	29.07	738.4	29.74	755.4	79	26.1	70	SE	2	0.9		0	5s			0	0	Fair.	
Cedar Keys, Florida	29.85	758.2	29.87	758.7	84	28.9	83	W	13	5.8		5c	0			0.08	2.0	Fair	
Champaign, Illinois	29.26	743.2	30.05	763.3	53.8	12.1	74	NE	14	6.3		5k	0	NE		0	0	Fair	
Charleston, S. Carolina	29.92	760.0	29.98	761.5	66	18.9	74	NE	11	4.9		0	8s		NE	0.29	7.4	Cloudy.	
Charlotte, N. Carolina	29.16	740.7	30.02	762.5	63.0	17.2	72	N	6	2.7		2k	0	N		0	0	Fair.	
Chattanooga, Tennessee	29.16	740.7	29.96	761.0	69	20.6	75	N	1	0.4		5cs	Sk	E	Calm	0	0	Fair.	
Cheyenne, Wyoming	29.14	740.1	29.95	760.7	47.2	8.4	28	NW	6	2.7		5ck	0	NW		0	0	Fair.	
Chicago, Illinois	29.39	746.5	30.07	763.8	52.5	11.4	76	NE	10	4 5		1c	0	W		0	0	Clear.	
Chincoteague, Virginia	29.97	761.2	29.99	761.7	62	16.7	67	N	10	4.5		1k	0	S		Inap.	Inap.	Clear	
Cincinnati, Ohio	29.40	746.7	30.04	763.0	62	16.7	56	SE	5	2.2		0	0			0	0	Clear.	
Cleveland, Ohio	29.36	745.7	30.08	764.0	51.5	10.8	82	SE	4	1.8		5k	Fg	N		0	0	Fair.	
Coleman City, Texas																			
Columbus, Ohio	29.23	742.4	30.05	763.3	55	12.8	68	NE	2	0.9		0	0			0	0	Clear	
Concho, Texas	27.93	709.4	29.81	757.2	75	23.9	76	SE	10	4.5		0	0			0	0	Clear.	
Corsicana, Texas	29.38	746.2	29.84	757.9	78	25.6	69	S	4	1.8		0	0			0	0	Clear.	
Davenport, Iowa	29.47	748.5	30.11	764.8	59	15.0	65	E	4	1.8		5cs	0	Calm		0	0	Fair.	
Dayton, Washington T'y	28.30	718.8	30.05	763.3	59.7	15.4	39	SE	7	3.1		0	0			0	0	Clear.	
Deadwood, Dakota	25.47	646.9	30.02	762.5	50	10.0	65	SW				0	0			0.08	2.0	Clear.	
Decatur, Texas																			
Delaware Breakwater, Del.	29.98	761.5	30.00	762.0	61	16.1	71	W	8	3.6		4ck	0	NW		0	0	Fair.	
Denison, Texas	29.08	738.6	29.86	758.4	80	26.7	70	SE	6	2.7		0	0			0	0	Clear.	
Denver, Colorado	24.83	630.7	29.90	759.4	58.8	14.9	71	N	2	0.9		0	5ks		W	0	0	Fair	
Des Moines, Iowa	29.17	740.9	30.05	763.3	59	15.0	76	S	5	2.2			10s			0	0	Cloudy.	
Detroit, Michigan	29.40	746.7	30.07	763.8	52.1	11.2	79	N	7	3.1			10s		Calm	0	0	Cloudy.	
Dodge City, Kansas	27.35	694.7	29.84	757.9	59.9	15.5	100	NE	8	3.6			10s			0.83	21.1	Cloudy.	
Dubuque, Iowa	29.43	747.5	30.11	764.8	58.4	14.7	64	SE	5	2.2		5c	5ks	S	SE	0	0	Cloudy.	
Duluth, Minnesota	29.46	748.3	30.14	765.5	49	9.4	71	NE	13	5.8			10s		Calm	0	0	Cloudy.	
Eagle Pass, Texas	29.06	738.1	29.87	758.7	78.5	25.8	73	SE	5	2.2		0	0			0	0	Clear.	
Eagle Rock, Idaho	25.34	643.6	30.05	763.3	40	4.4	65	N	7	3.1		0	0			0	0	Clear.	
Eastport, Maine	29.85	758.2	29.92	760.0	57	13.9	69	W	1	0.4		0	0			0	0	Clear.	
El Paso, Texas	26.11	663.2	29.76	755.9	59	15.0	33	NE	2	0.9		0	0			0	0	Clear.	
Erie, Pennsylvania	29.35	745.5	30.06	763.5	56	13.3	81	NE	2	0.9			10ks		W	0	0	Cloudy.	
Escanaba, Michigan	29.52	749.8	30.16	766.1	45	7.2	84	N	9	4.0		5k	5s	N	N	0	0	Cloudy.	
Florence, Arizona	28.31	719.1	29.91	759.7	55	12.8	17	W	1	0.4		0	0			0	0	Clear.	
Fort Apache, Arizona	25.01	635.2	29.79	756.7	44	6.7	16	NE	3	1.3		0	Sk		Calm	0	0	Dense smoke	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota	28.38	720.8	29.85	758.2	57	13.9	87	W	6	2.7		2cs	0	W		0.76	19.3	Fair.	
Fort Benton, Montana	27.32	693.9	30.06	763.5	54	12.2	67	W	3	1.3		0	0			0.40	10.2	Clear.	
Fort Buford, Dakota	27.98	710.7	29.90	759.4	54	12.2	87	S	4	1.8		5k	0	W		0.09	2.3	Fair.	
Fort Custer, Montana	26.95	684.5	30.04	763.0	67	19.4	37	W	5	2.2		5k	0	NW		0.01	0.3	Fair.	
Fort Davis, Texas	25.14	638.5	30.10	764.5	77	25.0	31	SW	12	5.4		0	0			0	0	Clear.	
Fort Elliott, Texas	27.14	689.3	30.21	767.3	62	16.7	61	NE	20	8.9		10k	0	NE		0	0	Cloudy.	
Fort Gibson, Indian T'y	29.36	745.7	29.89	759.2	72	22.2	80	NE	8	3.6			10s		E	0.10	2.5	Cloudy.	
Fort Grant, Arizona					65	18.3	10	NE	5	2.2		8cs	0			0	0	Cloudy.	
Fort Griffin, Texas	28.52	724.4	29.72	754.9	78.0	25.6	65	SE	3	1.3		0	0			0	0	Clear	
Fort Keogh, Montana	27.51	698.7	29.92	760.0	53	11.7	79	SW	18	8.0		5cs	0	SW		0.23	5.8	Fair.	
Fort Macon, North Carolina	29.91	759.7	29.92	760.0	66	18.9	79	N	18	8.0		8k	0	NE		1.23	31.2	Fair.	
Fort McKavett, Texas	27.61	701.3	29.43	747.5	73.1	22.8	63	SW	3	1.3		0	0			0	0	Clear.	
Fort Missoula, Montana	26.85	682.0	30.23	767.8	54	12.2	87	E	1	0.4			10s			0.13	3.3	Cloudy.	
Fort St. Michaels	29.83	757.7	29.86	758.4	53	11.7	93	NW	6	2.7		8c	2ks	N		0	0	Cloudy.	
Fort Shaw, Montana	26.52	673.6	29.97	761.2	46	7.8	92	NE	1	0.4		5k	0	SW		0.79	20.1	Fair.	
Fort Sill, Indian Territory	28.64	727.4	29.85	758.2	79	26.1	62	N	8	3.6		2ck	0	W		0	0	Fair.	
Fort Stevenson, Dakota	28.14	714.7	29.92	760.0	55	12.8	93	E	6	2.7			10ks		E	0.05	1.3	Cloudy.	
Fort Verde, Arizona					57.2	14.0	31	SW			1	0	0			0	0	Clear.	
Fredericksburg, Texas	28.15	715.0	29.63	752.6	74	23.3	72	Calm	0	0		0	0			0	0	Clear.	
Galveston, Texas	29.83	757.7	29.87	758.7	82	27.8	83	W	5	2.2		Hz	0			0	0	Dense haze.	
Grand Haven, Michigan	29.46	748.3	30.11	764.8	53	11.7	73	NE	5	2.2		10k	0	NW		0	0	Cloudy.	
Hatteras, North Carolina	29.90	759.4	29.92	760.0	66	18.9	79	NE	26	11.6		1k	0	N		2.28	57.9	Clear.	
Helena, Montana	25.92	658.4	30.12	765.0	49	9.4	85	NW	1	0.4		2k	0	Calm		0	0	Fair.	
Henrietta, Texas	28.81	731.8	29.65	753.1	83	28.3	60	SE	6	2.7		0	0			0	0	Clear.	
Indianapolis, Indiana	29.26	743.2	30.03	762.7	57	13.9	72	NE	4	1.8		0	0			0	0	Clear.	
Indianola, Texas	29.85	758.2	29.88	758.9	82.1	27.8	83	S	6	2.7		Hz	Hz			0	0	Dense haze.	
Jacksboro, Texas	28.67	728.2	29.73	755.1	78	25.6	65	SE	3	1.3		0	0			0	0	Clear	
Jacksonville, Florida	29.85	758.2	29.87	758.7	80	26.7	82	NE	12	5.4			10s		NE	0	0	Cloudy.	
Keokuk, Iowa	29.43	747.5	30.07	763.8	56.0	13.3	71	SE	10	4.5			10s		SE	0	0	Cloudy.	
Key West, Florida	29.92	760.0	29.95	760.7	79.0	26.1	91	Calm	0	0		0	8n;s			2.14	54.4	Fair.	
Kittyhawk, North Carolina	29.95	760.7	29.97	761.2	64	17.8	73	NE	26	11.6		0	0			0.45	11.4	Clear.	
Knoxville, Tennessee	28.97	735.8	29.97	761.2	62	16.7	97	NE	5	2.2			10s;fg		NE;C	0.02	0.5	Cloudy.	
La Crosse, Wisconsin	29.28	743.7	30.00	762.0	60.2	15.7	88	SW	1	0.4			Fg			0	0	Dense fog.	
La Mesilla, New Mexico	25.99	660.1	30.14	765.5	56.2	13.4	14	Calm	0	0		1c	0			0	0	Clear.	
Laredo, Texas	29.38	746.2	29.70	754.4	77	25.0	86	SE	2	0.9		0	0			0	0	Clear.	
Leavenworth, Kansas	29.09	738.9	29.96	761.0	63	17.2	78	SE	8	3.6			10s		NW	Inap.	Inap.	Cloudy.	
Lewiston, Idaho	29.25	742.9	30.08	764.0	53	11.7	79	Calm	0	0		0	0			0	0	Clear.	
Little Rock, Arkansas	29.63	752.6	29.94	760.5	69	20.6	90	Calm	0	0		5c	2s	NE		0.02	0.5	Fair.	
Los Angeles, California	29.48	748.8	29.85	758.2	59.3	15.2	100	E	1	0.4			Fg		Calm	0	0	Dense fog.	
Louisville, Kentucky	29.45	748.0	30.00	762.0	62.5	16.9	72	N	1	0.4		0	0			0	0	Clear	
Lynchburg, Virginia	29.33	745.0	30.00	762.0	65	18.3	78	Calm	0	0			10s			0.22	5.6	Cloudy.	
Madison, Wisconsin	29.09	738.9	30.07	763.8	52	11.1	73	E	4	1.8		2cs	0	W		0	0	Fair.	
Marquette, Michigan	29.48	748.8	30.19	766.8	45	7.2	76	NW	2	0.9		5cs	0	NW		0	0	Fair.	
Mason, Texas	28.23	717.0	29.90	759.4	76.6	24.8	56	W	4	1.8		0	0			0	0	Clear.	
Memphis, Tennessee	29.66	753.4	29.99	761.7	69	20.6	80	NE	4	1.8		2cs	0	SW		0	0	Clear	
Milwaukee, Wisconsin	29.36	745.7	30.09	764.3	49	9.4	71	N	8	3.6		1c	1k			0	0	Clear.	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.82	757.4	29.89	759.2	79	26.1	82	N	11	4.9	.....	5cs	Hz	.....	.....	0	0	Fair	
Montgomery, Alabama	29.68	753.9	29.90	759.4	77.2	25.1	69	NE	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Moorhead, Minnesota	28.96	735.6	29.92	760.0	58	14.4	94	E	10	4.5	.....	.....	1on	.....	E	0.23	5.8	Light rain	
Morgantown, W. Virginia	29.05	737.9	30.02	762.5	57	13.9	81	NE	4	1.8	.....	Hz	Hz	.....	.....	0	0	Light haze	
Mt. Washington, N. H.	23.72	602.5	29.75	755.6	32.1	0.1	89	Calm	0	0	.....	.....	Fg	.....	Calm	0	0	Light fog	
Nashville, Tennessee	29.46	748.3	29.98	761.5	67.4	19.7	65	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
New Haven, Connecticut	29.88	758.9	29.99	761.7	57	13.9	69	NE	9	4.0	.....	0	Hz	.....	.....	0	0	Dense haze	
New London, Connecticut	29.95	760.7	30.00	762.0	61	16.1	66	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
New Orleans, Louisiana	29.79	756.7	29.84	757.9	84.0	28.9	66	E	12	5.4	.....	0	Hz	.....	.....	0	0	Clear	
Newport, Rhode Island	29.94	760.5	29.99	761.7	61.2	16.2	69	N	6	2.7	.....	0	0	.....	.....	0	0	Clear	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	29.97	761.2	30.00	762.0	60.5	15.8	71	NE	7	3.1	.....	0	0	.....	.....	0	0	Clear	
New York, New York	29.83	757.7	30.00	762.0	60	15.6	71	N	7	3.1	.....	1cs	Fg	.....	.....	0	0	Clear	
Norfolk, Virginia	29.95	760.7	29.99	761.7	68	20.0	51	N	6	2.7	.....	0	0	.....	.....	0.47	11.9	Clear	
North Platte, Nebraska	27.12	688.8	29.94	760.5	60	15.6	88	S	4	1.8	.....	.....	1os	.....	S	0.24	6.1	Cloudy	
Olympia, Washington T'y	30.00	762.0	30.04	763.0	48.0	8.9	93	N	1	0.4	.....	2ck	0	W	.....	0	0	Fair	
Omaha, Nebraska	28.88	733.5	30.02	762.5	64	17.8	77	SE	4	1.8	.....	5cs	1s	W	.....	0	0	Fair	
Oswego, New York	29.71	754.6	30.03	762.7	51.0	10.6	86	W	2	0.9	.....	2c	Fg	W	Calm	0	0	Light fog	
Pensacola, Florida	29.84	757.9	29.87	758.7	83	28.3	71	N	4	1.8	.....	2cs	0	Calm	.....	0	0	Fair	
Philadelphia, Pa	29.96	761.0	30.02	762.5	61.0	16.1	66	NE	9	4.0	.....	0	Fg	.....	.....	0	0	Clear	
Phœnix, Arizona	28.66	728.0	30.40	772.1	65	18.3	49	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Pike's Peak, Colorado	17.97	456.4	30.18	766.6	37	2.8	38	SW	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Ploche, Nevada	24.07	611.4	29.92	760.0	55	12.8	22	NW	7	3.1	.....	0	0	.....	.....	0	0	Clear	
Pittsburg, Pennsylvania	29.25	742.9	30.04	763.0	54	12.2	77	N	4	1.8	.....	4c	Fg	W	Calm	0	0	Fair	
Port Eads, Louisiana	29.85	758.2	29.86	758.4	85.2	29.6	96	W	4	1.8	.....	0	Hz	.....	Calm	0	0	Dense haze	
Port Huron, Michigan	29.44	747.8	30.00	764.5	51.2	10.7	79	NE	6	2.7	.....	10cs	0	W	.....	0	0	Cloudy	
Portland, Maine	29.92	760.0	29.96	761.0	56	13.3	69	NW	5	2.2	.....	0	Hz	.....	.....	0	0	Clear	
Portland, Oregon	29.99	761.7	30.06	763.5	52.2	11.2	90	Calm	0	0	.....	0	Fg	.....	.....	0	0	Clear	
Portsmouth, N. Carolina	.....	.....	.....	.....	68	20.0	74	NE	28	12.5	.....	5k	0	N	.....	1.21	30.7	Fair	
Prescott, Arizona	24.74	628.4	29.81	757.2	48	8.9	29	S	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	29.87	758.7	29.88	758.9	82.5	28.1	83	SW	14	6.3	.....	2c;1k	1ks	Calm	SW	0.27	6.9	Fair	
Red Bluff, California	29.53	750.0	29.86	758.4	67.0	19.4	48	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Rio Grande City, Texas	29.65	753.1	29.86	758.4	77	25.0	82	SE	8	3.6	.....	8cs	0	Calm	.....	0	0	Fair	
Rochester, New York	29.43	747.5	30.05	763.3	51	10.6	86	W	2	0.9	.....	.....	1os	.....	NW	0	0	Cloudy	
Roseburg, Oregon	29.52	749.8	30.08	764.0	48.6	9.2	92	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Sacramento, California	29.81	757.2	29.88	758.9	58.5	14.7	76	S	5	2.2	.....	0	0	.....	.....	0	0	Clear	
St. Louis, Missouri	29.50	749.3	30.08	764.0	57.5	14.2	61	E	7	3.1	.....	10cs	0	.....	.....	0	0	Cloudy	
St. Paul, Minnesota	29.18	741.2	30.02	762.5	60	15.6	77	E	4	1.8	.....	.....	10ks	.....	E	0	0	Cloudy	
Salt Lake City, Utah	25.69	652.5	29.89	759.2	54	12.2	32	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
San Antonio, Texas	29.18	741.2	29.87	758.7	72.8	22.7	85	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
San Diego, California	29.75	755.6	29.82	757.4	62.7	17.1	78	Calm	0	0	.....	.....	1os	.....	.....	0	0	Cloudy	
Sandusky, Ohio	29.40	746.7	30.06	763.5	60	15.6	71	S	4	1.8	.....	.....	1os	.....	.....	0	0	Cloudy	
Sandy Hook, New Jersey	29.96	761.0	29.99	761.7	59.8	15.4	67	NE	9	4.0	.....	0	Hz	.....	.....	0	0	Clear	
San Francisco, California	29.88	758.9	29.95	760.7	52	11.1	86	SW	7	3.1	.....	0	Fg	.....	SW	0	0	Clear	
Santa Fé, New Mexico	23.30	591.8	29.81	757.2	59	15.0	23	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Savannah, Georgia	29.87	758.7	29.96	761.0	69.5	20.8	80	NE	11	4.9	.....	.....	10ks	.....	NE	0.20	5.1	Cloudy	
Shreveport, Louisiana	29.68	753.9	29.91	759.7	78	25.6	82	E	8	3.6	.....	0	Hz	.....	.....	0	0	Clear	
Silver City, New Mexico	24.24	615.7	29.70	754.4	65	18.3	6	NW	1	0.4	.....	2c	0	NW	.....	0	0	Clear	
Sitka Alaska	29.96	761.0	30.03	762.7	50	10.0	86	W	2	0.9	.....	.....	1os	.....	.....	0	0	Cloudy	
Smithville, North Carolina	29.92	760.0	29.95	760.7	64	17.8	78	N	8	3.6	.....	0	1ks	.....	.....	0.14	3.6	Clear	
Spokane Falls, Wash. Ter.	28 07	713.0	30.03	762.7	48	8.9	85	E	1	0.4	.....	2cs	0	.....	.....	0	0	Clear	
Springfield, Illinois	29.44	747.8	30.10	764.5	56	13.3	63	E	5	2.2	.....	7cs	0	W	.....	0	0	Fair	
Springfield, Massachusetts	29.88	758.9	30.01	762.2	57.5	14.2	70	N	4	1.8	.....	1ck	0	NE	.....	0	0	Clear	
Stockton, Texas	26.80	680.7	29.79	756.7	73.6	23.1	55	S	16	7.2	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	29.18	741.2	30.02	762.5	51	10.6	86	SE	6	2.7	.....	.....	1on	.....	Calm	0.01	0.3	Light rain	
Thatcher's Island, Mass	29.92	760.0	29.97	761.2	55.6	13.1	81	N	9	4.0	.....	2cs	0	W	.....	0	0	Clear	
Toledo, Ohio	29.38	746.2	30.06	763.5	55	12.8	81	N	5	2.2	.....	0	Sk	.....	.....	0	0	Clear	
Tucson, Arizona	27.41	696.2	29.70	754.4	63	17.2	24	SE	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.68	753.9	30.08	764.0	53.7	12.1	79	E	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Uvalde, Texas	28.90	734.0	29.69	754.1	72	22.2	85	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Vicksburg, Mississippi	29.72	754.9	29.97	761.2	76	24.4	73	NE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Visalia, California	29.49	749.0	29.84	757.9	58	14.4	64	NW	1	0.4	.....	0	c	.....	.....	0	0	Clear	
Washington, D. C.	29.88	758.9	29.99	761.7	62	16.7	77	SE	1	0.4	.....	5c	0	SW	.....	0	0	Fair	
Wickenburg, Arizona	.....	.....	.....	.....	68	20.0	18	Calm	.....	.....	0	0	0	.....	.....	0	0	Clear	
Wilmington, N. Carolina	29.90	759.4	29.96	761.0	64	17.8	78	N	6	2.7	.....	0	0	.....	.....	0.57	14.5	Clear	
Winnemucca, Nevada	25.64	651.2	29.85	758.2	51	10.6	34	NE	12	5.4	.....	0	0	.....	.....	0	0	Clear	
Wood's Holl, Mass	29.94	760.5	29.98	761.5	61	16.1	77	N	5	2.2	.....	1ck	Hz	NE	.....	0	0	Clear	
Yankton, Dakota	28.76	730.5	30.02	762.5	62	16.7	89	SE	6	2.7	.....	2k	2s	.....	.....	0.08	2.0	Fair	
Yuma, Arizona	29.54	750.3	29.68	753.9	72.1	22.3	62	SW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.11	561.6	.....	.....	55.0	12.8	72	Calm	0	0	.....	.....	1on	.....	.....	0.38	9.7	Cloudy	Thomas Herman
Buff Bay Town, Jamaica.‡	29.76	755.9	30.06	763.5	77	25.0	86	E	.....	.....	.....	Hz	Hz	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	29.92	760.0	29.97	761.2	81	27.2	95	Calm	0	0	.....	0	8ks	.....	Calm	Inap.	Inap.	Cloudy	A. Van Caneghem, Asst
Kingston, Jamaica, W. I.	29.95	760.7	29.96	761.0	80.7	27.1	80	Calm	0	0	.....	2ck	8s	.....	.....	0	0	.....	Robert Johnstone
Navassa, W. I.	29.86	758.4	29.94	760.5	83	28.3	79	E	17.5	7.8	.....	2s	Hz	.....	.....	0	0	Hazy	F. M. Everett.
Paramaribo, S. A.	30.06	763.5	30.06	763.5	80	26.7	87	E	.....	.....	2	3c	4k	E	.....	0.130	3.3	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.43	747.5	29.98	761.5	78	25.6	95	N	2	0.9	.....	.....	10ks	.....	.....	0.15	3.8	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	77.0	25	.....	NW	.....	.....	1	6cs	5ks	.....	NW	0.39	10.	.....	Earl Flint.
Santiago de Cuba, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.86	758.4	29.91	759.7	58.0	14.4	91	W	4	1.8	.....	2k	2s	NE	W	0	0	Fair	J. Fortescue & W Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0— 10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross																			Comm A. J.Errington.
H. M. S. Alert,																			
Thursday Island, Occania	29.94	760.5	77	25.0	85	SE			3-4		4							D. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra,																			
Ragusa, Dalmatia, Austria	30.03	762.7	80	26.7	74	Calm			0		0							Misty	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab,																			
Aden, Arabia, Asia	29.69	754.1	89	31.7	80	S			2		0					Sm'h		Blue sky	Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon,																			
N 24° 47′, E. 66° 59′	29.58	751.3	85	29.4	83	WSW			2-3		8	WSW						D. clouds	Comm. G. W. Hand.
H. M. S. Bittern,																			
N. 39° 30′, E. 25° 40′			78	25.6		N			3-4							4	N	D. clouds	Capt. E. B. Pusey.
H. M. S. Blanche,																			
N 17° 00′, W. 61° 45′	30.10	764.5	78	25.6	90	S			2		10					1	S	Overcast	Capt. C. G. F. Knowles.
H. M. S. Boadicea,																			
Ascension I'ds, Africa	30.04	763.0	78	25.6	61	SE			2-3		1	SSE						Blue sky	Com. F. W. Richards.
H. M. S. Champion,																			
Monte Video, Uruguay	30.23	767.8	41	5.0	64	N			2		2	Calm						D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus,																			
N. 39° 42′, E. 120° 10′	29.54	750.3	71	21.7	80	S			5		3	NW						D. clouds	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruiser,																			
Palermo, Sicily	30.09	764.3	81	27.2		ESE			1		0							Misty	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae,																			
N 49° 31′, W. 3° 49′	30.20	767.1	59	15.0	98	NW			1							0-2	WSW	D. clouds	Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido,																			
Simon's Bay, Cape Colony	29.72	754.9	56	13.3		NW			4-6		10	NNW						Raining	Capt C. Domville.
H. M. S. Dock-Yard,																			
Bermuda, W.I.	29.92	760.0	81.5	27.5	89	SSE			6		3	SSE						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid,																			
N. 49° 37′, W. 55° 52′	29.75	755.6	45.5	7.5	80	NNW			1		10							Overcast	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse,																			
S. 7° 13′, E. 72° 23′	29.90	759.4	78	25.6		SE			3-4		10							Raining	Capt. E. St. J. Garforth.
H. M. S. Egeria,																			
S. 21° 20′, E. 64° 30′	30.12	765.0	72	22.2		ESE			5		9	ESE				3	ESE	Squally	Comm. C. Johnstone.
H. M. S. Emerald,																			
N. 5° 05′, E. 167° 10′	29.85	758.2	84	28.9	83	NE			1-3		7	NE				3	ENE	Showery	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus,																			
Port Louis; Mauritius	30.23	767.8	75	23.9	72	E			2-3		4	ESE						D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome,																			
N. 50° 03′, W. 55° 50′	29.68	753.9	41	5.0		N			2		9	N						D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn,																			
N. 13° 12′, E. 47° 08′	29.64	752.8	86.5	30.3	72	SSE			4		0					3	SSE	Blue sky	Capt. P. Aldrich.
H. M. S. Flamingo,																			
N. 18° 45′, W. 78° 41′	30.00	762.0	87	30.6	84	E			1-2		3	SE				2	E	D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet,																			
Esquimault, Vancouver I'd.	30.05	763.3	54	12.2	86	Calm			0		10							Overcast	Comm. E. G. Bourke.
H. M. S. Garnet,																			
Sandy Point, Patagonia	29.27	743.4	42	5.6	65	WNW			6		6							Squally	Capt. L. F. Jones.
H. M. S. Griffin,																			
N. 23° 21′, W. 74° 18′	30.01	762.2	84	28.9	79	SSE			5		10					2	ENE	Overcast	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber,																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C.P. Fitzgerald.
H. M. S. Iris,																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher,																			
S. 12° 04′, W. 77° 11′	29.97	761.2	61	16.1		Calm			0		5	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily,																			
Yokohama, Japan	29.92	760.0	78	25.6		SE			1		7							D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie,																			
N. 20° 14′, E. 110° 05′	29.79	756.7	85	29.4	83	SE			1-2		2					1	SE	Squally	Capt. A. Carpenter.
H. M. S. Midge																			
N. 22° 50′, E. 113° 46′	29.85	758.2				SW			2		6	SW						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. N. S. Modeste,																			
S. 30° 11′, E. 41° 37′	30.07	763.8	70	21.1	75	W			4		3	WNW				3	WNW	D. clouds	Capt. J. G. Mead.
H. M. S Monarch,																			
Tunis, Tunis, Africa	30.01	762.2	78	25.6	86	E			1		1	ENE						Blue sky	Capt. G. C. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, West Coast of Borneo			83.5	28.6		Calm			0		2	SSE						D. clouds	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.85	758.2	52	11.1	86	Calm			0		3	NNW						Misty	Capt. E. B. Drummond.
H. M. S. Orontes, Sierra Leone, Africa *†	29.95	760.7	80.5	26.9	89	WNW			3		8	ENE					SSW	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 48′, W. 79° 32′	29.87	758.7	78.5	25.8	97	Calm			0		10							Overcast	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, N. 20° 35′, W. 72° 00′	29.97	761.2	83	28.3	83	E			3		7					2	E	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A.C.Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.76	755.9	82	27.8		S			2		8							D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 51° 42′, W. 127° 11′	29.99	761.7	55	12.8		WSW			1		9							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	30.05	763.3*	80.3	26.8	78	S			2		4	ESE				Sm'h		D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 24° 03′, W. 159° 17′	30.15	765.8	75	23.9	85	NE			4		4					3	NE	D. clouds	Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Iquique, Peru	30.00	762.0	59	15.0	76	Calm			0		3	Calm						D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I			83	28.3		ESE			2		2							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	30.18	766.6	55	12.8	73	W			1–2		3	S						Showery	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Abu Shohr, Persia	29.58	751.3	83.5	28.6	83	W			1–2									Dense mist.	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candido dos Reis, Comd't
Quanza, Brava Cape Verd I'ds	30.05	763.2	77.9	25.5	69	NNE			1		7		N					D. clouds	Carlos M. da Silva Costa, Comd't
Rio Lima																			S. C. da Silva Costa, Comd't.
Sado, Loando, Africa	30.02	762.5	72.5	22.5	81	W			2		1							Blue sky	G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.81	757.2	84.2	29.0	81	SSW			2		1							D. clouds	F. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga																			Capt. M. von Krusenstierna
H. M. Frigate Vanadis																			Com. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

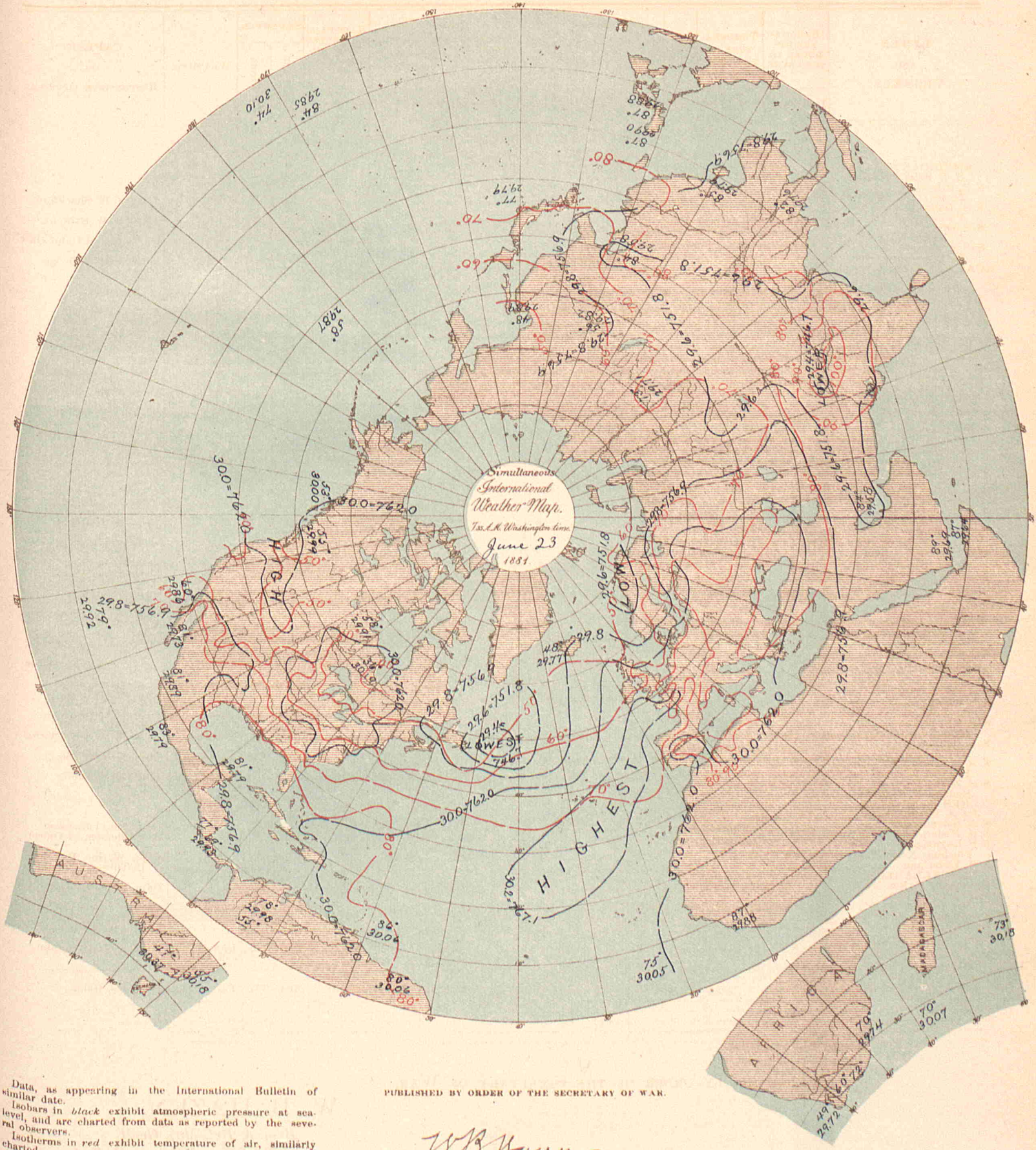
STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	29.94	760.5	82	27.8	71	NE	4	1.8			8		NE	0	0			Fair	
Naval Hospital, Yokahama, Japan	29.71	754.6	70.5	21.4	90	Calm			0		2		W	0	0			Clear	
Adams, Acapulco, Mexico	29.79	756.7	83	28.3	83	ENE			0-1		2		W			Sm'h		Fair	
Alaska, Callao, Peru	29.89	759.2	63	17.2	89	E			1		5		ESE	0	0	Sm'h		Fair	
Alert, N. 32° 06′, E. 140° 00′ *	29.79	756.7	77	25.0	77	E			1		0			0	0	Long	E	Hazy	
Alliance, N. 45° 20′, W. 53° 05′	29.79	756.7	43	6.1	100	NW			5		10			0	0	Mod.		Cloudy	
Ashuelot, Kobe, Japan	29.86	758.4	73	22.8	43	NW			2		5		NW					Fair	
Colorado, New York, N. Y	29.99	761.7	63	17.2	72	NNE	5	2.2			2		N	0	0			Hazy	
Constitution, Newport, R. I	29.92	760.0	57	13.9	81	NE			1		2							Clear	
Franklin, Norfolk, Va	29.91	759.7	66	18.9	64	NE	9	4.0			0			0.55	14.0			Clear	
Galena, Vigo, Spain	30.10	764.5	68	20.0	79	NW			1		2					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	30.00	762.0	75	23.9	64	SW	1.2	0.5			0			0	0			Clear	
Jamestown, Sitka, Alaska *	30.00	762.0	53	11.7	93	WNW			1		10			0	0			Cloudy	
Kearsarge, Norfolk, Va	29.99	761.7	67	19.4	69	NE			1		0					Sm'h		Clear	
Lackawanna, Apia, Samoa Id's, Oceania †	30.10	764.5	74	23.3	100	SE			2		2		SE					Fair	
Marion, Montevideo, Uruguay * †	30.11	764.8	43	6.1	83	N			3		2		Calm			Sm'h		Fair	
Michigan, Detroit, Michigan	29.96	761.0	52	11.1	86	NE			2		10							Cloudy	
Minnesota, Newport, R. I	29.99	761.7	60	15.6	82	NE			2		0					Sm'h		Hazy	
Monocacy, Yokohama, Japan	29.91	759.7	73	22.8	85	WSW			1		2		Calm					Fair	
Nipsic, Antwerp, Belgium	30.04	763.0	66	18.9	64	SSW			3		8					Sm'h		D. clouds	
Onward, Callao, Peru †	30.05	763.3	64	17.8	83	E			2		10		N			Long	W	Cloudy	
Palos, Nagasaki, Japan	29.90	759.4	75	23.9	64	SW			1		8							Fair	
Passaic, Washington, D. C	30.04	763.0	69	20.6	90	NE			1		0							Clear	
Pensacola, Mare Isl'd, Cal	29.95	760.7	55	12.8	93	SW			3		0			0	0			Clear	
Portsmouth, Newport, R. I	29.97	761.2	59	15.0	94	NNE			2		2		NE			Sm'h		Clear	
Powhatan, Newport, R. I	30.00	762.0	61	16.1	77	NE			1		0							Clear	
Quinnebaug, Navy Yard, New York	29.92	760.0	65	18.3	68	NNE			1		2		SW					Hazy	
Ranger, Salinas Bay, Carmen I'd *	29.73	755.1	83	28.3	87	SE			2		8		Calm	0	0	Sm'h		Cloudy	
Richmond, Kobe, Japan	29.77	756.1	75	23.9	44	WNW			1		5?		NW	0	0			Cloudy?	
Saratoga, Newport, R. I	29.95	760.7	56	13.3	94	NE			2		2		Calm	0	0			Fair	
Shenandoah, S. 24° 25′, W. 43° 22 *	30.14	765.5	69	20.6	70	W			3		5		W			Mod	wsw	Rainy	
St. Louis, League Island, Pa	29.57	751.1	58	14.4	88	NE	7	3.1			2			0	0			Clear	
Swatara, Shangbai, China * †	29.82	757.4	77	25.0	86	ESE			2		10		Calm					Overcast	
Tennessee, Navy Yard, N. Y	30.01	762.2	60	15.6	88	NNW	8	3.6			2		NW	0	0	Sm'h		Hazy	
Ticonderoga, S. 36° 23′, W. 35° 50′	30.44	773.2	58	14.4	88	ESE			2		2		ESE	0	0	Sm'h	E	Clear	
Vandalia, New London, Conn	29.97	761.2	59	15.0	82	NE			2		2		Calm					Hazy	
Wabash, Boston, Massachusetts	30.03	762.7	57	13.9	63	NNW	7	3.1			2		WNW	0	0			Hazy	
Wachusetts, N. Yard, Mare I'd, Cal	29.92	760.0	59	15.0	82	SW			3		0			0	0			Clear	
Wyoming, Norfolk, Va	29.94	760.5	64	17.8	68	NE	10	4.5			5		NE	0	0			Fair	
Yantic, N. 20° 30′, W. 90° 57′ *	29.79	756.7	81	27.2	91	ENE			2		8					Sm'h		Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire,																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 13° 00′, W. 118° 57′	29.92	760.0	78.5	25.8	86	NNW			2		4							D. clouds	Capt. E. J. Molony.
Chin Yang																			Capt. N. Youlden.
S. S. Cipero, N. 25° 21′, W. 35° 49′	30.31	769.6	74.5	23.6	86	NNW			1		8					1	NNW	D. clouds	Capt. W. N. Lalley.
City of Agra, S. 16° 01′, W. 32° 56′	30.15	765.8	79.5	26.4	80	SE			4		3							D. clouds	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 24° 53′, W. 25° 37′	30.20	767.1	74.8	23.8	81	N			3		7							D. clouds	Capt. Jas. Buchan.
Denbighshire																			Capt. H. Y. Murdoch.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randell.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomeno																			Capt. W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R.N R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt E. W. Turner.
Naiad, N. 41° 38′, W. 11° 56′	30.25	768.3	62.5	16.9	86	WSW			3		4							D. clouds	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. J. W. Brady.
Queen of Cambria, ‡ N. 43° 21′, W. 28° 34′	29.91	759.7	64	17.8	94	SSW			7		10							Raining	Capt. M. Parry.
Sierra Estrella, N. 60 24′, W. 23° 42′	30.05	763.3	75.1	23.9	95	SW			5		10							Raining	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven, ‡ N. 49° 10′, W. 3° 55′	30.16	766.1	57.5	14.2	53	NNW			2		5							D. clouds	Capt. C. W. Pearson.
Schr. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 55° 25′, W. 12° 50′	30.06	763.5				S			3		5		SE			Mod.	NE	Fair	
S. S. Circassian, ‡ N. 54° 34′, W. 42° 00′	29.46	748.3	48	8.9	92	ESE			5		10kn			2 hours		3	E	Overcast	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian, N. 49° 02′, W. 47° 08′	29.26	743.2	45	7.2		WNW			5		10		NW			Cross	NW|SW	Drizzling	Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Bothnia																			
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic, N. 41° 04′, W. 68° 22′	29.83	757.7	56	13.3		Calm			0		0					Sm'h		Clear	Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 46° 16′, W. 38° 59′ †	29.52	749.8	62	16.7	66	SW			6		8		SW	0	0	Mod.	SW	Fair	Capt. Benj. Gleadell.
S. S. Germanic, Liverpool, England †	30.24	768.1	57	13.9	81	W			4		8		WNW	0	0			D. clouds	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Phole.
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern																			
S. S. Köln, N. 45° 57′, W. 36° 45′	29.64	752.8	70.0	21.1	70	SW			5-6		5		SW	16 hours rain	& fog	Cross	SW	Fair	Capt. Th. Jüngst.
S. S. Leipzig																			Capt. F. Pfeiffer.
S. S. Strassburg																			Capt. C. Helmbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, N. 45° 11′, W. 38° 02′....*†	29.73	755.1	64	17.8	89	W	.....	.....	6	.....	2	.....	W	.....	.....	Mod.	W	Clear.....	Capt. J. W. Shackford.
S. S. Indiana, Philadelphia, Pa.....†	30.20	767.1	74	23.3	59	N	.....	.....	4	.....	2	.....	N	0	0	.....	.....	Clear.....	Capt. R. W. Sargent.
S. S. Ohio, N. 42° 40′, W. 44° 04′....*†	29.98	761.5	67	19.4	95	NW	.....	.....	4	.....	2	.....	NW	Showers		Mod.	NW	Fair.....	W. Shackford, Chief Off'r
S. S. Pennsylvania, Liverpool, England.....†	30.13	765.3	56	13.3	87	NW	.....	.....	5	.....	8	.....	NW	.....	.....	Sm'h	NW	Cloudy.....	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 29° 20′, W. 115′ 46°....†	29.86	758.4	60	15.6	88	NW	.....	.....	3	.....	10	.....	NW	0	0	Short	WNW	Hazy.....	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 41° 33′, W. 179° 06′...†	29.87	758.7	58	14.4	76	SW	.....	.....	5	.....	10	.....	.....	Rain		Mod.	SW	Overcast.....	Capt. H. Davison.
S. S. Gaelic.....																			Capt. W. H. Kidley.
S. S. Oceanic, Yokohama, Japan.....	30.17	766.3	73	22.8	80	NE	.....	.....	1	.....	2	.....	W	.....	.....	.....	.....	Fine.....	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 44° 20′, W. 124° 20′.....†	30.09	764.3	57	13.9	81	NNW	.....	.....	1	.....	8	.....	SW	.....	.....	Sm'h	.....	Fair.....	Capt. Fred. Bolles.
S. S. Oregon, Astoria, Oregon.....	30.13	765.3	56.5	13.6	90	NNW	.....	.....	1	.....	8	.....	NNW	.....	.....	.....	.....	Cloudy.....	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, N. 36° 13′, W. 121° 48′...†	29.84	757.9	50	10.0	88	WNW	.....	.....	3	.....	0	.....	.....	0	0	.....	.....	Clear.....	Capt. J. N. Ingalls.
S. S. Dakota, N. 30° 25′, W. 124° 18′.....†	29.93	760.2	56	13.3	69	NW	.....	.....	5	.....	2	.....	NW	0	0	Long	NW	Fair.....	Capt. H. G. Morse.
S. S. Idaho, N. 43° 19′, W. 124° 48′.....†	30.11	764.8	55	12.8	93	NW	.....	.....	3	.....	10	.....	NW	.....	.....	Mod.	NW	Cloudy.....	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 35° 08′, W. 120° 45′..†	29.84	757.9	54	12.2	80	NW	.....	.....	6	.....	Fog	.....	W	.....	.....	R'gh	WSW	Foggy	Geo. H. Harrison.
S. S. Senator.....																			Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal.....†	29.93	760.2	51	10.6	86	Calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	Clear.....	Capt. G. Debney.
S. S. Victoria, Haro Strait.....†	30.03	762.8	56	13.3	94	NE	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	Clear	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia.....																			A. Bannerman, 2d Officer
S. S. City of New York, S. 29° —′, W. 179° 30′ ....†	29.98	761.5	68	20.0	84	NW	.....	.....	7	.....	10	.....	NW	0	0	H'vy	W	Cloudy.....	Wm.H.Hawes,2d Officer.
S. S. City of Panama, Off Mazatlan, Mexico...†	29.93	760.2	84	28.9	91	WNW	.....	.....	2	.....	8k	.....	NE	0	0	Sm'll	W	Fair.....	Capt. D. S. Austin.
S. S. City of Peking.....																			Capt. G. G. Berry.
S. S. City of Sidney, S. 27° 09′, W. 177° 47′....*†	30.04	763.0	66	18.9	78	W	.....	.....	2	.....	10	.....	NW	0	0	Mod.	W	Threatening	Capt. H. C. Dearborn.
S. S. City of Tokio, Hong Kong, China.....†	29.96	761.0	87	30.6	75	Calm	.....	.....	0	.....	0	.....	.....	.....	.....	.....	.....	Clear.....	A. L. Ritchie, 2d Officer
S. S. Colima, N. 31° 20′, W. 119° 29′....†	29.91	759.7	60	15.6	88	NW	.....	.....	4	.....	5	.....	NW	0	0	R'gh	NW	Fair	Capt. R. R. Searle.
S. S. Granada, Panama Bay, Panama †	29.92	760.0	79	26.1	91	Calm	.....	.....	0	.....	2	.....	Calm	5 hours		.....	.....	Clear.....	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. Wales.....	29.97	761.2	60	15.6	44	ENE	.....	.....	5	.....	0?	.....	.....	.....	.....	.....	.....	Cloudy ?.....	.....
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland.....																			Capt. Sam'l Jackson.
S. S. Nederland.....																			A. Feddersen, 2d Officer.
S. S. Rhynland, Flushing, Netherlands.†	30.21	767.3	62	16.7	83	WSW	.....	.....	4	.....	2	.....	WSW	0	0	.....	.....	Clear.....	Capt. W. Geo. Randle.
S. S. Vaderland.....																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley.....																			Capt. A. Mehaffey.
Sch'r Addie Fuller, N. 32° 57′, W. 78° 51′.....	29.89	759.2	74	23.3	72	NNE	16	7.2	.....	.....	10d	.....	NE	0.60	15.2	R'gh	NE	Cloudy..	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.																			Capt. L. L. Lewis.
Bark Carrie Heckle.....																			Capt B. F. Woodbury.
Brigantine George, Arroyo, Porto Rica.....†	30.12	765.0	84	28.9	.....	ENE	.....	.....	5	.....	10	.....	.....	Showers		Mod.	.....	Cloudy.....	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Cherrystone, Va.....†	29.99	761.7	65	18.3	84	NNE	2	0.9	.....	0	2s	.....	.....	0.06	1.5	.....	.....	Clear.....	.....
Bark Sunbeam, N. 25° 33′, W. 25° 17′.....†	30.22	767.6	75	23.9	85	ENE	.....	.....	4	.....	5	.....	NE	Light		Mod.	NW	Fair	Capt. Jos. Hand.
.....																			
.....																			
.....																			
.....																			
.....																			

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 24, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours ‡			30.01	762 3	79.3	26.3	89	W			2		2			0	0	Fair	Raynard.
Algiers ‡			30.04	763.1	74.5	23.6	78	N			4		0			Inap.	Inap.	Clear	Nicolas.
La Calle ‡			30.05	763.2	86.7	30.4	90	ESE			1		1			0	0	Very fair	Fonfrède.
Tunis ‡			30.09	764.3															Jacques.
Sfax ‡			30.16	766.0															Gau.
Saida ‡			30.04	763.0	89.2	31.8	26	NNW			2		2			Inap.	Inap.	Fair	Dumas.
Tebessa ‡			30.14	765.5	90.3	32.4	14	ESE			2		0			0	0	Clear	Watrin.
Geriville ‡					92.8	33.8	23	SSE			7		0			0	0	Clear	Lonchamp.
Laghouat ‡			30.06	763.5	91.0	32.8	11	E			5		3			0	0	Pretty fair	Herbin.
Biskra ‡			30.16	766.1	91.0	32.8	38	SE			4		0			0	0	Clear	Baudass6.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.28	769.1	30.37	771.4	48.3	9.1	81	SSE	1	0.4			7			0	0	Fine	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.57	751.0	30.08	764.1	86.4	30.2	53	Calm			0		4			0	0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.43	747.5	30.17	766.2	77.7	25.4	67	NW	1.8	0.8			8			0.256	6 5		Dr. Wierzbicki.
Eperies	29.24	742.7	30.07	763.8	82.8	28.2	54	Calm			0		cs 8s			0.217	5.5	Th'der storm	Julius Mikolik.
Gratz ‡	29.02	737.0	30.21	767.2	79.9	26.6	71	S			3		2			0	0		Andreas Rospini.
Hermannstadt	28.71	729.3	30.06	763.5	81.7	27.6	52	NE			2		4			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.84	732.5	30.12	765.0	78.8	26.0	75	NE			3		3			0.165	4.2		The Staff.
Lemberg	29.13	739.8	30.07	763.8	77.5	25.3	65	NE			2		8			0.358	9.1		Dr. T. Stanecki.
Pola	29.98	761.6	30.09	764.3	83.5	28.6	70	NNW			2		2			0	0		I. R. Hydrographic Office.
Szathmar	29.65	753.0	30.10	764.4	80.4	26.9	77	NE			2		3			0	0		Beicht Peter, S. J.
Szegedin	29.81	757.2	30.08	768.9	83.1	28.4													Karl Stancel.
Trieste	30.00	762.0	30.10	764.6	89.6	32.0	50	Calm			0		2			0	0		Secco.
Vienna	29.44	747.8	30.12	765.0	82.8	28.2	56	E			2		2			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed June 22, 1882.

STATIONS.	Barometer. Corrected for Instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

Aberdeen	30.00	762.0	30.10	764.5	57.8	14.3	61	S	23	10.3			3			0.020	0.5	Squally	W. Boswell.
Armagh, Observatory	29.82	757.4	30.05	763.3	59.9	15.5	66	S	21	9.4			10					Squally	S. Call.
Bidston, Liverpool Obs'y			30.16	766.1	65.5	18.6	73	S	15	6.7			4					D. clouds	John Hartnup.
Bolton, Sharples																			Thomas Mackereth.
Bradford, Yorkshire	29.81	757.2	30.20	767.1	68.2	20.1	66	SW			1.0		5			0.17	4.3	D. clouds	J.McLandsborough, F.R.S
Bridgetown, Barbadoes	30.01	762.2	30.04	763.0	85	29.4	66	NE			2		5					D. clouds	Corpl. J. Surgener, A.H.C
Cardington			30.21	767.3	71.6	22.0	47	S			1.0		4					D. clouds	John McLaren.
Chatham, School M. E.	30.12	765.0	30.25	768.3	71.5	21.9	51	SE			1		4					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	30.03	762.7	30.26	768.6	60.2	15.7	70	SSE			2		2					D. clouds	The Staff.
Fort Napier, Natal	27.50	698.5	29.72	754.9	81.2	27.3	100	SW			2		0					Blue sky	Pvt. E. K. Anniss, A. H. C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	87	30.6	80	W			1		0					Blue sky	Sgt. C. E. Keane.
Galway, Queen's College			29.88	758.9	56	13.3	87	SW			4		10			0.43	10.9	Raining	J. O'Donaghue.
Gibraltar, Mediterranean	30.02	762.5	30.07	763.8	75.4	24.1	84	NW			1		0					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.88	758.9	30.08	764.0	60.4	15.8	52	SSW			6		8					D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	30.05	763.5	30.22	767.6	73.0	22.8	49	SE			1		5					D. clouds	The Staff.
Guernsey	29.98	761.5	30.19	766.8	64	17.8	58	ENE			1		0					Blue sky	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.20	767.1	30.23	767.8	73.0	22.8	39	SE	8	3.6			5					D. clouds	The Staff.
Leicester, Museum	29.95	761.0	30.21	767.3	69.0	20.6	46	SW			1		3					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.96	761.0	30.03	762.7	81.8	27.7	57	NE			2		0					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	30.00	762.0	30.05	763.3	85.0	29.4	79	S			1		7					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.69	754.1	30.20	767.1	67.5	19.7	59	S			2		4					D. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	30.00	762.0	30.23	767.8	67.0	19.4	49	SW			2		5					D. clouds	The Staff.
Plymouth	30.17	766.3	30.24	768.1	64.2	17.9	47	S			2		0					Blue sky	John Merrifield.
Sandwick Manse, Orkneys			30.02	762.5	55.1	12.8	72	S	28	12.5			10					Misty	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.94	760.5	30.00	762.0	79.8	26.6	60	NE			2		5					D. clouds	Serg't W. H. Lyne.
Sheffield	29.94	760.5	30.22	767.6	69.4	20.8	64	SW			2		3			0.08	2.0	D. clouds	W. F. Cooper.
Silloth Rectory	30.14	765.5	30.17	766.3	63.1	17.3	72	WSW			4		10			0.310	7.9	Overcast	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.20	767.1	61.3	16.3	56	S	14	6.3			8					D. clouds	Rev. S. J. Perry.
Stratfield Turgiss	30.02	762.5	30.23	767.8	71.4	21.9	46	SW			2		2					D. clouds	Rev. C. H. Griffiths, F. M. S.
Truro, Royal Institution	30.21	767.3	30.22	767.6	70	21.1	52	S			4		4					D. clouds	W. Newcombe.
Valencia, Observatory	29.95	761.0	29.99	761.7	58.4	14.7	85	SSE	47	21.0			10					Misty	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

Bathurst, N. B					53.0	11.7		Calm	0	0		3ck	0			0	0	Blue sky	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.92	760.0	29.96	761.0	57	13.9	83	Calm	0	0		0	0			0	0	Clear	H. J. Cundall, C. E.
Chatham, N. B.*	29.95	760.7	30.01	762.2	48	8.9	96	NW	1	0.4			Fg			0.02	0.5	Foggy	G. A. Blair.
Chicontimi, Quebec					54.4	12.4		NW			4	0	8ks			0	0	D. clouds	Rev. V. A. Huart.
Cornwall, Ontario	29.90	759.4	30.10	764.5	52.9	11.6	84	NW			1	0	0			0	0	Blue sky	James Smith, M. A
Dalhousie, N. B	29.93	760.2	29.96	761.0	52.0	11.1		W			1	0	0			0	0	Blue sky	H. A. Johnson.
Father Point, Quebec*	29.96	761.0	29.98	761.5	50	10.0	86	Calm	0	0		0	2ks			0	0	Clear	J. McWilliams.
Fort Garry, Manitoba*	29.25	742.9	30.06	763.5	57	13.9	81	SW	4	1.8		2cs	2ks	SW	SW	0	0	Fair	James Stewart.
Fredericton, N. B	29.95	760.7	30.01	762.2	56.1	13.3	75	W	1	0.4		0	0			0.035	0.9	Clear	Prof. Harrison.
Granton, Ontario	29.13	739.9	30.26	768.6	44.0	6.7	100	Calm			0	0	0			0	0	Clear	James Grant.
Halifax, N. S.*	29.86	758.4	29.99	761.7	56	13.3	82	SE	4	1.8		2ck	0			0	0	Fair	A. Allison.
Hamilton, Ontario	29.76	755.9	30.16	766.1	52.7	11.5	84	NE			1	0	0			0	0	Clear	Geo. Dickson, B. A.
Kingston, Ontario*	29.81	757.2	30.15	765.8	55	12.8	79	NW	4	1.8		0	0			Inap.	Inap.	Clear	S. Woods, M. A.
Little Glace Bay, N. S	29.93	760.2	29.97	761.2	48.5	9.2	90	SW			2	0	3ks			0	0	Fair	C. H. Rigby.
Montreal, Quebec*	29.87	758.7	30.07	763.8	62	16.7	61	W	4	1.8		0	0			0	0	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario	30.17	766.3	30.20	767.1	41.1	5.1	93	N			1	0	0			0	0	Blue sky	J. R. Nason.
Parry Sound, Ontario*	29.51	749.5	30.21	767.3	53	11.7	83	Calm	0	0		5k	5ks	NW	NW	0	0	Cloudy	Rev. R. Moseley.
Peterboro, Ontario	29.44	747.8	30.19	766.8	56.7	13.7	69	NW			1		9ks			0	0	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.51	749.5	30.20	767.1	51	10.6	93	N	2	0.9		5c	0	NW		0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.55	750.6	30.20	767.1	48	8.9	94	N	1	0.4		5ck	0			0	0	Fair	M. Payne.
Quebec, Quebec*	29.71	754.6	30.02	762.5	54	12.2	87	NW			3	0	8s		NW	0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.73	755.1	30.20	767.1	49	9.4	82	NW	5	2.2			8s		NW	0	0	Cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.49	749.0	30.21	767.3	48	8.9	92	SE	1	0.4			10ks			0	0	Cloudy	K. Stewart.
St. Andrews, N. B	29.91	759.7	29.96	761.0	53	11.7	90	Calm	0	0			10n			0	0	Cloudy	
St. John, N. B	29.83	757.7	29.99	761.7	54.0	12.2	88	Calm	0	0			10s			0	0	D. clouds	G. Murdock, C. E.
Stratford, Ontario	28.92	734.6	30.20	767.1	49.0	9.4	85	NE	2	0.9		2cs	0			0	0	Blue sky	C. J. Macgregor, M. A.
Sydney, C. B*	29.95	760.7	29.99	761.7	53	11.7	85	W	3	1.3		2ck	0	NW		0	0	Clear	T. C. Hill, C. E.
Toronto, Ontario*	29.83	757.7	30.22	767.6	54	12.2	72	N	8	3.6		0	0			0	0	Clear	Magnetic Observatory
Windsor, N. S	29.87	758.7	29.97	761.2	53.0	11.7	86	S	1	0.4		0	6k			0	0	Fair	
Woodstock, Ontario	29.13	739.9	30.20	767.1	52.0	11.1	85	NW	2	0.9		5c	0	W		0	0	D. clouds	Prof. Wolverton.
Yarmouth, N. S.*	29.91	759.7	29.97	761.2	52	11.1	93	SW	1	0.4		0	0			0	0	Clear	Lt. F. E. Wilmot, R. N
SUB-SERIES.																			
St. Johns, Newfoundland	29.93	760.2	30.18	766.6	45	7.2	76	SE					10			0	0	Fair	John Delany.
St. Pierre, N. F			29.95	760.7	50.0	10.0		SW			1					0	0		N. F. Land, Comd't

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

Cape St. Francis Lt. House	29.81	757.2			62.0	16.7	54	WNW	20.2	9.0			10s			0	0	Overcast	John Duthie.
Cape Town, C. G. H. Obs'y	29.83	757.7	29.87	758.7	51.0	10.6		NW	0.8	0.4		5	5kjks;n			0.260	6.6		The Staff, for D. Gill.
Worcester*†	28.66	728.0			51.1	10.6	85	WNW			1	5	5			0.82	20.8		C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

SUB-SERIES.																			
Zi-Ka-Wei, near Shanghai	29.75	755.6	29.77	756.2	75.9	24.4	94	Calm	0	0			10n			0.008	0.2	Sprinkling	M. Marc Dechevrens, S.J

STATIONS.	Barometer. Corrected for instru'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	25.20	665.5	29.92	760.0	68.0	20.0	91	SE			1	10ck	8			0.43	11.	Cloudy	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.29	769.3	30.34	770.5	61.2	16.2	59	NW	16	7			9						Oversergent Fischer.
Fanöe	30.30	769.7	30.32	770.2	57.7	14.3	68	W			4		5						Overlœrer Lauridsen.
Godthaab, Greenland																			S. Kleinschmidt.
Stykkisholm, Iceland	29.26	743.1	29.30	744.2	52.5	11.4		SE			7		10					Raining	A. O. Thorlacius.
Thorshavn	29.79	756.7	29.83	757.6	47.8	8.8	92	SE	25	11			10					Raining	Overlœrer Bergh.
Vestervig	30.19	766.8	30.28	769.2	56.3	13.5	75	W			4		9						Locarer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.50	749.3	30.13	765.2	76.6	24.8	57	NW			1	ck	o			0.122	3.1		M. Labroue, Director.
Alençon Normal School	29.72	754.8	30.27	768.8	68.7	20.4	71	N			2		o			o	o	Clear	M. Nicot, Director.
Arras, Engineer School	29.99	761.7	30.24	768.1	70.7	21.5	47	ESE				o	k		E				M. Klein, Commandant.
Avignon, Normal School	30.02	762.6	30.10	764.6	87.1	30.6	41	N			1		o			o	o	Clear	M. Giraud, Director.
Bar-sur-Seine	29.63	752.5	30.16	766.1	75.2	24.0	56	ESE			1	o	8kn		E	0.071	1.8	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.98	761.6	30.24	768.2	68.5	20.3	46	ENE			1		5		WSW	o	o	Cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.27	743.5	30.09	764.3	72.9	22.7	76	ENE			1	o	cn		NE	0.63	16.		M. Gobin, Director.
Bordeaux, Observatory	29.87	758.7	30.13	765.2	76.5	24.7	60	NE			1		10			o	o	Covered	M. Rayet, Director.
Bourges, Normal School	29.69	754.0	30.22	767.7	80.6	27	43	NNE			1	c	o	NNE		o	o		M. Postel, Director.
Brest, Naval Observatory	30.00	762.1	30.25	768.3	74.5	23.6	66	Calm			o		3			0.039	1.0		M. de Rermaree, Dir.
Caen, Normal School	30.15	765.8	30.22	767.6	72.9	22.7	50	N			1		2		NE	o	o	Slightly cl'dy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.92	760.0	30.23	767.9	75.9	24.4	50	W			1		5		NW	0.020	0.5	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.73	755.1	30.23	767.9	77.4	25.2	87	SW			1					o	o		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.80	731.4	30.10	764.6	73.4	23.0	74	NE			1		5			0.311	7.9	½ covered	M. Allnard, Director.
Cluny, Normal School	29.33	745.0	30.15	765.8	78.4	25.8	67	NE			2		2		S	0.004	0.1		M. de Villemontée, Dir.
Commercy, Normal School	29.34	745.1	30.17	766.4	75.6	24.2	57	NE			3	o	2k		NE	o	o	Slightly cl'dy	Dr. Coulet, Director.
Gap, Normal School	27.67	702.8	30.07	763.8	82.8	28.2	39	S			1	o	k		W	o	o		M. Jeangirard, Director.
Gréasque, du. Rhone	29.07	738.4	30.21	767.4	90.9	32.7	32	SW			2		5		SW	o	o	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.35	745.6	30.08	764.0	82.0	27.8	58	WNW			1	o	cs			o	o		M. Ablard, Director.
Guéret, Normal School	28.59	726.2	30.11	764.7	74.1	23.4	62	SSE			1	o	kn		WNW	o	o		M. Rivoire, Director.
Lamballe, Normal School	29.95	760.6	30.21	767.4	69.8	21	67	E			2				E	o	o		M. Ollitrault, Director.
Lescar, Normal School	29.56	750.8	30.21	767.2	75.2	24	70	NW			1	c	o			1.244	31.6		M Chauvin, Director.
Lorient, Naval Observatory	30.15	765.7	30.25	768.3	73.8	23.2	58	S			1		o			o	o	Clear	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.11	739.5	30.14	765.5	76.8	24.9	56	E			1		5		SE	o	o	Cloudy	M. André, Director.
Mans, Normal School	29.93	760.1	30.22	767.7	70.3	21.3	50	NE			1		2		W	o	o	Slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	29.85	758.2	30.11	764.9	74.1	23.4	71	WNW			1		4		SSW	o	o		M. Stephan, Director.
Montlouis l'Instituteur	25.06	636.4	30.29	769.4	62.6	17.0	80	E	7.4	3.3			8		E	0.016	0.4	Rain & fog	M. Cave, for Dr. Fines.
Montpellier, Normal School	29.98	761.5	30.09	764.2	84.9	29.4	59	S			2		2		SW	o	o	Slightly cl'dy	M. P. Galzin, Director.
Nancy, Normal School	29.40	746.8	30.15	765.7	70.9	21.6	70	NW			1		2k		NW	0.138	3.5	Slightly cl'dy	M. Hasse.
Nantes, Observatory	30.06	763.5	30.22	767.6	77.0	25	47	NE			0–1		o			o	o		M. Larocque, Director.
Nice	30.08	764.0	30.11	764.8	81.7	27.6	47	SE			2		Haze	E	SE	o	o	Hazy	Capt. Boissière, Director.
Perpignan, Observatory	30.01	762.2	30.11	764.8	79.7	26.5	57	SE	5.6	2.5			7	NW	SW	o	o		Dr. Fines.
Pic-du-Midi, Plantade	22.74	577.7			55.9	13.3							10	NE	SW	0.327	8.3	Stormy	Gen'l de Nansouty, Dir.
Privas, Normal School	29.07	738.4	30.08	764.0	84.2	29	52	S			1		1	S	S	o	o	Clear	M. Taillieu.
Puy de Dôme Obs'y, Summit	25.38	644.7			56.5	13.6	95	SE			2		10			0.425	10.8	Foggy	M. Allnard, Director.
Rochefort, Naval Obs'y	30.13	765.3	30.16	766.1	80.6	27.0	52	NE			1		o			o	o	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.00	762.0	30.21	767.2	75.9	24.4	49	W			1		o			o	o	Clear	M. Mouillot, Director.
Rodez, Normal School	28.00	711.3	30.05	763.3	76.6	24.8	61	SW			1		10			0.091	2.3	Covered	M. Richard, Director.
Rouen, Normal School	30.15	765.8	30.24	768.0	73.4	23	48	NE			1		5		W	o	o	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	30.08	764.0	30.24	768.0	68.0	20	42	N			1		5		E	o	o	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.06	763.4	30.22	767.6	73.9	23.3	44	NE			1		1		SW	o	o		M. Renou, Director.
Toulouse, Observatory	29.46	748.3	30.19	766.8	76.6	24.8	83	SSE			1		10			0.059	1.5	Covered	M. Baillaud, Director.
Tours	29.98	761.6	30.18	766.6	76.3	24.6	48	E			2		2		S	o	o	¼ covered	M. de Tastes.
Versailles, Observatory	29.74	755.3	30.23	767.8	72.7	22.6	44	N			2					o	o		Dr. A. Bériguy, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.95	760.7	30.24	768.1	72.1	22.3	45	NNE			3		2	SW	WSW	o	o		M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.32	744.6	30.19	766.7	77.5	25.3	60	N			2	o	5k		NW	0.079	2.0		Prof. Dr. Hoh.
Berlin	30.11	764.7	30.27	768.9	75.2	24.0	41	N			1		5			o	o		Prof. Dr. Arndt.
Breslau	29.75	755.6	30.28	769.2	77.2	25.1	37	NE			2		8			o	o		Royal University Obs'y.
Carlsruhe	29.74	755.4	30.15	765.9	74.1	23.4	66	NE			1		1c	SW		0.016	0.4		Albert Senz.
Cassel	29.51	749.6	30.23	767.8	74.1	23.4	55	NNE			2		6	NE		o	o		Dr. H. Möhl.
Frankfort on the Main	29.91	759.6	30.20	768.7	65.8	18.8	75	NNE			1		10			0.059	1.5		Physical Society.
Friedrichshafen	28.73	729.7	30.11	764.7	75.7	24.3	68	SW			3		2	SW		0.252	6.4		Wilhelm, Chief Tel.
Hamburg	30.24	768.1	30.31	769.9	64.0	17.8	57	NNE			2		7			o	o		Dr. R. Kleeman.
Kiel	30.30	769.6	30.32	770.0	62.2	16.8	65	NW			2		9			0.008	0.2		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.84	757.9	30.25	768.4	72.1	22.3	56	NE			3		9			0.047	1.2		Prof. Dr. Bruhns.
Magdeburg	30.08	764.0	30.26	768.7	69.8	21.0	56	NNE			2	o	6k		SW	o	o		Dr. Assmann.
Memel	30.27	768.8	30.32	770.0	61.3	16.3	74	W			4		4cs						Reinbrecht & Issermann.
Munich	28.34	719.7	30.21	767.3	77.5	25.3	58	NE			2		o			0.370	9.4		Central Station.
Neufahrwasser	30.30	769.7	30.32	770.1	62.1	16.7	61	NE			2		5			o	o		A. Lothes.
Neustadt, Palatinate	29.63	752.7	30.16	766.1	73.0	22.8	65	N			2		10			0.031	0.8		Dicknether.
Stuttgart	29.20	741.6	30.05	763.2	78.8	26.0	62	W			3		8	W		0.539	13.7		Prof. Dr. Schoder.
Weissenburg, Bavaria	28.66	728.0	30.13	765.4	78.6	25.9	52	W			4		4	E		0.031	0.8		Prof. Kemlein.
Wustrow	30.30	769.5	30.32	770.2	61.2	16.2	68	W			4	o	5s			o	o		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r.	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.63	752.5	30.00	762.0	83.1	28.4		NE			4.0		0					Clear	Schmidt & Wourlisch.
INDIAN SERIES.																			
Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.55	750.6	29.60	751.8	88.9	31.6	80	SW	22.0	9.8		7		SW		0	0	Misty	
Deesa	29.14	740.0	29.59	751.6	96.0	35.8	43	S	15.9	7.1		5			S	0	0	D. clouds	
Bombay	29.73	755.2	29.77	756.1	83.8	28.8	81	WSW	8.0	3.6		10			WSW	1.40	35.6	Overcast	
Poona, Yarrowda	27.92	709.2	29.76	756.0	80.5	26.9	59	W	17.0	7.6		9			WSW	0.02	0.5	D. clouds	
Belgaum	27.28	693.0	29.83	757.6	74.0	23.3	77	SSW	10.0	4.5		9			SW	0	0	D. clouds	
Lahore	28.78	730.9	29.47	748.6	106.3	41.3	21	SW	4.0	1.8		0				0	0	Blue sky	
Roorkee	28.62	727.0	29.48	748.8	99.9	37.7	34	NW	3.5	1.6		9				0	0	Misty	
Agra	28.98	736.1	29.51	749.6	105.1	40.6	29	W	7.0	3.1		2			W	0	0		
Nagpur	28.59	726.2	29.60	751.9	92.4	33.6	44	W	4.0	1.8		9			W	0	0	Gloomy	
Jubbulpore	28.28	718.3	29.58	751.4	97.1	36.2	28	N	3.2	1.4		10				0	0	Overcast	
Lucknow	29.19	741.5	29.56	750.8	92.6	33.7	55	NNE	4.1	1.8		0				0	0	Blue sky	
Allahabad	29.22	742.2	29.52	749.7	99.7	37.6	42	NE	2.2	1.0		0				0	0	Blue sky	
Patna	29.39	746.6	29.57	751.1	83.2	28.4	91	NE	6.0	2.7		6		NE	NE	0.41	10.4	D. clouds	
Hazaribagh	27.57	700.2	29.54	750.4	81.8	27.7	79	SE	11.3	5.0		10			SE	0	0		
Cuttack	29.53	750.0	29.61	752.1	86.3	30.2	77	Calm	0.9	0.4		10				0.44	11.2	Overcast	
Calcutta, Alipore	29.57	751.1	29.59	751.7	80.2	26.8	91	SE	3.0	1.3		10				0	0	Overcast	
Dhubri	29.53	750.0	29.65	753.0	78.5	25.8	91	Calm	2.1	0.9		5		W		0.03	0.8	D. clouds	
Chittagong	29.59	751.6	29.68	753.9	78.9	26.1	91	ESE	4.1	1.8		8				0.05	1.3	D. clouds	
Sibsagar	29.29	744.0	29.62	752.4	84.9	29.4	84	NE	2.8	1.2		10		SW	SW	0	0	D. clouds	
Zanzibar, Africa			30.06	763.5	83.6	28.7	60	SE	5	2.2		8				0	0	D. clouds	
ITALIAN SERIES.																			
By authority of the Minister of Agriculture, Industry and Commerce.																			
Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.70	754.4	30.10	764.4	89.2	31.8	45	S	0.7	0.3			1			0	0		Prof. Giovanni Clodig.
Milan	29.61	752.0	30.10	764.5	89.2	31.8	41	SSE	3.8	1.7			8	WSW		0	0		Prof. Schiaparelli.
Padua	29.97	761.1	30.07	763.8	88.2	31.2	46	SE	3.8	1.7			1	SW		0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.25	743.0	30.13	765.2	81.7	27.6	48	N	1.3	0.6			9	NE		0	0		Prof. P. F. Denza.
Genoa	29.95	760.8	30.14	765.5	82.4	28.0	40	SW	1.8	0.8			2			0	0		Prof. G. M. Garibaldi.
Mondovi	28.29	718.6	30.13	765.4	80.8	27.1	43	NE			4		8	SW		0	0		Prof. D. C. Bruno.
Pesaro	30.06	763.6	30.11	764.8	79.9	26.6	57	NW					0			0	0		Prof. Luigi Guidi.
Florence	29.83	757.6	30.07	763.8	93.2	34.0	34	W			2		6			0	0		Prof. Costantino Pitter.
Leghorn	30.02	762.6	30.11	764.7	82.9	28.3	56	WSW	1.8	0.8			0			0	0		Prof. P. Monte.
Rome	29.90	759.5	30.07	763.8	92.7	33.7	38	SW	10.5	4.7			0			0	0		Prof. P. S. Ferrari.
Lecce	29.81	757.2	30.05	763.3	84.9	29.4	37	NNW	12.5	5.6			0			0	0		Prof. C. de Giorgi.
Cosenza	29.19	741.3	30.04	762.9	88.9	31.6	67	SW	1.8	0.8			1	SW		0	0		Prof. D. Conti.
Cagliari					80.1	26.7	39	SSE			2		1			0	0		Prof. A. Pacinotti.
Palermo	29.85	758.1	30.09	764.3	79.9	26.6	46	ENE	2.5	1.1			0			0	0		Prof. G. Ciaccatore.
Syracuse	29.97	761.1	30.01	762.2	83.3	28.5	46	SE	9.4	4.2			2	W		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.54	750.2	30.03	762.8	84.6	29.2	66	SE	0	0			1	N		0	0		Prof. F. Brioschi.
Stelvio	22.52	572.0			55.6	13.1	43	SW			4	0	58		SW	0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.55	572.8			54.7	12.6	71	E			1		10	SE		0	0	Covered	Prof. P. F. Denza.
JAPANESE SERIES.																			
Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y †..	29.96	761.0	29.97	761.2	65.6	18.7	99	WSW	4.6	2.1			10n			1.377	35.0	Light rain	K. Sasaki.
Kioto	29.79	756.6	29.96	761.0	73.0	22.8	80	SSE	0.7	0.3			10s			1.110	28.2	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.67	753.6	29.87	758.7	67.6	19.8	93	E	8.3	3.7			10n			0.870	22.1	Light rain	S. Takehayashi.
Tokei Obs'y, Yeddo	29.94	760.5	30.01	762.2	71.0	21.7	86	SSW	5.4	2.4		0	1s			0	0	Clear	The Staff.
Wakayama	29.94	760.5	29.99	761.7	73.0	22.8	75	S	7.6	3.4			10n		S	0.368	9.4	Raining	Y. Kuwamuca.
MAURITIUS SERIES.																			
Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	30.03	762.7	30.22	767.6	73.5	23.1	65	ESE	17.0	7.6		0	4		SE	0.01	0.3	Squally	A. N. Figon.
MEXICAN SERIES.																			
By authority of the Secretary of Public Works.																			
Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.37	619.0	29.97	761.3	64.6	18.1	78	SW			1	5c	0	SW		0.095	2.4	½ cloudy	Prof. M. Leal.
Mazatlan	29.65	753.1	29.91	759.6	80.0	26.7	78	E	0.9	0.4		0	4cn		ESE	0	0	½cloudy	F. Quijano, U. E.
Mexico, Central Obs'y	23 12	587.3	30.02	762.5	59.0	15.0	86	Calm	0	0		8ck	0			0.047	1.2	Cloudy	The Staff.
Pabellon, Aguascallentes	23.95	608.4	29.87	758.6	65.7	18.7	87	WNW			1	2c	0			0	0	Clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.47	596.3	30.19	766.9	57.0	13.9	55	Calm	0	0		0	7		SE	0.178	4.5	Cloudy	Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.58	573.6	30.15	765.7	58.5	14.7	62	WSW	0.9	0.4		1c	0			0.315	8.0	Clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES.																			
Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.29	769.4	30.29	769.4	72.0	22.2		ESE			3					0	0		
Groningen	30.27	768.8	30.32	770.2	64.2	17.9		NE			2					0	0		
Helder	30.29	769.3	30.29	769.3	61.7	16.5		NE			2					0	0		
Hellevoetsluis	30.29	769.3	30.29	769.3	68.4	20.2	62	E			1					0	0		
Utrecht	30.26	768.6	30.31	769.8	69.3	20.7	50	ENE			2		5			0	0	Cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	Observers.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES.																			
Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.15	765.9	30.22	767.5	51.4	10.8	54	W	11.6	5.2			5			0	0		
Christiania	29.94	760.5	30.08	764.1	70.7	21.5	41	SSW	4	2			4			0	0		
Gjæsvær	29.68	753.9	29.71	754.5	37.4	3.0		W			7		10						
Lodingen	29.95	760.8	30.00	762.0	38.5	3.6	75	WSW			5		7			0.079	2.0		
PORTUGUESE SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.10	764.5	30.11	764.9	67.6	19.8	98	SSW	7.4	3.3			8			0.059	1.5		Dr. J. A. Sampaio.
Campo Major	29.05	737.8	30.01	762.3	77.0	25.0	37	W	6.3	2.8			9			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.16	766.0	30.24	768.2	72.3	22.4	49	NE	1.8	0.8			8			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.75	755.7	30.11	764.7	70.0	21.1	51	NW	11.2	5.0			2			0	0		The Staff.
Ponta Delgada, Azores	30.24	768.1	30.31	769.9	70.2	21.2	80	SW	5.6	2.5			10			0	0		
RUSSIAN SERIES.																			
Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.54	724.8	29.57	751.1	64.8	18.2	38	SW	13	6			9n						Capt. Lasarew.
Archangel	29.76	756.0	29.78	756.5	69.8	21.0	62	SSW	9	4			10					Raining	Capt. Sseliwerstow.
Astrakhan	30.06	763.4	29.97	761.3	63.9	17.7	95	S	2	1			10n			Blank		Heavy cl'ds	Capt. Wisganow.
Barnaul	29.20	741.6	29.69	754.0	54.3	12.4	91	W	18	8			10						Meteorological Obs'y.
Dorpat	29.88	759.0	30.12	765.0	72.0	22.2	56	WNW	4	2			0						Observatory.
Ekaterinburg	28.93	734.7	29.88	758.9	53.8	12.1	55	N	4	2			10						Meteorological Obs'y.
Kasan	29.69	754.2	29.95	760.6	77.0	25.0	38	NNW	2	1		9ck	0						Observatory.
Kertch	30.08	764.0	30.10	764.5	78.8	26.0	60	Calm	0	0			0						Lagorio & Sastyrez.
Kieff	29.46	748.3	30.06	763.4	85.8	29.9	36	WNW	9	4		c;ck	7ks						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.80	756.8	29.99	761.7	82.8	28.2	40	SSW	13	6			6			Blank			Meteorological Obs'y.
Moscow	29.49	749.1	30.01	762.2	79.9	26.6	56	Calm	0	0			0						Meteorological Obs'y.
Nertchinsk	27.72	704.0	29.98	761.4	52.5	11.4	87	Calm	0	0			5			0.213	5.4		Meteorological Obs'y.
Nikolaiev	30.10	764.4	30.17	766.2	86.7	30.4	43	NE	4	2		0	7kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.85	758.2	29.94	760.4	53.8	12.1	74	Calm			0	1ck	0			0	0		Lieut. Iwanow.
Pekin, China	29.56	750.9	29.71	754.5	76.3	24.6	58	NE	7	3		0	5k					Thund'rst'm	Physical Observatory.
St. Petersburg	30.03	762.7	30.04	763.1	63.9	17.7	61	WNW	16	7		cs	1k						Central Physical Obs'y.
Tashkend, Laboratory	28.38	720.9	29.86	758.5	81.9	27.7	45	Calm	0	0			0						Teich, A. M.
Tiflis	28.65	727.6	29.98	761.6	84.6	29.2	32	SE	4	2		0	2k						Physical Observatory.
Warsaw	29.81	757.2	30.22	767.6	73.4	23.0	47	NNE	7	3		0	6cks						Astronomical Obs'y.
Wilna	29.78	756.3	30.18	766.6	73.8	23.2	47	NW	4	2			2					Light clouds	Berg, Assistant.
Yeniseisk	29.46	748.3	29.73	755.2	76.5	24.7	46	Calm	0	0			0						M. O. Marks.
SCOTTISH SERIES.																			
Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.13	765.3	60.1	15.6	54	SW			3	0	9k			0.08	2.0	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			29.82	757.4	55	12.8	93	SSE			7		10					Raining	J. Youngclause.
North Unst, Shetland Isl'ds			30.13	765.3				S			4		Hz						Robert Burnet.
SPANISH SERIES.																			
Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.98	761.4	30.08	764.1	72.0	22.2	78	ESE	3.4	1.5			6			0	0	Hazy	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.07	763.8	30.13	765.2	79.2	26.2	64	E	1.6	0.7		2	5	SE		0.067	1.7	Cloudy	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.19	690.6			69.1	20.6	62	NE	9.4	4.2			4			0.039	1.0	Cloudy	Domingo Martin.
Madrid, Royal Obs'y	27.85	707.5	29.98	761.5	79.5	26.4	57	NE	15.7	7.0		0	8			0.150	3.8	Stormy	The Staff.
Murcia, Met. Obs'y	29.89	759.1	30.03	762.8	77.5	25.3	66	ENE	6.0	2.7		5	5			0	0	Hazy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.17	741.0	30.04	762.9	73.8	23.2	64	NE	2.2	1.0		2	3			0	0	Cloudy	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.98	761.5	30.05	763.2	82.0	27.8	78	ESE	3.6	1.6		1c	1ck	N	W	0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.83	757.6	29.88	758.9	82.4	28.0	84	E	6.6	3.0			10			0.05	1.5	Raining	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.01	762.2	30.11	764.7	74.8	23.8	59	SSW	6.1	2.7		0	2		SW	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.03	762.8	30.12	765.1	81.3	27.4	94	SE	5.6	2.5		4ks	4k	SE	SE	0.110	2.8	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.78	756.3	29.92	760.0	85.0	30.0	65	SSW	5.6	2.9		0	7kn		S	0	0	Cloudy	José L. Fastovra.
SWEDISH SERIES.																			
Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Raparanda	29.89	759.1	29.93	760.1	55.8	13.2	33	NW			4		8			0	0		
Umea	30.02	762.6	30.08	763.9	61.5	16.4	32	NW			6		2			0	0		
Hernosand	30.09	764.3	30.14	765.6	60.3	15.7	29	NNW			2		0			0.004	0.1		
Stockholm	29.97	761.2	30.15	765.7	65.5	18.6	59	W			4		2			0.031	0.8		
Wisby	30.07	763.8	30.13	765.3	60.8	16.0	73	W			4		0			0.083	2.1		
Sub-Series.																			
Upsala	29.93	760.3	30.02	762.5	60.4	15.8	59	NE	9.6	4.3			9		W	0	0		S. G. Fineman.
SWISS SERIES.																			
Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.74	730.1	30.11	764.8	74.5	23.6	59	N			2		3			0	0		The Observatory.
Zurich	28.55	725.2	30.11	764.9	75.6	24.8	69	SW			1		4			0.181	4.6	Lightly cl'dy	The Observatory.
TURKISH SERIES.																			
Furnished by the co-operation of A. Comnbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.07	763.8	72.7	22.6	69	NE	22	10.0			6		NE	0	0		The Observatory.
Valona			30.17	766.4	83.3	28.5		SW			1		0			0	0	Clear	A. Bertraud.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.82	757.3	81.0	27.2	69	N			1		0			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	BAROMETER. Corrected for instru'm'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.07	763.8	30.15	765.8	61	16.1	61	N	4	1.8		Hz	Hz			0	0	Light haze	
Alpena, Michigan	29.56	750.8	30.22	767.6	50.3	10.2	72	W	5	2.2		2cs	5s	NW		0	0	Fair	
Atlanta, Georgia	28.92	734.6	30.07	763.8	78.5	25.8	65	S	6	2.7		0	0			0	0	Clear	
Atlantic City, New Jersey	30.13	765.3	30.14	765.5	58	14.4	70	N	10	4.5		0	Hz			Inap.	Inap.	Clear	
Augusta, Georgia	29.92	760.0	30.10	764.5	73.8	23.2	76	SE	2	0.9		0	0			0	0	Clear	
Baltimore, Maryland	30.16	766.1	30.21	767.3	62	16.7	51	NW	3	1.3		0	Hz			0	0	Clear	
Barnegat, New Jersey	30.10	764.5	30.12	765.0	57	13.9	81	N	14	6.3		0	0			0.44	11.2	Clear	
Bismarck, Dakota	28.25	717.5	29.99	761.7	55	12.8	93	NW	12	5.4			10s		Calm	Inap.	Inap.	Cloudy	
Boise City, Idaho	27.09	688.1	29.85	758.2	57.3	14.1	63	W	4	1.8		5k	0	W		0	0	Fair	
Boston, Massachusetts	29.92	760.0	30.07	763.8	56.8	13.8	63	NW	7	3.1		0	0			0	0	Clear	
Brackettville, Texas	28.76	730.5	29.76	755.9	80	26.7	59	E	8	3.6		0	0			0	0	Clear	
Brownsville, Texas	29.82	757.4	29.86	758.4	85	29.4	79	S	4	1.8		5c	0			0	0	Clear	
Buffalo, New York	29.49	749.0	30.18	766.6	54.5	12.5	72	NE	1	0.4		0	Sk			0	0	Fair	
Burlington, Vermont	29.82	757.4	30.10	764.5	59.5	15.3	74	W	3	1.3		0	0			0	0	Dense smoke	
Cairo, Illinois	29.72	754.9	30.11	764.8	65	18.3	84	NE	4	1.8			10s		W	Inap.	Inap.	Clear	
Campo, California	27.35	694.7	29.92	760.0	40	4.4	65	S	3	1.3		0	0			0	0	Cloudy	
Camp Thomas, Arizona	27.17	690.1			55.8	13.2	50	Calm			0	2ck	0			0	0	Clear	
Cape Henry, Virginia	30.13	765.3	30.15	765.8	65	18.3	78	S	3	1.3		c	2ks			0	0	Clear	
Cape May, New Jersey	30.12	765.0	30.15	765.8	61	16.1	66	N	12	5.4		0	0			0	0	Clear	
Castroville, Texas	29.16	740.7	29.83	757.7	80	26.7	74	SE	2	0.9			10s		S	0	0	Cloudy	
Cedar Keys, Florida	30.02	762.5	30.04	763.0	78	25.6	86	NE	7	3.1		5c	Hz			0.45	11.4	Fair	
Champaign, Illinois	29.30	744.2	30.10	764.5	56.5	13.6	81	SE	5	2.2		0	0			0	0	Clear	
Charleston, S. Carolina	30.06	763.5	30.12	765.0	80	26.7	59	E	8	3.6		0	0			0	0	Clear	
Charlotte, N. Carolina	29.24	742.7	30.10	764.5	71.0	21.7	66	S	6	2.7			10s		SW	0	0	Cloudy	
Chattanooga, Tennessee	29.27	743.4	30.07	763.8	70	21.1	75	N	2	0.9		10s	0	Calm		0	0	Clear	
Cheyenne, Wyoming	24.17	613.9	29.98	761.5	49.2	9.6	78	SW	4	1.8		0	0			0	0	Clear	
Chicago, Illinois	29.45	748.0	30.13	765.3	56.2	13.4	70	NE	4	1.8		5ck	0	N		0	0	Fair	
Chincoteague, Virginia	30.12	765.0	30.14	765.5	65	18.3	78	N	13	5.8		8k	0	N		0	0	Cloudy	
Cincinnati, Ohio	29.51	749.5	30.15	765.8	63	17.2	78	E	2	0.9		7ck	Fg	W		0	0	Fair	
Cleveland, Ohio	29.48	748.8	30.20	767.1	51	10.6	72	SE	7	3.1		5c	0	W		0	0	Fair	
Coleman City, Texas	28.14	714.7	29.72	754.9	75	23.9	68	S	3	1.3		1c	0	W		0	0	Clear	
Columbus, Ohio	29.33	745.0	30.15	765.8	58	14.4	64	E	5	2.2		c	0			0	0	Clear	
Concho, Texas	28.05	712.5	29.93	760.2	92	33.3	80	S	4	1.8		2c	0			0	0	Fair	
Corsicana, Texas	29.54	750.3	30.00	762.0	78	25.6	78	Calm	0	0		0	0			0	0	Clear	
Davenport, Iowa	29.49	749.0	30.13	765.3	59	15.0	70	E	4	1.8		8cs	0	Calm		0	0	Fair	
Dayton, Washington T'y	28.23	717.0	29.98	761.5	63.4	17.4	57	SW	4	1.8		5k	0	Calm		0.01	0.3	Fair	
Deadwood, Dakota	25.53	648.5	30.08	764.0	42	5.6	74	SW				0	0			0	0	Clear	
Decatur, Texas	28.81	731.8	29.91	759.7	81	27.2	60	SE	6	2.7		0	0			0	0	Clear	
Delaware Breakwater, Del.	30.14	765.5	30.16	766.1	61	16.1	71	N	16	7.2		1c	0	W		0	0	Clear	
Denison, Texas	29.18	741.2	29.96	761.0	83	28.3	71	SE	4	1.8		5cs	0	Calm		0	0	Clear	
Denver, Colorado	24.88	631.9	29.95	760.7	59.2	15.1	70	SE	3	1.3		0	0			0	0	Fair	
Des Moines, Iowa	29.15	740.4	30.03	762.7	63	17.2	78	S	3	1.3		0	0			0	0	Clear	
Detroit, Michigan	29.50	749.3	30.17	766.3	51.2	10.7	79	N	8	3.6		0	0			0.02	0.5	Clear	
Dodge City, Kansas	27.48	698.0	29.97	761.2	65.2	18.4	99	E	9	4.0			10s;1g			0	0	Clear	
Dubuque, Iowa	29.41	747.0	30.09	764.3	61	16.1	65	SE	6	2.7		5k	Hz	SW	Calm	0.01	0.3	Cloudy	
Duluth, Minnesota	29.36	745.7	30.04	763.0	48	8.9	93	NE	8	3.6			10s;1g		NE	0	0	Fair	
Eagle Pass, Texas	29.15	740.4	29.96	761.0	78.4	25.8	78	SE	4	1.8		0	0			0.30	7.6	Cloudy	
Eagle Rock, Idaho	25.29	642.4	30.00	762.0	48	8.9	56	N	11	4.9		0	0			0	0	Clear	
Eastport, Maine	29.92	760.0	29.98	761.5	56	13.3	64	Calm	0	0			10s			0	0	Clear	
El Paso, Texas	26.15	664.2	29.80	756.9	65	18.3	26	W	1	0.4		1c	1s	W		0	0	Cloudy	
Erie, Pennsylvania	29.47	748.5	30.18	766.6	56	13.3	75	SE	4	1.8		1c	0			0	0	Clear	
Escanaba, Michigan	29.51	749.5	30.15	765.8	53	11.7	80	S	3	1.3			10s		Calm	0	0	Fair	
Florence, Arizona	28.35	720.1	29.95	760.7	62	16.7	36	W	2	0.9		0	0			0	0	Cloudy	
Fort Apache, Arizona	25.04	636.0	29.82	757.4	45	7.2	18	NE	3	1.3		0	Sk		Calm	0	0	Clear	
Fort Assinnaboine, Montana																		Dense smoke	
Fort Bennett, Dakota	28.49	723.6	29.96	761.0	57	13.9	81	Calm	0	0		0	0			0	0	Clear	
Fort Benton, Montana	27.24	691.9	29.98	761.5	56	13.3	63	SE	6	2.7		0	0			0	0	Clear	
Fort Buford, Dakota	28.14	714.7	30.06	763.5	52	11.1	86	NE	4	1.8		10cs	0	NE		0.14	3.6	Cloudy	
Fort Custer, Montana	26.95	684.5	30.04	763.0	50	10.0	86	NW	4	1.8		0	0			0	0	Clear	
Fort Davis, Texas	25.20	640.1	30.16	766.1	72	22.2	46	W	9	4.0		5c	0			0	0	Fair	
Fort Elliott, Texas	27.24	691.9	30.31	769.9	67	19.4	66	NE	12	5.4		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.49	749.0	30.02	762.5	66	18.9	100	S	4	1.8			10n		Calm	1.10	27.9	Light rain	
Fort Griffin, Texas					68	20.0	10	E	4	1.8		5ck;k	0			0	0	Fair	
Fort Keogh, Montana	28.67	728.2	29.87	758.7	81.2	27.3	52	SE	4	1.8		0	0			0	0	Clear	
Fort Macon, North Carolina	27.62	701.5	30.04	763.0	48	8.9	92	Calm	0	0		0	0			0	0	Clear	
Fort McKavett, Texas	30.11	764.8	30.12	765.0	68	20.0	79	NE	11	4.9		2c	0	Calm		0	0	Clear	
Fort Missoula, Montana	27.69	703.3	29.52	749.8	73.1	22.8	76	SW	9	4.0		7cs	0			0	0	Fair	
Fort St. Michaels	26.72	678.7	30.10	764.5	51	10.6	86	SW	2	0.9		0	0			0	0	Clear	
Fort Shaw, Montana	29.67	753.6	29.70	754.4	53	11.7	73	NE	17	7.6			10ks		NE	0	0	Cloudy	
Fort Sill, Indian Territory	26.41	670.8	29.86	758.4	47	8.3	92	W	4	1.8		2cs	0			0	0	Clear	
Fort Stevenson, Dakota	28.77	730.7	29.98	761.5	78	25.6	78	NE	12	5.4		2k	0	NW		0	0	Fair	
Fort Verde, Arizona																			
Fredericksburg, Texas					57.9	14.4	22	W			1	0	0			0	0	Clear	
Galveston, Texas	28.24	717.3	29.72	754.9	74	23.3	90	SW	5	2.2			10ks		SW	0	0	Cloudy	
Grand Haven, Michigan	29.91	759.7	29.96	761.0	86	30.0	80	S	3	1.3		0	5ks		S	0	0	Fair	
Hatteras, North Carolina	29.50	749.3	30.16	766.1	57	13.9	69	E	4	1.8		0	0			0	0	Clear	
Helena, Montana	30.12	765.0	30.14	765.5	67	19.4	89	NE	12	5.4		5c	5ks			0	0	Cloudy	
Henrietta, Texas	25.82	655.8	30.02	762.5	52	11.1	60	Calm	0	0		2k	0	Calm		0	0	Fair	
Indianapolis, Indiana	28.96	735.6	29.82	757.4	85	29.4	64	SE	7	3.1		2ck	0	W		0	0	Clear	
Indianola, Texas	29.32	744.7	30.10	764.5	66	18.9	66	S	2	0.9		7k	0	SW		0	0	Fair	
Jacksboro, Texas	29.93	760.2	29.96	761.0	82.4	28.0	87	SE	4	1.8		2c	2ks;hz	S	SE	0	0	Dense haze	
Jacksonville, Florida	28.81	731.8	29.87	758.7	79	26.1	66	E	2	0.9		1ck	0	N		0	0	Clear	
Keokuk, Iowa	30.02	762.5	30.04	763.0	81	27.2	78	NE	4	1.8		5k	0	NE		0	0	Fair	
Key West, Florida	29.42	747.3	30.06	763.5	58.0	14.4	84	E	7	3.1			10s		E	0	0	Cloudy	
Kittyhawk, North Carolina	30.01	762.2	30.04	763.0	82.8	28.2	81	SW	6	2.7		5cs;k	2s	SW		0	0	Fair	
Knoxville, Tennessee	30.14	765.5	30.16	766.1	68	20.0	74	NE	6	2.7		2ck	0	NE		0	0	Fair	
La Crosse, Wisconsin	29.10	739.1	30.10	764.5	67	19.4	74	Calm	0	0		0	4s		Calm	0	0	Fair	
La Mesilla, New Mexico	29.27	743.4	29.99	761.7	66	18.9	69	SE	10	4.5		2k	2s	W		0.02	0.5	Fair	
Laredo, Texas	26.04	661.4	30.19	766.8	62.0	16.7	18	NW	1	0.4		2c	0			0	0	Fair	
Leavenworth, Kansas	29.44	747.8	29.76	755.9	79	26.1	82	SE	2	0.9		0	0			0	0	Clear	
Lewiston, Idaho	29.21	741.9	30.08	764.0	66	18.9	79	NE	3	1.3			10s		SE	Inap	Inap.	Cloudy	
Little Rock, Arkansas	29.08	738.6	29.91	759.7	66	18.9	48	E	1	0.4			10s		Calm	0.01	0.3	Cloudy	
Los Angeles, California	29.71	754.6	30.02	762.5	69	20.6	90	NE	2	0.9			10ks		S	0	0	Cloudy	
Louisville, Kentucky	29.53	750.0	29.90	759.4	62.3	16.8	88	S	1	0.4			10s		Calm	0	0	Cloudy	
Lynchburg, Virginia	29.54	750.3	30.09	764.3	64.0	17.8	68	NE	5	2.2		5c	0			0	0	Fair	
Madison, Wisconsin	29.48	748.8	30.15	765.8	69	20.6	48	Calm	0	0		5k	0	W		0	0	Fair	
Marquette, Michigan	29.12	739.6	30.10	764.5	56	13.3	81	SE	7	3.1		2cs	0	W		0	0	Fair	
Mason, Texas	29.44	747.8	30.15	765.8	47	8.3	92	SE	3	1.3			10n		Calm	0.10	2.5	Light rain	
Memphis, Tennessee	28.32	719.3	29.98	761.5	78.4	25.8	82	S	5	2.2		0	1ks		S	0	0	Clear	
Milwaukee, Wisconsin	29.75	755.6	30.08	764.0	67	19.4	79	NE	4	1.8		9cs	1s	Calm	W	0.01	0.3	Cloudy	
	29.42	747.3	30.15	765.8	50	10.0	79	NE	1	0.4			10s		NW	0	0	Cloudy	

JUNE 24, 1881.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.93	760.2	30.00	762.0	81	27.2	77	NE	4	1.8		1cs	Hz			0	0	Clear	
Montgomery, Alabama	29.82	757.4	30.04	763.0	78.1	25.6	77	SE	4	1.8		5k	0	NW		0	0	Fair	
Moorhead, Minnesota	28.97	735.8	29.93	760.2	57	13.9	94	NW	3	1.3			1os		NW	0.67	17.0	Cloudy	
Morgantown, W. Virginia	29.19	741.4	30.18	766.6	53	11.7	86	Calm	0	0			Fg			0	0	Dense fog	
Mt. Washington, N. H.	23.85	605.8	29.88	758.9	34	1.1	90	N	13	5.8		5k	0	N		0	0	Fair	
Nashville, Tennessee	29.55	750.6	30.07	763.8	68.2	20.1	61	NE	2	0.9		5cs	0			0	0	Fair	
New Haven, Connecticut	29.98	761.5	30.09	764.3	61	16.1	55	N	6	2.7		0	Hz			0	0	Clear	
New London, Connecticut	30.06	763.5	30.10	764.5	64	17.8	58	NE	4	1.8		0	0			0	0	Clear	
New Orleans, Louisiana	29.93	760.2	29.98	761.5	84.0	28.9	71	S	1	0.4		0	Sk			0	0	Clear	
Newport, Rhode Island	30.02	762.5	30.07	763.8	63.3	17.4	61	N	6	2.7		0	0			0	0	Clear	
New River, N. Carolina					67	19.4	79	NE			1	0	0					Clear	
New Shoreham, Rhode I'd	30.05	763.3	30.08	764.0	59.5	15.3	70	N	10	4.5		0	Hz		Calm	0	0	Clear	
New York, New York	29.97	761.2	30.14	765.5	58	14.4	64	N	6	2.7		0	Hz			0	0	Clear	
Norfolk, Virginia	30.12	765.0	30.16	766.1	68	20.0	70	NW	2	0.9		0	5ks			0	0	Fair	
North Platte, Nebraska	27.17	690.1	29.99	761.7	60	15.6	88	NW	4	1.8		0	0			0	0	Clear	
Olympia, Washington T'y	29.96	761.0	30.00	762.0	57.0	13.9	87	S	4	1.8			1os		W	Inap	Inap.	Cloudy	
Omaha, Nebraska	28.92	734.6	30.06	763.5	70.9	21.6	71	S	6	2.7		0	8ks		SW	0	0	Cloudy	
Oswego, New York	29.84	757.9	30.16	766.1	54.0	12.2	87	W	2	0.9		0	0			0	0	Clear	
Pensacola, Florida	29.98	761.5	30.01	762.2	84	28.9	83	S	12	5.4		0	5ks		W	0.14	3.6	Fair	
Philadelphia, Pa	30.11	764.8	30.17	766.3	57.3	14.1	63	N	9	4.0		0	Fg			0	0	Clear	
Phœnix, Arizona	28.72	729.5	30.48	774.2	65	18.3	49	SE	2	0.9		0	0			0	0	Clear	
Pike's Peak, Colorado	18.01	457.4	30.22	767.6	37	2.8	53	SW	4	1.8		0	0			0.07	1.8	Clear	
Ploche, Nevada	24.00	609.6	29.85	758.2	60	15.6	15	S	7	3.1		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.39	746.5	30.18	766.6	51	10.6	79	NW	2	0.9		0	0			0	0	Clear	
Port Eads, Louisiana	30.00	762.0	30.01	762.2	83.1	28.4	91	S	8	3.6		1k	Hz	S	Calm	Inap.	Inap.	Clear	
Port Huron, Michigan	29.53	750.0	30.19	766.8	52.5	11.4	73	NE	2	0.9		5c	0	W		0	0	Fair	
Portland, Maine	29.99	761.7	30.04	763.0	59	15.0	70	NW	6	2.7		2ck	2s	NW	Calm	0	0	Fair	
Portland, Oregon	29.98	761.5	30.05	763.3	57.7	14.3	80	SE	1	0.4		2k	2ks	W;SW	SW	0	0	Fair	
Portsmouth, N. Carolina					68	20.0	79	NE	13	5.8		5ck	0	NE		0	0	Fair	
Prescott, Arizona	24.77	629.1	29.84	757.9	48	8.9	29	SW	2	0.9		0	0			0	0	Clear	
Punta Rassa, Florida	30.00	762.0	30.01	762.2	84.5	29.2	75.5	W	10	4.5		2c	5ks	Calm	SW	0	0	Fair	
Red Bluff, California	29.51	749.5	29.84	757.9	68.5	20.3	45	Calm	0	0		0	0			0	0	Clear	
Rio Grande City, Texas	29.71	754.6	29.92	760.0	78	25.6	82	SE	6	2.7		5c	0	Calm		0	0	Fair	
Rochester, New York	29.56	750.8	30.18	766.6	53	11.7	86	W	6	2.7		1cs	Hz	Calm		0	0	Clear	
Roseburg, Oregon	29.51	749.5	30.07	763.8	50.6	10.3	89	Calm	0	0		0	0			0	0	Clear	
Sacramento, California	29.80	756.9	29.87	758.7	59.9	15.5	65	SE	8	3.6		0	0			0	0	Clear	
St. Louis, Missouri	29.51	749.5	30.09	764.3	64.0	17.8	78	E	3	1.3		10cs	0			0	0	Cloudy	
St. Paul, Minnesota	29.13	739.9	29.97	761.2	60	15.6	88	N	2	0.9			10ks		Calm	0.05	1.3	Cloudy	
Salt Lake City, Utah	25.59	650.0	29.79	756.7	60	15.6	29	Calm	0	0		7k	0	SW		0	0	Fair	
San Antonio, Texas	29.26	743.2	29.95	760.7	75.1	23.9	90	Calm	0	0		1c	1s	Calm	Calm	0	0	Fair	
San Diego, California	29.78	756.4	29.85	758.2	60.8	16.0	82	SE	5	2.2			1os			0	0	Cloudy	
Sandusky, Ohio	29.51	749.5	30.17	766.3	59	15.0	65	SE	6	2.7		0	Hz			0	0	Clear	
Sandy Hook, New Jersey	30.09	764.3	30.12	765.0	58.5	14.7	73	N	15	6.7		0	0			0	0	Clear	
San Francisco, California	29.89	759.2	29.96	761.0	51	10.6	93	W	28	12.5		0	1s;fg		W	0	0	Fair	
Santa Fé, New Mexico	23.36	593.3	29.87	758.7	60	15.6	55	NE	4	1.8		0	0			0	0	Clear	
Savannah, Georgia	30.00	762.0	30.09	764.3	80	26.7	68	SE	4	1.8		0	0			0	0	Clear	
Shreveport, Louisiana	29.78	756.4	30.01	762.2	78	25.6	78	NE	4	1.8		0	5s			0	0	Fair	
Silver City, New Mexico	24.28	616.7	29.74	755.4	65	18.3	6	N	6	2.7		0	0			0	0	Clear	
Sitka, Alaska	29.77	756.1	29.84	757.9	50	10.0	86	Calm	0	0		0	0			0	0	Clear	
Smithville, North Carolina	30.08	764.0	30.11	764.8	74	23.3	59	NE	7	3.1		1k	0			0	0	Clear	
Spokane Falls, Wash. Ter.	27.92	709.2	29.88	758.9	56	13.3	80	S	2	0.9		10ck	0			0	0	Cloudy	
Springfield, Illinois	29.43	747.5	30.09	764.3	69.5	20.8	82	E	6	2.7		1c	0	W		0	0	Clear	
Springfield, Massachusetts	29.98	761.5	30.11	764.8	64.2	17.9	48	N	5	2.2		1ck	0	N		Inap.	Inap.	Clear	
Stockton, Texas	26.89	683.0	29.88	758.9	74.5	23.6	68	SE	8	3.6		2c	5s	SE	SE	0	0	Fair	
St. Vincent, Minnesota	29.18	741.2	30.02	762.5	55	12.8	87	NE	4	1.8			1os		Calm	0.14	3.6	Cloudy	
Thatcher's Island, Mass	30.03	762.7	30.08	764.0	57.4	14.1	81	NW	4	1.8		0	0			0	0	Clear	
Toledo, Ohio	29.49	749.0	30.17	766.3	54	12.2	93	N	5	2.2		2cs	Sk	NW		0	0	Fair	
Tucson, Arizona	27.46	697.5	29.75	755.6	67	19.4	21	SE	3	1.3		0	0			0	0	Clear	
Umatilla, Oregon	29.57	751.1	29.97	761.2	62.5	16.9	70	N	2	0.9		0	0			0	0	Clear	
Uvalde, Texas	28.98	736.1	29.75	755.6	77	25.0	91	SE	3	1.3		8cs	0	Calm		0	0	Cloudy	
Vicksburg, Mississippi	29.78	756.4	30.08	762.7	75	23.9	72	E	10	4.5		0	0			0	0	Clear	
Visalia, California	29.47	748.5	29.82	757.4	65	18.3	54	NW	6	2.7		0	0			0	0	Clear	
Washington, D. C.	30.07	763.8	30.18	766.6	59	15.0	65	N	4	1.8		1ck	0	W		Inap.	Inap.	Clear	
Wickenburg, Arizona					59	15.0	33	Calm			0	0	0			0	0	Clear	
Wilmington, N. Carolina	30.06	763.5	30.12	765.0	68	20.0	74	E	4	1.8		Hz	Hz	Calm	Calm	0	0	Dense haze	
Winnemucca, Nevada	25.55	649.0	29.76	755.9	59	15.0	28	S	12	5.4			10ks		SW	0	0	Cloudy	
Wood's Holl, Mass	30.03	762.7	30.07	763.8	61	16.1	66	N	8	3.6			1os		NW	0	0	Cloudy	
Yankton, Dakota	28.80	731.5	30.06	763.5	63	17.2	83	NW	4	1.8		0	0			0	0	Clear	
Yuma, Arizona	29.60	751.8	29.74	755.4	76.3	24.6	69	E	1	0.4		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.15	562.6			52.0	11.1	85	N	1	0.4		2ck	5ks			0.02	0.5	Cloudy	Thomas Herran
Buff Bay Town, Jamaica	29.79	756.7	30.10	764.5	77	25.0	90	E				k	k						
Havana, Cuba, W. I.	30.02	762.5	30.07	763.8	82	27.8	91	Calm	0	0		4cs	0	NE		0	0	Fair	A. Van Caneghem, Ass't.
Kingston, Jamaica, W. I.	30.00	762.0	30.01	762.2	79.5	26.4	84	Calm	0	0			1os		E	0.01	0.3	Squally	Robert Johnstone.
Navassa, W. I.	29.83	757.7	29.91	759.7	83	28.3	79	NE	12	5.4		5cs;hz	k			0	0	Squally	F. M. Everett.
Paramaribo, S. A.	30.06	763.5	30.07	763.8	79	26.1	87	SE	2	0.9		5k	4s	E		0.030	0.8	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.50	749.3	30.06	763.5	75	23.9	100	Calm	0	0			1on		Calm	0.51	13.0	Raining	Francesco J. Cisneros.
Rivas, Nicaragua					76.1	24.5		NW			1	10ck	1ks	NW	NW	0.059	1.5		Earl Flint.
Santiago de Cuba, W. I.																			Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.92	760.0	29.97	761.2	60.0	15.6	85	NE	13	5.8		2ck	0	E		0	0	Fair	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																			Comm. A. J. Errington
H M. S. Alert, Thursday Island, Oceania	29.96	761.0	75.5	24.2	84	SE			3–5		8							Squally	Capt. J. P. Maclear.
H. M. S. Alexandra, Ragusa, Dalmatia, Austria	30.05	763.3	82	27.8	70	Calm			0		0							Misty	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab, N. 12° 20′, E. 45° 22′	29.70	754.4	90	32.2	80	SW			1		1					2	SW	Blue sky	Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 24° 47′, E. 66° 59′	29.62	752.3	86	30.0	83	WSW			2–3		5	SSW						D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, N. 36° 55′, E. 23° 30′			75	23.9		NE			2–4							3	NE	D. clouds.	Capt. E. B. Pusey.
H. M. S. Blanche, N. 17° 00′, W. 61° 45′	30.15	765.8	82	27.8	83	NE			2		4					1	S	D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, Ascension I'd, Africa	30.03	762.7	80	26.7	74	ESE			2–3		2	SSE						D. clouds	Com. F. W. Richards.
H. M. S. Champion, Monte Video, Uruguay	30.14	765.5	50	10.0	86	WNW			1		9	Calm						D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Ninghai, China	29.72	754.9	70	21.1	90	ENE			2									Foggy	Capt. J. W. East.
H. M. S. Condor, N. 36° 39′, E. 12° 45′	30.06	763.5	77.5	25.3	80	Calm			0		0					Sm'h		Misty	Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, Palermo, Sicily	30.06	763.5	85	29.4		NE			2		0							Misty	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae, N. 50° 48′, W. 1° 06′	30.21	767.3	65	18.3	78	Calm			0		0					Sm'h		Misty	Capt. J. C. Parvis.
H. M S. Daring																			Capt. F. J. Eliott.
H. M. S. Dido, Simon's Bay, Cape Colony	29.92	760.0	53	11.7		WSW			2–5		10	WSW						Showery	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	29.94	760.5	79.5	26.4	88	SW			1–2		6	SSW						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 49° 37′, W. 55° 52′	29.97	761.2	49	9.4	85	S			1		4	SW						D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 7° 13′, E. 72° 23′	29.89	759.2	80.5	26.9		SE			4–5		10	SE				4	SE	Squally	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 22° 15′, E. 61° 4 0′	30.15	765.8	73	22.8		ESE			5		7	ESE				3	ESE	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, N. 5° 25′, E. 164° 17′	29.85	758.2	79	26.1	90	Calm			0		6					1	ENE	D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Port Louis, Mauritius	30.22	767.6	76	24.4	72	ESE			1–2		2							D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome, Tilt Cove, N. F	29.94	760.5	45	7.2		ESE			1		3	ESE						D. clouds	Capt. W. C. Karslake.
H. M. S. Fawn, N. 13° 36′, E. 50° 05′	29.68	753.9	87.5	30.8	72	SSW			4		1					3	SSW	Blue sky	Capt. P. Aldrich.
H. M. S. Flamingo, N. 18° 27′, W. 78° 12′	30.02	762.5	85	29.4	87	Calm			0									D. clouds	Comm. R. N. Custance.
H M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd	29.95	760.7	56	13.3	90	SW			1		10	WNW						Showery	Comm. E. G. Bourke.
H. M. S. Garnet																			Capt. L. F. Jones.
H. M. S. Griffon, N. 21° 40′, W. 74° 07′	30.05	763.3	84	28.9	83	E			2		1	E						Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.05	763.3	61	16.1		Calm			0		5	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.87	758.7	74	23.3		WSW			1		6							D. clouds	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 14′, E. 109° 58′	29.78	756.4	86	30.0	79	E			1–2		2					1	E	Misty	Capt. A. Carpenter.
H. M. S. Midge, N. 23° 07′, E. 113° 14′	29.80	756.9				Calm			0		4	S						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. M. S. Modeste, S. 31° 00′, E. 39° 50′	30.43	772.9	71	21.7	90	NNW			2–3		2	WNW				4	NW	D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Tunis, Tunis, N. Africa	30.09	764.3	80	26.7	86	NNE			2		1	NNW						Blue sky	Capt. G. Tryon, C B

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, West Coast of Borneo			82.5	28.1		Calm			0		1	SE						Blue sky	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.91	759.7	54.5	12.5	83	SSE			2		1	SSE						Misty	Capt. E. B Drummond.
H. M. S. Orontes, N. 9° 20′, W. 16° 09′ *†	29.96	761.0	77.5	25.3	92	SW			1		10	NNE				1	SSW	Gloomy	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 48′, W. 79° 32′	29.96	761.0	80	26.7	97	Calm			0		9					1	Con.	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin																			Capt. A. C. Paget.
H. M. S. Phœnix, N. 22° 15′, W. 70° 52	30.05	763.3	82	27.8	87	ESE			3		3					2	ESE	D. clouds	Capt. H. H. Grenfell.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.79	756.7	82	27.8		S			1		4							D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 52° 06′, W. 127° 39′	29.96	761.0	51	10.6		WNW			1		3							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	30.07	763.8	80.3	26.8	74	ESE			2		8	ENE				Sm'll		D. clouds	Capt. C. E. Foot.
H. M. S. Salamis.																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 25° 34′, W. 159° 25′	30.17	766.3	75	23.9	85	ENE			3		1					2	NE	Blue sky	Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, S. 18° 43′, W. 70° 32′	30.00	762.0	65	18.3	78	E			1		2	Calm				2	S	D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise																			Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S Urgent, Port Royal, Jamaica, W. I.			84	28.9		N			1		8							D. clouds	Com. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	30.23	767.8	55	12.8	80	WSW			2		3							Showery	Com. J. C. Wilson, A. D. C.
H. M. S. Woodlark, Abu Shehr, Persia	29.62	752.3	87.5	30.8	69	SW			1									Heavy mist	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candid dos Reis, Comd't.
Quanza, St. Vincent, Cape Verd Id's	30.05	763.2	78.4	25.8	69	NE			1		3		NE					D. clouds	Carlos M. de Silva Costa, Comd't
Rio Lima																			S. C da Silva Costa, Comd't.
Sndo., St. Paul de Loando, Benguela	30.04	763.0	73.4	23.0	80	W			2		2					1		D. clouds	G. A de Brito Capello, Comd't.
Tamega, Macao, China	29.80	757.0	85.1	29.5	78	SSE			1									Blue sky	P. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga, N. 36° 44′, W. 7° 32′	30.07	763.8	71.1	21.7	76	WNW			1		1							Blue sky	Capt. M. von Krusenstierna.
H. M. Frigate Vanadis																			Com. Th. Ulner.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	o—10	o—10	o—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.05	763.3	85	29.4	79	S	12	5.4			5		SW	o	o			Fair	
Naval Hospital, Yokahama, Japan	29.82	757.4	71.5	21.9	85	SW			3		10		W	o	o			Covered	
Adams, Acapulco, Mexico	29.69	754.1	83	28.3	87	Calm			o		8		Calm			Sm'h		Cloudy	
Alaska, Callao, Peru	29.95	760.7	64	17.8	89	Calm			o		10			o	o	Sm'h		Overcast	
Alert, N. 29° 15′, E. 141° 34′ *	29.88	758.9	79	26.1	74	WSW			1		2		Calm	o	o	Sm'h		Hazy	
Alliance, St. John's, N. F	30.06	763.5	48	8.9	78	WNW			2		10			o	o	Sm'h		Cloudy	
Ashnelot, Kobe, Japan	29.95	760.7	73	22.8	72	W			1		10		Calm					Cloudy	
Colorado, New York, N. Y	29.96	761.0	67	19.4	69	NW	1	0.4			2		Calm	o	o			Hazy	
Constitution, Newport, R. I	30.03	762.7	60	15.6	71	NNE			4									Hazy	
Franklin, Norfolk, Va	30.06	763.5	66	18.9	84	Calm	o	o			1		NW	o	o			Clear	
Galena, Vigo, Spain	30.07	763.8	70	21.1	80	Calm			o		2					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	29.94	760.5	75	23.9	81	SW	2.4	1.1			2		SW	o	o			Clear	
Jamestown, Sitka, Alaska *	29.84	757.9	50	10.0	93	Calm			o		8		ENE	o	o			Cloudy	
Kearsarge, Norfolk, Va	30.17	766.3	65	18.3	84	SSE			1		5		NW			Sm'h		Fair	
Lackawanna. Apia, Samoa Id's, Oceania †	30.12	765.0	76	24.4	95	ENE			2		8		E					Fair	
Marion, Montevideo, Uruguay *†	30.05	763.3	50	10.0	86	N			0-1		10		Calm			Sm'h		Cloudy	
Michigan, Detroit, Michigan	30.14	765.5	51	10.6	100	NE			2									Hazy	
Minnesota, Newport, R. I	30.08	764.0	60	15.6	76	N			2		1					Sm'h		Clear	
Monocacy, Yokohama, Japan	30.02	762.5	74	23.3	81	SW			1		10		Calm					Cloudy	
Nipsic, Antwerp, Belgium	30.24	768.1	68	20.0	60	ENE			2		5					Sm'h		D. clouds	
Onward, Callao, Peru †.	30.01	762.2	64	17.8	83	Calm			o		10		N			Long	W	Cloudy	
Palos, Nagasaki, Japan	29.87	758.7	68	20.0	84	NE			2		10							Rainy	
Passaic, Washington, D. C	30.16	766.1	58	14.4	94	NE			2		2		NE					Fair	
Pensacola, Mare Isl'd, Cal	29.95	760.7	57	13.9	87	SSW			4-5		o			o	o			Clear	
Portsmouth, Newport, R. I	30.02	762.5	59	15.0	94	NNW			2		5?		SW			Sm'h		Clear?	
Powhatan, Newport, R. I	30.06	763.5	66	18.9	68	NNW			3		o							Clear	
Quinnebaug, Navy Yard, New York	30.09	764.3	68	20.0	56	NE			2		2		NE					Clear	
Ranger, Salinas Bay, Carmen I'd *	29.80	756.9	82	27.8	83	SE			2		2		Calm	o	o	Sm'h		Clear	
Richmond, Kobe, Japan	29.97	761.2	76	24.4	77	Calm			o		10			o	o			Overcast	
Saratoga, Newport, R. I	30.02	762.5	59	15.0	87	NE			1		5		Calm	o	o			Fair	
Shenandoah, S. 23° 47′, W. 42° 58 *	30.37	771.4	70	21.1	70	S			2		8					Long	S	Fair	
St. Louis, League Island, Pa	29.72	754.9	57	13.9	69	NNW	12	5.4			o			o	o			Clear	
Swatara, Shangbai, China *†	29.76	755.9	78	25.6	86	Calm			o		10							Overcast	
Tennessee, Navy Yard, N. Y	30.10	764.5	58	14.4	82	NNE	9	4.0			o			o	o	Sm'h		Hazy	
Ticonderoga, S. 35° 25′, W. 36° 02′	30.32	770.1	57	13.9	94	W			1		5		W	o	o	Sm'h	ENE	Fair	
Vandalia. N. 40° 53′, W. 68° 55′	30.03	762.7	51	10.6	93	ENE			2		10		Calm					Misty	
Wabash, Boston, Massachusetts	30.07	763.8	57	13.9	69	NW	6	2.7			2		NW	o	o			Clear	
Wachusetts, N. Yard, Mare I'd, Cal	29.94	760.5	57	13.9	87	SW			3		o			o	o			Clear	
Wyoming, Norfolk, Va	30.15	765.8	64	17.8	89	Calm	o	o			5		SW	o	o			Fair	
Yantic, N. 20° 38′, W. 90° 47′ *	29.87	758.7	81	27.2	91	SSE			3-4		8					Sm'h		Cloudy	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 11° 32′, W. 118° 35′	29.92	760.0	77	25.0	88	N			2		3							Misty	Capt. E. J. Molony. Capt. H. Youlden.
Chin Yang																			
S. S. Cipero, N. 22° 41′, W. 38° 38′	30.24	768.1	77.1	25.1	82	NE			2		4					1	ENE	D. clouds	W. N. Lailey.
City of Agra, S. 17° 13′, W. 32° 57′	30.13	765.3	75.0	23.9	84	SSE			1		10					High	S	Overcast	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 23° 42′, W. 27° 16′	30.20	767.1	74.5	23.6	72	ENE			4		1							Blue sky	Capt. Jas. Buchan.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 10° 59′, W. 37° 02′	30.15	765.8	79.2	26.2	82	ESE			3		3							D. clouds	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Naiad, N. 39° 56′, W. 14° 37′	30.31	769.9	63.0	17.2	80	WSW			3		3							D. clouds	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 44° 04′, W. 25° 38′	30.07	763.8	62.3	16.8	94	WSW			3		4							D. clouds	Capt. M. Parry.
Sierra Estrella, N. 6° 02′, W. 21° 20′	30.04	763.0	79.1	26.2	84	S			4		7							D. clouds	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven																			Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 55° 44′, W. 4° 59′	30.12	765.0				SSW			4		2		SSW			Sm'h	SSW	Fair	
S. S. Circassian, ‡ N. 55° 00′, W. 33° 30′	29.37	746.0	50	10.0	93	WNW			6		10kn			½ hour		4-5	NW; SW	Overcast	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian, N. 50° 21′, W. 39° 46′	29.72	754.9	52	11.1		WNW			5		2		WNW			Mod.	NW	Fair	Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 48° 28′, W. 30° 57′	29.74	755.4	56	13.3	94	W			6		8		W	6 hours		High	WNW	Fair	Capt. Benj. Gleadell.
S. S. Germanic, Queenstown, Ireland	30.25	768.3	57	13.9	81	S			5		8		SSW	0	0			D. clouds	Capt. Ch. W. Kennedy
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Phole.
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern																			
S. S. Köln, N. 44° 35′, W. 39° 52′	30.00	762.0	65.0	18.3	90	N			2		10		NNE	16 hours Light	rain	Long	W	Cloudy	Capt. Th. Jüngst.
S. S. Strassburg, N. 51° 27′, E. 1° 55′	30.26	768.6	57.2	14.0		ESE			2		2		SE	0	0	Sm'h	ESE	Light haze	Capt. C. Helmbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 43° 06′, W. 42° 16′.....	29.84	757.9	62	16.7	89	NNE	.....	.....	6	.....	10	.....	NNE	.....	.....	Mod.	NNE	Overcast. ...	Capt. J. W. Shackford.
S. S. Indiana, Philadelphia, Pa...	.....	.....	75	23.9	43	NNE	.....	.....	5	.....	2	.....	NNE	0	0	.....	.....	Clear.....	Capt. R. W. Sargent.
S. S. Ohio, N. 45° 27′, W. 37° 10′.....*†	30.06	763.5	60	15.6	94	WNW	.....	.....	1	.....	10	.....	NW	Light		Mod.	WNW	Cloudy..... ..	Wm. Shackford, Chief Off'r
S. S. Pennsylvania. Liverpool, England.....†	30.17	766.3	66	18.9	84	SW	.....	.....	3	.....	5	.....	SW	.....	.....	Sm'h	.....	Fair	Capt. Geo H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 32° 48′, W. 117° 45′....†	29.90	759.4	60	15.6	88	WNW	.....	.....	2	.....	10	.....	NW	0	0	Mod.	W	Cloudy.....	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 40° 31′, E. 176° 52′.....†	29.96	761.0	60	15.6	88	W	.....	.....	5	.....	8	.....	WNW	0	0	High	W	Cloudy.....	Capt. H. Davison.
S. S. Gaelic.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. W. H. Kidley.
S. S. Oceanic, Yokohama, Japan.....	30.27	768.8	74	23.3	81	W	.....	.....	2	.....	2?	.....	W	.....	.....	.....	.....	Cloudy?.....	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia, N. 38° 56′, W. 123° 50′....†	30.01	762.2	52	11.1	86	NNW	.....	.....	4	.....	10	.....	.....	.....	.....	Light	NW	Cloudy.....	Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon.....†	30.14	765.5	60.0	15.6	82	Calm	.....	.....	0	.....	5	.....	E	.....	.....	.....	.....	Fair.....	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Francisco, Cal.....†	29.90	759.4	51	10.6	93	NW	.....	.....	2	.....	0	.....	.....	0	0	.....	.....	Fine.....	Capt. J. N. Ingalls.
S. S. Dakota.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. H. G. Morse.
S. S. Idaho, N. 46° 44′, W. 124° 53′....†	30.06	763.5	48	8.9	77	W	.....	.....	2	.....	10	.....	W	.....	.....	Sm'h	W	Cloudy.....	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 33° 40′, W. 118° 10′....†	29.86	758.4	64	17.8	83	SE	.....	.....	2	.....	8	.....	NW	....	.....	Mod.	W	Cloudy	Geo. H. Harrison.
S. S. Senator.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal.... ...†	29.93	760.2	51	10.6	93	W	.....	.....	4	.....	10	.....	SW	.....	.....	.....	.....	Overcast.....	Capt. G. Debney.
S. S. Victoria, Departure Bay.....†	29.98	761.5	57	13.9	94	Calm	.....	.....	0	.....	2	.....	.....	.....	.....	.....	.....	Clear.....	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Bannerman, 2d Officer.
S. S. City of New York, S. 26° —′, W. 176° —′....†	30.00	762.0	71	21.7	80	S	.....	.....	2	.....	10	.....	S	0	0	Mod.	S	Foggy.....	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 23° 00′, W. 108° 09′....†	29.93	760.2	77	25.0	77	SW	.....	.....	2	8ck	0	SW	.....	0	0	Sm'h	SW	Fair.....	Capt. D. S. Austin.
S. S. City of Peking, N. 38° 36′, W. 124° 59′.....†	30.04	763.0	56	13.3	93	NW	.....	.....	5	.....	10	.....	NW	0	0	Mod.	NW	Misty.....	Capt. G. G. Berry.
S. S. City of Sidney, S. 31° 09′, E. 179° 00′.....*†	29.71	754.6	62	16.7	83	WSW	.....	.....	5	.....	10	.....	NW	0.125	3.2	Mod.	W	Light rain...	Capt. H. C. Dearborn.
S. S. City of Tokio, Hong Kong, China.....†	29.99	761.7	86	30.0	75	SW	.....	.....	1	.....	2	.....	.....	.....	.....	.....	.....	Clear.....	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 27° 57′, W. 116° 11′... †	29.93	760.2	62	16.7	88	N	.....	.....	4	.....	10	.....	N	0	0	Mod.	NW	Misty.....	Capt. R. R. Searle.
S. S. Granada, Panama Bay, Panama †	29.88	758.9	83	28.3	83	Calm	.....	.....	0	.....	5	.....	NE	6 hours		.....	.....	Fair.....	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. W.....	30.03	762.7	58	14.4	53	N	.....	.....	3	.....	0?	.....	.....	.....	.....	.....	.....	Cloudy?.....	.....
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Sam'l Jackson.
S. S. Nederland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Foddersen, 2d Officer.
S. S. Rhynland, Antwerp, Belgium.....†	30.46	773.7	70	21.1	79	N	.....	.....	3	.....	2	.....	NE	0	0	.....	.....	Clear.	Capt. Wm. Geo. Randle.
S. S. Vaderland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, Savannah, Georgia.....	30.02	762.5	76	24.4	68	SE	.....	.....	.....	.....	0	.....	.....	0	0	.....	.....	Clear.....	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. L. L. Lewis.
Bark Carrie Heckle.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. B. F. Woodbury.
Brigantine George, Arroyo, Porto Rica.....†	30.13	765.3	85	29.4	.....	NE	.....	.....	3	.....	8	.....	.....	0	0	R'gh	.....	Clearing.....	Capt. W H. Champlin.
U. S. F. C. S. Fish Hawk, Cherrystone, Va.....†	30.14	765.5	67	19.4	89	WSW	2	0.9	.....	2c	2s	....	.....	0	0	.....	.....	Clear	.....
Bark Sunbeam, N. 24° 43′, W. 27° 41′.....†	30.22	767.6	76	24.4	81	ENE	.....	.....	5	.....	8	.....	ENE	0	0	Mod.	NW	Cloudy.....	Capt. Jos. Hand.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
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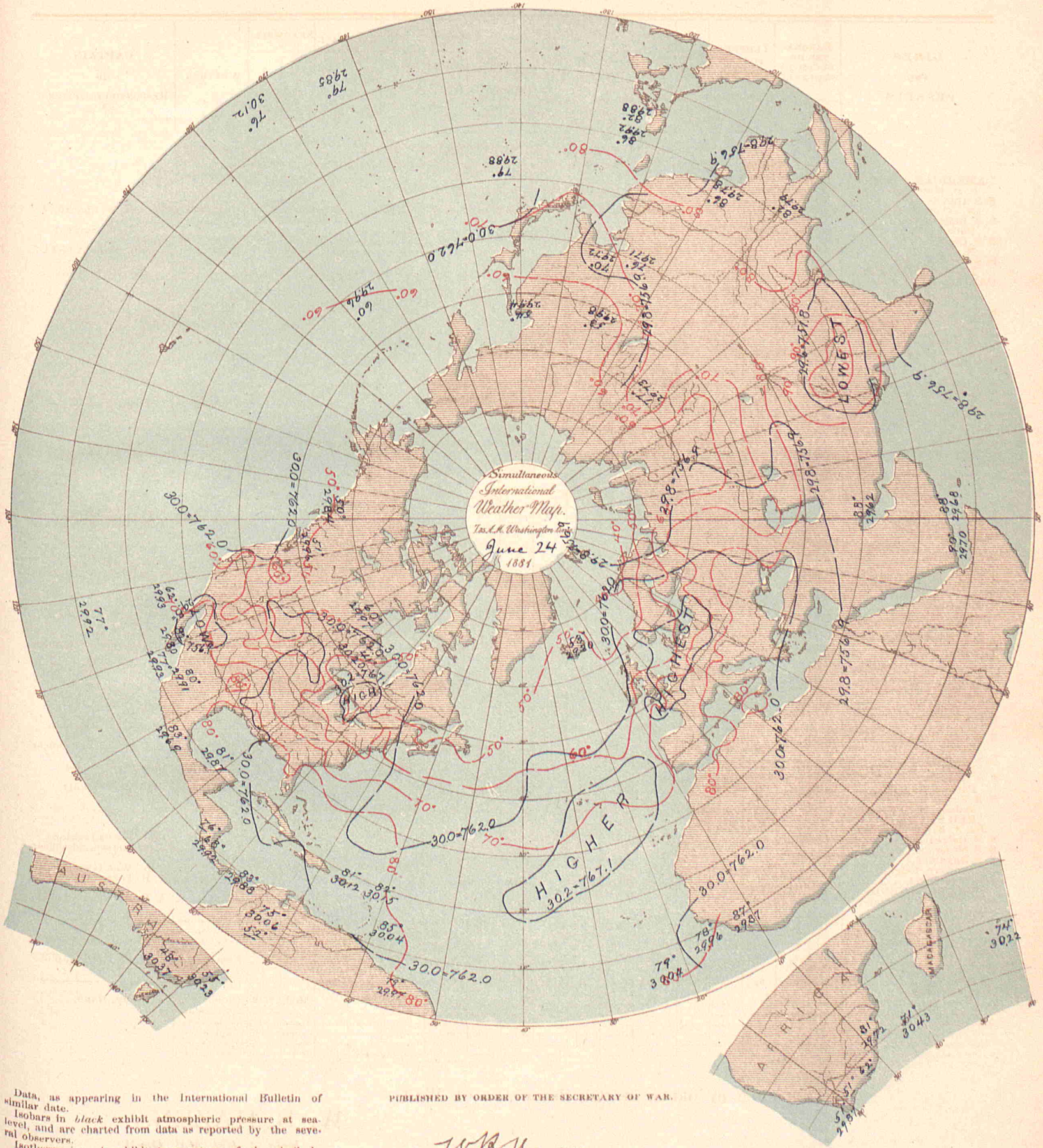
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 25, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours‡			30.03	762.8	75.4	24.1	82	N			1	4				0	0	Cloudy	Raynard.
Algiers‡			30.08	763.9	78.4	25.8	67	W			4	0				Inap.	Inap.	Clear	Nicolas.
La Calle‡			30.05	763.3	87.4	30.8	60	S			1	2				0	0	Fair	Fonfréde.
Tunis‡			30.06	763.5															Jacques.
Sfax‡																			Gau.
Saida‡			30.05	763.3	75.7	24.3	62	N			1	2				0	0	Fair	Dumas.
Tebessa‡			30.12	765.1	90.0	32.2	16	Calm			0	9				0	0	Covered	Watrin.
Geriville‡					95.0	35.0	19	SSE			5	0				0	0	Clear	Lonchamp.
Laghouat‡			30.08	763.9	94.3	34.6	11	SSE			1	0				Inap.	Inap.	Clear	Herbin.
Biskra‡			30.13	765.4	95.0	35.0	29	SE			1	0				0	0	Clear	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.25	768.3	30.34	770.6	42.0	5.6	91	ENE	10	4.5		1				0	0	Fine	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.55	750.6	30.08	763.9	81.3	27.4	55	S			2	0				0.488	12.4		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.37	745.9	30.10	764.6	78.1	25.6	60	E	11.9	5.3		3				0	0		Dr. Wierzbicki.
Eperies	29.21	742.0	30.05	763.2	81.3	27.4	56	Calm			0	2CS	0			0	0		Julius Mikolik.
Gratz‡	28.86	733.1	30.06	763.4	77.9	25.5	63	SW			2	0				0.583	14.8		Andreas Rospini.
Hermannstadt‡	28.67	728.3	30.02	762.4	84.4	29.1	51	NNW			3	5				1.346	34.2		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.76	730.4	30.03	762.7	79.5	26.4	59	SSW			1	4				0.039	1.0		The Staff.
Lemberg	29.14	740.1	30.09	764.2	73.4	23.0	70	NE			2	7				0	0		Dr. T. Stanecki.
Pola	29.93	760.3	30.04	763.0	88.2	31.2	53	SE			2	6				0	0		I. R. HydrographicOffice.
Szathmar	29.47	748.4	29.91	759.8	84.0	28.9	66	NW			1	5				0	0		Beicht Peter, S. J.
Szegedin	29.77	756.1	30.03	762.8	82.0	27.8	75	S			1	5				0	0		Karl Stancel.
Trieste	29.96	761.0	30.00	763.6	88.9	31.6	50	WSW			1	2				0	0		Secco.
Vienna	29.39	746.5	30.07	763.8	79.0	26.1	67	SE			1	5				0.004	0.1		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.68	753.9	29.78	756.4	51.1	10.6	94	S	17	7.6			10			0	0	Overcast	W. Boswell.
Armagh, Observatory	29.58	751.3	29.81	757.2	61.0	16.1	73	SW	14	6.3			2					D. clouds	S. Call.
Bidston, Liverpool Obs'y			29.88	758.9	58.2	14.6	81	WSW	24	10.7			8					Overcast	John Hartnup.
Bolton, Sharples																			Thomas Mackereth.
Bradford, Yorkshire	29.52	749.8	29.92	760.0	56.9	13.8	84	SW			1.0		10			0.09	2.3	Raining	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.98	761.5	30.01	762.2	86	30.0	68	NE			3		6					Gloomy	Corpl.J.Surgener,A.H.C
Cardington			29.98	761.5	60.0	15.6	88	S			0.4		10					Raining	John McLaren.
Chatham, School M. E.	29.95	760.7	30.08	764.0	60.0	15.6	77	S			3		10					Raining	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.82	757.4	30.05	763.3	62.0	16.7	81	WNW			3		7					Overcast	The Staff.
Fort Napier, Natal	27.70	703.6	29.92	760.0	65.2	18.4	68	SE			2		5?					Overcast?	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	86	30.0	88	W			1		2?					Raining?	Sgt. C. E. Keane.
Galway, Queen's College					60	15.6	60	W			2		10			0.02	0.5	Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.04	763.0	30.10	764.5	75.6	24.2	84	ENE			3		4					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.54	750.3	29.75	755.6	61.3	16.3	70	WSW			6		9k					Overcast	Harry Urquhart.
Greenwich, Royal Obs'y	29.89	759.2	30.06	763.5	57.1	13.9	94	SW			1		10					Raining	The Staff.
Guernsey	29.99	761.7	30.21	767.3	57	13.9	90	SSW			3		10					Raining	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.02	762.5	30.05	763.3	56.9	13.8	88	SSW	12	5.4			10					Raining	The Staff.
Leicester, Museum	29.71	754.6	29.96	761.0	57.3	14.1	91	SW			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.96	761.0	30.03	762.7	86.2	30.1	56	NW			2		0					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	30.03	762.7	30.08	764.0	84.5	29.2	81	W			1		5					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.45	748.0	29.95	760.7	55.3	12.9	98	S			3		10					Raining	John Mac Email.
Oxford, Radcliffe Obs'y	29.79	756.7	30.02	762.5	56.1	13.4	96	SW			2		10					Threatening	The Staff.
Plymouth	29.95	760.7	30.03	762.7	62.7	17.1	89	WSW			2		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.66	753.4	58.4	14.7	82	SSE	34	15.2			3					D. clouds	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.90	759.4	29.97	761.2	82.0	27.8	58	NE			2		1					Blue sky	Serg't W. H. Lyne.
Sheffield	29.76	755.9	29.94	760.5	59.4	15.2	96	SW			2		4			0.07	1.8	D. clouds	W. F. Cooper.
Silloth Rectory	29.78	756.4	29.81	757.2	59.2	15.1	88	SW			4		8			0.020	0.51	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.89	759.2	56.2	13.4	88	S	13	5.8			10					Overcast	Rev. S. J. Perry.
Stratfield Turgiss	29.85	759.2	30.07	763.8	55.9	13.3	92	SW			2		10					Raining	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	30.07	763.8	30.08	764.0	66	18.9	59	NW			6		5					D. clouds	W. Newcombe.
Valencia, Observatory	29.98	761.5	30.01	762.2	60.7	15.9	77	SW	31	13.9			7			Blank		Misty	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B					59.0	15.0		N	2	0.9		3ck	0			0	0	Blue sky	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.99	761.7	30.03	762.7	60	15.6	79	S	4	1.8		5cs	0			0.070	1.8	Fair	H. J. Cundall, C. E.
Chatham, N. B.*	29.94	760.5	30.00	762.0	55	12.8	87	SE	1	0.4		8c	2ks			0	0	Fair	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario	29.90	759.4	30.10	764.5	56.5	13.6	86	W			1		10s			0	0	D. clouds	James Smith, M. A
Dalhousie, N. B	29.94	760.5	29.98	761.5	52.0	11.1		NW			1	0	0			0	0	Blue sky	H. A. Johnson.
Father Point, Quebec*	29.93	760.2	29.95	760.7	58	14.4	67	NW	18	8.0			10n			0	0	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.21	741.9	30.03	762.7	58	14.4	85	NE	2	0.9		0	Hz			0	0	Hazy	James Stewart.
Fredericton, N. B	29.99	761.7	30.06	763.5	59.3	15.2	81	Calm	0	0		7ck	0	W		0	0	Fair	Prof. Harrison.
Granton, Ontario	29.02	737.1	30.12	765.0	52.0	11.1	86	Calm			0	0	0			0	0	Clear	James Grant.
Halifax, N. S.*	29.98	761.5	30.11	764.8	60	15.6	84	SE	2	0.9		5cs	0			0	0	Fair	A. Allison.
Hamilton, Ontario	29.73	755.1	30.12	765.0	60.5	15.8	80	NE			1	0	0			0	0	Clear	Geo. Dickson, B. A.
Kingston, Ontario*	29.79	756.7	30.12	765.0	55	12.8	84	Calm	0	0			10ks			0	0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S	30.05	763.3	30.09	764.3	46.0	7.8	96	Calm			0		Fg			0	0	Foggy	C. H. Rigby.
Montreal, Quebec*	29.88	758.9	30.07	763.8	58	14.4	76	W	10	4.5		5k	2ks		N	Inap.	Inap.	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario	30.09	764.3	30.12	765.0	45.7	7.6	71	SE			1		10ks			Inap.	Inap.	Raining	J. R. Nason.
Parry Sound, Ontario*	29.45	748.0	30.14	765.5	58	14.4	70	N	3	1.3		2k	2ks	NW	NW	0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario	29.40	746.7	30.14	765.5	60.2	15.7	68	Calm			0		9ks			0	0	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.43	747.5	30.12	765.0	53	11.7	93	N	4	1.8		10ck	0	NW		0	0	Fair	H. Morgan.
Port Stanley, Ontario	29.47	748.5	30.11	764.8	56	13.3	91	E	2	0.9		8ck	0	W		0	0	Cloudy	M. Payne.
Quebec, Quebec*	29.72	754.9	30.04	763.0	58	14.4	76	W			3	2c	2s	W	W	0.15	3.8	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.67	753.6	30.13	765.3	53	11.7	83	NW	3	1.3			8s		N	0	0	Cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.41	747.0	30.12	765.0	52	11.1	85	E	6	2.7			10ks			0	0	Cloudy	K. Stewart.
St. Andrews, N .B	29.98	761.5	30.03	762.7	55	12.8	87	Calm	0	0		0	Hz			0	0	Clear	
St. John, N. B	29.90	759.4	30.06	763.5	54.0	12.2	83	S	8	3.6			10ks			0	0	D. clouds	G. Murdock, C. E.
Stratford, Ontario	28.83	732.3	30.11	764.8	51.4	10.8	87	Calm	0	0		2cs	3s			0	0	Blue sky	C. J. Macgregor, M. A.
Sydney, C. B*	30.05	763.3	30.09	764.3	51	10.6	97	Calm	0	0			Fg			0	0	Dense fog	T. C. Hill, C. E.
Toronto, Ontario*	29.75	755.6	30.13	765.3	58	14.4	86	E	2	0.9		2ck	5ks	W	W	0	0	Cloudy	Magnetic Observatory
Windsor, N. S	29.97	761.2	30.06	763.5	56.5	13.6	87	SW	1	0.4		0	6s			0.02	0.5	Fair	
Woodstock, Ontario	29.04	737.6	30.09	764.3	57.0	13.9	74	NW	3	1.3		7cs	0		NW	0	0	D. clouds	Prof. Wolverton.
Yarmouth, N.S*	30.05	763.3	30.11	764.8	54	12.2	86	SW	2	0.9		8c	0	W		0	0	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.95	760.7	30.20	767.1	52	11.1	86	SW					10s			0	0	Fair	John Delany.
St. Pierre, N. F			30.11	764.8	51.1	10.6		S			1					0	0		N. F..Land, Comd't
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	30.19	766.8			60.0	15.6	71	W	16.7	7.5			2k			0	0		John Duthie.
Cape Town, C. G. H. Obs'y	30.32	770.1	30.36	771.1	46.0	7.8		NW	7.3	3.3		3	4ks			0	0		The Staff, for D. Gill
Worcester*†	29.16	740.7			51	10.6	80	WNW			1	2	5			0.60	15.2	Dull	C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.80	756.8	29.82	757.4	74.8	23.8	93	Calm	0	0			10			0.488	12.4	Covered	M. Marc Dechevrens, S.J

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

STATIONS.	BAROMETER.				TEMPERATURE OF THE AIR.		REL. HUM.	WIND.				CLOUDS.				RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Corrected for instrum'tal error and temperature.		Reduced to sea-level.					Direction.	Velocity.		Force	Amount and kind.		Direction,					
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

COSTA RICA SERIES.

By authority of the MINISTER OF FOREIGN AFFAIRS.

Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.21	665.7	29.93	760.2	67.1	19.5	90	SE			1	9cs	1d			0	0	Cloudy	Amand Maison.

DANISH SERIES.

Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.

Copenhagen	30.21	767.4	30.26	768.6	65.1	18.4	58	ESE	16	7			3						Oversergent Fischer.
Fanöe	30.05	763.2	30.07	763.7	66.0	18.9	65	SE			6		9						Overlooerer Lauridsen.
Godthaab, Greenland																			S. Kleinschmidt.
Stykkisholm, Iceland	28.85	732.7	28.89	733.8	51.1	10.6		SW			2		10					Raining	A. O. Thorlacius.
Thorshavn	29.41	747.0	29.45	747.9	54.5	12.5	86	S	36	16			9					Raining	Overlooerer Bergh.
Vestervig	30.02	762.6	30.12	765.0	65.8	18.8	60	SE			4		7						Locarer Oesterbol.

FRENCH SERIES.

Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.

Agen, Normal School	29.51	749.6	30.13	765.3	82.4	28	43	WSW			1	1c	0			0	0	Clear	M. Labroue, Director.
Alençon Normal School	29.64	752.8	30.19	766.8	74.5	23.6	62	SW			1	0	2s		W	0	0	Slightly cl'dy	M. Nicot, Director.
Arras, Engineer School	29.84	757.8	30.08	764.1	73.8	23.2	41	WSW				0	kn		W				M. Klein, Commandant.
Avignon, Normal School	30.00	762.1	30.08	764.1	91.9	33.3	44	N			1		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.53	750.0	30.06	763.4	82.2	27.9	52	SW			1	0	8kn		SW	0	0	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.85	758.2	30.11	764.7	77.9	25.5	45	SW			2		8		WSW	0	0	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.25	743.0	30.06	763.6	80.6	27	58	S			2	ck	0	SW		0	0		M. Gobin, Director.
Bordeaux, Observatory	29.88	758.9	30.13	765.2	84.6	29.2	49	W			1		8		SW	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.60	751.8	30.13	765.2	82.4	28	46	SSW			1	0	sk		SSW	0	0		M. Postel, Director.
Brest, Naval Observatory	29.93	760.2	30.17	766.4	59.0	15.0	91	SW			2		10		SW			Raining	M. de Rermaree, Dir.
Caen, Normal School	30.04	762.9	30.11	764.7	71.8	22.1	51	SSW			1		10		SW	0	0	Covered	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.80	757.0	30.11	764.8	81.1	27.3	54	SW			1		8		WSW	0	0	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.60	751.8	30.09	764.3	80.6	27	63	E			1					0	0		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.78	731.0	30.06	763.6	83.1	28.4	54	ENE			1	0	5k		SW	0.142	3.6	½ covered	M. Allnard, Director.
Cluny, Normal School	29.37	745.9	30.15	765.7	85.8	29.9	60	NE			1		2		N	0.004	0.1		M. de Villemontée, Dir.
Commercy, Normal School	29.26	743.2	30.10	764.6	80.2	26.8	43	NW			3	5ck	0	NW		0	0	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.67	702.9	30.06	763.5	86.9	30.5	51	E			1	0	k		W	0	0		M. Jeangirard, Director.
Grénsque, du. Rhone	29.05	737.9	30.19	766.9	89.8	32.1	31	SW			1		0			0	0	Clear	M. Kina, Director.
Grenoble, Normal School	29.32	744.8	30.04	763.0	87.1	30.6	40	WNW			1	0	2k			0	0	Slightly cl'dy	M. Ablard, Director.
Guéret, Normal School	28.58	725.9	30.10	764.4	81.1	27.3	41	SW			1	ck	0	NE		0	0		M. Rivoire, Director.
Lamballe, Normal School	29.93	760.2	30.20	767.1	58.3	14.6	86	W			2				W	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.60	751.9	30.25	768.4	77.0	25	63	N			1	c	0			0.16	4.		M. Chauvin, Director.
Lorient, Naval Observatory	30.12	765.0	30.22	767.6	59.7	15.4	85	W			3		10			0.079	2.0	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.10	739.1	30.12	765.0	82.8	28.2	45	WSW			1		5		S	0.028	0.7	Cloudy	M. André, Director.
Mans, Normal School	29.84	757.8	30.13	765.4	75.7	24.3	59	NW			1		2		W	0	0	Slightly cl'dy	M. Piboen, Director.
Marseille, Observatory	29.83	757.6	30.09	764.2	84.4	29.1	41	W			1		1		SW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	25.07	636.7	30.30	769.7	68.9	20.5	58	E	3.8	1.7			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.97	761.1	30.07	763.8	86.5	30.3	53	SE			2		2		SW	0	0		M. P. Galzin, Director.
Nancy, Normal School	29.34	745.2	30.07	763.8	80.6	27	45	W			1	0	2k		W	0	0	Slightly cl'dy	M. Hasse.
Nantes, Observatory	30.00	762.0	30.16	766.1	75.2	24	47	WNW			1-2		10		WSW	0	0	Covered	M. Larocque, Director.
Nice	29.86	758.4	29.89	759.2	80.2	26.8	46	SE			2		5	SE	SE	0	0	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	29.98	761.6	30.09	764.2	84.2	29.0	55	SE	5.6	2.5			5	WNW	NE	0	0	Stormy	Dr. Fines.
Pic-du-Midi, Plantade	22.80	579.0			55.8	13.2							1		SSW	0.016	0.4	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.08	738.6	30.08	764.0	90.5	32.5	42	N			1		2	N	N	0	0	Slightly cl'dy.	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.40	645.1			63.5	17.5	89	S			1	0	8k			0.291	7.4	¾ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.14	765.5	30.17	766.3	80.6	27.0	57	SSW			1		5		SSW	0	0	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.93	760.2	30.13	765.4	82.4	28.0	58	W			1		0			0	0	Clear	M. Mouillot, Director.
Rodez, Normal School	28.05	712.7	30.08	763.9	81.7	27.6	47	NW			1		5			0	0	Cloudy	M. Richard, Director.
Rouen, Normal School	30.02	762.6	30.11	764.8	75.2	24	60	W			2		8		SW	0	0	Very cloudy	M. Platrier, Director.
Saint Lô, Normal School	30.02	762.5	30.18	766.5	66.2	19	54	W			1		10		NE	0	0	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.95	760.6	30.11	764.8	79.5	26.4	40	SW			1		5	W	SSW	0	0		M. Renou, Director.
Toulouse, Observatory	29.46	748 3	30.19	766.8	86.7	30.4	64	NW			1		2			0	0	Slightly cl'dy	M. Baillaud, Director.
Tours	29.88	759.0	30.08	764.0	83.5	28.6	48	SW			1		8		W	0	0	¾ covered	M. de Tastes.
Versailles, Observatory	29.62	752.3	30.11	764.8	80.2	26.8	38	SW			2					0.004	0.1		Dr. A. Bérigny, Director.
SUB-SERIES.																			
Paris, Montsouris Obs'y	29.84	757.9	30.13	765.3	79.3	26.3	45	WSW			2		9	SW	SSW	0	0		M. Marié Davy, Director.

GERMAN SERIES.

Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.

Bamberg	29.22	742.1	30.08	764.1	77.0	25.0	52	WSW			1	0	3k		W	0.020	0.5		Prof. Dr. Hoh.
Berlin	29.94	760.5	30.11	764.7	78.8	25.0	50	E			1		7			0.035	0.9		Prof. Dr. Arndt.
Breslau	29.62	752.3	30.15	765.8	77.0	25.0	67	ESE			2		7			0.122	3.1		Royal University Obs'y.
Carlsruhe	29.66	753.4	30.08	763.9	79.5	26.4	63	WSW			1		5	SW		0.394	10.0		Albert Senz.
Cassel	29.40	746.7	30.12	765.0	78.4	25.8	60	S			1		5	NE		0	0		Dr. H. Möhl.
Frankfort on the Main	29.76	755.8	30.11	764.7	78.8	26.0	49	SW			1		3			0.035	0.9		Physical Society.
Friedrichshafen	28.72	729.5	30.10	764.5	75.2	24.0	70	SW			3		4	W		0.413	10.5		Wilhelm, Chief Tel.
Hamburg	30.04	762.9	30.11	764.7	72.9	22.7	63	SE			4		4			0	0		Dr. R. Kleeman.
Kiel	30.13	765.4	30.15	765.8	68.2	20.1	58	E			1		5			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.70	754.4	30.11	764.7	73.2	22.9	61	SSE			1		9			0.894	22.7	Hazy	Prof. Dr. Bruhns.
Magdeburg	29.87	758.8	30.06	763.5	67.8	19.9	75	ESE			3		10ks		SE	0.035	0.9		Dr. Assmann.
Memel	30.28	769.0	30.32	770.2	65.1	18.4	62	NW			4		2k						Reinbrecht & Issermann.
Munich	28.32	719.3	30.19	766.9	81.0	27.2	45	Calm			0		5	NW		0.047	1.2		Central Station.
Neufahrwasser	30.30	769.6	30.32	770.0	63.9	17.7	73	ENE			2		0			0	0		A. Lothes.
Neustadt, Palatinate	29.54	750.2	30.06	763.6	80.1	26.7	62	S			1		4			0	0		Dickmether.
Stuttgart	29.16	740.6	30.02	762.4	75.2	24.0	74	W			3		4	W		0.118	3.0		Prof. Dr. Schoder.
Weissenburg, Bavaria	28.63	727.2	30.10	764.6	75.6	24.2	62	W			2		9	W		0.134	3.4		Prof. Kemlein.
Wustrow	30.16	766.0	30.19	766.7	65.1	18.4	78	E			3		10s			0	0		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the last 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES.																			
Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.60	751.8	29.97	761.3	84.2	29.0		NE			4.0		0					Clear	Schmidt & Wourlisch.
INDIAN SERIES.																			
Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.52	749.7	29.57	751.0	89.7	32.1	78	SW	25.0	11.2			0			0	0	Blue sky	
Deesa	29.10	739.1	29.56	750.7	96.6	35.9	44	S	13.0	5.8			5		SW	0	0	D. clouds	
Bombay	29.70	754.4	29.74	755.4	83.6	28.7	77	SW	6.0	2.7			10		SW	1.29	32.8	Overcast	
Poona, Yarrowda	27.88	708.3	29.73	755.0	81.0	27.2	58	WSW	21.0	9.4			4		WSW	0	0	D. clouds	
Belgaum	27.25	692.2	29.78	756.3	77.8	25.4	64	WSW	9.0	4.0			7	E	SW	0	0	D. clouds	
Lahore	28.72	729.6	29.42	747.2	107.2	41.8	21	W	2.3	1.0			0			0	0	Misty	
Roorkee	28.56	725.5	29.43	747.4	94.6	34.8	54	E	4.8	2.2			9			0	0	Misty	
Agra	28.95	735.4	29.49	749.0	101.1	38.4	36	SW	7.3	3.3			6		SW	0	0		
Nagpur	28.56	725.4	29.58	751.4	85.3	35.2	66	W	4.6	2.1			8		W	0.35	8.9	Gloomy	
Jubbulpore	28.27	718.1	29.62	752.2	81.8	27.7	66	S	5.5	2.5			10			0.02	0.5	Overcast	
Lucknow	29.16	740.6	29.53	750.0	84.2	29.0	66	ESE	5.9	2.6			10					Drizzling	
Allahabad	29.19	741.4	29.50	749.2	83.7	28.7	75	NE	4.1	1.8			10			0.19	4.8	Overcast	
Patna	29.37	746.0	29.55	750.5	83.2	28.4	86	SE	4.1	1.8			10	SE	SE	0.90	22.9	Overcast	
Hazaribagh	27.56	699.9	29.53	750.1	81.8	27.7	79	S	7.2	3.2			9	NE	SW			Thnd'rstorm	
Cuttack	29.45	748.1	29.53	750.2	85.0	29.4	82	Calm	0.2	0.1			9			0.45	11.4	D. clouds	
Calcutta, Alipore	29.50	749.3	29.52	749.9	81.5	27.5	91	S	4.0	1.8			8		SE	0.43	10.9	D. clouds	
Dhubri	29.49	749.1	29.61	752.2	77.5	25.3	94	ENE	0.4	0.2			10			1.03	26.2	Showery	
Chittagong	29.53	750.1	29.62	752.4	83.3	28.5	78	SE	5.0	2.2			8			0	0	D. clouds	
Sibsagar	29.29	743.9	29.66	753.3	84.3	29.1	86	S	1.8	0.8			10	W	W	0.08	2.0	D. clouds	
Zanzibar, Africa			30.08	764.0	83.7	25.7	55	SSE	5	2.2			1		S	0	0	Blue sky	
ITALIAN SERIES.																			
By authority of the Minister of Agriculture, Industry and Commerce.																			
Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.67	753.6	30.06	763.6	86.9	30.5	42	S	0.7	0.3			6			0	0		Prof. Giovanni Clodig.
Milan	29.53	750.1	30.02	762.6	89.1	31.7	37	ESE	4.9	2.2			2	W		0	0		Prof. Schiaparelli.
Padua	29.97	761.3	30.08	764.0	87.6	30.9	54	ESE	4.9	2.2			1			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.15	740.4	30.02	762.6	85.5	29.7	49	NNW	1.3	0.6			1			0	0		Prof. P. F. Denza.
Genoa	29.91	759.6	30.09	764.3	82.8	28.2	43	SW	3.8	1.7			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.20	716.2	30.04	763.0	84.2	29.0	47	NE			2		0			0	0		Prof. D. C. Bruno.
Pesaro	30.00	761.9	30.04	763.1	83.1	28.4	65	NE					1			0	0		Prof. Luigi Guidi.
Florence	29.78	756.5	30.03	762.7	92.8	33.8	32	W			2		0			0	0		Prof. Costantino Pitter.
Leghorn	29.97	761.3	30.06	763.4	85.3	29.6	45	W	0.7	0.3			5			0	0		Prof. P. Monte.
Rome	29.88	759.0	30.05	763.3	94.1	34.5	37	SW	12.5	5.6			10			0	0		Prof. P. S. Ferrari.
Lecce	29.77	756.2	30.01	762.3	84.9	29.4	37	NE	12.5	5.6			0			0	0		Prof. C. de Giorgi.
Cosenza	29.16	740.7	30.01	762.3	90.0	32.2	64	SSW	1.3	0.6			2	SW		0	0		Prof. D. Conti.
Cagliari	29.86	758.4	30.05	763.2	84.0	28.9	34	SE			4		0			0	0		Prof. A. Pacinotti.
Palermo	29.84	757.8	30.08	764.0	85.6	29.8	40	E	3.1	1.4			0			0	0		Prof. G. Ciaccíatore.
Syracuse	29.97	761.2	30.01	762.3	86.7	30.4	47	S	6.3	2.8			4	W		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.53	750.0	30.02	762.6	84.9	29.4	70	SSE	0	0			0			0	0		Prof. F. Brioschi.
Stelvio	22.47	570.8			57.4	14.1	45	W			6	0	8kn		SW	0.071	1.8	Misty	Prof. P. F. Denza.
Valdobbia	22.49	571.3			57.9	14.4	69	N			6	0	5kn		NE	0	0	Misty	Prof. P. F. Denza.
JAPANESE SERIES.																			
Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y†	29.83	757.5	29.85	758.2	67.9	19.9	98	Calm	0	0			10n			1.980	50.3	Light rain	K. Sasaki.
Kioto	29.72	754.9	29.89	759.2	67.1	19.5	93	E	0.5	0.2			10s			1.720	43.7	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.68	753.9	29.88	758.9	74.6	23.7	98	SW	7.7	3.4			10n			0.320	8.1	Raining	S. Takehayashi.
Tokei Obs'y, Yeddo	29.90	759.4	29.96	761.0	68.2	20.1	80	WSW	2.5	1.1			10s			0.050	1.3	Covered	The Staff.
Wakayama	29.81	757.2	29.86	758.4	68.3	20.2	91	E	2.8	1.2			10n			0.750	19.0	Raining	Y. Kuwamuca.
MAURITIUS SERIES.																			
Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	30.04	763.0	30.23	767.8	72.5	22.5	63	ESE	17.5	7.8		0	6		ESE	0	0	Cloudy	A. N. Figon.
MEXICAN SERIES.																			
By authority of the Secretary of Public Works.																			
Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.41	620.0	29.99	761.7	67.0	19.4	85	SW			1	0	9k		NW	0.055	1.4	Very cloudy	Prof. M. Leal.
Mazatlan	29.66	753.3	29.91	759.8	81	27.2	85	SSW	1.6	0.8		2c	1k		ESE	0	0	Clear	F. Quijano, U. E.
Mexico, Central Obs'y	23.11	587.1	30.04	763.1	59.4	15.2	86	Calm	0	0			10k		SE	0.174	4.4	Covered	The Staff.
Pabellon, Aguascalientes	23.90	607.1	29.80	757.0	64.9	18.3	87	Calm			0	5c	1s	E		0.008	2.0	½ cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.43	595.2	30.10	764.7	59.0	15.0	57	Calm	0	0		0	4		E	0	0	Clear	Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.60	574.2	30.20	767.1	55.2	12.9	64	SW	0.9	0.4		1c	2s	SW	SW	0.082	2.1	Clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES.																			
Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.10	764.4	30.10	764.4	74.8	23.8		SSW			3					0	0		
Groningen	30.01	762.3	30.07	763.7	83.7	28.7		WSW			1					0	0		
Helder	30.06	763.4	30.06	763.4	67.5	19.7		SW			2					0.024	0.6		
Hellevoetsluis	30.08	764.1	30.08	764.1	79.0	26.1	62	S			2					0	0		
Utrecht	30.04	762.9	30.08	764.1	74.7	23.7	55	S			2		5			0.043	1.1	Cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.97	761.1	30.03	762.7	64.4	18.0	49	S	40.3	18.0			1			0	0		
Christiania	30.06	763.4	30.20	767.1	63.7	17.6	48	SW	18	8			3			0	0		
Gjæsvær	30.13	765.2	30.15	765.8	45.3	7.4		WSW			2		10						
Lodingen	30.04	763.1	30.09	764.3	52.7	11.5	34	N			1		10			0	0		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.22	767.6	30.24	768.0	70.3	21.3	94	SSW	4.9	2.2			6			0	0		Dr. J. A. Sampaio.
Campo Major	29.15	740.3	30.10	764.4	87.4	30.8	31	NNW	3.8	1.7			8			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.24	768.0	30.32	770.2	70.9	21.6	62	SW	5.6	2.5			6			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.84	758.0	30.19	766.8	77.5	25.3	54	N	18.6	8.3			1			0	0		The Staff.
Ponta Delgada, Azores	30.35	771.0	30.43	772.8	74.5	23.6	77	SW	1.8	0.8			3			0.035	0.9		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.59	746.1	29.63	752.7	58.6	14.8	54	W	11	5		0	8n						Capt. Lasarew.
Archangel	30.32	770.2	30.34	770.7	50.5	10.3	64	NW	22	10		4cs	0						Capt. Sselliwerstow.
Astrakhan	29.95	760.8	29.87	758.7	71.1	21.7	66	N	4	2		0	8n;s			Blank			Capt. Wisganow.
Barnaul	29.26	743.1	29.73	755.2	70.2	21.2	49	SSE	4	2			8						Meteorological Obs'y.
Dorpat	30.06	763.5	30.30	769.5	71.6	22.0	46	NE	9	4		2ck	0						Observatory.
Ekaterinburg	28.88	733.6	29.84	757.8	53.8	12.1	74	N	9	4			10						Meteorological Obs'y.
Kasan	29.60	751.9	29.85	758.3	58.8	26.0	41	WNW	7	3		0	5k						Observatory.
Kertch	30.02	762.6	30.04	763.1	80.6	27.0	53	NNE	7	3			0						Lagorio & Sastyrez.
Kieff	29.45	748.0	30.07	763.7	68.2	20.1	95	E	4	2			9cks						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.76	756.0	29.96	760.9	85.8	29.9	35	SE	2	1			4						Meteorological Obs'y.
Moscow	29.52	749.7	30.04	763.0	74.1	23.4	43	NW	4	2		0	4ks						Meteorological Obs'y.
Nertchinsk	27.76	705.1	30.03	762.7	51.8	11.0	87	Calm	0	0			9			0.106	2.7		Meteorological Obs'y.
Nikolaiev	30.01	762.2	30.08	764.0	88.0	31.1	41	N	4	2		0	2k						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.94	760.4	30.02	762.6	57.4	14.1	78	Calm			0	0	0			0	0		Lieut. Iwanow.
Pekin, China	29.61	752.2	29.76	755.8	65.7	18.7	90	Calm	0	0		0	8n					Thunder	Physical Observatory.
St. Petersburg	30.31	769.9	30.33	770.3	63.5	17.5	33	NE	9	4		4c;cs	0					Light clouds	Central Physical Obs'y.
Tashkend, Laboratory	28.26	717.7	29.73	755.1	82.8	28.2	45	Calm	0	0			4						Teich, A. M.
Tiflis	28.56	725.3	29.88	759.0	88.7	31.5	29	S	2	1			0						Physical Observatory.
Warsaw	29.79	756.7	30.20	767.1	75.2	24.0	45	E	7	3		0	4cks						Astronomical Obs'y.
Wilna	29.83	757.7	30.24	768.0	73.0	22.8	46	NNE	7	3			4						Berg, Assistant.
Yeniseisk	29.52	749.8	29.80	756.8	65.8	18.8	88	SSW	4	2			10					Raining	M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restairig Park			29.75	755.6	62.6	17.0	66	SW			3	0	9k			0.01	0.3	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			29.73	755.1	57	13.9	94	SW			4	5	5	W		0.5	13.	Showery	J. Youngclause.
North Unst, Shetland Isl'ds			29.72	754.9				S			6					Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.00	762.1	30.11	764.7	75.6	24.2	69	E	2.7	1.2			2			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.15	765.8	30.21	767.2	77.7	25.4	68	NW	2.2	1.0			10			0	0	Covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.32	693.8			79.5	26.4	35	S	7.4	3.3			0			0	0	Clear	Domingo Martin.
Madrid, Royal Obs'y	27.97	710.4	30.09	764.2	83.7	28.7	40	N	2.9	1.3		0	1			0.713	18.1	Almost clear	The Staff.
Murcia, Met. Obs'y	29.90	759.5	30.04	763.1	91.4	33.0	40	SSE	2.0	0.9		5	5			0	0	Hazy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.32	744.7	30.19	756.7	71.6	22.0	72	N	0	0			10			0	0	Covered	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.99	761.8	30.06	763.5	78.6	25.9	78	SE	1.8	0.8		8ck	0	ESE		0.157	4.0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.80	756.8	29.85	758.1	82.3	27.9	83	NNE	0.7	0.3			10n			0.51	13.0	Covered	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.05	763.3	30.15	765.8	74.5	23.6	70	SW	3.7	1.7		0	3		W	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.03	762.8	30.12	765.1	84.2	29.0	92	SE	0	0		6cs	3k	SE	SE	0	0	Cloudy	Enrique Gedea, Chief Engineer.
Tuguegarao, Philippine Ids	29.75	755.6	29.89	759.3	82.6	28.1	82	WNW	0.3	0.1		0	7k		W	0.08	2.0		José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.32	770.1	30.36	771.1	52.9	11.6	42	SW			4		8			0	0		
Umea	30.30	769.6	30.35	770.9	50.1	15.6	37	SW			6		7			0	0		
Hernosand	30.32	770.0	30.37	771.3	55.6	13.1	61	N			4		5			0	0		
Stockholm	30.12	765.1	30.30	769.6	66.9	19.4	53	SE			2		2			0	0		
Wisby	30.19	766.7	30.24	768.2	65.1	18.4	72	NW			2		5			0	0		
Sub-Series.																			
Upsala	30.09	764.2	30.17	766.4	70.2	21.2	49	S	11.4	5.1			8		SE	0	0		S. G. Fineman.
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.72	729.4	30.08	763.9	78.1	25.6	59	N			2		3			0	0		The Observatory.
Zurich	28.53	724.6	30.08	764.0	80.8	27.1	57	W			2		3			0.071	1.8	Clear	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			30.03	762.8	74.5	23.6	65	NE	19.	8.5			1		NE	0	0		The Observatory.
Valona			30.15	765.8	80.8	27.1		Calm			0		0			0	0	Clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.84	758.0	86.0	30.0	59	SW			2		0			0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Barometer. Corrected for instru-m'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
UNITED STATES SERIES. By authority of the Secretary of War. Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.																			
Albany, New York	30.09	764.3	30.17	766.3	64	17.8	53	NW	2	0.9		2k;hz	Hz			0	0	Dense haze.	
Alpena, Michigan	29.47	748.5	30.12	765.0	49.5	9.7	85	E	14	6.3			10n		Calm	0.40	10.2	Heavy rain	
Atlanta, Georgia	28.90	734.0	30.05	763.3	71.2	21.8	92	E	11	4.9			10s		Calm	0.04	1.0	Cloudy	
Atlantic City, New Jersey	30.16	766.1	30.18	766.6	66	18.9	79	SW	3	1.3		0	0			0	0	Clear	
Augusta, Georgia	29.91	759.7	30.09	764.3	71.8	22.1	76	E	3	1.3		2ck	Hz			0.07	1.8	Fair	
Baltimore, Maryland	30.11	764.8	30.16	766.1	66	18.9	74	S	3	1.3		8k	0	W		0	0	Fair	
Barnegat, New Jersey	30.13	765.3	30.15	765.8	70	21.1	66	SW	7	3.1		0	0			0	0	Clear	
Bismarck, Dakota	28.23	717.0	29.97	761.2	52	11.1	86	E	6	2.7		5c	0	Calm		0.01	0.3	Fair	
Boise City, Idaho	27.22	691.4	29.98	761.5	57.0	13.9	69	W	1	0.4		0	0			0	0	Clear	
Boston, Massachusetts	29.95	760.7	30.10	764.5	60.0	15.6	75	W	3	1.3		2ck	2ks	W	W	Inap	Inap.	Fair	
Brackettville, Texas	28.78	731.0	29.79	756.7	75	23.9	90	E	9	4.0		0	2s		SE	0	0	Fair	
Brownsville, Texas	29.77	756.1	29.81	757.2	84	28.9	75	SE	4	1.8		2c	0			0	0	Clear	
Buffalo, New York	29.41	747.0	30.10	764.5	55	12.8	65	SW	3	1.3		5cs	Sk	W		0	0	Dense smoke	
Burlington, Vermont	29.82	757.4	30.10	764.5	61.2	16.2	79	S	4	1.8		5k	2s	SW		Inap.	Inap.	Fair	
Cairo, Illinois	29.69	754.1	30.08	764.0	70	21.1	75	E	3	1.3		0	0			0	0	Clear	
Campo, California	27.33	694.2	29.90	759.4	38.4	3.6	45	S	4	1.8		0	0			0	0	Clear	
Camp Thomas, Arizona	27.17	690.1			74	23.3	43	SE			1	10cs;k	0	E		0	0	Cloudy	
Cape Henry, Virginia	30.13	765.3	30.15	765.8	70	21.1	80	SE	11	4.9		5k	0	SW		0.05	1.3	Fair	
Cape May, New Jersey	30.14	765.5	30.17	766.3	67	19.4	84	S	8	3.6		0	0			0	0	Clear	
Castroville, Texas	29.19	741.4	29.86	758.4	81	27.2	74	S	3	1.3			10s		S	0	0	Cloudy	
Cedar Keys, Florida	30.04	763.0	30.05	763.5	81	27.2	74	E	11	4.9		0	0			0	0	Clear	
Champaign, Illinois	29.23	742.4	30.00	762.0	65.2	18.4	84	SW	4	1.8		2k	0	SW		0	0	Fair	
Charleston, S. Carolina	30.04	763.0	30.10	764.5	78	25.6	78	NE	1	0.4		0	8s		Calm	0	0	Cloudy	
Charlotte, N. Carolina	29.26	743.2	30.12	765.0	72.0	22.2	67	S	1	0.4		0	Hz			0.55	14.0	Clear	
Chattanooga, Tennessee	29.24	742.7	30.04	763.0	73.5	23.1	85	E	5	2.2		2cs	0	Calm		0.01	0.3	Fair	
Cheyenne, Wyoming	24.04	610.6	29.85	758.2	58	14.4	82	SW	2	0.9			10s		SW	0	0	Cloudy	
Chicago, Illinois	29.28	743.7	29.96	761.0	63.3	17.4	74	SW	5	2.2		8k	0	W		Inap.	Inap.	Fair	
Chincoteague, Virginia	30.15	765.8	30.17	766.3	67	19.4	79	SE	10	4.5		2k	0	SE		0	0	Fair	
Cincinnati, Ohio	29.46	748.3	30.10	764.5	66	18.9	74	SE	30	13.4		4k	1ks	W		0	0	Fair	
Cleveland, Ohio	29.39	746.5	30.11	764.8	53	11.7	73	SE	8	3.6		8c	0	W		0	0	Fair	
Coleman City, Texas	28.18	715.8	29.77	756.1	76	24.4	77	SE	4	1.8		2c	0	W		0	0	Fair	
Columbus, Ohio	29.26	743.2	30.08	764.0	60	15.6	71	E	4	1.8		5k	0	W		0	0	Fair	
Concho, Texas	28.06	712.7	29.94	760.5	76	24.4	82	Calm	0	0		5c	0	SE		0	0	Fair	
Corsicana, Texas	29.58	751.3	30.04	763.0	79	26.1	82	S	4	1.8		0	2ks			0	0	Clear	
Davenport, Iowa	29.36	745.7	30.00	762.0	67	19.4	79	W	3	1.3		8k	0	W		0.07	1.8	Fair	
Dayton, Washington T'y	28.29	718.6	30.04	763.0	49.7	9.8	58	S	2	0.9		0	0			0	0	Clear	
Deadwood, Dakota	25.33	643.4	29.88	758.9	61	16.1	66	SW				5c	0	SW		0	0	Fair	
Decatur, Texas	28.81	731.8	29.92	760.0	78	25.6	65	SE	12	5.4		2k	0	SE		0	0	Fair	
Delaware Breakwater, Del.	30.15	765.8	30.17	766.3	64	17.8	89	S	8	3.6		2ck	0	NW		0	0	Fair	
Denison, Texas	29.19	741.4	29.97	761.2	78	25.6	73	SE	8	3.6		8cs	0	Calm		0	0	Fair	
Denver, Colorado	24.74	628.4	29.81	757.2	64.2	17.9	72	W	5	2.2		0	0			0	0	Clear	
Des Moines, Iowa	29.12	739.6	30.00	762.0	67	19.4	89	E	1	0.4			10s			0.28	7.1	Cloudy	
Detroit, Michigan	29.36	745.7	30.04	763.0	62.0	16.7	72	SE	10	4.5			10s		Calm	0	0	Cloudy	
Dodge City, Kansas	27.41	696.2	29.90	759.4	65.6	18.7	86	SE	8	3.6		5k;cs	2s	SE;W		0	0	Cloudy	
Dubuque, Iowa	29.30	744.2	29.98	761.5	60.5	15.8	81	NW	8	3.6		8k	Hz	NW	Calm	0.05	1.3	Fair	
Duluth, Minnesota	29.40	746.7	30.08	764.0	50	10.0	93	NE	11	4.9			10s		NE	0.02	0.5	Cloudy	
Eagle Pass, Texas	29.18	741.2	29.98	761.5	78.3	25.7	82	SE	7	3.1		1c	0	Calm		0	0	Clear	
Eagle Rock, Idaho	25.28	642.1	29.99	761.7	53	11.7	61	SW	8	3.6		0	0			0	0	Clear	
Eastport, Maine	29.99	761.7	30.06	763.5	57	13.9	75	S	3	1.3		0	8s			0.09	2.3	Fair	
El Paso, Texas	26.15	664.2	29.80	756.9	76	24.4	31	NW	4	1.8		0	1s			0	0	Clear	
Erie, Pennsylvania	29.38	746.2	30.08	764.0	57	13.9	69	SE	7	3.1		10c	0			0	0	Cloudy	
Escanaba, Michigan	29.38	746.2	30.02	762.5	52	11.1	93	NE	9	4.0			10s		Calm	0.35	8.9	Cloudy	
Florence, Arizona	28.34	719.8	29.94	760.5	60	15.6	39	Calm	0	0		0	0			0	0	Clear	
Fort Apache, Arizona	25.01	635.2	29.79	756.7	53	11.7	25	E	4	1.8		0	Sk		Calm	0	0	Dense smoke	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota	28.42	721.9	29.88	758.9	57	13.9	87	SE	6	2.7		1cs	0			0	0	Clear	
Fort Benton, Montana	27.05	687.1	29.79	756.7	63	17.2	57	NW	5	2.2		0	0			0	0	Clear	
Fort Buford, Dakota	27.90	708.6	29.82	757.4	62	16.7	77	SE	16	7.2		5cs	0	W		0	0	Fair	
Fort Custer, Montana	26.65	676.9	29.74	755.4	64	17.8	67	NW	4	1.8		0	0			0	0	Clear	
Fort Davis, Texas	25.18	639.6	30.14	765.5	67	19.4	64	SW	6	2.7		0	0			0	0	Clear	
Fort Elliott, Texas	27.27	692.6	30.34	770.6	67	19.4	69	SE	8	3.6		5c	0	SE		0.02	0.5	Fair	
Fort Gibson, Indian T'y	29.41	747.0	29.94	760.5	70	21.1	95	SE	6	2.7			10s		W	0.90	22.9	Cloudy	
Fort Grant, Arizona					70	21.1	44	E	14	6.3		8k	0			0	0	Cloudy	
Fort Griffin, Texas	28.69	728.7	29.90	759.4	79.0	26.1	70	SE	3	1.3		5ck	0			0	0	Fair	
Fort Keogh, Montana	27.32	693.9	29.74	755.4	60	15.6	76	SE	7	3.1		5c	0			0	0	Fair	
Fort Macon, North Carolina	30.13	765.3	30.14	765.5	72	22.2	85	N	4	1.8		8k	0	Calm		0	0	Cloudy	
Fort McKavett, Texas	27.76	705.1	29.59	751.6	74.9	23.8	77	S	3	1.3		4c	0	S		0	0	Fair	
Fort Missoula, Montana	26.60	675.6	29.98	761.5	58	14.4	64	S	2	0.9		2c	0	S		0	0	Fair	
Fort St. Michaels	29.55	750.6	29.58	751.3	46	7.8	69	N	14	6.3		0	8ks			0	0	Fair	
Fort Shaw, Montana	26.28	667.5	29.73	755.1	55	12.8	68	W	9	4.0		8cs	0	W		0	0	Cloudy	
Fort Sill, Indian Territory	28.68	728.5	29.89	759.2	76	24.4	73	S	16	7.2		8c	2s	W		0	0	Cloudy	
Fort Stevenson, Dakota	28.18	715.8	29.96	761.0	56	13.3	94	E	4	1.8		2cs	0	Calm		0.55	14.0	Clear	
Fort Verde, Arizona					59	15.0	48	W			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.28	718.3	29.77	756.1	75	23.9	83	SW	6	2.7		4cs	0	W		0	0	Fair	
Galveston, Texas	29.98	761.5	30.02	762.5	84.5	29.2	79	S	6	2.7		5ck	0	S		0	0	Fair	
Grand Haven, Michigan	29.34	745.2	29.99	761.7	60	15.6	94	E	3	1.3			10n		E	0.95	24.1	Light rain	
Hatteras, North Carolina	30.14	765.5	30.16	766.1	77	25.0	77	S	8	3.6		8k	0			0	0	Fair	
Helena, Montana	25.77	654.5	29.97	761.2	62	16.7	51	Calm	0	0		0	5s		Calm	0.18	4.6	Fair	
Henrietta, Texas	28.72	729.5	29.57	751.1	82	27.8	71	S	12	5.4		8cs	0	SW		0	0	Fair	
Indianapolis, Indiana	29.25	742.9	30.02	762.5	69.5	20.8	61	SW	3	1.3		0	Hz		Calm	0	0	Clear	
Indianola, Texas	29.97	761.2	30.00	762.0	82.0	27.8	83	S	5	2.2		1k	2ks	S	Calm	0	0	Fair	
Jacksboro, Texas	28.81	731.8	29.88	758.9	78	25.6	78	SE	10	4.5		8cs	0	Calm		0	0	Fair	
Jacksonville, Florida	30.05	763.3	30.07	763.8	82	27.8	79	SE	5	2.2		5cs;k	0	SE		0	0	Fair	
Keokuk, Iowa	29.34	745.2	29.98	761.5	68.6	20.3	82	SW	1	0.4		2k	5s	NW	SW	0	0	Cloudy	
Key West, Florida	30.03	762.7	30.06	763.5	82.6	28.1	73	E	3	1.3		2cs	2s			0	0	Fair	
Kittyhawk, North Carolina	30.16	766.1	30.18	766.6	71	21.7	85	E	2	0.9			10s		W	0.14	3.6	Cloudy	
Knoxville, Tennessee	29.07	738.4	30.07	763.8	67.5	19.7	82	NE	3	1.3		2k	5s	SW	Calm	0	0	Fair	
La Crosse, Wisconsin	29.20	741.9	29.93	760.2	60	15.6	82	N	8	3.6			10s		N	0.38	9.7	Cloudy	
La Mesilla, New Mexico	26.00	660.4	30.15	765.8	70.3	21.3	44	Calm	0	0		0*	2s			0	0	Fair	
Laredo, Texas	29.48	748.8	29.81	757.2	78	25.6	86	SE	2	0.9		0	8s		S	0	0	Fair	
Leavenworth, Kansas	29.11	739.4	29.98	761.5	68	20.0	84	SE	5	2.2			10s			0	0	Cloudy	
Lewiston, Idaho	29.17	740.9	30.00	762.0	60	15.6	44	E	1	0.4		0	0			0.01	0.3	Clear	
Little Rock, Arkansas	29.70	754.4	30.01	762.2	67	19.4	95	Calm	0	0			Fg			1.24	31.5	Dense fog	
Los Angeles, California	29.52	749.8	29.89	759.2	58.3	14.6	88	E	4	1.8			10s		Calm	0	0	Cloudy	
Louisville, Kentucky	29.48	748.8	30.03	762.7	67.5	19.7	74	Calm	0	0		0	Sk			0	0	Clear	
Lynchburg, Virginia	29.45	748.0	30.12	765.0	69	20.6	65	Calm	0	0		10k	0	W		0	0	Cloudy	
Madison, Wisconsin	28.97	735.8	29.95	760.7	60	15.6	88	NW	9	4.0		0	8s		NW	0.40	10.2	Cloudy	
Marquette, Michigan	29.36	745.7	30.07	763.8	45	7.2	100	N	3	1.3			10n;fg		N	0.39	9.9	Light rain	
Mason, Texas																			
Memphis, Tennessee	29.73	755.1	30.06	763.5	69	20.6	90	NE	1	0.4		10cs	Sk	NW	NE	0.03	0.8	Cloudy	
Milwaukee, Wisconsin	29.23	742.4	29.96	761.0	57	13.9	81	SE	5	2.2			10s		NW	0.46	11.7	Cloudy	

JUNE 25, 1881.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
United States Series—Continued.																			
Mobile, Alabama	29.95	760.7	30.02	762.5	83	28.3	83	W	4	1.8		5c	Hz	W		0	0	Fair	
Montgomery, Alabama	29.80	756.9	30.02	762.5	78.2	25.7	77	SE	5	2.2		5k	5ks	W	W	0.01	0.3	Cloudy	
Moorhead, Minnesota	29.06	738.1	30.02	762.5	53	11.7	96	NE	10	4.5			10s		SE	0	0	Cloudy	
Morgantown, W. Virginia	29.15	740.4	30.14	765.5	53	11.7	93	Calm	0	0			Fg			0	0	Dense fog	
Mt. Washington, N. H.	23.91	607.3	29.94	760.5	37	2.8	90	NW	18	8.0			Fg		NW	0	0	Light fog	
Nashville, Tennessee	29.52	749.8	30.04	763.0	70.4	21.3	75	W	1	0.4		0	0			0	0	Clear	
New Haven, Connecticut	30.04	763.0	30.15	765.8	63	17.2	52	N	4	1.8		0	Hz			0	0	Clear	
New London, Connecticut	30.11	764.8	30.16	766.1	66	18.9	59	NW	4	1.8		0	0			0	0	Clear	
New Orleans, Louisiana	29.98	761.5	30.03	762.7	82.0	27.8	79	W	3	1.3		5c	2ks	W	W	0.11	2.8	Fair	
Newport, Rhode Island	30.07	763.8	30.12	765.0	65.5	18.6	64	SW	2	0.9		0	Hz			0	0	Light haze	
New River, N. Carolina					76	24.4	76	E			1	8cs	0					Cloudy	
New Shoreham, Rhode I'd	30.11	764.8	30.14	765.5	64.0	17.8	78	NW	10	4.5		0	0			0	0	Clear	
New York, New York	30.00	762.0	30.17	766.3	66	18.9	64	N	2	0.9		5cs	0	W		0	0	Fair	
Norfolk, Virginia	30.13	765.3	30.17	766.3	71	21.7	71	SE	5	2.2		0	8ks		W	0.01	0.3	Fair	
North Platte, Nebraska	27.10	688.3	29.92	760.0	60	15.6	88	SE	5	2.2			10s		SE	0.81	20.6	Cloudy	
Olympia, Washington T'y	29.98	761.5	30.02	762.5	48.0	8.9	93	W	1	0.4		10cs	0	Calm		0.01	0.3	Cloudy	
Omaha, Nebraska	28.90	734.0	30.04	763.0	71	21.7	80	Calm	0	0		10cs	0			0	0	Cloudy	
Oswego, New York	29.82	757.4	30.14	765.5	56.0	13.3	79	Calm	0	0		5cs	1s	W	W	0	0	Fair	
Pensacola, Florida	30.00	762.0	30.03	762.7	83	28.3	83	Calm	0	0		0	5ks		W	0	0	Fair	
Philadelphia, Pa	30.11	764.8	30.17	766.3	66.0	18.9	69	W	3	1.3			Fg			0	0	Dense fog	
Phœnix, Arizona	28.69	728.7	30.43	772.9	69	20.6	48	E	2	0.9		0	0			0	0	Clear	
Pike's Peak, Colorado	18.00	457.2	30.21	767.3	37	2.8	53	SW	20	8.9		0	0			0	0	Clear	
Pioche, Nevada	24.04	610.6	29.89	759.2	60	15.6	29	NW	4	1.8		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.35	745.5	30.14	765.5	53	11.7	89	NE	2	0.9		0	Fg		Calm	0	0	Clear	
Port Eads, Louisiana	30.04	763.0	30.05	763.3	83.3	28.5	87	SW	10	4.5		3c;ck	Hz	SW	Calm	0	0	Fair	
Port Huron, Michigan	29.41	747.0	30.07	763.8	55.6	13.1	81	SE	3	1.3			10s		S	0	0	Cloudy	
Portland, Maine	30.03	762.7	30.08	764.0	63	17.2	67	NW	2	0.9			10s		SW	0.03	0.8	Cloudy	
Portland, Oregon	29.98	761.5	30.05	763.3	52.9	11.6	88	Calm	0	0		2cs	0	W		0	0	Clear	
Portsmouth, N. Carolina					75	23.9	77	NE	9	4.0		5ck	0	Calm		0	0	Fair	
Prescott, Arizona	24.76	628.9	29.83	757.7	52	11.1	35	S	2	0.9		0	0			0	0	Clear	
Punta Rassa, Florida	30.02	762.5	30.03	762.7	80	26.7	85	S	13	5.8		8cs	1ks	Calm	S	0.88	22.4	Cloudy	
Red Bluff, California	29.54	750.3	29.87	758.7	66.0	18.9	69	Calm	0	0		0	0			0	0	Clear	
Rio Grande City, Texas	29.73	755.1	29.94	760.5	78	25.6	86	SE	5	2.2		5c	0	W		0	0	Fair	
Rochester, New York	29.52	749.8	30.14	765.5	55	12.8	81	W	4	1.8		5ck	Hz	W		0	0	Fair	
Roseburg, Oregon	29.50	749.3	30.06	763.5	52.1	11.2	90	NE	1	0.4		1c	0			0	0	Clear	
Sacramento, California	29.82	757.4	29.89	759.2	58.0	14.4	82	SE	6	2.7		0	0			0	0	Clear	
St. Louis, Missouri	29.47	748.5	30.05	763.3	67.2	19.6	83	S	4	1.8		10cs	0			0	0	Cloudy	
St. Paul, Minnesota	29.18	741.2	30.02	762.5	54	12.2	87	NW	6	2.7			10s		NW	0.43	10.9	Cloudy	
Salt Lake City, Utah	25.59	650.0	29.79	756.7	64	17.8	30	Calm	0	0		0	0			0	0	Clear	
San Antonio, Texas	29.30	744.2	30.00	762.0	79.0	26.1	87	SE	1	0.4		1c	0	Calm		0	0	Clear	
San Diego, California	29.78	756.4	29.85	758.2	61.9	16.6	77	SE	8	3.6			10s			0	0	Cloudy	
Sandusky, Ohio	29.41	747.0	30.07	763.8	60	15.6	71	SE	12	5.4			10s			0	0	Cloudy	
Sandy Hook, New Jersey	30.13	765.3	30.16	766.1	64.2	17.9	76	NW	3	1.3		0	Hz			0	0	Clear	
San Francisco, California	29.90	759.4	29.97	761.2	52	11.1	93	SW	8	3.6			Fg		SW	0	0	Dense fog	
Santa Fé, New Mexico	23.33	592.6	29.84	757.9	64	17.8	43	Calm	0	0		0	0			0	0	Clear	
Savannah, Georgia	30.00	762.0	30.10	764.5	76	24.4	79	E	2	0.9			10ks			0	0	Cloudy	
Shreveport, Louisiana	29.83	757.7	30.06	763.5	75	23.9	86	S	4	1.8		0	5s			0.20	5.1	Fair	
Silver City, New Mexico	24.27	616.4	29.73	755.1	68	20.0	42	NW	2	0.9		8cs	0	NW		0	0	Fair	
Sitka, Alaska	29.41	747.0	29.48	748.8	54	12.2	61	SE	9	4.0			10ks		SE	0.01	0.3	Cloudy	
Smithville, North Carolina	30.09	764.3	30.12	765.0	77	25.0	77	SE	6	2.7		2k	8s	S		0	0	Cloudy	
Spokane Falls, Wash. Ter.	28.00	711.2	29.96	761.0	51	10.6	78	W	1	0.4		5cs	0			0	0	Fair	
Springfield, Illinois	29.37	746.0	30.03	762.7	66	18.9	79	SW	6	2.7		5c	0	W		0	0	Fair	
Springfield, Massachusetts	30.02	762.5	30.15	765.8	67.0	19.4	58	W	5	2.2		1ck	0	SW		0	0	Clear	
Stockton, Texas	26.94	684.3	29.93	760.2	74.5	23.6	76	SE	12	5.4		0	0			0	0	Clear	
St. Vincent, Minnesota	29.19	741.4	30.03	762.7	52	11.1	86	S	2	0.9		0	0			0	0	Clear	
Thatcher's Island, Mass	30.06	763.5	30.11	764.8	69.8	21.0	82	E	9	4.0		5ck	5s	Calm	NW	0	0	Cloudy	
Toledo, Ohio	29.37	746.0	30.05	763.3	60	15.6	75	S	7	3.1		2ck	5s	W	W	0	0	Cloudy	
Tucson, Arizona	27.42	696.5	29.70	754.4	76	24.4	45	SE	2	0.9		2cs	0			0	0	Clear	
Umatilla, Oregon	29.67	753.6	30.07	763.8	55.0	12.8	71	E	6	2.7		5cs	0			0	0	Fair	
Uvalde, Texas	29.04	737.6	29.82	757.4	78	25.6	82	SE	2	0.9		0	5s		S	0	0	Fair	
Vicksburg, Mississippi	29.86	758.4	30.11	764.8	74	23.3	86	Calm	0	0		0	0			0	0	Clear	
Visalia, California	29.48	748.8	29.84	757.9	64	17.8	60	NW	3	1.3		0	0			0	0	Clear	
Washington, D. C.	30.04	763.0	30.15	765.8	65.5	18.6	78	N	1	0.4		1c	Hz			0	0	Clear	
Wickenburg, Arizona					65	18.3	31	Calm			0	0	0			0	0	Clear	
Wilmington, N. Carolina	30.06	763.5	30.12	765.0	75	23.9	86	Calm	0	0		2c	8s	Calm	Calm	0.05	1.3	Cloudy	
Winnemucca, Nevada	25.63	651.0	29.84	757.9	54	12.2	55	NE	4	1.8		0	0			0	0	Clear	
Wood's Holl, Mass	30.08	764.0	30.11	764.8	64	17.8	78	NW	4	1.8		1cs	Hz	Calm		0	0	Clear	
Yankton, Dakota	28.78	731.0	30.04	763.0	64	17.8	83	E	6	2.7		0	0			0	0	Clear	
Yuma, Arizona	29.60	751.8	29.74	755.4	71.7	22.1	54	NE	2	0.9		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.13	562.1			53.0	11.7	73	Calm	0	0		5cs	0			0.03	0.8	Fair	Thomas Herran
Buff Bay Town, Jamaica ‡	29.83	757.7	30.14	765.5	77	25.0	86	E				2k	2k						
Havana, Cuba, W. I.	30.03	762.7	30.08	764.0	81	27.2	87	Calm	0	0		8cs	4ks	Calm	Calm	0.18	4.6	Cloudy	A. Van Caneghem, Ass't.
Kingston, Jamaica, W. I.	30.05	763.3	30.06	763.5	83.4	28.6	80	ESE	1	0.4		2cs	0			0	0	Fair	Robert Johnstone
Navassa, W. I.	29.97	761.2	30.05	763.3	82	27.8	75	E	15	6.7		2s	8k	NE	E	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.10	764.5	30.10	764.5	80	26.7	82	E			2	3k	4s	E		0.260	6.6	Fair	Dr. C. J. Hering.
Puerto Bertio, U. S. Col'mbia	29.45	748.0	30.00	762.0	78	25.6	95	Calm	0	0			Fg			0.05	1.3	Foggy	Francesco J. Cisneros.
Rivas, Nicaragua					75.2	24.		NW			1	7ck	5ks	NE	NW	0.110	2.8		Earl Flint.
Santiago de Cuba, W. I.																			Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.01	762.2	30.06	763.5	63.0	17.2	85	NE	10	4.5		2c	0	NE		0	0	Fair	J. Fortescue & W. Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross																			Comm A. J.Errington.
H. M. S. Alert, Thursday Island, Oceania	29.98	761.5	74.8	23.8	83	SE			3-5		8							Squally	Capt. J. P. Maclear.
H. M. S. Alexandra, N 42° 45,′ E. 17° 47′	30.04	763.0	83	28.3	74	Calm			0		3						Sm'h	D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab, N. 12° 40′, E. 45° 00.′	29.68	753.9	89	31.7	72	SW			3		0						Sm'h	Blue sky	Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N 24° 43′, E. 66° 55′	29.61	752.1	88	31.1	75	WSW			2		5	SW				3	SW	D. clouds	Comm. G. W. Hand.
H. M. S. Bittern, N. 37° 30′, E. 20° 58′			80	26.7		NNW			2-3							2	N	D. clouds	Capt. E. B. Pusey.
H. M. S. Blanche, N 16° 59′, W. 61° 44′	30.12	765.0	83	28.3	79	E			5		6					4	E	D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, Ascension I'ds, Africa	30.10	764.5	73	22.8	71	ESE			2-3		3	SSE						D. clouds	Com. F. W. Richards.
H. M S. Champion, Monte Video, Uruguay	30.03	762.7	56	13.3	87	NE			1		9							D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, Ninghai, China	29.69	754.1	68	20.0	94	SW			2									Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruiser, Palermo, Sicily	30.05	763.3	85	29.4		NNE			1		1	NNE						Blue sky	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Eliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.35	770.9	57	13.9		W			2-4		4	SSW						Squally	Capt C. Domville.
H. M. S. Dock-Yard, Bermuda, W.I.	30.13	765.3	76	24.4	83	NW			1		3	NW						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 49° 30′, W. 55° 49′	29.95	760.7	55	12.8	71	WSW			1		10?							Blue sky?	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 5° 06′, E. 73° 47′	29.87	758.7	80	26.7		ESE			3-4		7					4	SE	D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 23° 00′, E. 58° 45′	30.20	767.1	73	22.8		ESE			4		4	ESE				3	ESE	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, N. 5° 20′, E. 163° 10′	29.83	757.7	84	28.9	87	Calm			0		4	ENE						Showery	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Port Louis; Mauritius	30.24	768.1	75	23.9	64	ESE			1-2		4	ENE						D. clouds	Capt. R. D. King.
H. M .S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn, N. 13° 25′, E. 52° 40′	29.68	753.9	81	27.2	91	E			4		0					4	SSE	Blue sky	Capt. P. Aldrich.
H. M. S. Flamingo, Lucca, Jamaica, W. I.	29.97	761.2	85	29.4	83	Calm			0									D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	30.01	762.2	55	12.8	83	Calm			0		9							Showery	Comm. E. G. Bourke.
H. M. S. Garnet, S. 52° 35′, W. 69° 45′	29.13	739.9	48	8.9	77	NW			7		6	WSW						Squally	Capt. L. F. Jones.
H. M. S. Griffin, N. 21° 00′, W. 74° 00′	30.11	764.8	85	29.4	79	ESE			1		1	ESE						Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber,																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C.P. Fitzgerald.
H. M. S. Iris,																			Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.05	763.3	60	15.6		SSE			1		3	N						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily, Yokohama, Japan	29.85	758.2	70	21.1		W			1		10							Overcast	Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	29.77	756.1	84.1	28.9	85	ESE			1-2		3					1	ESE	Misty	Capt. A. Carpenter.
H. M. S. Midge, N. 23° 07′, E. 113° 14′	29.78	756.4				Calm			0		3	NE						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. N. S. Modeste, S. 31° 20′, E. 37° 20′	30.09	764.3	68	20.0	?	N			3		2	NNW				3	NNE	D. clouds	Capt. J. G. Mead.
H. M. S Monarch, Tunis, Africa	30.07	763.8	76	24.4	86	Calm			0		0							Blue sky	Capt. G. C. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, West Coast of Borneo			83.5	28.6		W			1		1	W						Blue sky	Capt. J. H. Corfe.
H. M. S Northampton, Halifax, Nova Scotia.*†	30.02	762.5	57	13.9	77	Calm			0		3							D. clouds	Capt. E. B. Drummond.
H. M. S. Orontes, N. 10° 32′, W. 19° 58′	29.98	761.5	77.5	25.3	88	NNE			1		10	NNE				1	NNE	Overcast	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S Pelican, N. 8° 48′, W. 79° 32′	29.93	760.2	79.5	26.4	95	NE			2		4					2	NE	D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin, S. 52° 40′, W. 70° 10′	29.04	737.6	45	7.2		NW			6-7		5							Squally	Capt. A. C. Paget.
H. M. S. Phœnix, N. 24° 00′, W. 69° 41′	30.10	764.5	81	27.2	83	ESE			2		6	ESE				2	ESE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A.C.Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.73	755.1	84	28.9		S			1		0							Blue sky	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 52° 30′, W. 128° 07′	29.79	756.7	53	11.7		ENE			1		9							Raining	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 60 10′, E. 39° 11′	30.09	764.3	79.3	26.3	69	SE			2		3					Sm'h		D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 27° 04′, W. 159° 28′	30.24	768.1	75	23.9	85	ENE			2		2					2	ENE	D. clouds	Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Arica, Peru	30.06	763.5	63	17.2	88	Calm			0		8	Calm						D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise, Sandy Point, Patagonia	28.89	736.3	43	6.1	91	W			5-6		4							Squally	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I			82	27.8		ESE			2		2							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	30.33	770.4	51	10.6	86	Calm			0		1							Blue sky	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, N. 28° 07′, E. 50° 15′	29.63	752.6	88.5	31.4	59	SSE			1									Heavy mist	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candido dos Rios, Comd't
Quanza, St. Vincent, Cape Verd I'ds	30.05	763.3	79.3	26.3	67	NE			4		3		SE			2	NE	D. clouds	Carlos M. da Silva Costa, Comd't
RioLima																			S. C. da Silva Costa, Comd't.
Sado, Loando, Africa	30.08	763.9	68.0	20.0	85	WNW			1		10							Overcast	G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.85	758.1	85.5	29.7	73	SE			2		1			2 h	ours			Blue sky	P. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga, N. 36° 46′, W. 8° 40′	30.11	764.9	68.7	20.4	87	NW			3		0							Blue sky	Capt. M. von Krusenstierna
H. M Frigate Vanadis																			Com. Th. Ulner.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.11	764.8	83	28.3	83	W	4	1.8			8		SW	0	0			Fair.	
Naval Hospital, Yokahama, Japan	29.83	757.7	67.5	19.7	82	Calm			0		10		WSW	0.19	4.8			Misty	
Adams, Acapulco, Mexico	29.69	754.1	82	27.8	87	NNW			1		2		W			Sm'h		Fair	
Alaska, Callao, Peru	29.97	761.2	62	16.7	100	S			1		10		S	0	0			Overcast	
Alert, Port Lloyd, Bonin Id.*	29.87	758.7	80	26.7	78	Calm			0		9			0	0	Sm'h		Clear	
Alliance, St. John's, N. F	30.09	764.3	51	10.6	86	WSW			1		8			0	0	Sm'h		Cloudy	
Ashuelot, Kobe, Japan	29.86	758.4	67	19.4	100	NE			2		10		Calm					Cloudy	
Colorado, New York, N. Y	30.17	766.3	68	20.0	74	NE	2	0.9			0			0	0			Hazy	
Constitution, Newport, R. I	30.07	763.8	60	15.6	82	SW			1-2		0							Clear.	
Franklin, Norfolk, Va	30.11	764.8	69	20.6	90	SE	4	1.8			8		WSW	0	0			Fair	
Galena, Vigo, Spain	30.43	772.9	71	21.7	85	Calm			0		2					Sm'h		Fair	
Independence, N. Yard, Mare I'd, Cal	29.96	761.0	71	21.7	66	SSW	2.4	1.1			0			0	0			Clear.	
Jamestown, Sitka, Alaska*	29.56	750.8	52	11.1	86	SE			2		8			0	0			Cloudy	
Kearsarge, Norfolk, Va	30.18	766.6	70	21.1	85	Calm			0		5							Fair	
Lackawanna. Apia, Samoa Id's, Oceania†	30.11	764.8	75	23.9	90	ENE			1-2		2		NE					Fair	
Marion, Monte Video, Uruguay..*†	29.97	761.2	54	12.2	87	ENE			3		10			Mod	erate	Sm'h		Cloudy	
Michigan, Detroit, Michigan	29.97	761.2	60	15.6	82	SE					10							Cloudy	
Minnesota, Newport, R. I	30.12	765.0	62	16.7	77	NNW			0-1		2					Sm'h		Clear	
Monocacy, Yokohama, Japan	29.98	761.5	70	21.1	80	W			1		10		Calm					Drizzling	
Nipsic, Antwerp, Belgium	30.11	764.8	71	21.7	57	SSW			1		8					Sm'h		D. clouds	
Onward, Callao, Peru†	30.01	762.2	63	17.2	89	SSE			3		10		NNW			Long	W	Cloudy.	
Palos, Nagasaki, Japan	29.87	758.7	75	23.9	100	SSW			2		10							Rainy	
Passaic, Washington, D. C	30.16	766.1	66	18.9	100	E			1		2							Fair	
Pensacola, Mare Isl'd, Cal	29.95	760.7	54	12.2	93	SW			4-5		2			0	0			Fair	
Portsmouth, Newport, R. I	30.10	764.5	61	16.1	100	Calm			0		2					Sm'h		Clear	
Powhatan. Newport, R. I	30.10	764.5	63	17.2	78	S			1		5?							Clear?	
Ranger, N. 26° 50′, W. 111° 05′*	29.77	756.1	83	28.3	83	SE			4		2		Calm	0	0	Mod.	SE	Clear	
Richmond, Kobe, Japan	29.78	756.4	68	20.0	100	ENE			3		10			2.31	58.7			Cloudy	
Saratoga, Newport, R. I	30.09	764.3	61	16.1	77	WSW			1		0			0	0			Clear	
Shenandoah, S. 23° 00′, W. 43° 10′*	30.36	771.1	67	19.4	84	NE			2		5					Sm'h		Fair	
St. Louis, League Island, Pa	29.76	755.9	63	17.2	83	Calm	0	0			2							Clear	
Swatara, N. 31° 07′, E. 122° 15′*†	29.80	756.9	76	24.4	91	SE			3		10		Calm					Overcast	
Tennessee, Navy Yard, N. Y	30.19	766.8	68	20.0	56	N	8	3.6			5		NW	0	0	Sm'h		Fair	
Ticonderoga, S. 33° 33′, W. 35° 46′	30.30	769.6	61	16.1	82	W			3		2		W	0	0	Sm'h	ENE	Clear	
Vandalia. N. 42° 18′, W. 65° 58′	30.15	765.8	56	13.3	94	WNW			1		2		Calm			Long	SE	Fair	
Wabash, Boston, Massachusetts	30.13	765.3	62	16.7	72	W	4	1.8			8		WSW	0	0			Hazy	
Wachusetts, N. Yard, Mare I'd, Cal	29.97	761.2	56	13.3	94	SW			3		5		W	0	0			Fair	
Wyoming, Norfolk, Va	30.19	766.8	68	20.0	100	S	2	0.9			5		S	0	0			Fair	
Yantic, N. 20° 35′, W. 90° 53′*	29.91	759.7	80	26.7	96	E			2		2?		NE			Mod.	NE	Cloudy?	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 10° 21′ W. 118° 43′	29.93	760.2	78.5	25.8	78	N			2		5							Misty	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 19° 55′, W. 41° 21′	30.20	767.1	78	25.6	78	ENE			3		3					2	E	D. clouds	Capt. W. N. Lalley.
City of Agra, S. 17° 30′, W. 32° 54′	30.14	765.5	78.5	25.8	84	SSE			2		3							D. clouds	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 22° 12′, W. 29° 20′	30.25	768.3	75.2	24.0	77	ENE			5		1							Blue sky	Capt. A. Buchan.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 10° 59′, W. 37° 02′	30.17	766.3	75.5	24.2	91	SE			5		8							Showery	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Naiad, N. 37° 41′, W. 15° 45′	30.39	771.9	67.0	19.4	95	N			3		6							D. clouds	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 44° 57′, W. 23° 28′	30.16	766.1	65	18.3	89	SSW			5		9							Misty	Capt. M. Parry.
Sierra Estrella, N. 5° 25′, W. 20° 05′	30.17	766.3	79.5	26.4	82	SSW			3		9							Overcast	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven																			Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, N. 55° 51′, W. 4° 17′	29.78	756.4				WSW			3		5		SW			Sm'h		Showery	
S. S. Circassian, ‡ N. 55° 20′, W. 24° 00′	30.10	764.5	50	10.0	79	WNW			6		7kn			½ hour		5-7	NW; SW	D. clouds	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian, N. 51° 14′, W. 31° 42′	30.11	764.8	53	11.7		WSW			2		10		WSW			Sm'h		Cloudy	Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Gallia																			Capt. W. H. P. Haims.
S. S. Algeria																			Capt. W. Watson.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 50° 08′, W. 22° 36′ †	30.05	763.3	57	13.9	81	NW			4		8		NW	4 hours		Mod.	WNW	Fair	Capt. Benj. Gleadell.
S. S. Germanic, N. 51° 21′, W. 14° 30′ †	30.12	765.0	56	13.3	87	WSW			5		2		W	Showers		Mod.	WSW	Showery	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C Phole.
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, N. 37° 49′, W. 7° 40′	30.21	767.3	70.2	21.2		NW			2		2		NW	0	0	Sm'h	E; W	Clear	
S. S. Köln, N. 42° 53′, W. 44° 25′	29.92	760.0	75.0	23.9	77	WSW			6-7		8		WSW	12h'rs rain	hv'y in	Cross	WSW	Cloudy	Capt. Th. Jüngst
S. S. Strassburg, N. 50° 06′, W. 4° 11′	30.05	763.3	55.4	13.0		SSW			5		10		SW	2 hours		Mod.	SSW	Light rain	Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

UNITED STATES MERCHANT-MARINE SERIES.

Furnished by the co-operation of the owners and agents of the respective lines and vessels.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, N. 41° 04′, W. 47° 41′....*†	30.13	765.3	58	14.4	87	NE			2		10		N			Mod.	Con.	Overcast	Capt. J. W. Shackford.
S. S. Indiana, Philadelphia, Pa			80	26.7	61	SE			5		8		SE	0	0			Cloudy	Capt. R. W. Sargent.
S. S. Ohio, N. 47° 45′, W. 30° 40′....*†	30.27	768.8	57	13.9	100	NW			1		8		NW	Light		Mod.	WNW	Cloudy	W. Shackford, Chief Off'r
S. S. Pennsylvania, Liverpool, England.....†	29.85	758.2	64	17.8	83	SW			4		8		SW			Sm'h		Cloudy	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern, N. 34° 50′, W. 120° 55°....†	30.00	762.0	55	12.8	87	NW			6		10		NW	0	0	Sh'rp	WNW	Cloudy	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 39° 36′, E. 171° 59′....†	30.24	768.1	58	14.4	76	WNW			2		8		WNW	0	0	Mod.	W	Cloudy	Capt. H. Davison.
S. S. Gaelic																			Capt. W. H. Kidley.
S. S. Oceanic, N. 35° 35′, E. 141° 31′	30.27	768.8	74	23.3	81	SE			1		10		NW			Sm'h			Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon.....†	30.04	763.0	53.0	11.7	93	Calm			0		2		SW					Fair	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, San Francisco, Cal.....†	29.92	760.0	52	11.1	93	Calm			0		8			0	0			Foggy	Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, Victoria, British Col'bia..	30.02	762.5	58	14.4	81	Calm			0		10							Rainy	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 32° 45′, W. 117° 10′..†	29.86	758.4	64	17.8	89	SE			2		8		SW			Mod.	WNW	Cloudy	Geo. H. Harrison.
S. S. Senator																			Capt. Thos. Wallace.
S. S. State of California, San Francisco, Cal.....†	29.94	760.5	51	10.6	93	SW			2		10		SW					Foggy	Capt. G. Debney.
S. S. Victoria, Departure Bay.....†	30.00	762.0	57	13.9	81	Calm			0		8							Light rain	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 2d Officer
S. S. City of New York, S. 23° 30′, W. 174° —′ ....†	30.00	762.0	71	21.7	81	S			2		10		S	0	0	Mod.	S	Foggy	Wm.H.Hawes,2d Officer.
S. S. City of Panama, N. 24° 08′, W. 111° 46′....†	29.91	759.7	65	18.3	94	NW			2		10s		NW	0	0	Sm'h	W	Overcast	Capt. D. S. Austin.
S. S. City of Peking, N. 40° 50′, W. 130° 21′...†	30.12	765.0	58	14.4	87	SW			4		10		SW	0	0	Light	W	Misty	Capt. G. G. Berry.
S. S. City of Sidney, S. 35° 10′, E. 176° 01′.....*†	29.43	747.5	62	16.7	66	WSW			6		8		W	0.125	3.2	H'vy	W	Light rain	Capt. H. C. Dearborn.
S. S. City of Tokio, Hong Kong, China.....†	29.86	758.4	87	30.6	75	SW			2		2		SW					Fair	A. L. Ritchie, 2d Officer
S. S. Colima, N. 24° 51′, W. 112° 59′....†	29.88	758.9	66	18.9	78	SW			2		8		S	0	0	Mod.	NW	Cloudy	Capt. R. R. Searle.
S. S. Granada, Panama Bay, Panama †	29.96	761.0	86	30.0	92	Calm			0		2		N	3 hours				Clear	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. Wales.....	30.06	763.5	56	13.3	87	NNW			1		8?		NW					Clear?	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland																			A. Feddersen, 2d Officer.
S. S. Rhynland, Antwerp, Belgium.....†	30.33	770.4	75	23.9	76	S			3		8		SSW	0	0			Cloudy	Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Savannah, Georgia	30.07	763.8	76	24.4	73	SE					8			0	0			Cloudy	Capt. J. Jorgenson.
Sch'r Annie R. Lewis.																			Capt. L. L. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, Monabo, Porto Rica.....†	30.15	765.8	85	29.4		ENE			5		2			0	0	R'gh		Clearing	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk, Cherrystone, Va.....†	30.16	766.1	69	20.6	?	SE	2	0.9		2c	2s			0	0			Fair	
Bark Sunbeam, N. 24° 08′, W. 30° 47′.....†	30.32	770.1	76	24.4	76	ENE			6		5		ENE	0	0	Mod.	ENE	Fair	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 26, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From	From	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours‡			29.97	761.3	77.0	25.0	82	N			2		0			0	0	Clear	Raynard.
Algiers‡			30.04	763.0	78.1	25.6	67	N			2		0			0	0	Clear	Nicolas.
La Calle‡			30.00	762.0	72.0	22.2	84	WSW			1		4			0	0	Cloudy	Fonfréde.
Tunis‡			29.95	760.8															Jacques.
Sfax‡																			Gau.
Saida‡			29.99	761.8	92.3	33.5	17	N			2		3			0	0	Pretty fair	Dumas.
Tebessa‡			30.03	762.7	83.5	28.6	20	NW			4		8			Inap.	Inap.	Very cloudy	Watrin.
Geriville‡					95.7	35.4	27	SE			6		0			0	0	Clear	Lonchamp.
Laghouat‡			30.03	762.7	94.6	34.8	11	S			2		1			0	0	Very fair	Herbin.
Biskra‡			30.04	762.9	101.8	38.8	23	SE			1		0			Inap.	Inap.	Clear.	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	30.31	769.9	30.41	772.4	43.0	6.1	87	NNE	4	1.8			0			0	0	Fine	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.34	745.3	29.86	758.5	81.0	27.2	71	NE			2		5			0.197	5.0		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.14	740.1	29.87	758.8	75.2	24.0	67	NNW	6.9	3.1			5			0.004	0.1		Dr. Wierzbicki.
Eperies	28.97	735.9	29.80	756.8	82.4	28.0	54	SE			2	0	78			Inap.	Inap.		Julius Mikolik.
Gratz‡	28.66	728.0	29.84	758.0	81.0	27.2	70	S			2		3			0.004	0.1		Andreas Rospini.
Hermannstadt	28.49	723.6	29.85	758.3	77.0	25.0	65	NW			3		8			0.059	1.5		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.63	727.2	29.93	760.1	68.4	20.2	83	W			1		9			0.173	4.4		The Staff.
Lemberg	28.90	734.1	29.84	758.0	77.7	25.4	60	SE			2		9			0.374	9.5		Dr. T. Stanecki.
Pola	29.75	755.6	29.85	758.3	88.5	31.4	57	SW			1		6			0	0		I. R. HydrographicOffice.
Szathmar	29.39	746.5	29.84	757.8	79.9	26.6	79	NE			3		5			0	0		Beicht Peter, S. J.
Szegedin	29.57	751.1	29.84	757.9	75.9	24.4	85	Calm			0		5			0.169	4.3		Karl Stancel.
Trieste	29.78	756.4	29.88	759.0	87.6	30.9	57	W			1		2			2.083	52.9		Secco.
Vienna	29.21	741.9	29.89	759.2	79.9	26.6	55	N			2		2			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maesoyck																			M. Pierrot.

Entered at the Post Office at Washington, D. C., as Second-class Matter. Printed June 24, 1882.

STATIONS.	Barometer. Corrected for instrm'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.95	760.7	30.04	763.0	58.7	14.8	50	SSE	12	5.4			5			0	0	Blue sky	W. Boswell.
Armagh, Observatory	29.93	760.2	30.16	766.1	59.0	15.0	65	SW	7	3.1									S. Call.
Bidston, Liverpool Obs'y			30.18	766.6	60.2	15.7	72	W	15	6.7			2					Blue sky	John Hartnup.
Bolton, Sharples	29.64	752.8	30.17	766.3	57.9	14.4	70	WNW	12	5.4			8					D. clouds	Thomas Mackereth.
Bradford, Yorkshire																0.01	0.3		J.McLandsborough,F.R.S
Bridgetown, Barbadoes	30.02	762.5	30.05	763.3	84	28.9	71	NE			2		7					Gloomy	Corpl.J.Surgener,A.H.C
Cardington			30.17	766.3	68.0	20.0	56	S			0.4		8					Overcast	John McLaren.
Chatham, School M. E.	30.07	763.8	30.20	767.1	65.3	18.5	63	NW			1		10					Gloomy	Corpl. W. Beck, R. E.
Falmouth, Observatory	30.06	763.5	30.29	769.4	61.5	16.4	68	W			1		9					Overcast	The Staff.
Fort Napier, Natal	28.02	711.7	30.23	767.8	59.1	15.1	55	Calm			0		6?					Overcast?	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	86	30.0	88	W			1		3?					Raining?	Sgt. C. E. Keane.
Galway, Queen's College			29.93	760.2	58	14.4	76	WNW			4		10			0.26	6.6	Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	29.96	761.0	30.01	762.2	76.0	24.4	86	E			2		0					Blue sky	2nd Cpl. C. Baldwin.
Glasgow, Observatory	29.82	757.4	30.03	762.7	56.9	13.8	58	SSW			6		7					D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	30.02	762.5	30.19	766.8	65.5	18.6	61	W			1		8					D. clouds	The Staff.
Guernsey	30.03	762.7	30.24	768.1	63	17.2	62	WSW			1		5					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.17	766.3	30.20	767.1	67.2	19.6	55	W	10	4.5			6					D. clouds	The Staff.
Leicester, Museum	29.93	760.2	30.19	766.8	61.2	16.2	87	NW			2		9					Overcast	J. E. Carryer.
Malta, Mediterranean	29.86	758.4	29.94	760.5	85.8	29.9	49	NE			2		0					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	30.05	763.3	30.10	764.5	87.0	30.6	82	E			1		5					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.67	753.6	30.19	766.8	62.1	16.7	63	NW			2		7					D. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	29.97	761.2	30.20	767.1	66.7	19.3	55	W			2		4					D. clouds	The Staff.
Plymouth	30.18	766.6	30.25	768.3	65.9	18.8	68	WSW			3		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			30.00	762.0	53.4	11.9	78	W	20	8.9			0					Blue sky	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.73	755.1	29.79	756.7	82.4	28.0	61	NE			2		1					Blue sky	Serg't W. H. Lyne.
Sheffield	29.98	761.5	30.25	768.3	63.9	17.7	72	SW			2		8			0	0	Overcast	W. F. Cooper.
Silloth Rectory	30.10	764.5	30.13	765.3	62.0	16.7	73	W			5		5			0.075	1.9	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.19	766.8	60.0	15.6	66	W	16	7.2			10					Overcast	Rev. S. J. Perry.
Stratfield Turgiss	30.00	762.0	30.20	767.1	69.0	20.6	54	NW			3		6					D. clouds	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	30.24	768.1	30.25	768.3	62	16.7	72	N			2		8					D. clouds	W. Newcombe.
Valencia, Observatory	30.16	766.1	30.18	766.6	58.6	14.8	82	SSW	20	8.9			10					D. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.																			Hon. J. Ferguson.
Charlottetown, P. E. Island	30.08	764.0	30.12	765.0	59	15.0	81	SW	4	1.8		0	2s			0.130	3.3	Fair	H. J. Cundall, C. E.
Chatham, N. B. *	30.02	762.5	30.08	764.0	54	12.2	93	S	4	1.8		8c	0	S		0.03	0.8	Fair	G. A. Blair.
Chicontimi, Quebec					51.6	10.9		NW			1	1cs	0			0	0	Blue sky	Rev. V. A. Huard.
Cornwall, Ontario	29.90	759.4	30.08	764.0	57.5	14.2	80	W			1	1cs	0			0	0	Blue sky	James Smith, M. A
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec *	30.01	762.2	30.03	762.7	58	14.4	88	NW	10	4.5			10n			0	0	Cloudy	J. McWilliams.
Fort Garry, Manitoba *	28.85	732.8	29.65	753.1	55	12.8	97	SE	5	2.2			10n			0.47	11.9	Light rain	James Stewart.
Fredericton, N. B.	30.06	763.5	30.13	765.3	58.2	14.6	87	E	4	1.8			10s			0.140	3.6	Cloudy	Prof. Harrison.
Granton, Ontario	29.02	737.1	30.12	765.0	52.0	11.1	86	Calm			0	0	0			0	0	Clear	James Grant.
Halifax, N. S. *	30.08	764.0	30.21	767.3	50	10.0	99	S	5	2.2			Fg			0	0	Foggy	A. Allison.
Hamilton, Ontario	29.75	755.6	30.14	765.5	63.7	17.6	76	NE			1	3ck	0	N		0	0	Clear	Geo. Dickson, B. A.
Kingston, Ontario *	29.77	756.1	30.10	764.5	64	17.8	67	N	1	0.4		0	0			Inap.	Inap.	Clear	S. Woods, M. A.
Little Glace Bay, N. S.	30.15	765.8	30.19	766.8	62.0	16.7	56	SW			4	4cs	0	SW		0	0	Fair	C. H. Rigby.
Montreal, Quebec *	29.81	757.2	30.08	764.0	67	19.4	57	W	4	1.8		0	0			0	0	Clear	C. H. McLeod, C. E.
Moose Factory, Ontario	30.17	766.3	30.20	767.1	55.1	12.8	58	Calm			0	0	0			Inap.	Inap.	Blue sky	J. R. Nason.
Parry Sound, Ontario *	29.45	748.0	30.13	765.3	58	14.4	78	NE	4	1.8		2ck	0	W		0.02	0.5	Fair	Rev. R. Moseley.
Peterboro, Ontario																			J. F. Jeffers, M. A.
Port Dover, Ontario	29.40	746.7	30.08	764.0	58	14.4	94	NE	7	3.1		0	0			0.05	1.3	Clear	H. Morgan.
Port Stanley, Ontario	29.44	747.8	30.08	764.0	57	13.9	87	NE	6	2.7		0	0			0.07	1.8	Clear	M. Payne.
Quebec, Quebec *	29.76	755.9	30.08	764.0	55	12.8	80	W			1	2c	2s	W	W	0	0	Fair	Capt. Ashe, R. N.
Rockliffe, Ontario *	29.68	753.9	30.14	765.5	56	13.3	78	NW	3	1.3		0	0			0	0	Clear	W. H. McIntyre.
Saugeen, Ontario *	29.43	747.5	30.14	765.5	54	12.2	92	E	1	0.4			10ks			0.31	7.9	Cloudy	K. Stewart.
St. Andrews, N. B.	30.06	763.5	30.11	764.8	49	9.4	96	SE	3	1.3			Fg			0.18	4.6	Foggy	
St. John, N. B.	29.98	761.5	30.14	765.5	50.0	10.0	96	S	6	2.7			Fg			0	0	Light fog	G. Murdock, C. E.
Stratford, Ontario	28.83	732 3	30.10	764.5	55.9	13.3	80	SE	6	2.7		0	0			0.026	0.7	Blue sky	C. J. Macgregor, M. A.
Sydney, C. B. *	30.16	766.1	30.20	767.1	64	17.8	66	SW	8	3.6		2k	0	SW		0	0	Clear	T. C. Hill, C. E.
Toronto, Ontario *	29.74	755.4	30.11	764.8	60	15.6	73	NE	5	2.2		8ck	0			0.03	0.8	Cloudy	Magnetic Observatory
Windsor, N. S.	30.03	762.7	30.12	765.0	55.5	13.1	90	E	1	0.4		0	0			0.93	23.6	Clear	
Woodstock, Ontario	29.06	738.1	30.10	764.5	61.1	16.2	69	NE	8	3.6		1c	0	W		0.04	1.0	Blue sky	Prof. Wolverton.
Yarmouth, N. S. *	30.10	764.5	30.16	766.1	52	11.1	97	S	2	0.9			Fg			0	0	Foggy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	30.11	764.8	30.36	771.1	60	15.6	44	SW	2	0.9		0	0			0	0	Fair	John Delany.
St. Pierre, N. F.			30.15	765.8	53.6	12.0		W			3					0	0		N. F. Land, Comd't
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	30.38	771.6			60.0	15.6	71	WSW	21.7	9.7		6c	0			0	0	Fine	John Duthie.
Cape Town, C. G. H. Obs'y	30.31	769.9	30.35	770.9	47.0	8.3		SSE	1.0	0.4		2	3ks			0.660	1.5		The Staff, for D. Gill.
Worcester *†.	29.27	743.4			57.8	14.3	62	SE			1	0	1			0	0	Fine	C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.84	757.8	29.86	758.5	77.9	25.5	92	E	3.8	1.7		0	7			0	0	Very cloudy	M. Marc Dechevrens, S.J

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

STATIONS.	Barometer. Corrected for instru-m'tal error and tem-perature.		Barometer. Reduced to sea-level.		Tempera-ture of the Air.		Rel. Hum.	Wind. Direc-tion.	Wind. Velocity.		Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.24	666.5	29.96	761.0	67.1	19.5	90					2cs	1d	E		Inap.	Inap.	Fair	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	29.95	760.7	30.00	761.9	66.7	19.3	64	SE	18	8			8						Oversergent Fischer.
Fanöe																			Overloerer Lauridsen.
Godthaab, Greenland																			S. Kleinschmidt.
Stykkisholm, Iceland	29.15	740.4	29.19	741.5	47.7	8.7		SW			7		10					Raining	A. O. Thorlacius.
Thorshavn	29.74	755.3	29.77	756.2	52.3	11.3	85	SW	20	9			4						Overloerer Bergh.
Vestervig	29.88	758.9	29.97	761.3	57.2	14.0	91	W			4		10						Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.68	753.8	30.32	770.1	68.7	20.4	62	NW			1	o	n;kn		N	o	o		M. Labroue, Director.
Alençon Normal School	29.79	756.7	30.34	770.7	67.3	19.6	68	NW			2		o			0.087	2.2	Clear.	M. Nicot, Director.
Arras, Engineer School	29.97	761.1	30.25	768.4	64.0	17.8	57	WNW			2	ck	o		W				M. Klein, Commandant.
Avignon, Normal School	30.01	762.3	30.09	764.3	77.0	25	47	NNW			4		o			o	o	Clear	M. Giraud, Director.
Bar-sur-Seine	29.67	753.7	30.22	767.7	65.5	18.6	52	NW			2	o	8kn		NNE	0.150	3.8	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.98	761.6	30.24	768.1	68.7	20.4	47	NNW			1		8		NW	0.047	1.2	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.29	743.9	30.12	765.0	68.0	20	56	N			2	o	kn		SE	0.67	17.		M. Gobin, Director.
Bordeaux, Observatory	29.99	761.8	30.24	768.2	72.3	22.4	52	E			1		8		W	0.008	0.2	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.71	754.7	30.25	768.4	68.0	20	40	NW			1	o	k		NW	0.028	0.7		M. Postel, Director.
Brest, Naval Observatory	30.07	763.8	30.32	770.0	68.4	20.2	71	W			1		9		W	0.189	4.8		M. de Rermaree, Dir.
Caen, Normal School	30.21	767.2	30.28	769.0	68.2	20.1	62	WNW			1		5		NW	0.102	2.6	Cloudy	M. Bétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.91	759.8	30.23	767.8	65.8	18.8	69	W			1		8		W	0.244	6.2	Very cloudy	M. Jadot, Director.
Charleville, Normal School	29.76	755.8	30.26	768.6	68.7	20.4	50	WSW			1					0.20	5.		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.87	733.3	30.20	767.1	68.0	20.0	61	NNW			1		8		NW	0.004	0.1	¾ covered	M. Allnard, Director.
Cluny, Normal School	29.37	746.1	30.18	766.5	68.0	20	46	NW			3		5		N	0.059	1.5		M. de Villemontée, Dir.
Commercy, Normal School	29.33	745.0	30.18	766.5	65.3	18.5	64	W			6	o	5k		W	0.43	11.	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.63	701.8	30.07	763.7	75.2	24	47	NW			2				SE	0.047	1.2		M. Jeangirard, Director.
Grénasque, du. Rhone	28.99	736.3	30.13	765.3	81.0	27.2	37	NW			3		5		NW	o	o	½ covered	M. Kina, Director.
Grenoble, Normal School	29.38	746.3	30.13	765.4	64.6	18.1	77	NW			3	o	kn		SE	0.622	15.8		M. Ablard, Director.
Guéret, Normal School	28.75	730.3	30.29	769.4	63.5	17.5	53	NW			2	o	5k		SE	0.280	7.1	Cloudy	M. Rivoire, Director.
Lamballe, Normal School	29.91	759.6	30.17	766.4	64.4	18	78	SW			1				SW	0.31	8.		M. Ollitrault, Director.
Lescar, Normal School	29.71	754.5	30.37	771.3	68.0	20	87	W			1	k	o			o	o		M. Chauvin, Director.
Lorient, Naval Observatory	30.26	768.0	30.30	771.2	68.0	20.0	64	W			1		8	S	W	o	o	¾ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.17	740.8	30.21	767.3	66.4	19.1	61	N			1		8		N	0.925	23.5	Very cloudy	M. André, Director.
Mans, Normal School	30.00	761.9	30.30	769.7	64.8	18.2	60	NNE			1		5		W	o	o	Cloudy	M. Piboen, Director.
Marseille, Observatory	29.76	756.0	30.03	762.7	82.2	27.9	40	WNW			4		5		WNW	o	o		M. Stephan, Director.
Montlouis l'Instituteur	25.02	635.6	30.20	768.6	61.3	16.3	72	W	5.6	2.5			7		W	o	o		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.97	761.1	30.07	763.8	80.2	26.8	53	N			3		2		NW	o	o	Slightly cl'dy	M. P. Galzin, Director.
Nancy, Normal School	29.38	746.2	30.13	765.4	65.1	18.4	66	NW			2	o	5kn		NW	0.39	10.	Cloudy	M. Hasse.
Nantes, Observatory	30.15	765.8	30.31	769.9	67.5	19.7	57	WNW			1-2	o	8kn		W	0.024	0.6		M. Larocque, Director.
Nice	29.78	756.3	29.81	757.1	80.2	26.8	62	W			2		1	W	W	o	o	Clear	Capt. Boissière, Director.
Perpignan, Observatory	30.02	762.4	30.12	765.0	77.4	25.2	52	N	22.4	10.0			4		NW	o	o		Dr. Fines.
Pic-du-Midi, Plantade	22.80	579.0			54.1	12.3							1	SSW	NNW	o	o	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.13	740.0	30.17	766.3	71.6	22	48	N			3		10n	N	S	o	o	Covered	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.38	644.6			46.8	8.2	71	NNW			2	o	8k			0.134	3.4	¾ covered	M. Allnard, Director.
Rochefort, Naval Obs'y	30.26	768.5	30.29	769.3	73.8	23.2	55	W			1		5		NW	o	o	½ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.04	763.0	30.25	768.4	70.5	21.4	59	WNW			1		5		N	0.024	0.6	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.99	711.0	30.08	764.1	68.0	20	55	NW			1		5		NE	o	o	Cloudy	M. Richard, Director.
Rouen, Normal School	30.15	765.7	30.23	767.9	60.1	15.6	66	SW			2		8		WNW	o	o	Very cloudy	M. Platrier, Director.
Saint Lô, Normal School	30.13	765.2	30.28	769.2	65.1	18.4	65	NW			1		5		NE	1.46	37.	Cloudy	M. Delaplanche, Dir.
Saint Maur, Observatory	30.08	764.1	30.25	768.3	66.0	18.9	53	NW			2		7		NW	0.083	2.1		M. Renou, Director.
Toulouse, Observatory	29.56	750.7	30.28	769.2	70.2	21.2	62	WNW			2		10			o	o	Covered	M. Baillaud, Director.
Tours	30.06	763.4	30.25	768.4	72.3	22.4	48	NNE			1		5		NNW	0.008	0.2	½ covered	M. de Tastes.
Versailles, Observatory	29.76	755.9	30.25	768.4	67.3	19.6	53	NW			3					o	o		Dr. A. Bérigny, Director.
Sun-Scales.																			
Paris, Montsouris Obs'y	29.98	761.4	30.27	768.8	64.8	18.2	53	WNW			2		8		NW	0.063	1.6		M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.15	740.5	30.02	762.4	63.7	17.6	80	W			3	o	6k		W	0.142	3.6	Raining	Prof. Dr. Hoh.
Berlin	29.81	757.1	29.97	761.3	69.4	20.8	80	NW			6		7			o	o		Prof. Dr. Arndt.
Breslau	29.41	747.0	29.94	760.4	75.4	24.1	58	N			1		1			0.378	9.6		Royal University Obs'y.
Carlsruhe	29.71	754.7	30.14	765.5	60.1	15.6	94	W			1		10	NW		0.386	9.8	Raining	Albert Senz.
Cassel	29.35	745.6	30.07	763.8	71.2	21.8	61	NW			2		8	NE		0.043	1.1		Dr. H. Möhl.
Frankfort on the Main	29.79	756.6	30.15	765.9	62.4	16.9	73	NW			1		10			0.360	9.3		Physical Society.
Friedrichshafen	28.09	728.7	30.10	764.5	64.0	17.8	86	SW			6		10	WNW		0.028	0.7	Raining	Wilhelm, Chief Tel.
Hamburg	29.96	761.0	30.03	762.8	60.8	16.0	89	W			2		10			0.039	1.0		Dr. R. Kleeman.
Kiel	30.00	761.9	30.01	762.3	62.2	16.8	77	WNW			2		10			o	o		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.56	750.7	29.97	761.3	58.6	14.8	100	NW			4		10	WNW				Raining	Prof. Dr. Bruhns.
Magdeburg	29.81	757.1	30.00	761.9	59.5	15.3	93	NW			4		10n			0.472	12.0		Dr. Assmann.
Memel	29.99	761.8	30.04	763.0	80.2	26.8	38	SE			4	o	5ks						Reinbrecht & Issermann.
Munich	28.23	717.1	30.10	764.5	72.1	22.3	59	SW			2		7	NW		0.402	10.2	Raining	Central Station.
Neufahrwasser	29.96	761.0	29.98	761.4	71.1	21.7	57	ENE			1		0			o	o		A. Lothes.
Neustadt, Palatinate	29.58	751.2	30.11	764.7	72.5	22.5	65	WSW			2		3			o	o		Dicknether.
Stuttgart	29.17	740.9	30.05	763.3	61.9	16.6	78	NW			3		10			0.028	0.7		Prof. Dr. Schoder.
Weissenburg, Bavaria	28.58	725.8	30.04	762.9	61.5	16.4	82	W			6		10	W		0.220	5.6		Prof. Kemlein.
Wustrow	29.95	760.7	29.98	761.4	60.8	16.0	88	W			4		10s			o	o		Brandes & Reimer.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.49	749.0	29.86	758.5	86.4	30.2		NE			3.5		0					Clear	Schmidt & Wourtisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.53	750.0	29.58	751.3	90.1	32.3	73	SW	25.0	11.2			0			0	0	Blue sky	
Deesa	29.06	738.1	29.51	749.6	96.3	35.7	41	SSW	16.6	7.4			5		SW	0	0	D. clouds	
Bombay	29.65	753.1	29.69	754.0	82.1	27.8	85	S	14.0	6.3			9		S	0.80	20.3	D. clouds	
Poona, Yarrowda	27.84	707.2	29.68	753.9	81.5	27.5	58	WSW	18.0	8.0			7		WSW	0	0	D. clouds	
Belgaum	27.23	691.6	29.59	751.6	70.1	21.2	95	WSW	11.0	4.9			10			0.38	9.6	Drizzling	
Lahore	28.70	728.9	29.39	746.5	108.2	42.3	23	W	2.3	1.0			3			0	0	Misty	
Roorkee	28.59	726.2	29.46	748.2	92.8	33.8	52	SE	7.7	3.4			5			0	0	Misty	
Agra	28.91	734.4	29.45	748.1	96.1	35.6	45	NW	6.9	3.1			9		N	0	0	Overcast	
Nagpur	28.54	724.8	29.56	750.8	86.7	30.4	64	WNW	4.9	2.2			10		W	0.15	3.8	Overcast	
Jubbulpore	28.25	717.5	29.59	751.6	82.3	27.9	60	NW	6.1	2.7			10			0.49	12.4	Overcast	
Lucknow	29.19	741.5	29.56	750.5	85.1	29.5	66	NNE	6.0	2.7			10			0	0	Overcast	
Allahabad	29.24	742.6	29.55	750.5	78.0	25.6	94	E	2.9	1.3			10			0.17	4.3	Thund'r st'm	
Patna	29.38	746.2	29.56	750.7	82.5	28.1	88	SE	6.3	2.8			10	SE	SE	0.12	3.0	Overcast	
Hazaribagh	27.54	699.6	29.53	750.1	77.6	25.4	87	SE	8.2	3.7			10		SE	0.28	7.1	Thund'r st'm	
Cuttack	29.47	748.4	29.55	750.5	84.0	28.9	79	Calm	0.8	0.4			10			0.02	0.5	Overcast	
Calcutta, Alipore	29.51	749.5	29.53	750.0	82.4	28.0	86	ESE	3.0	1.3			10			0.31	7.9	Overcast	
Dhubri	29.51	749.5	29.63	752.6	79.9	26.6	88	ESE	25.0	11.2			9		ESE	0.32	8.1	Thunder	
Chittagong	29.56	750.9	29.66	753.2	80.2	26.8	92	SSE	5.7	2.6			8			0.06	1.5	D. clouds	
Sibsagar	29.33	744.9	29.66	753.4	83.3	28.5	86	NE	1.9	0.8			6	SW	SW	0.37	9.4	D. clouds	
Zanzibar, Africa			30.09	764.3	84.1	28.9	60	SSW					1			0	0	D. clouds	
ITALIAN SERIES. By authority of the MINISTER OF AGRICULTURE, INDUSTRY AND COMMERCE. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.48	748.9	29.88	758.9	86.7	30.4	31	NE	0.7	0.3			1			0	0		Prof. Giovanni Clodig.
Milan	29.37	745.9	29.82	757.4	85.9	30.5	38	SE	4.3	1.9			6	SW		0	0		Prof. Schiaparelli.
Padua	29.77	756.1	29.87	758.8	86.4	30.2	43	ESE	4.3	1.9			1	SW		0.130	3.3		Prof. Dott. Lorenzoni.
Moncalieri	28.99	736.3	29.86	758.5	83.3	28.5	47	NW	2.5	1.1			4	N		0	0		Prof. P. F. Denza.
Genoa	29.74	755.5	29.93	760.2	78.8	26.0	64	SW	6.9	3.1			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.06	712.8	29.91	759.6	81.1	27.3	57	SSE			2		8			0	0		Prof. D. C. Bruno.
Pesaro	29.82	757.3	29.86	758.5	80.2	26.8	64	N					2			0	0		Prof. Luigi Guidi.
Florence	29.64	752.8	29.88	759.0	88.7	31.5	17	W			2		0			0	0		Prof. Costantino Pitter.
Leghorn	29.85	758.1	29.93	760.2	81.9	27.7	56	WSW	0.7	0.3			1			0	0		Prof. P. Monte.
Rome	29.75	755.6	29.92	759.9	90.9	32.7	26	SW	8.7	3.9			1			0	0		Prof. P. S. Ferrari.
Lecce	29.66	753.4	29.90	759.5	85.8	29.9	43	Calm	0	0			0			0	0		Prof. C. de Giorgi.
Cosenza	29.05	737.8	29.90	759.4	89.2	31.8	66	SW	3.1	1.4			1	SW		0	0		Prof. D. Conti.
Cagliari	29.73	755.2	29.92	760.0	82.6	28.1	58	S			4		2			0	0		Prof. A. Pacinotti.
Palermo	29.74	755.3	29.98	761.5	85.1	29.5	40	E	4.9	2.2			10			0	0		Prof. G. Ciaccintore.
Syracuse	29.89	759.2	29.93	760.3	85.3	29.6	40	S	5.6	2.5			9	WSW		0	0		Prof. Vincenzo Guiliano.
SUB-SERIES.																			
Naples, S. R	29.41	747.0	29.90	759.5	81.7	27.6	72	NW	0.7	0.3			2	W		0	0		Prof. F. Brioschi.
Stelvio	22.31	566.7			50.7	10.4	55	SE			2	rocks	0	SE		0.657	16.7	Covered	Prof. P. F. Denza.
Valdobbia	22.35	567.7			51.6	10.9	77	NE			2	0	8kn		WNW	0	0	Misty	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.90	759.4	29.91	759.7	72.4	22.4	87	WSW	2.9	1.3			10n			0.782	19.9	Light rain	K. Sasaki.
Kioto	29.79	756.6	29.96	761.0	71.1	21.7	96	SW	0.2	0.1			10s			0.310	7.9	Foggy	M. Tojima.
Nagasaki, I. M. Obs'y	29.75	755.6	29.94	760.5	76.6	24.8	91	SW	5.2	2.3			10s			0.780	19.8	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	29.97	761.2	30.04	763.0	66.5	19.2	88	ENE	5.4	2.4		4cs	0			0	0	Fair	The Staff.
Wakayama	29.91	759.7	29.96	761.0	74.6	23.7	91	S	3.6	2.1		ck	3s			1.382	35.1	Fair	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	30.02	762.5	30.21	767.3	72.8	22.7	64	SE	14.0	6.3		0	2		SE	0	0	Fine	A. N. Figon.
MEXICAN SERIES. By authority of the SECRETARY of PUBLIC WORKS. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.41	620.0	30.00	762.0	66.0	18.9	83	N			1	0	5k		E	0.161	4.1	½ cloudy	Prof. M. Leal.
Mazatlan	29.67	753.6	29.93	760.2	76.5	24.7	86	ESE	5.3	2.3		3cs	0n		ESE	0	0	Very cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	23.12	587.4	30.09	764.3	58.1	14.5	80	Calm	0	0		0	7k			0	0		The Staff.
Pabellon, Aguascalientes	23.95	608.2	29.86	758.4	62.6	17.0	90	Calm			0	3c	2s	NW		0.03	0.9	½ cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.45	595.6	30.13	765.3	58.8	14.9	60	Calm	0	0		0	2		SE	0.304	7.7	Clear	Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.61	574.3	30.20	767.2	55.6	13.1		ESE	0.9	0.4		0	9ns		ESE	0.137	3.5	Very cloudy	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.21	767.3	30.21	767.3	62.8	17.1		W			4					0.075	1.9		
Groningen	30.03	762.7	30.08	764.1	65.3	18.5		NW			3					0.035	0.9		
Helder	30.11	764.9	30.11	764.9	58.8	14.9		WNW			4					0	0		
Hellevoetsluis	30.17	766.3	30.17	766.3	63.9	17.7	79	WSW			4					0.055	1.4		
Utrecht	30.11	764.7	30.15	765.9	69.3	20.7	61	WNW			2		5			0.016	0.4	Cloudy	H. van der Brink.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill	Barometer. Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.

NORWEGIAN SERIES.

Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.

Bergen	29.87	758.6	29.93	760.2	54.3	12.4	91	W	15.0	6.7			10			1.134	28.8		
Christiania	29.81	757.2	29.96	760.9	54.9	12.7	96	NE	0	0			10			0.016	0.4	Raining	
Gjæsvær	29.98	761.6	30.01	762.2	58.6	14.8		Calm			0		0						
Lodingen	29.86	758.4	29.91	759.6	59.9	15.5	53	S			4		0			0.055	1.4		

PORTUGUESE SERIES.

Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.

Angra, Azores	30.32	770.2	30.34	770.6	72.0	22.2	86	SSW	3.8	1.7			3			0	0		Dr. J. A. Sampaio.
Campo Major	29.08	738.6	30.04	763.0	83.5	28.6	23	NNW	3.8	1.7			2			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.15	765.9	30.24	768.2	72.9	22.7	68	SW	3.1	1.4			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.78	756.5	30.13	765.4	79.2	26.2	38	N	24.2	10.8			1			0	0		The Staff.
Ponta Delgada, Azores	30.43	772.8	30.50	774.6	74.5	23.6	77	Calm	0	0			3			0	0		

RUSSIAN SERIES.

Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.

Akmolinski	28.59	726.1	29.62	752.4	66.7	19.3	47	W	9	4		3cs	0						Capt. Lasarew.
Archangel	30.33	770.4	30.35	770.9	53.8	12.1	51	NNW	9	4		0	6ks						Capt. Sseliwerstow.
Astrakhan	29.93	760.3	29.85	758.2	85.1	29.5	38	WSW	7	3			0						Capt. Wisganow.
Barnaul ‡	29.15	740.5	29.62	752.4	77.0	25.0	42	NW	2	1			9						Meteorological Obs'y.
Dorpat	29.95	760.8	30.19	766.8	67.5	19.7	34	ENE	9	4		8c	0						Observatory.
Ekaterinburg	28.76	730.4	29.68	753.8	69.6	20.9	50	ENE	9	4		ck	6ks						Meteorological Obs'y.
Kasan	29.56	750.7	29.82	757.3	65.7	18.7	57	N	9	4		9c	0						Observatory.
Kertch	29.80	757.0	29.82	757.5	81.3	27.4	55	S	2	1			3						Lagorio & Sastyrez.
Kieff	29.27	743.5	29.87	758.8	75.2	24.0	34	NNE	11	5		ck	3ks						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.58	751.2	29.77	756.2	77.9	25.5	57	WNW	18	8			9						Meteorological Obs'y.
Moscow	29.48	748.9	30.02	762.6	61.7	16.5	47	NW	10.1	4.5		0	3ks						Meteorological Obs'y.
Nertchinsk	27.74	704.6	29.98	761.5	57.2	14.0	72	Calm	0	0			0			0	0		Meteorological Obs'y.
Nikolaiev	29.81	757.2	29.88	759.0	82.8	28.2	58	ENE	9	4			10kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.93	760.3	30.02	762.5	64.9	18.3	79	Calm			0	0	1k			0	0		Lieut. Iwanow.
Pekin, China	29.61	752.1	29.75	756.7	73.0	22.8	60	Calm	0	0		0	3ks					Thunder	Physical Observatory.
St. Petersburg	30.24	768.2	30.26	768.6	58.5	14.7	42	ENE	11	5		1cs	0						Central Physical Obs'y.
Tashkend, Laboratory	28.24	717.3	29.73	755.1	77.0	25.	42	Calm	0	0			8						Teich, A. M.
Tiflis	28.50	723.8	29.83	757.6	86.4	30.2	32	SE	9	4		0	3k						Physical Observatory.
Warsaw	29.53	750.0	29.94	760.4	66.6	19.2	83	Calm	0	0			10n					Raining	Astronomical Obs'y.
Wilna	29.64	752.8	30.04	763.0	75.0	23.9	42	SE	2	1			5						Berg, Assistant.
Yeniseisk	29.50	749.4	29.78	756.4	72.0	22.2	58	S	9	4			3					Thund'r st'm	M. O. Marks.

SCOTTISH SERIES.

Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.

Leith, Restalrig Park			30.11	764.8	58.2	14.6	60	W			3		10k			0.07	1.8	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			29.95	760.7	57	13.9	94	WSW			4		10			0.1	3.	Showery	J. Youngclause.
North Unst, Shetland Isl'ds			29.85	758.2				SW			4								Robert Burnet.

SPANISH SERIES.

Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.

Barcelona, Met. Obs'y	29.98	761.4	30.08	764.0	76.1	24.5	66	ESE	4.0	1.8	c					0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.20	767.1	30.26	768.5	74.8	23.8	76	N	2.0	0.9		2	8	N		0.016	0.4	Covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.33	694.1			68.4	20.2	54	NE	8.3	3.7			0			0	0	Clear	Domingo Martin.
Madrid, Royal Obs'y	27.93	709.4	30.02	762.4	89.6	32.0	36	E	4.0	1.8		0	1			0	0	Almost clear	The Staff.
Murcia, Met. Obs'y ‡	29.90	759.5	30.04	763.1	91.4	33.0	46	ESE	3.8	1.7		2	5	W		0	0	Cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.28	743.6	30.14	765.5	74.3	23.5	68	NE	0	0			1			0	0	Almost clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	30.02	762.5	30.09	764.2	79.6	26.4	82	SE	5.8	2.6		2ck	0	S		0.969	24.6	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.83	757.6	29.88	758.9	82.6	28.1	82	NE	1.1	0.5		0	1s			0	0	Clear	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.93	760.2	30.02	762.6	86.4	30.2	48	SW	8.0	3.6		3	2	NNW	SW	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	30.01	762.3	30.10	764.6	81.0	27.2	94	SE	6.0	2.7		4k	3k	SE	SE	0.079	2.0	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.75	755.6	29.89	759.3	86.2	30.1	70	ENE	0	0		0	2ks		ENE	0.04	1.0	Clear	José L. Fastovra.

SWEDISH SERIES.

Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.

Haparanda	30.19	766.7	30.22	767.7	61.2	16.2	49	SW			4		0			0	0		
Umea	30.18	766.6	30.23	767.9	61.5	16.4	40	SW			6		1			0	0		
Hernosand	30.15	765.9	30.21	767.2	57.0	13.9	58	S			4		0			0	0		
Stockholm	29.92	759.9	30.10	764.4	66.9	19.4	61	SSE			4		0			0	0		
Wisby	30.00	761.9	30.06	763.4	72.7	22.6	47	S			2		0			0	0		
Sub-Series.																			
Upsala	29.88	759.0	29.97	761.2	70.9	21.6	51	SE	12.1	5.4			5			0	0		S. G. Fineman.

SWISS SERIES.

Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.

Geneva	28.75	730.3	30.14	765.5	67.3	19.6	58	NW			4		9			0.350	8.9	Covered	The Observatory.
Zurich ‡	28.54	725.0	30.17	766.2	59.9	15.0	85	W			4		9			0.157	4.0	Raining	The Observatory.

TURKISH SERIES.

Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.

Constantinople			29.86	758.4	75.2	24.0	66	NE	13	6.0			0			0	0		The Observatory.
Valona			30.03	762.8	83.1	28.4		Calm			0		0			0	0	Clear	A. Bertrand.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.78	756.4	85.3	29.6	60	WSW			3		5s		SW	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.05	763.3	30.13	765.3	59.5	15.3	88	NE	6	2.7			ion			0.30	7.6	Light rain	
Alpena, Michigan	29.52	749.8	30.17	766.3	51.5	10.8	86	E	1	0.4			ios		SE	0.27	6.9	Cloudy	
Atlanta, Georgia	28.92	734.6	30.07	763.8	72.0	22.2	90	SE	6	2.7			ios		Calm	0	0	Cloudy	
Atlantic City, New Jersey	30.08	764.0	30.09	764.3	67	19.4	89	S	5	2.2		8c	0	Calm		0	0	Fair	
Augusta, Georgia	29.89	759.2	30.07	763.8	74.8	23.8	86	S	1	0.4			ios		SW	0.24	6.1	Cloudy	
Baltimore, Maryland	30.02	762.5	30.07	763.8	69	20.6	90	E	4	1.8			ios		E	0	0	Cloudy	
Barnegat, New Jersey	30.06	763.5	30.08	764.0	70	21.1	85	SE	4	1.8			ios		SW	0	0	Cloudy	
Bismarck, Dakota	27.96	710.2	29.70	754.4	59	15.0	94	W	2	0.9		10c	0	W		0.38	9.7	Cloudy	
Boise City, Idaho	27.11	688.6	29.87	758.7	57.2	14.0	60	W	2	0.9		0	0			0	0	Clear	
Boston, Massachusetts	29.99	761.7	30.14	765.5	61.0	16.1	74	S	1	0.4		10s	0	SW		0.06	1.5	Cloudy	
Brackettville, Texas	28.78	731.0	29.78	756.4	78	25.6	82	E	12	5.4			10s		E	0	0	Clear	
Brownsville, Texas	29.80	756.9	29.84	757.9	83	28.3	83	S	4	1.8		2ck	0	S		Inap.	Inap.	Fair	
Buffalo, New York	29.38	746.2	30.07	763.8	59.2	15.1	78	NE	8	3.6		5ck	0	W		0.11	2.8	Fair	
Burlington, Vermont	29.83	757.7	30.11	764.8	59.8	15.4	74	E	2	0.9		5ck	2s	W	W	0	0	Fair	
Cairo, Illinois	29.66	753.4	30.05	763.3	74	23.3	81	SE	4	1.8		10ck	0	W		0	0	Cloudy	
Campo, California	27.30	693.4	29.87	758.7	39.3	4.1	64	S	3	1.3		0	0			0	0	Clear	
Camp Thomas, Arizona	27.15	689.6			67	19.4	50	Calm			0	2ck	0	SE		0	0	Clear	
Cape Henry, Virginia	30.04	763.0	30.06	763.5	68	20.0	95	SE	10	4.5			10n			1.18	30.0	Light rain	
Cape May, New Jersey	30.04	763.0	30.06	763.5	68	20.0	79	SE	7	3.1		0	8ks	SW		0	0	Cloudy	
Castroville, Texas	29.19	741.4	29.86	758.4	82	27.8	75	SE	5	2.2			10s	S	Inap.	Inap.	Cloudy		
Cedar Keys, Florida	30.04	763.0	30.06	763.5	83	28.3	79	SE	9	4.0		5cs	2ks	SW		0	0	Fair	
Champaign, Illinois	29.25	742.9	30.03	762.7	62.7	17.1	83	NE	5	2.2			10s	NE		0.41	10.4	Cloudy	
Charleston, S. Carolina	30.02	762.5	30.08	764.0	84.5	29.2	68	SW	8	3.6		0	5s	SW		0	0	Fair	
Charlotte, N. Carolina	29.22	742.2	30.08	764.0	74.0	23.3	86	S	1	0.4			10s	SW		0.06	1.5	Cloudy	
Chattanooga, Tennessee	29.26	743.2	30.06	763.5	72.0	22.2	85	NE	2	0.9		10ck	0	N		0	0	Cloudy	
Cheyenne, Wyoming	24.05	610.9	29.86	758.4	53.2	11.8	73	SW	6	2.7		0	0			0.13	3.3	Clear	
Chicago, Illinois	29.37	746.0	30.05	763.3	53.0	11.7	95	N	7	3.1			Fg			Inap.	Inap.	Dense fog	
Chincoteague, Virginia	30.06	763.5	30.08	764.0	67	19.4	95	S	15	6.7		8k	2s	S	S	0.01	0.3	Cloudy	
Cincinnati, Ohio	29.43	747.5	30.07	763.8	68	20.0	79	S	1	0.4		0	0			0	0	Clear	
Cleveland, Ohio	29.33	745.0	30.05	763.3	63.8	17.7	76	E	1	0.4		1c	0			0.10	2.5	Clear	
Coleman City, Texas	28.16	715.3	29.74	755.4	76	24.4	76	SE	3	1.3		0	0			0	0	Clear	
Columbus, Ohio	29.22	742.2	30.04	763.0	64	17.8	78	N	3	1.3		2cs	0	N		0	0	Clear	
Concho, Texas	28.04	712.2	29.92	760.0	75	23.9	77	SE	6	2.7		0	0			0	0	Clear	
Corsicana, Texas	29.57	751.1	30.03	762.7	80	26.7	78	S	4	1.8		1cs	0			0	0	Clear	
Davenport, Iowa	29.40	746.7	30.04	763.0	62	16.7	83	E	6	2.7			10s	Calm		0.01	0.3	Cloudy	
Dayton, Washington T'y	28.22	716.8	29.97	761.2	53	11.7	54	S	1	0.4		5c	0	Calm		0	0	Fair	
Deadwood, Dakota	25.32	643.1	29.87	758.7	54	12.2	80	SW				10cs	0			0.16	4.1	Cloudy	
Decatur, Texas	28.77	730.7	29.87	758.7	80	26.7	74	SE	10	4.5		0	0			0	0	Clear	
Delaware Breakwater, Del.	30.06	763.5	30.08	764.0	68	20.0	90	S	8	3.6		9k	0	SW		Inap.	Inap.	Cloudy	
Denison, Texas	29.18	741.2	29.96	761.0	80	26.7	78	S	8	3.6		0	0			0	0	Clear	
Denver, Colorado	24.78	629.4	29.84	757.9	57.2	14.0	48	S	6	2.7		0	0			0	0	Clear	
Des Moines, Iowa	29.01	736.8	29.89	759.2	67	19.4	89	S	6	2.7			10s			0.05	1.3	Cloudy	
Detroit, Michigan	29.40	746.7	30.07	763.8	61.8	16.6	82	N	5	2.2		5cs	0	N		0.35	8.9	Fair	
Dodge City, Kansas	27.36	694.9	29.86	758.4	62.1	16.7	87	SE	14	6.3		5cs	2s	SW		0.37	9.4	Clear	
Dubuque, Iowa	29.31	744.5	29.99	761.7	60	15.6	82	E	7	3.1			10s	Calm		0	0	Cloudy	
Duluth, Minnesota	29.24	742.7	29.92	760.0	48	8.9	93	NE	5	2.2			10s	Calm		0	0	Cloudy	
Eagle Pass, Texas	29.16	740.7	29.97	761.2	81.4	27.4	74	SE	8	3.6		5cs	0	Calm		0	0	Fair	
Eagle Rock, Idaho	25.28	642.1	29.99	761.7	55	12.8	45	SW	7	3.1		2k	0	W		0	0	Fair	
Eastport, Maine	30.06	763.5	30.14	765.5	51	10.6	86	S	4	1.8			Fg		S	0	0	Dense fog	
El Paso, Texas	26.13	663.7	29.78	756.4	76	24.4	38	NW	8	3.6		0	5s		W	0	0	Fair	
Erie, Pennsylvania	29.36	745.7	30.06	763.5	63	17.2	83	NE	3	1.3		2c	0			0.01	0.3	Clear	
Escanaba, Michigan	29.45	748.0	30.09	764.3	53	11.7	86	SE	6	2.7			10s	Calm		Inap.	Inap.	Cloudy	
Florence, Arizona	28.39	721.1	29.99	761.7	66	18.9	41	Calm	0	0		0	0			0	0	Clear	
Fort Apache, Arizona	25.04	636.0	29.82	757.4	54	12.2	26	E	3	1.3		0	8k	Calm		0	0	Dense smoke	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota	28.22	716.8	29.69	754.1	62	16.7	77	S	3	1.3		2c	0			0	0	Fair	
Fort Benton, Montana	27.04	686.8	29.78	756.4	60	15.6	60	W	3	1.3			10ks	Calm		0	0	Cloudy	
Fort Buford, Dakota	27.80	706.1	29.72	754.9	55	12.8	87	NW	6	2.7		2cs	0	W		0	0	Clear	
Fort Custer, Montana	26.72	678.7	29.81	757.2	60	15.6	77	SE	6	2.7		0	0			0	0	Clear	
Fort Davis, Texas	25.14	638.5	30.10	764.5	70	21.1	57	S	8	3.6			10ks	S		0	0	Cloudy	
Fort Elliott, Texas	27.21	691.1	30.28	769.1	67	19.4	64	NE	4	1.8		5k	0	NE		0	0	Fair	
Fort Gibson, Indian T'y	29.42	747.3	29.95	760.7	72	22.2	90	E	4	1.8		5cs	0	N		1.06	26.9	Fair	
Fort Grant, Arizona					67	19.4	46	N	4	1.8		0	0			0	0	Clear	
Fort Griffin, Texas	28.68	728.5	29.87	758.7	80.4	26.9	55	SE	6	2.7		0	0			0	0	Clear	
Fort Keogh, Montana	27.34	694.4	29.75	755.6	57	13.9	87	Calm	0	0		5c	0	SW		0	0	Fair	
Fort Macon, North Carolina	30.06	763.5	30.07	763.8	77	25.0	91	SW	4	1.8		10ck	0	Calm		0	0	Cloudy	
Fort McKavett, Texas	27.74	704.6	29.57	751.1	74	23.3	81	SE	9	4.0		0	0			0	0	Clear	
Fort Missoula, Montana	26.67	677.4	30.05	763.3	60	15.6	71	SW	1	0.4			10s			0	0	Cloudy	
Fort St. Michaels	29.53	750.0	29.56	750.8	53	11.7	79	NW	6	2.7			10ks	N		0	0	Cloudy	
Fort Shaw, Montana	26.26	667.0	29.71	754.6	59	15.0	59	W	8	3.6		3k	0	W		0	0	Cloudy	
Fort Sill, Indian Territory	28.71	729.2	29.92	760.0	80	26.7	66	S	10	4.5		0	0			0	0	Clear	
Fort Stevenson, Dakota	27.92	709.2	29.70	754.4	64	17.8	88	W	4	1.8			10ks	N		Inap.	Inap.	Cloudy	
Fort Verde, Arizona					60.2	15.7	29	W			1	0	0			0	0	Clear	
Fredericksburg, Texas	28.27	718.0	29.75	755.6	74	23.3	90	S	7	3.1		1k	0	SW		0	0	Fair	
Galveston, Texas	29.98	761.5	30.02	762.5	84	28.9	75	SW	15	6.7		5ck	0	SW		Inap.	Inap.	Fair	
Grand Haven, Michigan	29.45	748.0	30.10	764.5	60	15.6	94	E	4	1.8			10s	Calm		0.07	1.8	Cloudy	
Hatteras, North Carolina	30.07	763.8	30.09	764.3	76	24.4	91	S	18	8.0			10s	SW		0.45	11.4	Cloudy	
Helena, Montana	25.74	653.8	29.94	760.5	60	15.6	55	Calm	0	0		2k	0	Calm		0	0	Fair	
Henrietta, Texas	28.91	734.3	29.76	755.9	84	28.9	64	SE	12	5.4		2cs	0			0	0	Clear	
Indianapolis, Indiana	29.27	743.4	30.04	763.0	68.5	20.3	77	N	4	1.8		5c;k	0	N		Inap.	Inap.	Fair	
Indianola, Texas	29.98	761.5	30.01	762.2	82.3	27.9	79	S	10	4.5		2k	0	S		Inap.	Inap.	Fair	
Jacksboro, Texas	28.79	731.3	29.86	758.4	79	26.1	74	SE	8	3.6		1cs	0	Calm		0	0	Clear	
Jacksonville, Florida	30.03	762.7	30.05	763.3	81	27.2	74	S	6	2.7		2cs	0	W		1.26	32.0	Fair	
Keokuk, Iowa	29.32	744.7	29.96	761.0	66.5	19.2	89	SE	6	2.7			10s	SE		0	0	Cloudy	
Key West, Florida	30.07	763.8	30.10	764.5	81.5	27.5	81	SE	4	1.8		5cs;k	0	SE		0	0	Fair	
Kittyhawk, North Carolina	30.08	764.0	30.10	764.5	74	23.3	90	W	4	1.8			10ks	W		0.01	0.3	Cloudy	
Knoxville, Tennessee	29.07	738.4	30.07	763.8	72	22.2	90	Calm	0	0		2ck	5s	Calm	SW	0	0	Fair	
La Crosse, Wisconsin	29.22	742.2	29.94	760.5	62	16.7	83	SE	9	4.0			10s			0	0	Cloudy	
La Mesilla, New Mexico	26.01	660.6	30.16	766.1	71.2	21.8	37	SE	2	0.9		2c	2s	SW		0	0	Fair	
Laredo, Texas	29.47	748.5	29.79	756.7	82	27.8	81	SE	6	2.7		0	8s		S	0	0	Fair	
Leavenworth, Kansas	28.99	736.3	29.86	758.4	70	21.1	80	SW	6	2.7			10s		SW	0.75	19.1	Cloudy	
Lewiston, Idaho	29.18	741.2	30.01	762.2	64	17.8	78	E	2	0.9			10s		Calm	0	0	Cloudy	
Little Rock, Arkansas	29.70	754.4	30.01	762.2	66	18.9	95	Calm	0	0			Fg			0.83	21.1	Dense fog	
Los Angeles, California	29.50	749.3	29.87	758.7	62.1	16.7	88	Calm	0	0			10s		Calm	0	0	Cloudy	
Louisville, Kentucky	29.49	749.0	30.04	763.0	71.0	21.7	71	Calm	0	0		8c	0			0	0	Fair	
Lynchburg, Virginia	29.38	746.2	30.05	763.3	72	22.2	76	Calm	0	0		0	0			0.04	1.0	Clear	
Madison, Wisconsin	29.05	737.9	30.03	762.7	58	14.4	88	E	8	3.6			10s	Calm		0	0	Cloudy	
Marquette, Michigan	29.38	746.2	30.09	764.3	48	8.9	93	NE	3	1.3			Fg			Inap	Inap.	Dense fog	
Mason, Texas	28.34	719.8	30.01	762.2	79	26.1	58	S	8	3.6		0	1ks		SW	0	0	Clear	
Memphis, Tennessee	29.73	755.1	30.06	763.5	70	21.1	69	W	2	0.9			Fg		Calm	0.10	2.5	Dense fog	
Milwaukee, Wisconsin	29.36	745.7	30.09	764.3	51	10.6	100	N	6	2.7			Fg			0	0	Dense fog	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
United States Series—Continued.																			
Mobile, Alabama	30.00	762.0	30.07	763.8	74	23.3	86	NW	7	3.1		5cs	0	W		0.09	2.3	Fair	
Montgomery, Alabama	29.84	757.9	30.06	763.5	76.3	24.6	86	SE	3	1.3		8c	0	W		0	0	Fair	
Moorhead, Minnesota	28.75	730.2	29.71	754.6	61	16.1	88	S	16	7.2			10s		S	0.52	13.2	Cloudy	
Morgantown, W. Virginia	29.08	738.6	30.04	763.0	63	17.2	83	Calm	0	0		2k	Hz	W		0	0	Fair	
Mt. Washington, N. H.	23.95	608.3	29.98	761.5	41	5.0	83	W	2	0.9		8k	Hz	W	Calm	0.15	3.8	Cloudy	
Nashville, Tennessee	29.51	749.5	30.03	762.7	73.8	23.2	78	NW	1	0.4		8cs	0	NW		0	0	Fair	
New Haven, Connecticut	30.02	762.5	30.13	765.3	65	18.3	78	SW	3	1.3		8cs	Hz	W		0	0	Cloudy	
New London, Connecticut	30.12	765.0	30.16	766.1	65	18.3	78	W	2	0.9		0	0			0	0	Clear	
New Orleans, Louisiana	30.00	762.0	30.05	763.3	80.5	26.9	76	SW	3	1.3		5c	0	SW		0.01	0.3	Fair	
Newport, Rhode Island	30.12	765.0	30.17	766.3	64.8	18.2	78	SW	5	2.2		9ck	Hz	SW		0	0	Cloudy	
New River, N. Carolina					80	26.7	78	SW			1	10cs	0					Cloudy	
New Shoreham, Rhode I'd	30.13	765.3	30.16	766.1	64.0	17.8	83	SE	7	3.1		8ck	0	SW		0	0	Fair	
New York, New York	29.94	760.5	30.11	764.8	63	17.2	89	E	6	2.7			10s;fg			0	0	Cloudy	
Norfolk, Virginia	30.04	763.0	30.08	764.0	68	20.0	90	SE	6	2.7			10ks		W	1.58	40.1	Cloudy	
North Platte, Nebraska	27.02	686.3	29.84	757.9	55	12.8	93	NW	10	4.5		5c	0	NW		1.46	37.1	Fair	
Olympia, Washington T'y	29.82	757.4	29.86	758.4	58.5	14.7	91	S	2	0.9			1on		SW	0.26	6.6	Light rain	
Omaha, Nebraska	28.70	729.0	29.84	757.9	68.5	20.3	82	S	4	1.8			10s		SW	0.04	1.0	Cloudy	
Oswego, New York	29.79	756.7	30.11	764.8	57.2	14.0	87	NE	2	0.9		5cs	1s	W		0.09	2.3	Fair	
Pensacola, Florida	30.03	762.7	30.06	763.5	77	25.0	86	NW	4	1.8			10s		Calm	0.21	5.3	Cloudy	
Philadelphia, Pa	30.03	762.7	30.09	764.3	63.8	17.7	100	E	5	2.2			10s;fg			0	0	Cloudy	
Phœnix, Arizona	28.73	729.7	30.48	774.2	69	20.6	48	SE	3	1.3		0	0			0	0	Clear	
Pike's Peak, Colorado	18.01	457.4	30.22	767.6	40	4.4	56	SW	8	3.6		0	0			0	0	Clear	
Pioche, Nevada	24.08	611.6	29.93	760.2	59	15.0	23	NW	4	1.8		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.25	742.9	30.04	763.0	63	17.2	83	Calm	0	0		2k	5ks	SW	SW	0.01	0.3	Fair	
Port Eads, Louisiana	30.04	763.0	30.06	763.5	82.5	28.1	87	SW	16	7.2		2c	0	SW		0	0	Fair	
Port Huron, Michigan	29.46	748.3	30.12	765.0	54.6	12.6	77	NE	2	0.9		5c	0	W		Inap.	Inap.	Fair	
Portland, Maine	30.07	763.8	30.12	765.0	62	16.7	77	S	1	0.4		2ck	5s	SW	Calm	0.15	3.8	Fair	
Portland, Oregon	29.88	758.9	29.95	760.7	60.7	15.9	92	SE	4	1.8			1on		SW	0.07	1.8	Light rain	
Portsmouth, N. Carolina					78	25.6	82	SW	10	4.5			10s		Calm	0	0	Cloudy	
Prescott, Arizona	24.77	629.1	29.84	757.9	53	11.7	36	S	2	0.9		0	0			0	0	Clear	
Punta Rassa, Florida	30.05	763.3	30.06	763.5	83.5	28.6	77	SE	6	2.7		1k	1ks	Calm	S	0	0	Fair	
Red Bluff, California	29.48	748.8	29.82	757.4	72.0	22.2	44	N	3	1.3		2c	1s	NW	NW	0	0	Fair	
Rio Grande City, Texas	29.75	755.6	29.96	761.0	81	27.2	83	SE	10	4.5		2ck	5s	Calm	Calm	0	0	Fair	
Rochester, New York	29.49	749.0	30.11	764.8	57	13.9	87	SE	6	2.7		2k	8s	SE	SE	0.24	6.1	Cloudy	
Roseburg, Oregon	29.45	748.0	30.01	762.2	63	17.2	78	E	1	0.4		10cs	0			0	0	Cloudy	
Sacramento, California	29.78	756.4	29.85	758.2	63.0	17.2	72	SE	4	1.8		0	0			0	0	Clear	
St. Louis, Missouri	29.45	748.0	30.03	762.7	67.5	19.7	87	S	3	1.3		10cs	0	W		0	0	Cloudy	
St. Paul, Minnesota	29.02	737.1	29.86	758.4	60	15.6	88	SE	24	10.7			10s		SE	0.16	4.1	Cloudy	
Salt Lake City, Utah	25.63	651.0	29.83	757.7	62	16.7	36	Calm	0	0		0	0			0	0	Clear	
San Antonio, Texas	29.30	744.2	29.99	761.7	80.0	26.7	82	SE	3	1.3		Hz	4s	Calm	SE	0	0	Fair	
San Diego, California	29.76	755.9	29.83	757.7	62.0	16.7	83	SW	4	1.8			10s			0	0	Cloudy	
Sandusky, Ohio	29.37	746.0	30.03	762.7	66	18.9	84	NE	8	3.6			10ks		NE	0.36	9.1	Cloudy	
Sandy Hook, New Jersey	30.08	764.0	30.11	764.8	64.2	17.9	78	SE	10	4.5			10s			0	0	Cloudy	
San Francisco, California	29.84	757.9	29.90	759.4	54	12.2	86	Calm	0	0		0	0			0	0	Clear	
Santa Fé, New Mexico	23.32	592.3	29.84	757.9	61	16.1	40	E	3	1.3		0	0			0	0	Clear	
Savannah, Georgia	29.99	761.7	30.08	764.0	77	25.0	80	W	4	1.8		2c	0			0	0	Fair	
Shreveport, Louisiana	29.81	757.2	30.04	763.0	74.8	23.8	86	SE	2	0.9		5c	0			0	0	Fair	
Silver City, New Mexico	24.27	616.4	29.73	755.1	68	20.0	38	N	6	2.7		8k	0	N		0	0	Fair	
Sitka, Alaska	29.44	747.8	29.51	749.5	50	10.0	86	W	15	6.7			10s			0.31	7.9	Cloudy	
Smithville, North Carolina	30.04	763.0	30.07	763.8	79	26.1	82	S	13	5.8		8c	1ks			0	0	Cloudy	
Spokane Falls, Wash. Ter.	27 92	709.2	29.88	758.9	60	15.6	76	W	3	1.3			10s		W	Inap.	Inap.	Cloudy	
Springfield, Illinois	29.38	746.2	30.04	763.0	66	18.9	89	E	4	1.8		9c	0	W		0	0	Cloudy	
Springfield, Massachusetts	30.02	762.5	30.14	765.5	69.0	20.6	62	S	2	0.9			10s		S	0	0	Cloudy	
Stockton, Texas	26.88	682.7	29.87	758.7	73.0	22.8	76	S	12	5.4		2c	0	S		0	0	Fair	
St. Vincent, Minnesota	28.80	731.5	29.64	752.8	59	15.0	97	SE	12	5.4			10s		Calm	0.84	21.3	Cloudy	
Thatcher's Island, Mass	30.08	764.0	30.13	765.3	52.3	11.3	100	N	6	2.7			10n		N	0.22	5.6	Heavy rain	
Toledo, Ohio	29.37	746.0	30.05	763.3	62	16.7	88	N	6	2.7		0	8ks		W	0.39	9.9	Fair	
Tucson, Arizona	27.44	697.0	29.73	755.1	74	23.3	40	SE	3	1.3		0	0			0	0	Clear	
Umatilla, Oregon	29.59	751.6	29.99	761.7	65.5	18.6	58	W	5	2.2			10s		SW	Inap.	Inap.	Cloudy	
Uvalde, Texas	29.04	737.6	29.82	757.4	78	25.6	82	SE	2	0.9		0	0			0	0	Clear	
Vicksburg, Mississippi	29.86	758.4	30.11	764.8	74	23.3	81	S	4	1.8		0	0			0.08	2.0	Clear	
Visalia, California	29.43	747.5	29.78	756.4	65	18.3	73	N	1	0.4		0	0			0	0	Clear	
Washington, D. C.	29.93	760.2	30.04	763.0	71	21.7	85	Calm	0	0		1c	Fg			0.05	1.3	Clear	
Wickenburg, Arizona					64	17.8	25	Calm			0	0	0			0	0	Clear	
Wilmington, N. Carolina	30.01	762.2	30.06	763.5	78	25.6	82	SW	7	3.1		10c	0	Calm		0	0	Cloudy	
Winnemucca, Nevada	25.61	650.5	29.82	757.4	54	12.2	55	SW	6	2.7		0	0			0	0	Clear	
Wood's Holl, Mass	30.13	765.3	30.17	766.3	64	17.8	83	SW	4	1.8		1ck	Hz	W		0	0	Clear	
Yankton, Dakota	28.60	726.4	29.86	758.4	67	19.4	89	NW	5	2.2			10s		NW	0.12	3.0	Cloudy	
Yuma, Arizona	29.60	751.8	29.73	755.1	73.6	23.1	68	Calm	0	0		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.13	562.1			49.0	9.4	87	Calm	0	0		8ck	0			0	0	Cloudy	Thomas Herran.
Buff Bay Town, Jamaica	29.86	758.4	30.17	766.3	77	25.0	82	E				0	2k						
Havana, Cuba, W. I.	30.07	763.8	30.12	765.0	80	26.7	78	Calm	0	0		4cs	0	Calm		0.86	21.8	Fair	A. Van Caneghem, Ass't.
Kingston, Jamaica, W. I.	30.06	763.5	30.07	763.8	80.2	26.8	71	Calm	0	0		0	2s			0	0	Fair	Robert Johnstone.
Navassa, W. I.	29.97	761.2	30.05	763.3	83	28.3	79	E	8	3.6		2s	2k	NE	E	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.12	765.0	30.12	765.0	80	26.7	82	SE			2	4c	5k	E		0.650	16.5	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.46	748.3	30.01	762.2	81	27.2	76	Calm	0	0		0	8ks		Calm	0	0	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					77.9	25.5		NE			1	6ck	0	NE		0.35	9.		Earl Flint.
Santiago de Cuba, W. I.																			Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.05	763.5	30.11	764.8	64.0	17.8	86	E	16	7.2		1c	0	NE		0	0	Fair	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																			Comm. A. J. Errington
H M. S. Alert, Thursday Island, Oceania	30.00	762.0	75	23.9	78	SE			3-4		4							D. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, N. 43° 04′, E. 16° 33. ′	29.88	758.9	79.2	26.2	80	WNW			1		6					Sm'h		D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab, Aden, Arabia, Asia	29.77	756.1	88	31.1	72	S			3		2					Sm'h		D. clouds	Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 24° 14′, E. 65° 20′	29.57	751.1	86	30.0	79	SW			3		6	SW				3	SW	D. clouds.	Comm. G. W. Hand.
H. M. S. Bittern, N. 39° 42′, E. 19° 06′			79	26.1		Calm			0									D. clouds	Capt. E. B. Pusey.
H. M. S. Blanche, N. 15° 52′, W. 60° 33′	30.10	764.5	82	27.8	78	E			1		3					3	E	D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, Ascension I'd, Africa	30.14	765.5	77	25.0	72	ENE			2-4		2	ENE						Squally	Com. F. W. Richards.
H. M. S. Champion, Monte Video, Uruguay	29.91	759.7	54	12.2	86	W			2		10							Raining	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 39° 53′, E. 120° 14′	29.70	754.4	69	20.6	90	SSW			2		2							D. clouds	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 38° 29′, E. 13° 36′	29.98	761.5	81	27.2		NW			3		3	WNW				2	WSW	D. clouds	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.32	770.1	59	15.0		SSE			1		1	SE						Blue sky	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I	30.19	766.8	80	26.7	85	NE			2-3		2	NE						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 49° 30′, W. 55° 46′	30.10	764.5	61.5	16.4	70	WSW			1-2		5	SW						D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 3° 38′, E. 75° 02′	29.88	758.9	78	25.6		Calm			0		10					2	SE	Raining	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 24° 00′, E. 55° 25′	30.22	767.6	73	22.8		SE			4		3	SE				3	ESE	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, N. 5° 20′, E. 163° 10′	29.87	758.7	78	25.6	90	Calm			0		6	ENE						Raining	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, S. 19° 47′, E. 59° 30′	30.10	764.5	75	23.9	64	E			3-4		4	ESE				4-5	ESE	D. clouds	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn, N. 12° 59′, E. 55°48′	29.66	753.4	80	26.7	80	SSE			6		0					6	SSE	Blue sky	Capt. P. Aldrich.
H. M. S. Flamingo, Lucea, Jamaica, W. I	30.03	762.7	85	29.4	91	Calm			0		2	E						D. clouds	Comm. R. N. Custance.
H M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd	29.82	757.4	54.5	12.5	93	NE			1		9							Squally	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 30′, W. 67° 18.′	29.03	737.3	45	7.2	84	NW			5		10					4	N	Overcast	Capt. L. F. Jones.
H. M. S. Griffon, N. 20° 55′, W. 73° 42′	30.10	764.5	85	29.4	83	E			5		2							D. clouds	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Brindisi, Italy	29.88	758.9				NNE			1		0							Blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.05	763.3	60	15.6		SE			2		5	NW						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	29.78	756.4	84.5	29.2	85	ENE			2		4					1	ENE	Misty	Capt. A. Carpenter.
H. M. S. Midge, N. 23° 27′, E. 113° 14′	29.81	757.2				Calm			0		1?	NE						Thnd'r st'm?	Capt. W. N. Lang.
H. M. S. Minotaur																		?	Capt. H. H. Rawson.
H. M. S. Modeste, S. 31° 15′, E. 35° 40′	30.44	773.2	69	20.6	65	SW			1-2		2	WNW				7	SW	D. clouds	Capt. J. G. Mead.
H. M. S. Monarch, Tunis, Tunis, N. Africa	30.01	762.2	76	24.4	90	NNE			1		0							Blue sky	Capt. G. Tryon, C. B

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, West Coast of Borneo			84.5	29.2		SE			1		8	SE				4	SE	Raining	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	30.12	765.0	52	11.1	93	SSE			1									Foggy	Capt. E. B Drummond.
H. M. S. Orontes, N. 11° 34′, W. 23° 47′	30.05	763.3	80.0	26.7	86	NE			2		4	NNE				1	NNE	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.91	759.7	80	26.7	97	Calm			0		6							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin, S. 52° 00′, W. 67° 37.′	28.99	736.3	44	6.7		NNW			4		8					6	NNE	D. clouds	Capt. A. C. Paget.
H. M. S. Phœnix, N. 27° 05′, W. 67° 45	30.19	766.8	81	27.2	83	ESE			1		3	ESE				2	SE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.73	755.1	82	27.8		Calm			0		3							D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 52° 54′, W. 128° 35′	29.65	753.1	50	10.0		SSW			1		8							Raining	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	30.10	764.5	80.3	26.8	70	SE			3		8					Sm'h		D. clouds	Capt. C. E. Foot.
H. M. S. Salamis.																			Capt. A. Fitz George.
H. M. S. Sea Gull,																			Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon,																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 28° 09′, W. 159° 40′	30.24	768.1	74	23.3	81	ENE			3		1					2	NNW	Blue sky	Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Arica, Peru	30.16	766.1	62	16.7	88	S			1		10	Calm						Overcast	Capt. A. H. Markham.
H. M. S. Turquoise, Sandy Point, Patagonia	28.90	734.0	41	5.0	73	WNW			5–6		5							Squally	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne,																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.			80	26.7		NW			1		3							D. clouds	Com. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	30.38	771.6	50	10.0	86	Calm			0		0							Blue sky	Com. J. C. Wilson, A. D.C
H. M. S. Woodlark, Bahrein, Arabia	29.58	751.3	87.5	30.8	62	NE			1									D. clouds	Capt. T. P. Nesham.
H M. S. Zephyr																			Lt. Comm. G. W. Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capellò, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candid dos Reis, Comd't.
India, N. 35° 55′, W. 11° 45′	30.14	765.6	71.6	22.0	79	NNW			5		10		NNW			4	NNW	Overcast	A. M. da Sitra.
Quanza, N. 16° 42′, W. 24° 24′	30.06	763.6	79.0	26.1	66	NE			1		5		N			1	NE	D. clouds	Carlos M. de Silva Costa, Comd't
Rio Lima																			S. C da Silva Costa, Comd't.
Sado., St. Paul de Loando, Benguela	30.10	764.5	68.7	20.4	80	NW			1		1							Blue sky	G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.82	757.3	84.2	29.0	81	ENE			3		3			2 hours				D. clouds	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H M. Corvette Saga N. 36° 47′, W. 11° 04′	30.12	765.0	68.0	20.0	85	NE			6		0							Blue sky	Capt. M. von Krusenstierna.
H. M. Frigate Vanadis																			Com. Th. Ulner.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				

UNITED STATES NAVAL SERIES.

By authority of the Secretary of the Navy.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

N. Yard, Pensacola, Fla	30.12	765.0	79	26.1	74	NW	3	1.3			8		NW	0	0			Fair	
Naval Hospital, Yokahama, Japan	29.82	757.4	71	21.7	90	E			3		10		ENE	Slight				Sprinkling	
Adams, Acapulco, Mexico	29.70	754.4	83	28.3	83	E			1		5		W			Sm'h		Fair	
Alaska, Callao, Peru	30.02	762.5	63	17.2	94	SE			1		5		SE	0	0	Sm'h		Fair	
Alert, Port Lloyd, Bonin Id.*	29.91	759.7	80	25.7	78	NW			1		1		Calm	0	0	Sm'h		Clear	
Alliance, St. John's, N. F	30.26	768.6	58	14.4	70	WSW			2		5			0	0	Sm'h		Fair	
Ashuelot, Kobe, Japan	29.94	760.5	73	22.8	95	ENE			1		10		Calm					Cloudy	
Colorado, New York, N. Y	30.09	764.3	66	18.9	89	E	1	0.4			10			0	0			Hazy	
Constitution, Newport, R. I	30.07	763.8	62	16.7	86	S			4		0?							Cloudy?	
Franklin, Norfolk, Va	30.02	762.5	69	20.6	95	SSE	6	2.7			10		WNW	1.55	39.4			Cloudy	
Galena, N. 43° 41′, W. 8° 35′	30.26	768.6	66	18.9	94	ENE			4		2					Mod.	ENE	Fair	
Independence, N. Yard, Mare I'd, Cal	29.96	761.0	73	22.8	32	SW	3.6	1.6			2		SW	0	0			Clear	
Jamestown, Sitka, Alaska*	29.47	748.5	53	11.7	93	N			2		10		SSE	0.06	1.5			Cloudy	
Kearsarge, Norfolk, Va	30.10	764.5	70	21.1	90	Calm			0		10		NW			Sm'h		Threatening	
Lackawanna, Apia, Samoa Id's, Oceania†	30.11	764.8	81	27.2	96	N			1		5		N					Fair	
Marion, Monte Video, Uruguay..*†	29.85	758.2	54	12.2	93	W			3		10			Heavy		Sm'h		Foggy	
Michigan, Detroit, Michigan	30.05	763.3	65	18.3	73	NE			2		0							Clear	
Minnesota, Newport, R. I	30.15	765.8	63	17.2	89	SSE			1		10		WNW			Sm'h		Overcast	
Monocacy, Yokohama, Japan	30.01	762.2	73	22.8	81	NE			2		10		N					Cloudy	
Nipsic, Antwerp, Belgium	30.19	766.8	68	20.0	65	W			3		8					Sm'h		D. clouds	
Onward, Callao, Peru†.	30.05	763.3	63	17.2	89	SE			3		10		NW			Long	W	Cloudy	
Palos, Nagasaki, Japan	29.94	760.5	78	25.6	95	SW			2		10							Overcast	
Passaic, Washington, D. C	30.06	763.5	70	21.1	90	NE			1		2							Fair	
Pensacola, Mare Isl'd, Cal	29.90	759.4	58	14.4	88	SSW			4		0			0	0			Clear	
Portsmouth, Newport, R. I	30.15	765.8	61	16.1	?	SSW			2		10					Sm'h		Cloudy	
Powhatan, Newport, R. I	30.14	765.5	65	18.3	84	S			1		10		N					Cloudy	
Ranger, Mulege, Mexico*	29.79	756.7	79	26.1	86	Calm			0		0			0	0	Sm'h		Clear	
Richmond, Kobe, Japan	29.94	760.5	74	23.3	95	Calm			0		8			0.72	18.3			Cloudy	
Saratoga, Newport, R. I	30.12	765.0	63	17.2	89	SSW			1		8		Calm	0	0			Cloudy	
Shenandoah, Rio de Janeiro, Brazil.*	30.37	771.4	68	20.0	79	SE			1		2					Sm'h		Fair	
St. Louis, League Island, Pa	29.64	752.8	64	17.8	94	NE	1	0.4			10			0	0			Cloudy	
Swatara, N. 33° 05′, E. 122° 52′...*†	29.86	758.4	70	21.1	90	NE			2		10		Calm			Sm'h		Foggy	
Tennessee, Navy Yard, N. Y	30.12	765.0	66	18.9	94	ESE	2	0.9			10			0	0	Sm'h		Foggy	
Ticonderoga, S. 32° 35′, W. 35° 32′	30.44	773.2	65	18.3	84	Calm			0		8		SE	0	0	Sm'h	SSW	Fair	
Vandalia, N. 44° 18′, W. 63° 24′	30.19	766.8	58	14.4	88	SSE			1		2		Calm			Long	ESE	Fair	
Wabash, Boston, Massachusetts	30.17	766.3	61	16.1	82	SSW	3	1.3			10		SW	0.12	3.0			Cloudy	
Wachusetts, N. Yard, Mare I'd, Cal	29.89	759.2	59	15.0	82	SW			2		0			0	0			Clear	
Wyoming, Norfolk, Va	30.04	763.0	71	21.7	90	SE	8	3.6			8		W	1.65	41.9			Cloudy	
Yantic, N. 21° 06′, W. 90° 24′*	29.91	759.7	78	25.6	91	E			4		1		E			Sm'h	E	Clear	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 9° 45′, W. 118° 55′	29.92	760.0	75.8	24.3	96	WSW			3		10							Raining	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 17° 41′, W. 44° 40′	30.20	767.1	78.8	26.0	86	ENE			4		2					2	E	D. clouds	W. N. Lailey.
City of Agra, S. 19° 02′, W. 34° 00′	30.25	768.3	76.5	24.7	91	SE			4		4							D. clouds	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 20° 50′, W. 32° 00′	30.26	768.6	77.5	25.3	78	NE			6		4							Blue sky	Capt. Jas. Buchan.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 10° 59′, W. 37° 02′	30.21	767.3	78.3	25.7	91	SSE			6		6							Showery	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamports																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola, N. 35° 14′, W. 17° 08′	30.35	770.9	70.1	21.2	95	NNE			5		3							D. clouds	Capt. E. W. Turner.
Naiad																			Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 45° 31′, W. 20° 34′	30.10	764.5	63	17.2	89	SW			4		10							Misty	Capt. M. Parry.
Sierra Estrella, N. 5° 07′, W. 17° 28′	30.12	765.0	80.5	26.9	79	SSE			5		3							D. clouds	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven																			Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, Glasgow, Scotland	30.09	764.3				SSE			2		8		SW			Sm'h		Cloudy	
S. S. Circassian, ‡ N. 55° 20′, W. 14° 30′	30.26	768.6	54	12.2	80	SSW			6		10kn			½ hour		2	NW	Showery	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian, N. 51° 48′, W. 23° 51′	30.03	762.7	50	10.0		SSW			1		10		S			Sl't	Con.	Drizzling	Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia																			Capt. W. H. P. Hains.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic, N. 50° 05′, W. 13° 52′ †	30.08	764.0	56	13.3	63	SSE			4		10		SSW	4 hours Drizzles		Long	NW	Cloudy	Capt. Benj. Gleadell.
S. S. Germanic, N. 51° 02′, W. 22° 43′ †	30.12	765.0	51	10.6	?	WSW			3		10		W	Showers		Mod.	NW; SW	Drizzling	Capt. Ch. W. Kennedy
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Phole.
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, N. 38° 39′, W. 65° 14′	30.25	768.3	72.5	22.5		NW			2		1		NW	0	0	Sm'h	NW	Clear	
S. S. Köln, N. 41° 23′, W. 49° 09′	30.38	771.6	63.0	17.2		ENE			2–3		10		ENE	2 hours Rain;	fog	Sm'h	ENE	Cloudy	Capt. Th. Jüngst.
S. S. Strassburg, N. 49° 46′, W. 9° 50′	30.24	768.1	60.8	16.0	94	SSW			3		10		W	1 hour		Long	WNW	Cloudy	Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR RESPONSIBLE OFFICER.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. N. 40° 03′, W. 54° 08′.....	30.20	767.1	72	22.2	83	E	.....	.....	3	.....	8	.....	SE	.....	.....	Sm'h	SE	Fair.....	Capt. J. W. Shackford.
S. S. Indiana, Philadelphia, Pa.....	.....	.....	80	26.7	44	SW	.....	.....	5	.....	8	.....	SW	Mode	rate	.....	.....	Cloudy.....	Capt. R. W. Sargent.
S. S. Ohio, N. 49° 43′, W. 23° 18′.....*†	30.06	763.5	55	12.8	93	S	.....	.....	2	.....	10	.....	S	Light		Mod.	NW	Rainy.....	Wm. Shackford, Chief Off'r.
S. S. Pennsylvania, Liverpool, England.....†	30.17	766.3	63	17.2	94	NW	.....	.....	3	.....	2	.....	NW	.....	.....	Sm'h	.....	Fair.....	Capt. Geo H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 39° 02′, E. 166° 47′.....†	30.09	764.3	59	15.0	70	N	.....	.....	3	.....	5	.....	N	0	0	Light	NE	Fair.....	Capt. H. Davison.
S. S. Gaelic.....																		.....	Capt. W. H. Kidley.
S. S. Oceanic, N. 37° 58′, E. 146° 45′.....	30.33	770.4	68	20.0	79	NE	.....	.....	2	.....	2	.....	NW	.....	.....	1	E	Fine.....	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon.....†	29.95	760.7	61.0	16.1	88	Calm	.....	.....	0	.....	10	.....	SE	.....	.....	.....	.....	Cloudy.....	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, San Francisco, Cal.....†	29.87	758.7	52	11.1	93	Calm	.....	.....	0	.....	0	.....	.....	0	0	.....	.....	Fine.....	Capt. J. N. Ingalls.
S. S. Dakota.....																		.....	Capt. H. G. Morse.
S. S. Idaho, Seattle, Wash. Ter.....†	29.88	758.9	58	14.4	94	SE	.....	.....	3	.....	10	.....	SE	.....	.....	.....	.....	Rainy.....	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 33° 35′, W. 118° 10′.....†	29.84	757.9	66	18.9	94	Calm	.....	.....	0	.....	8	.....	NW	.....	.....	Sm'h	NW	Cloudy.....	Geo. H. Harrison.
S. S. Senator.....																		.....	Capt. Thos. Wallace.
S. S. State of California, N. 40° 26′, W. 124° 34′....†	30.03	762.7	55	12.8	93	NW	.....	.....	4	.....	10	.....	NW	.....	.....	Short	NW	Foggy.....	Capt. G. Debney.
S. S. Victoria, Victoria, Vancouvers Id..†	29.89	759.2	51	10.6	100	S	.....	.....	1	.....	8	.....	.....	.....	.....	.....	.....	Cloudy	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Bannerman, 2d Officer.
S. S. City of New York, S. 19° —′, W. 171° —′....†	30.06	763.5	80	26.7	91	ENE	.....	.....	5	.....	10	.....	NE	0	0	Mod.	NE	Cloudy.....	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 26° 43′, W. 114° 13′....†	29.93	760.2	59	15.0	94	NW	.....	.....	1	10c	0	NW	.....	0	0	Sm'h	W	Overcast.....	Capt. D. S. Austin.
S. S. City of Peking, N. 42° 50′, W. 135° 29′.....†	29.98	761.5	58	14.4	87	SW	.....	.....	4	.....	10	.....	SW	0	0	Mod.	SW	Cloudy.....	Capt. G. G. Berry.
S. S. City of Sidney, Auckland, New Zealand*†	29.89	759.2	54	12.2	79	SW	.....	.....	5	.....	8	.....	SW	0	0	Sm'h	.....	Cloudy.	Capt. H. C. Dearborn.
S. S. City of Tokio, Hong Kong, China.....†	29.96	761.0	85	29.4	79	W	.....	.....	2	.....	8	.....	SW	.....	.....	.....	.....	Cloudy.....	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 22° 54′, W. 109° 06′...†	29.90	759.4	75	23.9	80	W	.....	.....	4	.....	8	.....	WSW	0	0	Mod.	SW	Cloudy.....	Capt. R. R. Searle.
S. S. Granada, Panama Bay, Panama †	29.90	759.4	84	28.9	91	SW	.....	.....	2	.....	2	.....	SW	3 ho	urs	.....	.....	Clear.....	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. W.....	30.09	764.3	54	12.2	61	W	.....	.....	5	.....	10	.....	W	.....	.....	.....	.....	Cloudy.....	.....
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Sam'l Jackson.
S. S. Nederland, ‡ N. 40° 09′, W. 70° 08′.....†	30.19	766.8	65	18.3	83	S	.....	.....	1	.....	8	.....	S	0	0	Sm'h	.....	Fine.....	A. Fedderson, 2d Officer.
S. S. Rhynland, Antwerp, Belgium.....†	30.36	771.1	69	20.6	79	WNW	.....	.....	4	.....	2	.....	WNW	0.15	3.8	.....	.....	Clear.....	Capt. Wm. Geo. Randle.
S. S. Vaderland.....																		.....	T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			A. R. Mehaffey, 2d Mate.
Sch'r Abby K. Bentley.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sch'r Addie Fuller, Savannah, Georgia.....	30.06	763.5	78	25.6	69	W	.....	.....	.....	.....	2k	.....	.....	0	0	.....	.....	Fair.....	Capt J. Jorgensen.
Sch'r Annie R. Lewis.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. L. L. Lewis.
Bark Carrie Heckle.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. B. F. Woodbury.
Brigantine George, Monabo, Porto Rica.....†	30.15	765.8	85	29.4	.....	ENE	.....	.....	5	.....	2	.....	.....	Show	ers	R'gh	.....	.....	Capt. W H. Champlin.
U. S. F. C. S. Fish Hawk.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bark Sunbeam, N. 23° 51′, W. 34° 07′.....†	30.32	770.1	79	26.1	82	ENE	.....	.....	6	.....	5	.....	ENE	0	0	Mod.	ENE	Fair.....	Capt. Jos. Hand.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
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PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.

Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 27, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours‡			29.92	760.0	79.0	26.1	86	N			3		0			0	0	Clear	Raynard.
Algiers‡			29.99	761.7	77.7	25.4	73	NE			3		8			0	0	Very cloudy	Nicolas.
La Calle‡			29.97	761.1	79.5	26.4	71	WSW			5		4			0	0	Cloudy	Fonfréde.
Tunis‡			29.89	759.3															Jacques.
Sfax‡																			Gau,
Saida‡			29.97	761.3	96.6	35.9	16	NNE			1		0			0	0	Clear	Dumas.
Tebessa‡			29.94	760.4	88.2	31.2	18	N			2		8			0	0	Very cloudy	Watrin.
Geriville‡					97.2	36.2	14	SSE			7		0			0	0	Clear	Lonchamp.
Laghouat‡			29.92	760.0	97.5	36.4	11	W			5		3			0	0	Pretty fair	Herbin.
Biskra‡			29.92	760.0	101.1	38.4	27	NW			1		0			0	0	Clear	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria‡	30.15	765.8	30.24	768.1	43.3	6.3	76	N	10	4.5		2				0	0	Fine	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.35	745.4	29.87	758.8	74.1	23.4	62	NE			2	7				0.004	0.1		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.12	739.7	29.86	758.5	70.9	21.6	74	W	12.5	5.6		9				0.004	0.1		Dr. Wierzbicki.
Eperies‡	28.93	734.8	29.77	756.1	74.1	23.4	62	N			2	cs	5s			0.370	9.4		Julius Mikolik.
Gratz‡	28.69	728.8	29.90	759.5	69.6	20.9	74	NW			4		8			1.583	40.2		Andreas Rospini.
Hermannstadt	28.36	720.4	29.69	754.2	78.8	26.0	54	E			3		6			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.68	728.4	29.99	761.7	63.1	17.3	72	WNW			1		10			0.020	0.5		The Staff.
Lemberg	28.85	732.7	29.79	756.7	71.2	21.8	67	SE			1		10			Inap.	Inap.		Dr. T. Stanecki.
Pola	29.71	754.6	29.82	757.3	72.9	22.7	58	E			4		3			0	0		I. R. Hydrographic Office.
Szathmar	29.30	744.1	29.74	755.4	82.0	27.8	44	NW			2		7			0	0		Beicht Peter, S. J.
Szegedin	29.49	749.0	29.75	755.7	78.1	25.6	75	NW			3		6			0	0		Karl Stancel.
Trieste	29.76	756.0	29.87	758.6	72.3	22.4	65	ENE			3		10			0	0		Secco.
Vienna	29.27	743.5	29.97	761.3	65.5	18.6	62	NW			3		9			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.

BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

Aberdeen	29.66	753.4	29.76	755.9	53.8	12.1	81	S	16	7.2			9			0.110	2.8	Raining	W. Boswell.
Armagh, Observatory	29.67	753.6	29.90	759.4	57.4	14.1	70	WNW	9	4.0			7					D. clouds	S. Call.
Bidston, Liverpool Obs'y			29.87	758.7	55.4	13.0	96	W	20	8.9			10					Raining	John Hartnup.
Bolton, Sharples	29.32	744.7	29.85	758.2	55.8	13.2	82	SSW	6	2.7			10					Drizzling	Thomas Mackereth.
Bradford, Yorkshire	29.45	748.0	29.85	758.2	58.4	14.7	71	SW			1.0		10			0	0	Overcast	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.92	760.0	29.95	760.7	85	29.4	64	NE			3		4					D. clouds	Corpl. J. Surgener, A.H.C
Cardington			29.90	759.4	59.0	15.0	92	SW			0.2		10					Drizzling	John McLaren.
Chatham, School M. E.	29.82	757.4	29.94	760.5	61.3	16.3	79	SW			3		10					Gloomy	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.70	754.4	29.92	760.0	61.7	16.5	81	NW			5		9					Overcast	The Staff.
Fort Napier, Natal	27.83	706.9	30.04	763.0	76.0	24.4	100	NW			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.88	758.9	86	30.0	80	NW			1		0					Blue sky	Sgt. C. E. Keane.
Galway, Queen's College			30.00	762.0	59	15.0	70	WSW			3		10			0.02	0.5	Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	29.95	760.7	30.00	762.0	75.1	23.9	88	E			3		7					D. clouds	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.58	751.3	29.79	756.7	57.3	14.1	69	WSW			6		6					D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	29.77	756.1	29.94	760.5	61.5	16.4	78	SSW			1		10					Overcast	The Staff.
Guernsey	29.74	755.4	29.95	760.7	59	15.0	88	SSW			2		10					Drizzling	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	29.92	760.0	29.95	760.7	61.0	16.1	80	SSW	10	4.5			10					Threatening	The Staff.
Leicester, Museum	29.65	753.1	29.90	759.4	58.3	14.6	82	SW			1		1?					Drizzling?	J. E. Carryer.
Malta, Mediterranean	29.74	755.4	29.81	757.2	81.2	27.3	69	NW			2		2					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	30.08	764.0	30.13	765.3	86.0	30.0	72	SE			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.38	746.2	29.90	759.4	56.1	13.4	92	SSW			1		10					Raining	John Mac Email.
Oxford, Radcliffe Obs'y	29.70	754.4	29.93	760.2	56.1	13.4	88	S			2		10					Threatening	The Staff.
Plymouth	29.81	757.2	29.88	758.9	64.8	18.2	90	W			4		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.69	754.1	54.6	12.6	88	S	16	7.2			10					Raining	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.67	753.6	29.73	755.1	84.4	29.1	58	NNE			2		1					Blue sky	Serg't W. H. Lyne.
Sheffield	29.63	752.6	29.91	759.7	62.9	17.2	81	WSW			1		10			0	0	Overcast	W. F. Cooper.
Silloth Rectory	29.79	756.7	29.82	757.4	62.8	17.1	84	SW			4		5			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			29.88	758.9	55.0	12.8	92	SW	17	7.6			10					Raining	Rev. S. J. Perry.
Stratfield Turgiss	29.75	755.6	29.96	761.0	60.0	15.6	80	S			3		10					Raining	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	29.96	761.0	29.97	761.2	65	18.3	68	N			6		4					D. clouds	W. Newcombe.
Valencia, Observatory	30.05	763.3	30.07	763.8	55.9	13.3	76	WNW	20	8.9			8			Blank		D. clouds	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

Bathurst, N. B.					62.0	16.7		NE	1	0.4		0	0			0	0	Blue sky	Hon. J. Ferguson.
Charlottetown, P. E. Island	30.08	764.0	30.12	765.0	60	15.6	82	SW	5	2.2		0	2s			Inap.	Inap.	Fair	H. J. Cundall, C. E.
Chatham, N. B. *	30.06	763.5	30.12	765.0	56	13.3	93	Calm	0	0		5ck	0	SE		0.26	6.6	Fair	G. A. Blair.
Chicontimi, Quebec					50.7	10.4		NW			2	0	0			0	0	Blue sky	Rev. V. A. Huart.
Cornwall, Ontario	29.83	757.7	30.02	762.5	56.7	13.7	88	SE			1	1cs	0			0	0	Blue sky	James Smith, M. A
Dalhousie, N. B.																			H. A. Johnson.
Father Point, Quebec *	30.11	764.8	30.13	765.3	55	12.8	68	Calm	0	0		2cs	0			0	0	Clear	J. McWilliams.
Fort Garry, Manitoba *	28.86	733.0	29.66	753.4	57	13.9	87	NE	2	0.9		0	Hz			Inap.	Inap.	Hazy	James Stewart.
Fredericton, N. B.	30.10	764.5	30.16	766.1	56.0	13.3	93	W	1	0.4			10s			Inap.	Inap.	Foggy	Prof. Harrison.
Granton, Ontario	28.76	730.5	29.83	757.7	61.0	16.1	88	E			1		1on			0	0	Cloudy	James Grant.
Halifax, N. S. *	30.04	763.0	30.17	766.3	60	15.6	89	E	2	0.9		8k	0	W		0.126	3.2	Fair	A. Allison.
Hamilton, Ontario	29.49	749.0	29.87	758.7	60.0	15.6	89	NE			1	3ck	0	NE		0	0	Clear	Geo. Dickson, B. A.
Kingston, Ontario *	29.62	752.3	29.95	760.7	62	16.7	83	NE	2	0.9		10cs	0			0	0	Cloudy	S. Woods, M. A.
Little Glace Bay, N. S.	30.13	765.3	30.16	766.1	55.8	13.2	88	S			2		10n			Inap.	Inap.	Raining	C. H. Rigby.
Montreal, Quebec *	29.87	758.7	30.06	763.5	63	17.2	74	S	7	3.1		5c	Sk	W		0	0	Fair	C. H. McLeod, C. E.
Moose Factory, Ontario	29.72	754.9	29.76	755.9	61.9	16.6	61	SE			2		10n					Raining	J. R. Nason.
Parry Sound, Ontario *	29.18	741.2	29.85	758.2	61	16.1	71	SE	26	11.6		2k	5ks	SW	SW	0	0	Fair	Rev. R. Moseley.
Peterboro, Ontario	29.28	743.7	30.02	762.5	60.7	15.9	71	E			1		9ks			0	0	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.17	740.9	29.84	757.9	65	18.3	94	Calm	0	0			10n			0	0	Threatening	H. Morgan.
Port Stanley, Ontario	29.20	741.7	29.82	757.4	64	17.8	89	E	16	7.2			10n		SW	0	0	Cloudy	M. Payne.
Quebec, Quebec *	29.82	757.4	30.14	765.5	54	12.2	80	Calm	0	0		Hz	Sk			0	0	Smoky	Capt. Ashe, R. N.
Rockliffe, Ontario *	29.52	749.8	29.98	761.5	53	11.7	82	E	2	0.9		8c	0	W		0	0	Fair	W. H. McIntyre.
Saugeen, Ontario *	29.08	738.6	29.77	756.1	63	17.2	75	SE	13	5.8			8ks			0	0	Cloudy	K. Stewart.
St. Andrews, N. B.	30.10	764.5	30.15	765.8	52	11.1	92	S	1	0.4			Fg			0	0	Foggy	
St. John, N. B.	30.00	762.0	30.16	766.1	59.0	10.0	100	S	7	3.1			Fg			0	0	Light fog	G. Murdock, C. E.
Stratford, Ontario	28.56	725.4	29.81	757.2	58.9	14.9	87	SE	9	4.0			10s			0	0	D. clouds	C. J. Macgregor, M. A.
Sydney, C. B. *	30.14	765.5	30.18	766.6	54	12.2	96	SW	5	2.2			10n			0.03	0.8	Light rain	T. C. Hill, C. E.
Toronto, Ontario *	29.52	749.8	29.90	759.4	59	15.0	82	NE	10	4.5			10ks			0	0	Threatening	Magnetic Observatory
Windsor, N. S.	30.05	763.3	30.14	765.5	57.0	13.9	90	S	4	1.8			10n			0.24	6.1	Cloudy	
Woodstock, Ontario	28.79	731.3	29.82	757.4	59.3	15.2	85	E	8	3.6			10ks			0	0	D. clouds	Prof. Wolverton.
Yarmouth, N. S. *	30.11	764.8	30.17	766.3	54	12.2	98	Calm	0	0		0	Fg			0.06	1.5	Light fog	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	30.13	765.3	30.38	771.6	58	14.4	76	S	1	0.4		5k	5s			0	0	Fair	John Delany.
St. Pierre, N. F.			30.15	765.8	52.9	11.6		SW			1					2.36	59.9		N. F. Land, Comd't

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

Cape St. Francis Lt. House	30.05	763.3			65.0	18.3	82	NE	12.3	5.5		4c				0	0	Fine	John Duthie.
Cape Town, C. G. H. Obs'y	29.96	761.0	30.00	762.0	53.0	11.7		NW				0	1s			0	0		The Staff, for D. Gill.
Worcester *†	28.93	734.8			69.8	21.0	43	ENE			1	0	0			0	0	Fine	C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.84	757.9	29.86	758.5	71.2	21.8	97	Calm	0	0			10			1.909	48.5	Covered	M. Marc Dechevrens, S.J

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.25	666.7	29.97	761.2	69.8	21.0	87	SE			1	3cs	2d	NE		Inap.	Inap.	Cloudy	Amand Maison.

DANISH SERIES.

Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.

Copenhagen	29.96	761.0	30.01	762.2	62.1	16.7	59	NW	13	6			4						Oversergent Fischer.
Fanöe	29.98	761.4	30.00	761.9	59.2	15.1	71	WNW			4		8						Overloerer Lauridsen.
Godthaab, Greenland																			S. Kleinschmidt.
Stykkisholm, Iceland	29.19	741.3	29.23	742.4	49.1	9.5		NW			2		10					Raining	A. O. Thorlacius.
Thorshavn,	29.58	751.2	29.61	752.1	53.6	12.0	79	SW	13	6			6						Overloerer Bergh.
Vestervig	29.86	758.5	29.96	760.9	57.7	14.3	74	WSW			4		2						Loearer Oesterbol.

FRENCH SERIES.

Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.

Agen, Normal School	29.39	746.4	30.01	762.2	74.8	23.8	35	N			1	2c	0			0	0	Clear	M. Labroue, Director.
Alençon Normal School	29.50	749.2	30.05	763.2	72.0	22.2	72	S			2	0	8n	S		0	0	Very cloudy	M. Nicot, Director.
Arras, Engineer School	29.76	756.0	30.01	762.3	69.8	21.0	54	SW				c	n		S				M. Klein, Commandant.
Avignon, Normal School	29.78	756.5	29.86	758.5	80.2	26.8	32	N			3		0			0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.46	748.3	30.00	761.9	72.3	22.4	40	SSE			1	0	8kn			0	0	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.75	755.6	30.00	762.1	73.6	23.1	49	SW			1		10		SW	0	0	Covered	M. Frère Eugene Marie.
Besançon, Normal School	29.08	738.7	29.90	759.5	71.6	22	54	NE			2	c	0		SE	0	0		M. Gobin, Director.
Bordeaux, Observatory	29.76	756.0	30.02	762.4	77.4	25.2	47	WNW			1		8		SW	0	0	Very cloudy	M. Rayet, Director.
Bourges, Normal School	29.61	752.2	30.15	765.7	72.5	22.5	40	N			1		k		N	0	0		M. Postel, Director.
Brest, Naval Observatory	29.78	756.5	30.03	762.7	61.9	16.6	91	W			2		10		W	0	0		M. de Rermaree, Dir.
Caen, Normal School	29.91	759.6	29.98	761.4	68.0	20	60	SSW			1		5		SSW	0	0	Cloudy	M. Blétrix, Director.
Châlons-sur-Marne, N. Sch'l	29.63	752.6	29.94	760.4	77.7	25.4	58	S			1		0			0	0	Clear	M. Jadot, Director.
Charleville, Normal School	29.53	750.0	30.03	762.7	68.7	20.4	76	W			1					0	0		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.65	727.8	29.96	761.0	71.2	21.8	45	NNE			1		0			0	0	Clear	M. Alluard, Director.
Cluny, Normal School	29.18	741.1	29.99	761.8	74.8	23.8	49	NE			1		0			0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.18	741.1	30.02	762.4	70.3	21.3	46	E			3	0	8kn	E	E	0	0	Very cloudy	Dr. Coulet, Director.
Gap, Normal School	27.54	699.5	29.80	757.0	74.3	23.5	39	N			3		0			0	0		M. Jeangirard, Director.
Gréasque, du. Rhone	28.80	731.5	29.94	760.5	84.7	29.3	28	W			2		2		SW	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.18	741.2	29.93	760.2	71.8	22.1	65	ESE			1	clr	0			0	0		M. Ablard, Director.
Guéret, Normal School	28.46	722.8	30.00	761.9	68.9	20.5	53	NE			1	0	2k		SW	0	0	Slightlycl'dy	M. Rivoire, Director.
Lamballe, Normal School	29.76	756.0	30.03	762.8	62.8	17.1	66	SW			2				SW	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.49	749.0	30.14	765.6	69.4	20.8	61	W			1	0	k		W	0.012	0.3		M. Chauvin, Director.
Lorient, Naval Observatory	29.95	760.7	30.05	763.3	63.7	17.6	84	SW			1		10		SSW	0	0	Covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	28.94	735.0	29.97	761.1	69.1	20.6	39	NNW			2		0			0	0	Clear	M. André, Director.
Mans, Normal School	29.72	754.8	30.10	764.4	72.3	22.4	54	W			3		8		S	0	0	Very cloudy	M. Piboen, Director.
Marseille, Observatory	29.58	751.3	29.84	757.9	82.0	27.8	36	W			1		1		NE	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.86	631.5	30.10	764.5	67.1	19.5	35	E	5.6	2.5			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.76	755.8	29.86	758.5	87.8	31	36	WSW			3		0			0	0	Clear	M. P. Galzin, Director.
Nancy, Normal School	29.24	742.8	29.99	761.7	70.9	21.6	43	NNE			1	0	5n		NNE	0	0	Cloudy	M. Hasse.
Nantes, Observatory	29.89	759.1	30.05	763.2	70.9	21.6	53	W			1-2	0	8kn	SW	WSW	0	0		M. Larocque, Director.
Nice	29.78	756.3	29.81	757.1	81.0	27.2	61	W			2		1	W	W	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.79	756.7	29.89	759.3	80.6	27.0	30	N	20.6	9.2			0			0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.64	575.0			55.0	12.8							1		WNW	0	0	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	28.93	734.7	29.95	760.7	75.9	24.4	63	N			1		0			0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.22	640.5			49.5	9.7	77	NW			1	0	2k			0.008	0.2	¼ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.04	763.0	30.07	763.8	76.3	24.6	48	WSW			2		2		SW	0	0	¼ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.80	756.9	30.00	762.1	74.8	23.8	54	WNW			1		5		W	0	0	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.87	708.0	29.95	760.8	70.9	21.6	43	NW			1		5			0	0	Cloudy	M. Richard, Director.
Rouen, Normal School	29.88	758.9	29.97	761.1	68.0	20	55	S			1		10		SW			Raining	M. Platrier, Director.
Saint Lô, Normal School	29.87	758.8	30.03	762.8	60.8	16	87	NW			1		10		WNW	0	0	Covered	M. Delaplanche, Dir.
Saint Maur, Observatory	29.85	758.1	30.01	762.3	72.5	22.5	45	W			1		7		SW	0	0		M. Renou, Director.
Toulouse, Observatory	29.35	745.4	30.07	763.8	77.5	25.3	42	NW			1		0			0	0	Clear	M. Baillaud, Director.
Tours	29.80	757.0	30.00	762.0	76.6	24.8	35	SW			1		8		W	0	0	¼ covered	M. de Tastes.
Versailles, Observatory	29.52	749.8	30.01	762.3	70.2	21.2	45	SW			1					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.74	755.3	30.03	762.7	72.3	22.4	49	SW			1		9		SW	0	0		M. Marié Davy, Director.

GERMAN SERIES.

Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.

Bamberg	29.16	740.6	30.02	762.5	69.4	20.8	46	NNW			2	0	2k	W		0	0		Prof. Dr. Hoh.
Berlin	29.86	758.5	30.03	762.8	62.8	17.1	63	NW			4		8			0.165	4.2		Prof. Dr. Arndt.
Breslau	29.48	748.7	30.01	762.2	58.3	14.6	99	WNW			3		10			0.075	1.9		Royal University Obs'y.
Carlsruhe	29.58	751.3	29.99	761.8	70.9	21.6	61	NE			1		1	NE		0.031	0.8		Albert Senz.
Cassel	29.30	744.3	30.03	762.7	67.8	19.9	43	WNW			1		7	W		0.811	20.6		Dr. H. Möhl.
Frankfort on the Main	29.71	754.6	30.06	763.6	71.2	21.8	50	NW			2		4			0	0		Physical Society.
Friedrichshafen	28.58	725.8	29.95	760.8	73.4	23.0	42	NE			5		4	NE		0	0		Wilhelm, Chief Tel.
Hamburg	29.97	761.2	30.04	763.0	63.9	17.7	58	W			3		7			0.024	0.6		Dr. R. Kleeman.
Kiel	30.00	762.1	30.05	763.5	62.4	16.9	54	W			2		10			0	0		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.64	752.9	30.06	763.4	65.1	18.4	59	NNW			1		7	NW		0.913	23.2		Prof. Dr. Bruhns.
Magdeburg	29.85	758.3	30.04	763.1	62.2	16.8	58	NW			3	0	6ks	WSW		0.126	3.2		Dr. Assmann.
Memel	29.85	758.3	29.90	759.5	82.2	27.9	34	E			4	0	5ks						Reinbrecht & Issermann.
Munich	28.23	717.0	30.10	764.4	65.7	18.7	58	Calm			0		7	SW		0.098	2.5		Central Station.
Neufahrwasser	29.87	758.8	29.89	759.2	68.9	20.5	75	NNE			2		10			0.220	5.6		A. Lothes.
Neustadt, Palatinate	29.44	747.7	29.97	761.1	70.3	21.3	56	N			1		2	E		0	0		Dicknether.
Stuttgart	29.07	738.3	29.93	760.2	71.1	21.7	50	NE			3		3	E		0.008	0.2		Prof. Dr. Schoder.
Weissenburg, Bavaria	28.53	724.7	29.99	761.8	69.8	21.0	42	W			2		8	W		0	0		Prof. Kemlein.
Wustrow	29.99	761.8	30.02	762.5	59.0	15.0	81	W			3	0	4s			0.039	1.0		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

GREEK SERIES.

Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.

Athens	29.41	747.0	29.78	756.5	86.7	30.4		SW			2.0		0					Clear	Schmidt & Wourlisch.

INDIAN SERIES.

Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.

Kurrachee	29.53	750.0	29.58	751.3	89.8	32.1	75	SSW	20.0	8.9			0			0	0	Blue sky	
Deesa	29.07	738.3	29.52	749.8	98.6	37.0	37	SW	12.4	5.5			4		SSE	0	0	D. clouds	
Bombay	29.63	752.5	29.66	753.5	85.4	29.7	79	WSW	10.0	4.5			4	W		1.83	46.5	D. clouds	
Poona, Yarrowda	27.82	706.6	29.64	752.8	85.5	29.7	53	W	25.0	11.2			5		WSW	0	0	D. clouds	
Belgaum	27.20	690.9	29.72	754.9	75.8	24.3	72	SW	8.0	3.6			9		SW	0.09	2.3	Squally	
Lahore	28.80	731.4	29.58	751.3	101.2	38.4	39	NNE	6.6	3.0			0			0	0	Blue sky	
Roorkee	28.64	727.3	29.50	749.2	95.2	35.1	56	SW	5.8	2.6			4			0.16	4.0	Misty	
Agra	28.96	735.6	29.50	749.3	100.6	38.1	46	NE	4.8	2.2			3		NE	0	0		
Nagpur	28.56	725.3	29.60	751.7	75.7	24.3	94	N	5.6	2.5			10		N	0.05	1.4	Overcast	
Jubbulpore	28.23	717.0	29.57	751.0	81.8	27.7	75	W	3.5	1.6			10			1.15	29.2	Overcast	
Lucknow	29.22	742.3	29.60	751.8	80.2	26.8	89	W	5.0	2.2			10			0	0	Overcast	
Allahabad	29.25	742.9	29.56	750.8	79.8	26.6	98	Calm	1.0	0.4			10			3.52	89.4	Drizzling	
Patna	29.41	746.9	29.59	751.5	82.5	28.1	88	E	6.4	2.9			10	E	E	0.67	17.0	Overcast	
Hazaribagh	27.57	700.2	29.54	750.2	83.8	28.8	71	SSE	7.7	3.4			10		SE	0.41	10.4	Thund'rst'm	
Cuttack	29.48	748.8	29.56	750.8	84.8	29.3	83	SW	0.5	0.2			8			0.62	15.7	D. clouds	
Calcutta, Alipore	29.57	751.2	29.60	751.7	80.5	26.9	96	SSW	0.5	0.2			10		S	0.51	13.0	Overcast	
Dhubri	29.53	749.9	29.65	753.0	78.1	25.6	92	NE	4.3	1.9			5		S	0.74	18.8	D. clouds	
Chittagong	29.60	751.9	29.69	754.2	83.1	28.4	83	S	6.7	3.0			5			0	0	Blue sky	
Sibsagar	29.36	745.7	29.69	754.2	78.7	25.9	92	SW	2.7	1.2			10	SW	SW	0.85	21.6	D. clouds	
Zanzibar, Africa																			

ITALIAN SERIES.

By authority of the Minister of Agriculture, Industry and Commerce.

Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.

Udine	29.51	749.6	29.91	759.6	69.6	20.9	62	N	1.8	0.8			10			1.787	45.4		Prof. Giovanni Clodig.
Milan	29.33	744.9	29.82	757.4	82.2	27.9	38	ESE	3.8	1.7			6	NNE		0.087	2.2		Prof. Schiaparelli.
Padua	29.78	756.4	29.89	759.1	71.4	21.9	55	NNE	16.8	7.5			9	N		0.374	9.5		Prof. Dott. Lorenzoni.
Moncalieri	28.95	735.3	29.82	757.5	80.6	27.0	24	SE	4.3	1.9			1			0	0		Prof. P. F. Denza.
Genoa	29.62	752.4	29.81	757.1	82.0	27.8	35	N	7.4	3.3			0			0.157	4.0		Prof. G. M. Garibaldi.
Mondovi	27.98	710.8	29.83	757.6	75.4	24.1	35	ENE			4		0			0.043	1.1		Prof. D. C. Bruno.
Pesaro	29.78	756.4	29.83	757.6	74.8	23.8	71	NW					5			0	0		Prof. Luigi Guidi.
Florence	29.53	750.1	29.78	756.3	81.1	27.3	39	N			6		0			0	0		Prof. Costantino Pittor.
Leghorn	29.71	754.5	29.79	756.6	79.9	26.6	35	NNW	2.0	0.9			4			0	0		Prof. P. Monte.
Rome	29.60	751.9	29.77	756.2	83.5	28.6	33	SW	9.8	4.4			0			0	0		Prof. P. S. Ferrari.
Lecce	29.55	750.6	29.79	756.7	90.1	32.3	36	SE	9.4	4.2			2	E		0	0		Prof. C. de Giorgi.
Cosenza	28.93	734.7	29.78	756.3	90.0	32.2	64	SE	1.8	0.8			3	SE		0	0		Prof. D. Conti.
Cagliari	29.61	752.0	29.80	756.8	82.0	27.8	28	NW			6		0			0	0		Prof. A. Pacinotti.
Palermo	29.57	751.1	29.82	757.3	76.3	24.6	75	ENE	5.6	2.5			0			0	0		Prof. G. Ciaccatore.
Syracuse	29.71	754.6	29.75	755.6	83.5	28.6	63	SW	2.5	1.1			10	SW		0	0		Prof. Vincenzo Guiliano.
Sub-Series:																			
Naples, S. R	29.24	742.8	29.74	755.3	82.4	28.0	58	W	0.7	0.3			2	SW		0	0		Prof. F. Brioschi.
Stelvio	22.20	563.8			47.1	8.4	61	S			1	0	0			0	0	Clear	Prof. P. F. Denza.
Valdobbia	22.25	565.1			53.1	11.7	56	N			2	0	3k		NW	0	0	Misty	Prof. P. F. Denza.

JAPANESE SERIES.

Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.

Hiroshima, I. M. Obs'y	29.91	759.7	29.93	760.2	68.8	20.4	93	WSW	0.5	0.2			10s;ks			0.037	0.9	Covered	K. Sasaki.
Kioto	29.80	756.9	29.97	761.2	73.1	22.8	85	SSW	1.7	0.8			10s;ks			0.060	1.5	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.76	755.9	29.95	760.7	68.5	20.3	93	ENE	2.3	1.0			10s			0.820	20.8	Overcast	S. Takehayashi.
Tokei Obs'y, Yeddo	29.99	761.7	30.05	763.3	64.1	17.8	97	ENE	3.3	1.5			10n			0.110	2.8	Raining	The Staff.
Wakayama	29.91	759.7	29.96	761.0	70.7	21.5	93	SSW	3.1	1.4			10s			0.039	1.0	Cloudy	Y. Kuwamuca.

MAURITIUS SERIES.

Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.

Mauritius Obs'y, Mauritius	29.57	761.2	30.16	766.0	72.4	22.4	65.8	ESE	16.5	7.4		0	3		ESE	0.04	1.0	Squally	A. N. Figon.

MEXICAN SERIES.

By authority of the Secretary of Public Works.

Furnished by the co-operation of Senor Mariano Barcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.

Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.42	620.2	30.06	763.6	61.8	16.6	90	S			1	2c	2k			0.315	8.0	Clear	Prof. M. Leal.
Mazatlan	29.67	753.6	29.93	760.2	78.5	25.8	84	NNE	0.9	0.4		8c	1ks	ENE	ESE	Inap.	Inap.	Very cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	23.13	587.5	30.07	763.8	57.4	14.1	81	N	1.6	0.7			10pk		E	0.276	7.0	Overcast	The Staff.
Pabellon, Aguascalientes	23.97	608.7	29.86	758.9	64.9	18.3	85	NNW			1	2c	5ks	E	ESE	Inap.	Inap.	Cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.47	596.2	30.16	766.0	59.0	15.0	58	Calm	0	0			10		SE	0.748	19.0	Covered	Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.61	574.5	30.21	767.3	55.8	13.2	89	ENE	1.8	0.8		0	9ns		ENE	0	0	Very cloudy	J. A. Bonilla, M. E.

NETHERLANDS SERIES.

Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.

Flushing	30.03	762.7	30.03	762.7	72.7	22.6		W			3					0	0		
Groningen	29.97	761.3	30.03	762.7	65.1	18.4		S			1					0	0		
Helder	30.00	761.9	30.00	761.9	63.1	17.3		S			2					0.122	3.1		
Hellevoetsluis	30.01	762.2	30.01	762.2	66.9	19.4	70	WSW			3					0	0		
Utrecht	29.98	761.5	30.03	762.7	69.3	20.7	58	S			2		8			0.024	0.6	Very cloudy	H. van der Brink

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.79	756.7	29.85	758.3	57.2	14.0	63	NW	9.0	4.0			5			0.020	0.5		
Christiania	29.67	753.6	29.81	757.2	64.8	18.2	71	SSW	20	9			3			0.453	11.5		
Gjæsvær	29.97	761.1	29.99	761.7	60.8	16.0		Calm			0		2						
Lodingen	29.93	760.2	29.98	761.4	52.7	11.5	93	Calm			0		10			0.185	4.7	Rain & fog.	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.30	769.6	30.32	770.0	69.8	21.0	87	SSW	3.1	1.4			3			0	0		Dr. J. A. Sampaio.
Campo Major	28.93	734.7	30.24	768.1	98.2	36.8	18	N	4.9	2.2			0			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.99	761.8	30.08	764.0	74.5	23.6	60	SW	4.3	1.9			0			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.62	752.3	29.96	761.0	82.8	28.2	37	N	22.4	10.0			0			0	0		The Staff.
Ponta Delgada, Azores	30.37	771.3	30.44	773.1	70.9	21.6	72	NE	11.9	5.3			4	ENE		0.016	0.4		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.67	728.1	29.70	754.3	69.3	20.7	39	WNW	16	7		0	3ks						Capt. Lasarew.
Archangel	30.16	766.0	30.18	766.5	65.1	18.4	51	SW	4	2		0	8ks						Capt. Sselliwerstow.
Astrakhan	29.89	759.1	29.80	757.0	82.2	27.9	47	SE	9	4		0	2k						Capt. Wisganow.
Barnaul ‡	29.22	742.1	29.69	754.1	72.9	22.7	30	SW	4	2			9						Meteorological Obs'y.
Dorpat	29.85	758.2	30.09	764.2	67.6	19.8	40	ESE	7	3		8c	0						Observatory.
Ekaterinburg	28.94	735.0	29.87	758.7	66.2	19.0	51	N	4	2			10						Meteorological Obs'y.
Kasan	29.51	749.5	29.76	756.0	72.3	22.4	72	NNE	7	3			10						Observatory.
Kertch	29.76	755.8	29.78	756.3	74.1	23.4	84	Calm	0	0			10						Lagorio & Sastyrez.
Kieff	29.19	741.5	29.80	757.0	69.8	21.0	42	N	7	3		ck;c	7ks						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.58	751.2	29.78	756.3	69.3	20.7	40	NNW	13	6			6						Meteorological Obs'y.
Moscow	29.37	746.1	29.93	760.1	48.2	9.0	93	NW	7.8	3.5			10s					Raining	Meteorological Obs'y.
Nertchinsk	27.70	703.5	29.92	760.0	59.9	15.5	83	Calm	0	0			5			0.004	0.1		Meteorological Obs'y.
Nikolaiev	29.75	755.6	29.82	757.4	77.7	25.4	53	E	4	2			10kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.90	759.5	29.99	761.7	49.5	9.7	92	N			2		10n			0.165	4.2		Lieut. Iwanow.
Pekin, China	29.65	753.1	29.79	756.7	77.7	25.4	59	Calm	0	0			0						Physical Observatory.
St. Petersburg	30.10	764.4	30.11	764.8	64.2	17.9	37	NE	9	4		10s	0						Central Physical Obs'y.
Tashkend, Laboratory	28.38	720.8	29.86	758.4	76.1	24.5	48	NNW	9	4			5						Teich, A. M.
Tiflis	28.40	721.3	29.73	755.1	84.7	29.3	35	SE	4	2		0	4ks						Physical Observatory.
Warsaw	29.43	747.5	29.83	757.6	79.5	26.4	58	Calm	0	0			9cks						Astronomical Obs'y.
Wilna	29.52	749.7	29.91	759.8	75.6	24.2	39	Calm	0	0			1					Light clouds	Berg, Assistant.
Yeniseisk	29.50	749.2	29.77	756.1	80.2	26.8	41	S	7	3			8						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.79	756.7	59.2	15.1	59	W			3		10k			0.04	1.0	Showery.	Andrew Gibb.
Monach Lt. House, Hebrides			29.75	755.6	56	13.3	94	W			4	5	5	W		0.1	3.	Cloudy	J. Youngclause.
North Unst, Shetland Isl'ds			29.77	756.1				S			6	2	8	S		Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.86	758.4	29.96	761.0	77.4	25.2	67	SE	4.7	2.1			0			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.01	762.3	30.07	763.7	79.3	26.3	69	NW	1.3	0.6		2	0	N		0	0	Almost clear	Prof. Manuel de Naveran.
Burgos, Met. Obs'y	27.13	689.0			77.4	25.2	27	NE	7.2	3.2			0			0	0	Clear	Domingo Martin.
Madrid, Royal Obs'y	27.79	705.8	29.88	758.9	87.3	30.7	37	SW	4.7	2.1		0	0			0	0	Clear	The Staff.
Murcia, Met. Obs'y ‡	29.79	756.7	29.93	760.3	87.8	31.0	51	ENE	2.9	1.3		0	0			0	0	Clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.13	740.0	30.00	761.9	72.7	22.6	63	N	13.6	6.1			1			0	0	Almost clear	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	30.03	762.7	30.09	764.3	81.2	27.3	81	E	2.2	1.0		0	0			0	0	Clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.80	757.0	29.85	758.3	82.6	28.1	87	NNE	1.1	0.5			10n			0.08	2.0	Covered	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.81	757.2	29.91	759.6	86.2	30.1	44	E	23.4	10.0		0	0			0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.99	761.7	30.04	763.0	82.8	28.2	88	E	8.7	3.9		3k	5kn	E	E	0.091	2.3	Cloudy	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.77	756.2	29.92	759.9	80.1	26.7	88	ESE	0.4	0.2		0	5ks		ESE	0.09	2.2	Cloudy	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.10	764.5	30.14	765.5	63.7	17.6	42	S			2		0			0	0		
Umea	30.04	763.0	30.09	764.3	64.9	18.3	33	S			2		1			0	0		
Hernosand	29.98	761.5	30.03	762.8	64.2	17.9	50	S			4		4			0	0		
Stockholm	29.74	755.4	29.92	759.9	68.7	20.4	57	SE			4		3			0	0		
Wisby	29.82	757.4	29.88	758.9	75.9	24.4	48	SSE			4		5			0	0		
SUB-SERIES.																			
Upsala	29.70	754.4	29.79	756.6	74.8	23.8	51	ESE	12.3	5.5			8			0.189	4.8		S. G. Fineman.
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.58	725.7	29.96	760.9	68.0	20.0	55	N			1		0			0	0	Clear	The Observatory.
Zurich, ‡	28.39	721.0	29.97	761.3	70.3	21.3	50	E			4		3			0	0	Clear	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.78	756.5	78.1	25.6	54	NNE	17.	7.5			0			0	0		The Observatory.
Valona			29.98	761.4	85.1	29.5		SW			1		0			0	0	Clear	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			29.81	757.1	85.5	29.7	56	WSW			2		18		SW	0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	30.05	763.3	30.13	765.3	62	16.7	83	NE	1	0.4			10s;hz			0.14	3.6	Cloudy	
Alpena, Michigan	29.13	739.9	29.78	756.4	57	13.9	81	SE	9	4.0			1on		W	0.02	0.5	Heavy rain.	
Atlanta, Georgia	28.91	734.3	30.06	763.5	75.0	23.9	81	W	3	1.3		10c	0	Calm		0.01	0.3	Cloudy.	
Atlantic City, New Jersey	30.12	765.0	30.13	765.3	65	18.3	94	E	7	3.1			10s		Calm	0	0	Cloudy	
Augusta, Georgia	29.89	759.2	30.07	763.8	75.2	24.0	86	W	3	1.3		5cs	Hz	W		0.04	1.0	Fair	
Baltimore, Maryland	30.04	763.0	30.09	764.3	70	21.1	90	E	8	3.6			10s;fg			0	0	Cloudy	
Barnegat, New Jersey	30.10	764.5	30.12	765.0	64	17.8	94	E	10	4.5			10s;fg		Calm	0.21	5.3	Cloudy	
Bismarck, Dakota	27.92	709.2	29.66	753.4	64	17.8	78	W	3	1.3		0	0			0	0	Clear	
Boise City, Idaho	27.14	689.3	29.70	754.4	58.3	14.6	58	W	1	0.4		0	0			0	0	Clear.	
Boston, Massachusetts	30.02	762.5	30.16	766.1	56.6	13.7	95	Calm	0	0			Fg			0.14	3.6	Dense fog	
Brackettville, Texas	28.80	731.5	29.89	759.2	77	25.0	86	E	12	5.4			10ks		E	0	0	Cloudy.	
Brownsville, Texas	29.92	760.0	29.96	761.0	82	27.8	83	SE	2	0.9		0	0			0	0	Clear	
Buffalo, New York	29.17	740.9	29.86	758.4	69.5	20.8	74	SE	7	3.1		10ck;cs	Hz	W		0	0	Cloudy	
Burlington, Vermont	29.80	756.9	30.08	764.0	64.5	18.1	73	S	5	2.2		2c	0	W		Inap.	Inap.	Fair	
Cairo, Illinois	29.62	752.3	30.01	762.2	71	21.7	90	SW	11	4.9		5ck	2ks	SW	SW	0.74	18.8	Clearing	
Campo, California	27.34	694.4	29.91	759.7	43.7	6.5	60	S	3	1.3		0	0			0	0	Clear	
Camp Thomas, Arizona	27.16	689.8			71	21.7	49	Calm			0	5ck	5ks			0	0	Cloudy	
Cape Henry, Virginia	30.07	763.8	30.09	764.3	74	23.3	90	S	6	2.7			10s			0.01	0.3	Cloudy	
Cape May, New Jersey	30.09	764.3	30.12	765.0	67	19.4	90	SE	9	4.0			Fg			0.50	12.7	Dense fog	
Castroville, Texas	29.20	741.7	29.87	758.7	82	27.8	71	SE	8	3.6		5c	5s		S	0	0	Cloudy	
Cedar Keys, Florida	30.09	764.3	30.11	764.8	84	28.9	71	SW	5	2.2		0	2ks			0	0	Clear.	
Champaign, Illinois	29.04	737.6	29.79	756.7	69.4	20.8	95	W	18	8.0		8k	0	W		0.01	0.3	Fair.	
Charleston, S. Carolina	30.02	762.5	30.08	764.0	82	27.8	71	SW	5	2.2		5c	0	W		0	0	Fair	
Charlotte, N. Carolina	29.18	741.2	30.04	763.0	77.0	25.0	77	SE	3	1.3		0	Hz			0	0	Clear	
Chattanooga, Tennessee	29.26	743.2	30.06	763.5	75.0	23.9	79	SW	8	3.6		8cs	2ks	Calm	SW	0.03	0.8	Cloudy	
Cheyenne, Wyoming	24.05	611.1	29.87	758.7	59.3	15.2	27	NW	6	2.7		0	0			0	0	Clear	
Chicago, Illinois	29.06	738.1	29.74	755.4	65.3	18.5	92	W	8	3.6			10s		W	0.17	4.3	Cloudy	
Chincoteague, Virginia	30.09	764.3	30.11	764.8	67	19.4	95	SE	4	1.8		5k	5s	SE	SE	0	0	Cloudy	
Cincinnati, Ohio	29.26	743.2	29.90	759.4	74	23.3	76	SW	9	4.0			10ks		SW	0	0	Cloudy	
Cleveland, Ohio	29.10	739.1	29.82	757.4	67.6	19.8	76	SE	6	2.7			10s;fg		SW	Inap.	Inap.	Threatening	
Coleman City, Texas	28.16	715.3	29.74	755.4	78	25.6	65	SE	8	3.6		0	8s		S	0	0	Cloudy	
Columbus, Ohio	29.00	736.6	29.82	757.4	73	22.8	67	S	8	3.6			10s			0	0	Cloudy	
Concho, Texas	28.06	712.7	29.94	760.5	77	25.0	77	SE	8	3.6		0	8s			0	0	Cloudy	
Corsicana, Texas	29.58	751.3	30.04	763.0	80	26.7	78	S	8	3.6		0	8ks		S	0	0	Cloudy	
Davenport, Iowa	29.16	740.7	29.80	756.9	67	19.4	89	W	6	2.7			10s		W	0.84	21.3	Cloudy	
Dayton, Washington T'y	28.23	717.0	29.98	761.5	58.5	14.7	69	S	6	2.7		5ck	0	SW		0	0	Fair	
Deadwood, Dakota	25.30	642.6	29.85	758.2	60	15.6	71	SW				0	0			0	0	Clear	
Decatur, Texas	28.82	732.0	29.92	760.0	80	26.7	66	S	10	4.5		0	2s			0	0	Fair	
Delaware Breakwater, Del.	30.11	764.8	30.13	765.3	64	17.8	100	SE	11	4.9			Fg			0.88	22.4	Dense fog	
Denison, Texas	29.17	740.9	29.95	760.7	80	26.7	74	S	16	7.2		8cs	0	Calm		0	0	Fair	
Denver, Colorado	24.76	628.9	29.83	757.7	62.3	16.8	31	S	6	2.7		0	0			0	0	Clear	
Des Moines, Iowa	28.88	733.5	29.76	755.9	67	19.4	89	SW	3	1.3			10s			1.32	33.5	Cloudy	
Detroit, Michigan	29.06	738.1	29.73	755.1	64.3	17.9	94	SE	8	3.6			10n		Calm	0.79	20.1	Heavy rain.	
Dodge City, Kansas	27.28	692.9	29.77	756.1	71.4	21.9	70	S	9	4.0		0	0			0	0	Clear	
Dubuque, Iowa	29.06	738.1	29.74	755.4	66.2	19.0	88	Calm	0	0		5ck	Hz	NW		0.08	2.0	Fair	
Duluth, Minnesota	28.95	735.3	29.63	752.6	66	18.9	84	W	6	2.7		5k	0	W		0.24	6.1	Fair	
Eagle Pass, Texas	29.18	741.2	29.99	761.7	82.4	28.0	67	SE	11	4.9		0	5s		Calm	0	0	Fair	
Eagle Rock, Idaho	25.20	640.1	29.91	759.7	60	15.6	44	SW	4	1.8		0	0			0	0	Clear	
Eastport, Maine	30.09	764.3	30.16	766.1	51	10.6	86	S	2	0.9			Fg		S	0	0	Dense fog	
El Paso, Texas	26.17	664.7	29.82	757.4	71	21.7	58	E	4	1.8		0	5s			0	0	Fair	
Erie, Pennsylvania	29.13	739.9	29.81	757.2	68	20.0	79	S	15	6.7			10ks		SW	0	0	Cloudy	
Escanaba, Michigan	29.03	737.3	29.67	753.6	57	13.9	100	Calm	0	0			10n		Calm	0.85	21.6	Light rain	
Florence, Arizona	28.38	720.8	29.98	761.5	70	21.1	53	Calm	0	0		5k	0	E		0	0	Fair	
Fort Apache, Arizona	25.06	636.5	29.84	757.9	61	16.1	31	E	3	1.3		0	8k		Calm	0	0	Dense smoke	
Fort Assinnaboine, Montana																			
Fort Bennett, Dakota	28.18	715.8	29.65	753.1	60	15.6	88	N	1	0.4		0	0			Inap.	Inap.	Clear	
Fort Benton, Montana	26.97	685.0	29.71	754.6	58	14.4	53	NW	14	6.3		0	0			0	0	Clear.	
Fort Buford, Dakota	27.74	704.6	29.66	753.4	62	16.7	77	Calm	0	0		0	0			0	0	Clear	
Fort Custer, Montana	29.70	754.4	29.79	756.7	59	15.0	76	SE	4	1.8		0	0			0	0	Clear	
Fort Davis, Texas	25.16	639.1	30.12	765.0	69	20.6	65	SW	8	3.6		0	0			0.04	1.0	Clear	
Fort Elliott, Texas	27.18	690.4	30.25	768.3	70	21.1	75	S	4	1.8		0	0			0	0	Clear	
Fort Gibson, Indian T'y	29.36	745.7	29.90	759.4	80	26.7	78	SE	2	0.9		0	0			0	0	Clear	
Fort Grant, Arizona					67	19.4	37	Calm	0	0		5c;k	2s			0	0	Fair	
Fort Griffin, Texas	28.67	728.2	29.86	758.4	82.2	27.9	60	SE	11	4.9		5cs	0			0	0	Fair	
Fort Keogh, Montana	27.30	693.4	29.71	754.6	62	16.7	77	SW	6	2.7		2cs	0	SW		0	0	Fair	
Fort Macon, North Carolina	30.08	764.0	30.09	764.3	78	25.6	95	E	4	1.8		8c	0	Calm		1.15	29.2	Fair	
Fort McKavett, Texas	27.75	704.8	29.57	751.1	76	24.4	77	SE	6	2.7		4cs	0			0	0	Fair	
Fort Missoula, Montana	26.59	675.4	29.97	761.2	53	11.7	73	Calm	0	0		2k	0			0	0	Fair	
Fort St. Michaels	29.66	753.4	29.70	754.4	50	10.0	71	N	5	2.2			10s			0	0	Cloudy	
Fort Shaw, Montana	26.20	665.5	29.64	752.8	62	16.7	51	S	15	6.7		0	0			0	0	Clear	
Fort Sill, Indian Territory	28.70	729.0	29.92	760.0	83	28.3	56	S	14	6.3		10k	0	SW		0	0	Cloudy	
Fort Stevenson, Dakota	27.88	708.1	29.66	753.4	59	15.0	94	Calm	0	0		0	0			0	0	Clear	
Fort Verde, Arizona					70	21.1	44	S			1	5cs	2s	SW	S	0	0	Fair	
Fredericksburg, Texas	28.29	718.6	29.78	756.4	75	23.9	86	SW	8	3.6		4k	0	SW		0	0	Clear	
Galveston, Texas	30.01	762.2	30.05	763.3	84	28.9	75	S	10	4.5		4ck	0	SW		0	0	Fair	
Grand Haven, Michigan	29.05	737.9	29.70	754.4	66	18.9	95	SE	1	0.4			10s		SE	0.69	2.3	Cloudy	
Hatteras, North Carolina	30.10	764.5	30.12	765.0	76	24.4	91	SE	4	1.8		5c	2s			0.32	8.1	Fair	
Helena, Montana	25.67	652.0	29.87	758.7	57	13.9	75	Calm	0	0		0	0			0	0	Clear	
Henrietta, Texas																			
Indianapolis, Indiana	29.05	737.9	29.82	757.4	74	23.3	79	SW	6	2.7		4k	0	SW		0.08	2.0	Fair	
Indianola, Texas	29.97	761.2	30.00	762.0	82.2	27.9	83	S	8	3.6		0	2ks	Calm		Inap	Inap.	Fair	
Jacksboro, Texas	28.80	731.5	29.86	758.4	79	26.1	78	SW	12	5.4		5cs	c	W		0	0	Fair	
Jacksonville, Florida	30.07	763.8	30.09	764.3	84	28.9	71	S	8	3.6		5cs;k	0	SW		0	0	Fair	
Keokuk, Iowa	29.18	741.2	29.82	757.4	71.3	21.8	93	SW	6	2.7			10s		SW	0	0	Cloudy	
Key West, Florida	30.07	763.8	30.10	764.5	83.3	28.5	79	SE	7	3.1		0	5ks		SE	0	0	Fair	
Kittyhawk, North Carolina	30.09	764.3	30.11	764.8	71	21.7	95	S	8	3.6		2c	0			1.18	30.0	Fair	
Knoxville, Tennessee	29.05	737.9	30.05	763.3	74.2	23.4	80	SW	3	1.3		2c	5s	Calm	SW	0	0	Fair	
La Crosse, Wisconsin	28.93	734.8	29.62	752.3	71.2	21.8	80	S	4	1.8		0	0			0.22	5.6	Clear	
La Mesilla, New Mexico	26.03	661.2	30.18	766.6	70.0	21.1	53	S	1	0.4		0	2s			0	0	Fair	
Laredo, Texas	29.49	749.0	29.82	757.4	81	27.2	87	SE	6	2.7		0	0			0	0	Clear	
Leavenworth, Kansas	28.93	734.8	29.80	756.9	76	24.4	82	S	10	4.5		2cs	7s		N	0	0	Cloudy	
Lewiston, Idaho	29.09	738.9	29.92	760.0	68	20.0	52	NW	12	5.4		0	0			0	0	Clear	
Little Rock, Arkansas	29.68	753.9	29.99	761.7	77	25.0	95	SE	3	1.3		2k	0	SE		Inap.	Inap.	Fair	
Los Angeles, California	29.54	750.3	29.91	759.7	61.2	16.2	88	NE	1	0.4			10s		Calm	0	0	Cloudy	
Louisville, Kentucky	29.38	746.2	29.92	760.0	73.0	22.8	76	S	8	3.6		2cs	2s			0	0	Fair	
Lynchburg, Virginia	29.38	746.2	30.05	763.3	72	22.2	80	Calm	0	0			Fg			0	0	Dense fog	
Madison, Wisconsin	28.72	729.5	29.70	754.4	64	17.8	94	NW	8	3.6			10s		Calm	0	0	Cloudy	
Marquette, Michigan	28.92	734.6	29.64	752.8	57	13.9	94	SE	6	2.7			10s		SE	0.15	3.8	Cloudy	
Mason, Texas	28.38	720.8	30.05	763.3	79	26.1	70	S	9	4.0		4ck	1ks	NE	S	0	0	Fair	
Memphis, Tennessee	29.70	754.4	30.03	762.7	72	22.2	100	SE	2	0.9		0	1s		SE	0.30	7.6	Clear	
Milwaukee, Wisconsin	28.97	735.8	29.70	754.4	60	15.6	88	SW	6	2.7		0	5s		W	0.40	10.2	Fair	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill.	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
United States Series—Continued.																			
Mobile, Alabama	30.05	763.3	30.12	765.0	76	24.4	91	N	3	1.3		5cs	0	W		0.18	4.6	Fair	
Montgomery, Alabama	29.87	758.7	30.09	764.3	78.4	25.8	77	W	5	2.2		8c;k	0	W		0	0	Fair	
Moorhead, Minnesota	28.70	729.0	29.66	753.4	64.2	17.9	83	Calm	0	0		5k	0	N		0	0	Fair	
Morgantown, W. Virginia	28.94	735.1	29.90	759.4	65	18.3	89	Calm	0	0			10s		SW	0	0	Cloudy	
Mt. Washington, N. H.	23.99	609.3	30.02	762.5	44.1	6.7	75	SE	12	5.4		5c	Sk			0.08	2.0	Fair	
Nashville, Tennessee	29.48	748.8	30.00	762.0	72.2	22.3	78	SW	3	1.3		8ck;cs	2ks	W	W	0.03	0.8	Cloudy	
New Haven, Connecticut	30.04	763.0	30.15	765.8	64	17.8	83	E	3	1.3			10s		E	0.65	16.5	Cloudy	
New London, Connecticut	30.13	765.3	30.18	766.6	61	16.1	100	W	3	1.3			Fg			0.03	0.8	Dense fog	
New Orleans, Louisiana	30.03	762.7	30.08	764.0	84.0	28.9	73	W	1	0.4		2c	Sk	W		0.01	0.3	Fair	
Newport, Rhode Island	30.11	764.8	30.16	766.1	62.3	16.8	93	NE	5	2.2			10s;fg		Calm	Inap.	Inap.	Cloudy	
New River, N. Carolina					79	26.1	69	SE			1	2ck	0					Clear	
New Shoreham, Rhode I'd	30.16	766.1	30.19	766.8	60.0	15.6	94	NE	10	4.5			10s;fg		Calm	0	0	Cloudy	
New York, New York	29.97	761.2	30.14	765.5	62	16.7	94	NE	7	3.1			Fg			0	0	Dense fog	
Norfolk, Virginia	30.07	763.8	30.11	764.8	74	23.3	86	SW	4	1.8		8ck	0	SW		0.02	0.5	Fair	
North Platte, Nebraska	26.89	683.0	29.71	754.6	63	17.2	86	W	8	3.6		0	0			0	0	Clear	
Olympia, Washington T'y	29.99	761.7	30.03	762.7	53.0	11.7	86	S	6	2.7		0	1s		Calm	0.06	1.5	Clear	
Omaha, Nebraska	28.61	726.7	29.75	755.6	69.5	20.8	92	S	8	3.6		0	8ks		SW	0.26	6.6	Cloudy	
Oswego, New York	29.64	752.8	29.96	761.0	64.1	17.8	84	SE	12	5.4		5c;hz	4s			0	0	Fair	
Pensacola, Florida	30.06	763.5	30.09	764.3	77	25.0	82	N	4	1.8		2cs	0	Calm		0.03	0.8	Fair	
Philadelphia, Pa	30.07	763.8	30.13	765.3	63.3	17.4	94	S	4	1.8			10s;hz			0.02	0.5	Cloudy	
Phœnix, Arizona	28.73	729.7	30.46	773.7	72	22.2	42	NE	1	0.4		0	0			0	0	Clear	
Pike's Peak, Colorado	18.06	458.7	30.27	768.8	45	7.2	53	SW	8	3.6		0	0			0	0	Clear	
Ploche, Nevada	24.07	611.4	29.92	760.0	61	16.1	17	SW	3	1.3		0	0			0	0	Clear	
Pittsburg, Pennsylvania	29.12	739.6	29.91	759.7	71.5	21.9	64	SE	6	2.7			10s		SW	0	0	Cloudy	
Port Eads, Louisiana	30.09	764.3	30.10	764.5	83.0	28.3	83	SW	5	2.2		1k	11z	SW	Calm	0	0	Clear	
Port Huron, Michigan	29.12	739.6	29.78	756.4	60.5	15.8	94	S	9	4.0			10n		Calm	0.07	1.8	Light rain	
Portland, Maine	30.11	764.8	30.16	766.1	57	13.9	87	S	2	0.9			10s;fg		Calm	0.16	4.1	Cloudy	
Portland, Oregon	30.00	762.0	30.07	763.8	58.2	14.6	68	Calm	0	0			10ks		NW	Inap.	Inap.	Cloudy	
Portsmouth, N. Carolina					77	25.0	91	E	8	3.6		8c	0	Calm		0.48	12.2	Fair	
Prescott, Arizona	24.81	630.2	29.88	758.9	57	13.9	31	S	1	0.4		5c	0	SW		0	0	Fair	
Punta Rassa, Florida	30.08	764.0	30.09	764.3	82	27.8	77	E	6	2.7		1k	0	Calm		0	0	Clear	
Red Bluff, California	29.46	748.3	29.79	756.7	74.0	23.3	55	N	2	0.9		0	0			0	0	Clear	
Rio Grande City, Texas	29.78	756.4	29.99	761.7	81	27.2	83	SE	10	4.5		0	2s		Calm	0	0	Clear	
Rochester, New York	29.30	744.2	29.92	760.0	64	17.8	83	SE	10	4.5			Fg			0	0	Dense fog	
Roseburg, Oregon	29.51	749.5	30.07	763.8	58.5	14.7	73	N	4	1.8			10ks			0	0	Cloudy	
Sacramento, California	29.72	754.9	29.79	756.7	66.2	19.0	69	SE	7	3.1		0	0			0	0	Clear	
St. Louis, Missouri	29.30	744.2	29.88	758.9	69.5	20.8	87	S	7	3.1		8c;cs	0	W		Inap.	Inap.	Fair	
St. Paul, Minnesota	28.83	732.3	29.67	753.6	64	17.8	94	SW	6	2.7		0	0			0.27	6.9	Clear	
Salt Lake City, Utah	25.57	649.5	29.77	756.1	68	20.0	30	Calm	0	0		0	0			0	0	Clear	
San Antonio, Texas	29.32	744.7	30.00	762.0	80.3	26.8	82	SE	2	0.9		4cs	1s	Calm	SE	0	0	Fair	
San Diego, California	29.80	756.9	29.87	758.7	62.3	16.8	83	Calm	0	0			10s			0	0	Cloudy	
Sandusky, Ohio	29.11	739.4	29.77	756.1	67	19.4	89	S	13	5.8			10n			0.30	7.6	Light rain	
Sandy Hook, New Jersey	30.10	764.5	30.13	765.3	63.9	17.7	94	SE	10	4.5			10s;fg			0	0	Cloudy	
San Francisco, California	29.78	756.4	29.84	757.9	53	11.7	93	SW	11	4.9			Fg		SW	0	0	Dense fog	
Santa Fé, New Mexico	23.34	592.8	29.85	758.2	63	17.2	38	NE	4	1.8		0	0			0	0	Clear	
Savannah, Georgia	29.99	761.7	30.08	764.0	81	27.2	74	W	6	2.7		8cs	0			0.02	0.5	Fair	
Shreveport, Louisiana	29.81	757.2	30.04	763.0	81	27.2	78	S	4	1.8		5c	0			0	0	Fair	
Silver City, New Mexico	24.28	616.7	29.74	755.4	68	20.0	18	NW	3	1.3		8k	0	NW		0	0	Fair	
Sitka, Alaska																0.08	2.0		
Smithville, North Carolina	30.06	763.5	30.09	764.3	81	27.2	83	S	8	3.6		5k	2ks	SW	SW	Inap.	Inap.	Cloudy	
Spokane Falls, Wash. Ter.	27.90	708.6	29.86	758.4	55	12.8	73	S	7	3.1		0	0			0	0	Clear	
Springfield, Illinois	29.20	741.7	29.86	758.4	72	22.2	85	SW	6	2.7		2cs	Hz	W		0.07	1.8	Fair	
Springfield, Massachusetts	30.03	762.7	30.16	766.1	61.4	16.3	92	N	3	1.3			10s			1.82	46.2	Cloudy	
Stockton, Texas	26.93	684.0	29.92	760.0	72.8	22.7	81	S	4	1.8			10s		S	0.04	1.0	Cloudy	
St. Vincent, Minnesota	28.83	732.3	29.67	753.6	55	12.8	93	NW	2	0.9		5ck	0	NW		0	0	Fair	
Thatcher's Island, Mass	30.13	765.3	30.18	766.6	57.0	13.9	100	N	4	1.8			Fg			0.93	23.6	Dense fog	
Toledo, Ohio	29.07	738.4	29.75	755.6	67	19.4	95	S	10	4.5			10s		NW	0.36	9.1	Threatening	
Tucson, Arizona	27.48	698.0	29.77	756.1	75	23.9	37	SE	2	0.9		8k	0			0	0	Fair	
Umatilla, Oregon	29.64	752.8	30.04	763.0	60.5	15.8	60	SW	20	8.9		0	0			0	0	Clear	
Uvalde, Texas	29.04	737.6	29.82	757.4	78	25.6	86	SE	6	2.7			10s		Calm	0	0	Cloudy	
Vicksburg, Mississippi	29.88	758.9	30.13	765.3	77	25.0	77	S	5	2.2		0	0			0	0	Clear	
Visalia, California	29.38	746.2	29.73	755.1	69	20.6	65	NW	3	1.3		0	0			0	0	Clear	
Washington, D. C.	29.95	760.7	30.06	763.5	70	21.1	95	E	2	0.9			10s			0	0	Cloudy	
Wickenburg, Arizona					67	19.4	37	Calm			0	0	8ks		S	0	0	Cloudy	
Wilmington, N. Carolina	30.02	762.5	30.08	764.0	79	26.1	86	Calm	0	0			10ks		S	0.15	3.8	Cloudy	
Winnemucca, Nevada	25.58	649.7	29.79	756.7	55	12.8	50	SW	6	2.7		0	0			0	0	Clear	
Wood's Holl, Mass	30.12	765.0	30.16	766.1	62	16.7	94	SE	3	1.3			10s		Calm	0.42	10.7	Cloudy	
Yankton, Dakota	28.47	723.1	29.73	755.1	73	22.8	81	Calm	0	0		0	0			1.40	35.6	Clear	
Yuma, Arizona	29.64	752.8	29.78	756.4	69.3	20.7	61	NE	2	0.9		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.10	561.3			54.5	12.5	83	Calm	0	0		8cs	0			0	0	Cloudy	Thomas Herran
Buff Bay Town, Jamaica	29.81	757.2	30.13	765.3	75	23.9	90	E				5c	5k						
Havana, Cuba, W. I.	30.07	763.8	30.12	765.0	83	28.3	91	Calm	0	0		0	0			0	0	Clear	A. Van Cangehem, Ass't.
Kingston, Jamaica, W. I.	30.08	764.0	30.09	764.3	75.4	24.1	83	Calm	0	0		0	8s		E	0	0		Robert Johnstone.
Navassa, W. I.	29.95	760.7	30.03	762.7	81	27.2	74	E	12	5.4			5k;n		E	0.21	5.3	Cloudy	F. M. Everett.
Paramaribo, S. A.	30.11	764.8	30.11	764.8	79	26.1	87	SE			3	4c	5k	E		0.160	4.1	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.43	747.5	29.98	761.5	78	25.6	95	Calm	0	0			10ks		Calm	0.48	12.2	Cloudy	Francesco J. Olsneros.
Rivas, Nicaragua					76.1	24.5		SE			1	0	3ks		SE	0	0		Earl Flint.
Santiago de Cuba, W. I.																			Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	30.04	763.0	30.09	764.3	57.0	13.9	91	SE	9	4.0		2k	2s	S	SE	0	0	Fair	J. Fortescue & W. Wood.

BRITISH NAVAL SERIES.

Furnished by the co-opertaion of the Meteorclogical Council, London, Robert H. Scott, Esq., F.R. S., Secretary.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	Up'er 0—10	Lo'er 0—10	Upper From.	Lower. From.	Inch.	Mill.				
H. M. S. Albatross																			Comm A. J.Errington.
H. M. S. Alert, Thursday Island, Oceania	30.00	762.0	75	23.9	84	SE			3		1							Blue sky	Capt. J. P. Maclear.
H. M. S. Alexandra, Spalato, Dalmatia, Austria	29.78	756.4	79	26.1	67	WNW			2-4		5							Squally	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe
H. M. S. Arab, Aden, Arabia, Asia	29.64	752.8	88	31.1	80	SE			2		1					Sm'h		Blue sky	Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N 24° 27′, E. 63° 40′	29.52	749.8	85	29.4	87	SW			2-3		4	WSW				3	SSW	Misty	Comm. G. W. Hand.
H. M. S. Bittern, Ragusa, Dalmatia, Austria			80	26.7		Calm			0									Blue sky	Capt. E. B. Pusey.
H. M. S. Blanche, N 14° 53′, W. 59° 34′	30.12	765.0	83	28.3	79	ESE			4		5					3	E	D. clouds	Capt. C. G. F. Knowles.
H. M. S. Boadicea, Ascension I'ds, Africa	30.11	764.8	78	25.6	65	SE			2-3		0							Blue sky	Com. F. W. Richards.
H. M. S. Champion, Monte Video, Uruguay	29.73	755.1	59	15.0	87	N			2		10							Thunder-storm	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 39° 21′, E. 120° 16′	29.72	754.9	69	20.6	84	SSW			1		1							Blue sky	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruiser, N. 38° 59′, E. 14° 03′	29.76	755.9	82	27.8		Calm			0		3	SSW				3	SSW	Misty	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.00	762.0	62	16.7		N			3		3	ESE						D. clouds	Capt C. Domville.
H. M. S. Dock-Yard, Bermuda, W.I.	30.18	766.6	80	26.7	85	ESE			1		4	ESE						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 49° 38′, W. 55° 50′	30.13	765.3	58.5	14.7	81	WSW			1		8					1	NE	D. clouds	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, S. 1° 50′, E. 76° 46′	29.84	757.9	80	26.7		S			2		10					2	SW	Raining	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 25° 00′, E. 52° 10′	30.18	766.6	72	22.2		ESE			4		1	ESE				3	E	Blue sky	Comm. C. Johnstone.
H. M. S. Emerald, N. 5° 45′, E. 162° 00′	29.90	759.4	79	26.1	90	NNW			1		4	E						D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, S. 19° 42′, E. 61° 46′	30.04	763.0	76	24.4	60	E			6		4	ESE				4-5	ESE	Showery	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn, N. 11° 56′, E. 58° 51′	29.71	754.6	80.5	26.9	82	SSW			6		1					7	SW	Squally	Capt. P. Aldrich.
H. M. S. Flamingo, Lucea, Jamaica, W. I.	30.04	763.0	82	27.8	87	SSE			1		5	S						D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	29.97	761.2	53	11.7	79	W			3		1							Blue sky	Comm. E. G. Bourke.
H. M. S. Garnet, S. 51° 15′, W. 66° 00′	29.25	742.9	43	6.1	67	N			4		4					2	NNE	D. clouds	Capt. L. F. Jones.
H. M. S. Griffin, N. 20° 55′, W. 73° 42′	30.10	764.5	86	30.0	83	E			5		1	E						Blue sky	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber,																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C.P. Fitzgerald.
H. M. S. Iris, Brindisi, Italy	29.74	755.4	81	27.2	74	ENE			1-2		1							Blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	30.05	763.3	60	15.6		Calm			0		7	Calm						Drizzling	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily,																			Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	29.77	756.1	84.1	28.9	85	ESE			1		8							Misty	Capt. A. Carpenter.
H. M. S. Midge, N. 23° 07′, E. 113° 14′	29.87	758.7				Calm			0		6	Calm						D. clouds	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. N. S. Modeste, S. 31° 30′, E. 34° 30′	30.30	769.6	71	21.7	80	NW			5-6		5					5	NNE	D. clouds	Capt. J. G. Mead.
H. M. S Monarch, Tunis, Africa	29.87	758.7	80	26.7	86	NNW			3		1	NNW						Blue sky	Capt. G. C. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, West Coast of Borneo			80.5	26.9		SW			1		2	SW						D. clouds	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	30.12	765.0	61.5	16.4	85	Calm			0		9							Misty	Capt. E. B. Drummond.
H. M. S. Orontes, *† N. 12° 30′, W. 27° 50′	30.05	763.3	80.5	26.9	89	NE			3-4		5	NNE				2	NNE	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 80° 55′, W. 79° 30′	29.86	758.4	81	27.2	100	NW			1		10							Overcast	Capt. F. R. Dicken.
H. M. S. Penguin, S. 51° 20′, W. 66° 32′	29.19	741.4	42	5.6		N			5		10					4	N	Overcast	Capt. A. C. Paget.
H. M. S. Phœnix, N. 28° 42′, W. 66° 23′	30.21	767.3	81	27.2	83	Calm			0		10					1	ESE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A.C.Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.73	755.1	83	28.3		W			2		5							D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 53° 18′, W. 129° 03′	29.87	758.7	50	10.0		WSW			1-3		9							Squally	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	30.10	764.5	80.3	26.8	74	SSE			2										Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 29° 50′, W. 159° 42′	30.32	770.1	74	23.3	81	ENE			4		0					2	NNW	Blue sky	Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, S 18° 00′, W. 71° 23′	30.13	765.3	65	18.3	73	S			3		9	Calm				6	SE	D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise, Sandy Point, Patagonia	29.17	740.9	35	1.7	80	Calm			0		10							D. clouds	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I.			77	25.0		N			1		7							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	30.39	771.9	54	12.2	86	Calm			0		0							Blue sky	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Bahrein, Arabia	29.63	752.6	88.5	31.4	72	E			2-3									Misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candido dos Rios, Comd't
India N. 32° 26′, W. 14° 47′	30.09	764.3	69.8	21.0	77	NNW			4		3		NNW			3	NNW	D. clouds	A. M. Da Sitra.
Quanza, N. 16° 42′, W. 24° 44′	30.08	764.0	79.2	26.2	66	NE			2		0					1	NE	Blue sky	Carlos M. da Silva Costa, Comd't
RioLima																			S. C. da Silva Costa, Comd't.
Sado, Loando, Africa	30.08	763.9	70.9	21.6	78	WNW			2		10							Overcast	G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.84	757.9	82.4	28.0	85	ENE			1		10							Overcast	P. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga, N. 36° 51′, W. 13° 24′	30.03	762.8	66.7	19.3	93	NNE			6		9							Overcast	Capt. M. von Kruse
H. M. Frigate Vanadis																			Com. Th. Ulne

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From:	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				

UNITED STATES NAVAL SERIES.

By authority of the Secretary of the Navy.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

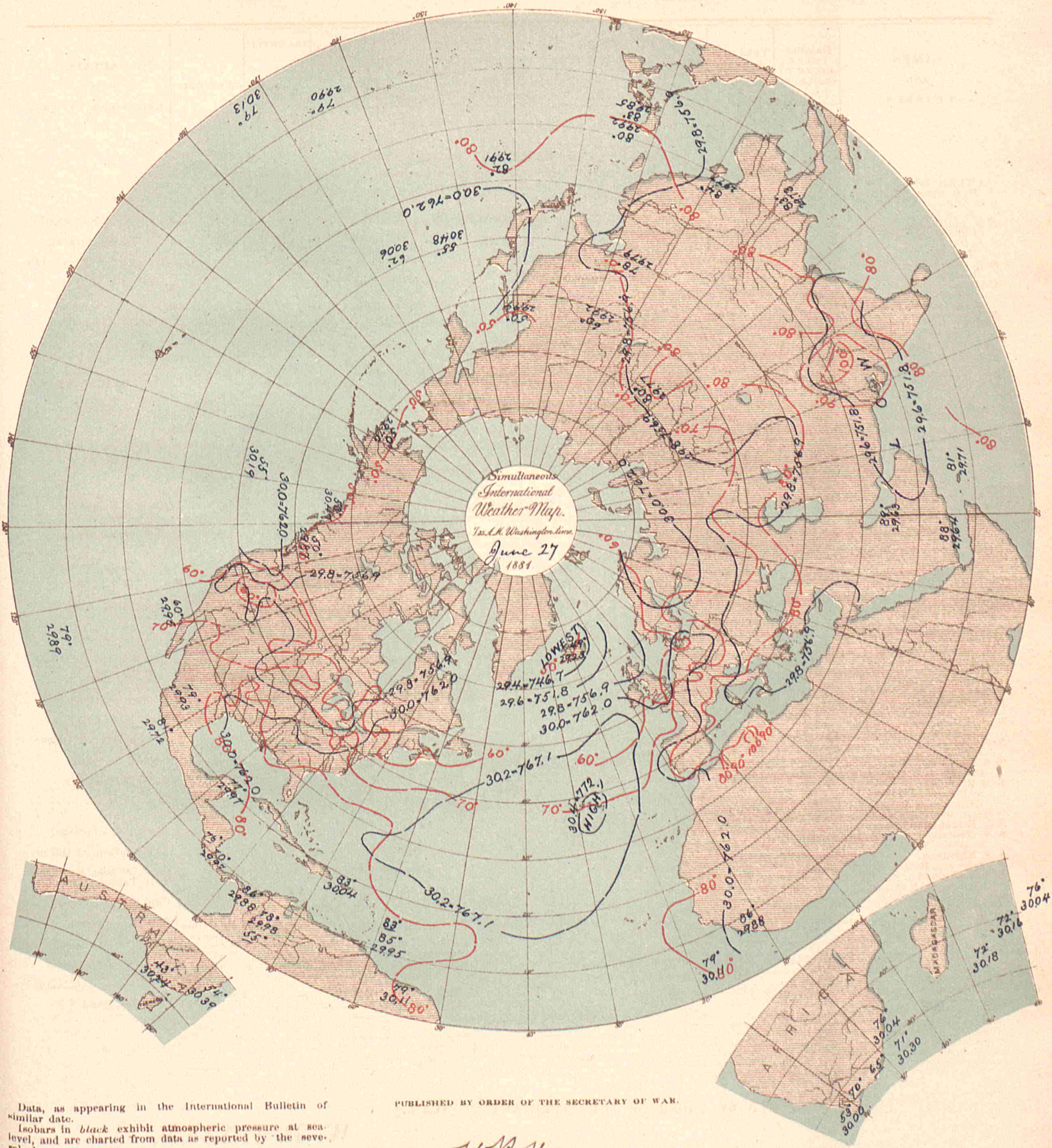
N. Yard, Pensacola, Fla	30.21	767.3	78	25.6	73	NW	4	1.8			8		NW	0	0			Fair	
Naval Hospital, Yokahama, Japan	29.91	759.7	64.5	18.1	97	Calm			0		10		ENE	0.21	5.3			Raining	
Adams, N. 17° 40′, W. 102° 32′	29.72	754.9	81	27.2	87	E			2		8		E			Long	SW	Cloudy	
Alaska, Callao, Peru	29.93	760.2	63	17.2	94	SE			1		10			0	0	Sm'h		Misty	
Alert, Port Lloyd, Bonin Id. *	29.91	759.7	82	27.8	63	Calm			0		2		Calm	0	0	Sm'h		Clear	
Alliance, St. John's, N. F	30.21	767.3	53	11.7	80	E			1		2		E	0	0	Sm'h		Fair	
Ashuelot, Kobe, Japan	29.97	761.2	71	21.7	85	SSE			1		10		Calm					Cloudy	
Colorado, New York, N. Y	30.15	765.8	64	17.8	94	Calm	0	0			10		Calm	0	0			Overcast	
Constitution, Newport, R. I	30.10	764.5	60	15.6	94	NE			3		10							Overcast	
Franklin, Norfolk, Va	30.03	762.7	73	22.8	100	S	6	2.7			2		SSW	0.05	1.3			Fair	
Galena, N. 43° 42′, W. 4° 31′	30.06	763.5	70	21.1	85	Calm			0		10					Sm'h		Cloudy	
Independence, N. Yard, Mare I'd, Cal	29.99	761.7	79	26.1	62	SSW	2.4	1.1			2		SSW	0	0			Clear	
Jamestown, Sitka, Alaska *	29.47	748.5	53	11.7	93	SE			1		10			0.47	11.9			Raining	
Kearsarge, Norfolk, Va	30.11	764.8	73	22.8	90	WSW			1		5					Sm'h		Fair	
Lackawanna. Apia, Samoa Id's, Oceania †	30.13	765.3	79	26.1	95	E			1-2		5		E					Fair	
Marion, Monte Video, Uruguay. *†	29.70	754.4	59	15.0	94	N			1		10		Calm	Heavy		Sm'h		H'y showers	
Michigan, Detroit, Michigan	29.64	752.8	65	18.3	?	S			2		10		S					Cloudy	
Minnesota, Newport, R. I	30.15	765.8	62	16.7	94	NE			2		0?					Sm'h		Overcast	
Monocacy, Yokohama, Japan	30.06	763.5	66	18.9	94	NNW			1		10		Calm					Raining	
Nipsic, Antwerp, Belgium	30.02	762.5	69	20.6	61	SW			2		8					Long		D. clouds	
Onward, Callao, Peru †.	30.01	762.2	63	17.2	89	SSE			1		10		N			Long	W	Cloudy	
Palos, Nagasaki, Japan	29.95	760.7	70	21.1	95	NNE			2		10							Overcast	
Passaic, Washington, D. C	30.08	764.0	69	20.6	90	NE			1		8		NE					Cloudy	
Pensacola, Mare Isl'd, Cal	29.85	758.2	57	13.9	94	SW			4		2		SE	0	0			Clear	
Portsmouth, Newport, R. I	30.16	766.1	61	16.1	?	N			1-2							Sm'h		Foggy	
Powhatan, Newport, R. I	30.15	765.8	62	16.7	100	NNE			2		10							Misty	
Quinnebaug, Navy Yard, New York	30.12	765.0	64	17.8	94	ENE			2		10							Foggy	
Ranger, Mulege, Mexico *	29.76	755.9	80	26.7	87	NW			2		0			0	0	Sm'h		Clear	
Richmond, Kobe, Japan	29.98	761.5	72	22.2	90	Calm			0		10			1.25	31.7			Threatening	
Saratoga, Newport, R. I	30.12	765.0	62	16.7	94	NE			2		10		NE	Mod	erate			Cloudy	
Shenandoah, Rio de Janeiro, Brazil. *	30.35	770.9	68	20.0	84	N			1		0					Sm'h		Clear	
St. Louis, League Island, Pa	29.69	754.1	65	18.3	89	E	2	0.9			10			0.11	2.8			Cloudy	
Swatara, N. 35° 20′, E. 123° 07′ ... *†	29.84	757.9	73	22.8	90	SSW			1		10		Calm			Sm'h		Foggy	
Tennessee, Navy Yard, N. Y	30.14	765.5	65	18.3	84	ESE	6	2.7			10			Inap.	Inap.	Sm'h		Foggy	
Ticonderoga, S. 32° 25′, W. 37° 12′	30.46	773.7	66	18.9	89	N			4		5		N	0	0	Sm'h	N	Fair	
Vandalia, Halifax. Nova Scotia	30.16	766.1	60	15.6	100	N			2		8		W					Fair	
Wabash, Boston, Massachusetts	30.20	767.1	60	15.6	88	NE	2	0.9			10		Calm	0.19	4.8			Foggy	
Wachusetts, N. Yard, Mare I'd, Cal	29.85	758.2	59	15.0	88	SW			4		2		S	0	0			Fair	
Wyoming, Norfolk, Va	30.17	766.3	73	22.8	100	Calm	0	0			8			0	0			Fair	
Yantic, N. 21° 50′, W. 88° 40′ *	29.97	761.2	77	25.0	95	E			2		1		NE			Sm'h	E	Clear	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 8° 31′ W. 118° 53′	29.89	759.2	78.5	25.8	85	Var.			1		10							Heavy rain	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 15° 46′, W. 48° 14′	30.16	766.1	80.5	26.9	87	ENE			4		8					3	E	D. clouds	Capt. W. N. Lailey.
City of Agra, S. 21° 39′, W. 35° 15′	30.31	769.9	69.5	20.8	92	SE			5		7							D. clouds	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 19° 30′, W. 34° 30′	30.22	767.6	76.0	24.4	82	NE			4		10							Overcast	Capt. A. Buchan.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 10° 59′, W. 37° 02′	30.19	766.8	77.5	25.3	86	SE			5		7							D. clouds	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Naiad, N. 32° 18′, W. 19° 56′	30.20	767.1	69.8	21.0	95	NNE			5		7							D. clouds	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 46° 23′, W. 16° 58′	30.35	770.9	57.2	14.0	75	N			4		8							D. clouds	Capt. M. Parry.
Sierra Estrella, N. 3° 30′, W. 19° 08′	30.11	764.8	78.8	26.0	79	SSE			4		2							Misty	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven																			Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, Glasgow, Scotland	29.80	756.9				W			4		5		NW			Sm'h		Fair	
S. S. Circassian, ‡ N. 55° 17′, W. 6° 31′	30.18	766.6	55	12.8	80	NW			6	5c	0			4	hours	4	NW	Showery	Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian, N. 51° 43′, W. 15° 35′	30.15	765.8	59	15.0		WNW			4		5		WNW			Sm'h		Fair	Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Gallia, N. 50° 51′, W. 15° 21′	30.19	766.8	59	15.0		W			6		8		W	0	0	Mod.	WNW	Cloudy	Capt. W. H. P. Hains.
S. S. Algeria																			Capt. W. Watson.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, N. 49° 56′, W. 31° 40′ †	30.46	773.7	52	11.1	79	WSW			4		2		W	0	0	Mod.	NW	D. clouds	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C Phole.
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, N. 39° 24′, W. 59° 36′	30.21	767.3	68.0	20.0		SSE			3		5		W	0	0	Mod.	SW	Cloudy	
S. S. Köln, N. 40° 57′, W. 54° 40′	30.26	768.6	72.0	22.2	90	N			2		8		N	4h'rs	hv'y	Sm'h	N	Fair	Capt. Th. Jüngst
S. S. Strassburg, N. 49° 17′, W. 16° 00′	30.22	767.6	58.1	14.5		NW			5		8		WNW	3	hours	Long	WNW	Cloudy	Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, N. 39° 19′, W. 60° 34′	30.19	766.8	72	22.2	90	WNW			3		1		W			Sm'h		Fair	Capt. J. W. Shackford.
S. S. Indiana, Philadelphia, Pa			76	24.4	81	SSE			5		8		SE	Light				Cloudy	Capt. R. W. Sargent.
S. S. Ohio, N. 50° 57′, W. 14° 46′ *†	30.26	768.6	58	14.4	94	NW			3		5		NW	0	0	Mod.	NW	Fair	W. Shackford, Chief Off'r
S. S. Pennsylvania, Liverpool, England †	30.07	763.8	61	16.1	88	NW			4		5		NW			Sm'h		Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 38° 18′, E. 161° 25′ †	30.06	763.5	62	16.7	66	N			4		8		N	0	0	Light	NNW	Cloudy	Capt. H. Davison.
S. S. Gaelic																			Capt. W. H. Kidley.
S. S. Oceanic, N. 39° 58′, E. 151° 12′	30.48	774.2	55	12.8	60	NNE			1		10		NE	0.02	0.5	1	NE	Cloudy	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon, Portland, Oregon †	30.05	763.3	58.0	14.4	88	Calm			0		10		NW					Cloudy	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, San Francisco, Cal †	29.83	757.7	53	11.7	93	W			2		Fog			0	0			Foggy	Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, Tacoma, Washington Ter. †	29.98	761.5	56	13.3	87	Calm			0		0							Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 34° 35′, W. 120° 40′ †	29.92	760.0	55	12.8	80	NW			8		Fog		NW			Long	NW	Foggy	Geo. H. Harrison.
S. S. Senator																			Capt. Thos. Wallace.
S. S. State of California, N. 45° 27′, W. 124° 15′ †	30.09	764.3	56	13.3	80	N			3		8		NW			Sm'h	NW	Cloudy	Capt. G. Debney.
S. S. Victoria, N. 46° 28′, W. 125° 00′ †	30.11	764.9	56	13.3	87	SW			2		2					Light	S	Clear	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 2d Officer
S. S. City of New York, S. 14° 30′, W. 170° —′ †	30.03	762.7	84	28.9	91	ESE			3		0			0	0	Mod.	E	Clear	Wm. H. Hawes, 2d Officer
S. S. City of Panama, N. 29° 56′, W. 116° 08′ †	29.95	760.7	60	15.6	82	WNW			2		10s		NW	0	0	Sm'h	NW	Overcast	Capt. D. S. Austin.
S. S. City of Peking, N. 44° 17′, W. 140° 19′ †	30.19	766.8	55	12.8	68	W			5		8		W	0	0	R'gh	wsw	Cloudy	Capt. G. G. Berry.
S. S. City of Sidney, S. 34° 15′, E. 172° 40′ *†	30.31	769.9	58	14.4	87	SW			3		5		SW	0	0	Mod.	SW	Fair	Capt. H. C. Dearborn.
S. S. City of Tokio, Hong Kong, China †	29.93	760.2	81	27.2	87	E			3		10		SE			Mod.	S	Cloudy	A. L. Ritchie, 2d Officer
S. S. Colima, Mazatlan, Mexico †	29.95	760.7	82	27.8	74	Calm			0		8		Calm	0	0	Sm'h	SW	Cloudy	Capt. R. R. Searle.
S. S. Granada, Panama Bay, Panama †	29.88	758.9	86	30.0	88	NNE			1		2		NE	3 hours				Clear	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. Wales	30.12	765.0	53	11.7	43	NW			4		10		W					Cloudy	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, ‡ N. 40° 05′, W. 64° 25′ †	30.14	765.5	60	15.6	?	E			1		5		E	0	0	Sm'h		Fine	A. Feddersen, 2d Officer
S. S. Rhynland, Antwerp, Belgium †	30.21	767.3	69	20.6	79	SSW			3		10		SSW	0	0			Cloudy	Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Savannah, Georgia	30.06	763.5	76	24.4	73	SW				Sck	0			0.02	0.5			Fair	Capt. J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, Monabo, Porto Rico †	30.12	765.0	85	29.4		ENE			6		8			Showers		R'gh			Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk																			
Bark Sunbeam, N. 23° 37′, W. 37° 29′ †	30.32	770.1	79	26.1	82	ENE			6		5		ENE	0	0	Mod.	ENE	Fair	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 28, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER.				TEMPERATURE OF THE AIR.		REL. HUM.	WIND.				CLOUDS.				RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
	Corrected for instrum'tal error and temperature.		Reduced to sea-level.					Direction.	Velocity.		Force	Amount and kind.		Direction.					
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES.																			
Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
‡Nemours			29.98	761.4	76.1	24.5	85	N			1		4			0	0	Cloudy	Raynard.
‡Algiers			30.02	762.5	79.2	26.2	56	NNE			3		0			0	0	Clear	Nicolas.
‡La Calle			30.03	762.8	80.2	26.8	74	NW			3		0			0	0	Clear	Fonfréde.
‡Tunis			29.97	761.3															Jacques.
‡Sfax																			Gau.
‡Saida			29.98	761.5	99.0	37.2	17	NNE			1		0			0	0	Clear	Dumas.
‡Tebessa			30.01	762.3	82.0	27.8	25	N			3		0			0	0	Clear	Watrin.
‡Geriville					96.8	36.0	13	NW			1		0			0	0	Clear	Lonchamp.
‡Laghouat			30.01	762.2	96.4	35.8	11	N			2		0			0	0	Clear	Herbin.
‡Biskra			30.04	762.9	101.8	38.8	22	NW			1		0			0	0	Clear	Baudassé.
AUSTRALIAN SERIES.																			
Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.74	755.4	29.84	757.9	50.6	10.3	58	N	19	8.5			10			0	0	Dull	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES.																			
Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.42	747.3	29.96	761.0	63.7	17.6	78	W			1		10			0.091	2.3		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.19	741.5	29.95	760.7	60.8	16.0	87	N	5.6	2.5			10			0.319	8.1		Dr. Wierzbicki.
Eperies	28.97	735.8	29.80	757.0	74.8	23.8	62	Calm			0		10s			Inap.	Inap.		Julius Mikolik.
‡Gratz	28.70	728.9	29.90	759.5	71.1	21.7	68	SSW			2		8			0	0		Andreas Rospini.
Hermannstadt	28.43	722.1	29.78	756.5	75.6	24.2	65	SW			3		10			0.335	8.5		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.63	727.1	29.92	759.9	69.8	21.0	64	ENE			1		7			0	0		The Staff.
Lemberg	28.87	733.4	29.81	757.2	75.7	24.3	51	SE			1		3			0	0		Dr. T. Stanecki.
Pola	29.79	756.6	29.89	759.3	79.9	26.6	52	WNW			1		7			0	0		I. R. Hydrographic Office.
Szathmar	29.35	745.5	29.80	756.8	81.1	27.3	57	SE			5		10			0	0		Beicht Peter, S. J.
Szegedin	29.56	750.8	29.83	757.6	76.1	24.5	73	N			2		6			0	0		Karl Stancel.
Trieste	29.75	755.7	29.85	758.3	77.2	25.1	52	NE			1		3			0	0		Secco.
Vienna	29.28	743.7	29.98	761.5	63.5	17.5	75	NNW			1		8			0.051	1.3		I. R. Central Met. Obs'y.
BELGIAN SERIES.																			
Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.

BRITISH SERIES.

Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.

Aberdeen	29.77	756.1	29.87	758.7	58.5	14.7	66	SSW	13	5.8			6			0.170	4.3	Showery	W. Boswell.
Armagh, Observatory	29.80	756.9	30.03	762.7	58.0	14.4	70	W	7	3.1			3					D. clouds	S. Call.
Bidston, Liverpool Obs'y			30.06	763.5	58.5	14.7	63	WSW	21	9.4			6					D. clouds	John Hartnup.
Bolton, Sharples	29.52	749.8	30.05	763.3	58.1	14.5	69	WSW	18	8.0			8					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.64	752.8	30.04	763.0	57.2	14.0	60	SW			1.0		10			0	0	Overcast	J. McLandsborough, F.R.S
Bridgetown, Barbadoes	29.96	761.0	29.99	761.7	77	25.0	95	NE			3		8					Overcast	Corpl. J. Surgener, A.H.C
Cardington			30.06	763.5	64.0	17.8	60	NW			0.4		8					Overcast	John McLaren.
Chatham, School M. E.	29.96	761.0	30.09	764.3	63.5	17.5	63	N			1		10			Blank		Gloomy	Corpl. W. Beck, R. E.
Falmouth, Observatory	29.97	761.2	30.19	766.8	60.5	15.8	54	NW			2		8					Overcast	The Staff.
Fort Napier, Natal	27.81	706.4	30.03	762.7	81.3	27.4	94	N			1		0					Blue sky	Pvt. E. K. Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	86	30.0	84	SW			1		4					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			30.11	764.8	58	14.4	70	W			4		8			0	0	Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	29.98	761.5	30.04	763.0				NE			2		3					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.72	754.9	29.92	760.0	57.2	14.0	63	WSW			6		8					D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	29.92	760.0	30.08	764.0	63.9	17.7	51	W			1		8					D. clouds	The Staff.
Guernsey	29.96	761.0	30.17	766.3	60	15.6	71	NW			4		4					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.06	763.5	30.10	764.5	63.1	17.3	52	NNW	8	3.6			8					D. clouds	The Staff.
Leicester, Museum	29.82	757.4	30.08	764.0	60.0	15.6	54	NW			1		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.78	756.4	29.85	758.2	79.0	26.1	75	NW			1		1					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	30.07	763.8	30.12	765.0	85.5	29.7	68	SE			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.57	751.1	30.09	764.3	58.6	14.8	67	W			2		10					Overcast	John Mac Email.
Oxford, Radcliffe Obs'y	29.87	758.7	30.10	764.5	62.1	16.7	51	W			3		7					D. clouds	The Staff.
Plymouth	30.09	764.3	30.16	766.1	63.5	17.5	70	W			1		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.82	757.4	54	12.2	78	WSW	15	6 7			0					Blue sky	Rev. C. Clouston, L. L. D.
Scutari Cemetery, Turkey	29.77	756.1	29.84	757.9	75.4	24.1	75	SSW			1		1					Blue sky	Serg't W. H. Lyne.
Sheffield	29.78	756.4	30.06	763.5	60.9	16.1	82	SSW			1		10			0	0	Overcast	W. F. Cooper.
Silloth Rectory	29.96	761.0	30.00	762.0	58.8	14.9	73	W			6		5			0	0	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.06	763.5	57.3	14.1	63	W	17	7.6			10					Overcast	Rev. S. J. Perry.
Stratfield Turgiss	29.90	759.4	30.11	764.8	64.0	17.8	58	SW			1		7					D. clouds	Rev. C. H. Griffiths, F.M.S.
Truro, Royal Institution	30.19	766.8	30.20	767.1	64	17.8	58	NW			6		5					D. clouds	W. Newcombe.
Valencia, Observatory	30.15	765.8	30.17	766.3	58.3	14.6	75	W	21	9.4			8					D. clouds	The Met'g'l Office.

CANADIAN SERIES.

Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.

Bathurst, N. B					60.0	15.6		SW	5	2.2			10n					Raining	Hon. J. Ferguson.
Charlottetown, P. E. Island	29.99	761.7	30.03	762.7	61	16.1	81	S	4	1.8			10s			0	0	Cloudy	H. J. Cundall, C. E.
Chatham, N. B. *	29.93	760.2	29.99	761.7	58	14.4	91	S	3	1.3			10ks		S	0	0	Cloudy	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario	29.39	746.5	29.57	751.1	66.4	19.1	80	NW			4		9s			0.489	12.4	D. clouds	James Smith, M. A
Dalhousie, N. B	29.88	758.9	29.91	759.7	55.0	12.8		E			2	0	5ks			0	0	D. clouds	H. A. Johnson.
Father Point, Quebec *	29.74	755.4	29.77	756.1	65	18.3	57	S	38	17.0			10n		S	0	0	Cloudy	J. McWilliams.
Fort Garry, Manitoba *	28.82	732.0	29.61	752.1	59	15.0	94	NW	2	0.9		5k	2ks	NW	NW	0.35	8.9	Clearing	James Stewart.
Fredericton, N. B	29.90	759.4	29.96	761.0	58.0	14.4	82	SE	12	5.4			10s			0	0	Threatening	Prof. Harrison.
Granton, Ontario	28.65	727.7	29.70	754.4	65.0	18.3	100	W			1	9cs	0	W		0.40	10.2	Cloudy	James Grant.
Halifax, N. S. *	29.93	760.2	30.05	763.3	59	15.0	86	SE	5	2.2		5c	0			0.062	1.6	Fair	A. Allison.
Hamilton, Ontario	29.29	744.0	29.66	753.4	70.5	21.4	84	SW			1	0	0			0.47	11.9	Clear	Geo. Dickson, B. A.
Kingston, Ontario *	29.31	744.5	29.63	752.6	62	16.7	92	S	6	2.7		0	0			0.42	10.7	Clear	S. Woods, M. A.
Little Glace Bay, N. S	30.05	763.3	30.08	764.0	57.0	13.9	81	Calm			0	4cs	0	SW		0	0	Fair	C. H. Rigby.
Montreal, Quebec *	29.36	745.7	29.55	750.6	67	19.4	81	SW	14	6.3		8k	0	W		0.68	17.3	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario	29.38	746.2	29.42	747.3	60.0	15.6	96	Calm			0		10n			0.30	7.6	Raining	J. R. Nason.
Parry Sound, Ontario *	28.96	735.6	29.64	752.8	58	14.4	99	W	16	7.2			Fg			0.25	6.3	Foggy	Rev. R. Moseley.
Peterboro, Ontario	28.92	734.6	29.63	752.6	69.7	20.9	79	W			1	3ck	0			0.80	20.3	Fair	J. F. Jeffers, M. A.
Port Dover, Ontario	29.03	737.3	29.70	754.4	65	18.3	94	SW	6	2.7		0	0			0.07	1.8	Clear	H. Morgan.
Port Stanley, Ontario	29.08	738.6	29.70	754.4	65	18.3	99	W	5	2.2		5ck	0	W		0.37	9.4	Fair	M. Payne.
Quebec, Quebec *	29.28	743.7	29.59	751.6	62	16.7	88	SE			5		10n			0.61	15.5	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario *	29.08	738.6	29.52	749.8	62	16.7	83	W	5	2.2			8s		W	1.31	33.3	Cloudy	W. H. McIntyre.
Saugeen, Ontario	28.97	735.8	29.67	753.6	58	14.4	99	SW	4	1.8			Fg			0.68	2.0	Foggy	K. Stewart.
St. Andrews, N. B	29.87	758.7	29.92	760.0	52	11.1	90	SE	1	0.4			10n			Inap.	Inap.	Light rain	
St. John, N. B	29.78	756.4	29.95	760.7	57.0	13.9	84	SE	5	2.2			10ks					Raining	G. Murdock, C. E.
Stratford, Ontario	28.45	722.6	29.67	753.6	66.0	18.9	97	W	8	3.6			10s			0.395	10.0	D. clouds	C. J. Macgregor, M. A.
Sydney, C. B. *	30.04	763.0	30.08	764.0	62	16.7	84	SW	1	0.4		5c	0	W		0.12	3.0	Fair	T. C. Hill, C. E.
Toronto, Ontario *	29.29	744.0	29.66	753.4	66	18.9	86	NW	13	5.8		2ck	2ks	W	W	0.56	14.2	Fair	Magnetic Observatory
Windsor, N. S	29.91	759.7	30.01	762.2	58.0	14.4	94	S	1	0.4			9k			0	0	Cloudy	
Woodstock, Ontario	28.65	727.7	29.66	753.4	70.2	21.2	88	SW	10	4.5			9ks			0.35	8.9	D. clouds	Prof. Wolverton.
Yarmouth, N. S. *	29.88	758.9	29.94	760.5	60	15.6	91	SE	7	3.1			10s			0	0	Cloudy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.92	760.0	30.17	766.3	54	12.2	93	NE	1	0.4			10s			0.60	15.2	Fair	John Delany.
St. Pierre, N. F.			30.03	762.7	50.0	10.0		SW			1					0.59	15.0		N. F. Land, Comd't.

Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.

CAPE COLONY SERIES.

Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.

Cape St. Francis Lt. House	29.94	760.5			63.7	17.6	91	WSW	10.5	4.7		0	0			0	0	Light haze	John Duthie.
Cape Town, C. G. H. Obs'y	30.17	766.3	30.21	767.3	48.0	8.9		NW				5	5n			0.360	9.1	Rainy	The Staff, for D. Gill.
Worcester * †	28.88	733.5			65.2	18.4	57	WNW			2	1	4			0	0		C. Stokes.

CHINESE SERIES.

Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.

Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.85	758.2	29.87	758.8	76.3	24.6	95	SE	2.2	1.0			10n			0.016	0.4	Raining	M. Marc Dechevrens, S.J

STATIONS.	Barometer. Corrected for instru-m'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.22	666.0	29.94	760.5	71.2	21.8	62	SE			1	3ck;s	3d		NE	0	0	Cloudy	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.00	761.9	30.04	763.1	62.2	16.8	56	ENE	9	4			5						Oversergent Fischer.
Fanöe	29.94	760.5	29.96	761.0	58.8	14.9	87	SW			4		10						Overloerer Lauridsen.
Godthaab, Greenland																			S. Kleinschmidt.
Stykkisholm, Iceland	29.28	743.7	29.32	744.8	45.7	7.6		NW			2		10					Raining	A. O. Thorlacius.
Thorshavn	29.61	752.0	29.64	752.9	50.4	10.2	86	SW	20	9			10						Overloerer Bergh.
Vestervig	29.85	758.3	29.95	760.7	60.8	16.0	81	SSW			4		9						Loerarer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.48	748.8	30.12	765.0	69.8	21	62	WNW			1	0	8n		NW	0.004	0.1	Very cloudy	M. Labroue, Director.
Alençon Normal School	29.65	753.0	30.20	767.0	65.1	18.4	77	N			2	0	5k		SE	0	0	Cloudy	M. Nicot, Director.
Arras, Engineer School	29.81	757.2	30.06	763.6	63.7	17.6	53	NNW				ck	0						M. Klein, Commandant.
Avignon, Normal School	29.85	758.2	29.93	760.2	83.1	28.4	32	N			4		0	N		0	0	Clear	M. Giraud, Director.
Bar-sur-Seine	29.51	749.5	30.05	763.2	69.6	20.9	53	NNW			3	0	8kn		WNW	0.063	1.6	Very cloudy	M. Saillard, Director.
Beauvais, Normal School	29.84	757.9	30.10	764.4	69.1	20.6	49	NNE			2		8	NW	N	0.059	1.5	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.15	740.5	29.97	761.2	73.4	23	52	SW			1	ck	0	W		0	0		M. Gobin, Director.
Bordeaux, Observatory	29.88	759.0	30.14	765.5	69.8	21.0	61	NE			1		10		W	0	0	Covered	M. Rayet, Director.
Bourges, Normal School	29.58	751.2	30.11	764.8	68.0	20	55	WNW			1		k		WNW	0	0		M. Postel, Director.
Brest, Naval Observatory	30.00	762.1	30.24	768.2	61.5	16.4	67	N			2		10		N	0.039	1.0		M. de Rermaree, Dir.
Caen, Normal School	30.08	763.9	30.15	765.7	65.5	18.6	64	NW			1		2		NNW	0.008	0.2	Slightly cl'dy	M. Biétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.67	753.5	29.97	761.3	73.4	23.0	60	NE			2		5		W	0.012	0.3	Cloudy	M. Jadot, Director.
Charleville, Normal School	29.51	749.6	30.01	762.3	68.0	20	72	W			1					0.098	2.5		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.72	729.4	30.03	762.8	70.2	21.2	56	N			2		8		N	0	0	¾ covered	M. Alluard, Director.
Cluny, Normal School	29.22	742.2	30.04	763.0	74.8	23.8	48	NE			2		2		NW	0	0		M. de Villemontée, Dir.
Commercy, Normal School	29.17	741.0	30.01	762.2	69.4	20.8	55	WNW			3	5ck		WNW	WNW	0.012	0.3	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.42	696.5	29.84	757.9	77.9	25.5	36	SW			2				SW	0	0		M. Jeangirard, Director.
Grénsque, du. Rhone	28.83	732.3	29.97	761.3	83.5	28.6	26	NW			1		2		NW	0	0	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.21	742.0	29.95	760.7	77.0	25	46	WNW			3	ck	0			0	0		M. Ablard, Director.
Guéret, Normal School	28.54	724.8	30.08	763.9	68.0	20	55	NW			2		5kn	NE	SW	0	0	Cloudy	M. Rivoire, Director.
Lamballe, Normal School	29.93	760.2	30.20	767.1	58.3	14.6	67	N			2				N	0	0		M. Ollitrault, Director.
Lescar, Normal School	29.54	750.3	30.19	766.9	70.5	21.4	54	W			1	0	k		W	0	0		M. Chauvin, Director.
Lorient, Naval Observatory	30.12	765.1	30.22	767.7	68.0	20.6	45	N			1		8	Calm	NNW	0.008	0.2	¾ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.00	736.5	30.02	762.4	75.4	24.1	44	NE			1		8		NNW	0	0	Very cloudy	M. André, Director.
Mans, Normal School	29.82	757.5	30.09	764.2	66.7	19.3	60	NNE			4		5		W	0.020	0.5	Cloudy	M. Piboen, Director.
Marseille, Observatory	29.63	752.7	29.89	759.3	83.5	28.6	29	WNW			2		3		SW	0	0		M. Stephan, Director.
Montlouis l'Instituteur	24.93	633.1	30.16	766.1	65.3	18.5	53	W	3.8	1.7			0			0	0		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.82	757.4	29.93	760.2	84.6	29.2	43	N			3		2			0	0	Slightly cl'dy	M. P. Galzin, Director.
Nancy, Normal School	29.21	741.8	29.95	760.6	72.7	22.6	47	WSW			1	0	5kn		SW	0	0	Cloudy	M. Hasse.
Nantes, Observatory	30.02	762.4	30.18	766.5	66.9	19.4	46	WNW			2-3	ck	8k	W	NNW	0.012	0.3		M. Larocque, Director.
Nice	29.85	758.3	29.89	759.2	80.1	26.7	65	SE			2		1	SE	SE.	0	0	Clear	Capt. Boissière, Director.
Perpignan, Observatory	29.90	759.4	30.00	762.0	80.8	27.1	31	N	13	5.8			0			0	0		Dr. Fines.
Pic-du-Midi, Plantade	22.65	575.4			52.3	11.3							1		S	0	0	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	28.99	736.4	30.01	762.2	78.8	26	29	N			3	0	1k			0	0	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.27	641.9			51.4	10.8	77	WNW			2	0	8k		WNW	0.004	0.1	¾ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.11	764.8	30.14	765.6	69.1	20.6	62	NE			1		10		NW	0	0	Covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	29.90	759.4	30.11	765.7	70.9	21.6	50	WNW			1		5		W	0	0	Cloudy	M. Mouillot, Director.
Rodez, Normal School	27.94	709.7	29.99	761.8	73.4	23	54	NW			3		5			0	0	Cloudy	M. Richard, Director.
Rouen, Normal School	30.04	762.9	30.12	765.1	68.0	20	47	NNW			2		5		NW	0.12	3.	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	30.02	762.6	30.18	766.6	63.7	17.6	61	NW			1		2	NE	NW	0.12	3.	Slightly cl'dy	M. Delaplanche, Dir.
Saint Maur, Observatory	29.92	760.0	30.09	764.2	68.2	20.1	54	NNW			2		8	W	NW	0.004	0.1		M. Renou, Director.
Toulouse, Observatory	29.42	747.2	30.14	765.6	75.9	24.4	44	NW			1		0			0	0	Clear	M. Baillaud, Director.
Tours	29.91	759.6	30.10	764.6	73.4	23.0	43	N			1		8		W	0	0	¾ covered	M. de Tastes.
Versailles, Observatory	29.60	751.9	30.10	764.4	66.6	19.2	58	N			2					0	0		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.82	757.3	30.11	764.7	69.6	20.9	53	NNW			2		7	W	NW	0.004	0.1		M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.14	740.2	30.00	762.1	64.8	18.2	60	NW			2	0	3k		W	0.012	0.3		Prof. Dr. Hoh.
Berlin	29.80	757.0	29 97	761.2	72.9	22.7	53	E			1		5			0	0		Prof. Dr. Arndt.
Breslau	29.50	749.2	30.03	762.7	67.6	19.8	53	ENE			1		9			0.091	2.3		Royal University Obs'y.
Carlsruhe	29.56	750.9	29.98	761.4	70.2	21.2	67	NE			1		9	W		0.047	1.2	Raining	Albert Senz.
Cassel	29.28	743.6	30.00	761.9	69.4	20.8	51	SW			1		6	SW		0	0		Dr. H. Möhl.
Frankfort on the Main	29.69	754.2	30.05	763.2	69.6	20.9	51	N			2		3			0	0		Physical Society.
Friedrichshafen	28.66	726.4	29.99	761.7	69.3	20.7	67	S			2		2	W		0	0		Wilhelm, Chief Tel.
Hamburg	29.89	759.2	29.96	761.0	68.9	20.5	58	WSW			3		10			0	0		Dr. R. Kleeman.
Kiel	29.97	761.1	29.98	761.5	65.5	18.6	50	NE			3		8			0	0		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.56	750.7	29.97	761.1	68.7	20.4	53	E			1		9			0	0		Prof. Dr. Bruhns.
Magdeburg	29.77	756.2	29.96	760.9	72.5	22.5	47	SE			1	0	7k		SW;S	0	0		Dr. Assmann.
Memel	29.88	758.9	29.93	760.1	60.8	16.0	87	NNW			3-4		10n						Reinbrecht & Issermann.
Munich	28.20	716.3	30.06	763.6	70.9	21.6	39	Calm			0		5	SW		0.004	0.1		Central Station.
Neufahrwasser	29.99	761.8	30.01	762.2	60.6	15.9	82	NNE			2		10			0.020	0.5	Light rain	A. Lothes.
Neustadt, Palatinate	29.46	748.2	29.98	761.6	70.0	21.1	65	SE					2	NW		0.252	6.4		Dicknether.
Stuttgart	29.04	737.7	29.91	759.6	70.3	21.3	58	NW			2		3	W		0.008	0.2		Prof. Dr. Schoder.
Weissenburg, Bavaria	28.52	724.5	29.98	761.6	68.0	20.0	55	W			2		8	W		0.008	0.2		Prof. Kemlein.
Wustrow	29.99	761.8	30.02	762.5	64.4	18.0	70	N			3	0	8s			0	0		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.52	749.8	29.89	759.3	84.9	29.4		SW			2.5		0					Clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.57	751.1	29.62	752.3	91.0	32.8	77	SSW	23.0	10.3			0			0	0	Blue sky	
Deesa	29.17	7409	29.64	752.9	80.4	26.9	86	SE	11.7	5.2			10		E	0.10	2.5	Overcast	
Bombay	29.65	753.0	29.68	754.0	84.6	29.2	80	WSW	9.0	4.0			10		SW	0	0	Overcast	
Poona, Yarrowda	27.84	707.0	29.67	753.6	81.8	27.7	60	W	18.0	8.0			9		WSW	0	0	D. clouds	
Belgaum	27.19	690.6	29.72	754.8	74.9	23.8	77	SW	9.0	4.0			8	E	SW	0	0	D. clouds	
Lahore	28.74	729.9	29.43	747.5	107.8	42.1	25	N	2.8	1.2			0			0	0	Blue sky	
Roorkee	28.61	726.7	29.47	748.5	96.3	35.7	56	Calm	3.2	1.4			3			0.51	13.0	Misty	
Agra	28.94	735.1	29.48	748.8	100.1	37.8	42	NE	6.0	2.7			0			0	0		
Nagpur	28.54	724.8	29.57	751.0	81.5	27.5	87	SSW	4.5	2.0			8		SW	0.32	8.1	Gloomy	
Jubbulpore	28.22	716.8	29.55	750.4	86.3	30.2	71	NW	2.5	1.1			3	E		0.04	1.0	D. clouds	
Lucknow	29.20	741.7	29.57	751.1	83.2	28.4	81	NNE	4.8	2.2			8	SW		0	0	D. clouds	
Allahabad	29.25	742.9	29.56	750.8	80.7	27.1	91	NE	1.7	0.8			10		E	0.29	7.4	Overcast	
Patna	29.43	747.5	29.61	752.1	81.1	27.3	89	E	6.3	2.8			10	E	E	0.85	21.6	Overcast	
Hazaribagh	27.61	701.3	29.59	751.6	80.6	27.0	78	SSE	9.5	4.2			9		S	0.18	4.6	Thnd'rstorm	
Cuttack	29.54	750.4	29.63	752.6	85.0	29.4	79	Calm	1.0	0.4			5			0.03	0.8	D. clouds	
Calcutta, Alipore	29.62	752.2	29.64	752.8	84.9	29.4	80	SSW	9.0	4.0			9	NE		0.36	9.1	D. clouds	
Dhubri	29.54	750.4	29.66	753.5	77.7	25.4	97	Calm	2.5	1.1			6			0.53	13.5	D. clouds	
Chittagong	29.63	752.5	29.72	754.8	83.5	28.6	84	SSW	4.4	2.0			5			0	0	Blue sky	
Sibsagar	29.34	745.3	29.68	753.8	80.4	26.9	85	ENE	1.5	0.7			10	W	W	0.40	10.2	D. clouds	
Zanzibar, Africa			30.05	763.3	82.0	27.8	63	SE	10	4.5			8		S	0	0	D. clouds	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.53	750.0	29.92	760.0	75.7	24.3	47	NE	1.8	0.8			4			0.012	0.3		Prof. Giovanni Clodig.
Milan	29.39	746.4	29.88	758.9	81.3	27.4	43	ESE	3.8	1.7			5	NE		0	0		Prof. Schiaparelli.
Padua	29.81	757.2	29.92	759.9	76.5	24.7	51	NNE	3.8	1.7			3			0	0		Prof. Dott. Lorenzoni.
Moncalieri	29.01	736.9	29.89	759.1	78.1	25.6	52	E	2.5	1.1			6	E		0	0		Prof. P. F. Denza.
Genoa	29.71	754.7	29.90	759.4	77.4	25.2	61	SW	5.6	2.5			0			0	0		Prof. G. M. Garibaldi.
Mondovi	28.05	712.4	29.89	759.2	74.5	23.6	47	E			2		1	N		0	0		Prof. D. C. Bruno.
Pesaro	29.85	758.3	29.90	759.5	74.5	23.6	73	NW					1			0	0		Prof. Luigi Guidi.
Florence	29.60	751.8	29.84	758.0	83.8	28.8	32	N			2		0			0	0		Prof. Costantino Pitter.
Leghorn	29.81	757.2	29.89	759.3	78.8	26.0	56	W	3.1	1.4			3			0	0		Prof. P. Monte.
Rome	29.68	753.8	29.85	758.1	87.1	30.6	39	WSW	11.2	5.0			2			0	0		Prof. P. S. Ferrari.
Lecce	29.61	752.2	29.85	758.3	86.7	30.4	51	WNW	0.7	0.3			5			0	0		Prof. C. de Giorgi.
Cosenza	28.98	736.2	29.84	757.8	84.9	29.4	68	SE	4.9	2.2			6	SE		0.236	6.0		Prof. D. Conti.
Cagliari	29.66	753.3	29.85	758.1	79.0	26.1	57	S			4		0			0	0		Prof. A. Pacinotti.
Palermo	29.65	753.1	29.89	759.3	77.2	25.1	63	NE	9.4	4.2			1			0	0		Prof. G. Clacciatore.
Syracuse	29.78	756.5	29.83	757.6	75.9	24.4	78	NE	6.3	2.8			5	W		0.421	10.7		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.32	744.8	29.83	757.6	81.3	27.4	33	SW	3.8	1.7			2	W		0	0		Prof. F. Brioschi.
Stelvio	22.28	565.8			47.7	8.7	70	NE			1		10kns			0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.30	566.4			51.1	10.6	64	NE			2	0	8kn		W	0	0	Misty	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.85	758.2	29.86	758.4	69.6	20.9	93	WSW	0.4	0.2			10s;ks			0.670	1.8	Gloomy	K. Sasaki.
Kioto	29.69	754.1	29.86	758.4	72.5	22.5	84	SSW	4.9	2.2		0	8s;ks			0	0	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.71	754.6	29.90	759.4	70.9	21.6	93	WSW	0.7	0.3		4cs	0			0.010	0.3	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	29.77	756.1	29.84	757.9	70.2	21.2	95	SSW	1.7	0.8			10s;ks			0.016	0.4	Cloudy	The Staff.
Wakayama	29.83	757.7	29.88	758.9	71.0	21.7	89	SW	5.2	2.3		2ck	0			0.015	0.4	Fair	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	29.99	761.7	30.18	766.5	73.0	22.8	66	E	21.5	9.6		0	3		ESE	0.19	4.8	Squally	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.41	620.0	30.04	763.0	63.0	17.2	85	S			1	1c	2k			0	0	Clear	Prof. M. Leal.
Mazatlan	29.66	753.4	29.92	759.8	80.7	27.1	82	WSW	1.6	0.8		1cs	8n		ESE	0	0	Very cloudy	F. Quijano, C. E.
Mexico, Central Obs'y	23.14	587.7	30.12	764.8	56.8	13.8	85	Calm	0	0		8c	0	E		Inap.	Inap.	Cloudy	The Staff.
Pabellon, Aguascalientes	23.95	608.2	29.89	759.1	62.4	16.9	82	E			1	1c	0	E		0	0	Clear	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.45	595.7	30.13	765.5	58.6	14.8	44	Calm	0	0			10		S	0.787	20.0	Covered	Prof. P. Spina.
San Luis Potosi																			G. Barroeta, M. D.
Tlacotalpam																			Prof. M. Cházaro.
Vera Cruz																			Prof. J. Rossell.
Zacatecas	22.58	573.4	30.18	766.7	55.4	13.0	71	Calm	0	0		0	0			0	0	Clear	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.07	763.8	30.07	763.8	63.7	17.6		NNW			4					0.197	5.0		
Groningen	29.92	759.9	29.97	761.3	61.3	16.3		NNW			1					0.169	4.3		
Helder	29.99	761.8	29.99	761.8	59.4	15.2		WNW			2					0	0		
Hellevoetsluis	30.03	762.7	30.03	762.7	63.5	17.5	80	W			2					0	0		
Utrecht	29.97	761.1	30.01	762.3	68.9	20.5	63	WNW			2		5			0.047	1.2	Cloudy	H. van der Brink.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction,		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES.																			
Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.81	757.2	29.87	758.8	54.7	12.6	93	SSE	4.9	2.2			10			0.106	2.7	Raining	
Christiania	29.72	754.9	29.86	758.5	66.6	19.2	55	SSE	7	3			5			0	0		
Gjæsvær	29.82	757.5	29.85	758.1	62.2	16.8		E			2		3						
Lodingen	29.80	757.0	29.85	758.2	63.1	17.3	61	Calm			0		7			0	0		
PORTUGUESE SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.23	767.9	30.25	768.3	68.0	20.0	85	SSE	11.2	5 0			0			0	0		Dr. J. A. Sampaio.
Campo Major	28.93	734.8	29.86	758.4	92.1	33.4	28	WSW	4.3	1.9			1			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.95	760.6	30.03	762.8	72.9	22.7	69	SW	0.7	0.3			10			0	0		Capt. D. A. de Cunha.
Lisbon, Observatory	29.63	752.6	29.98	761.4	77.2	25.1	53	N	15.0	6.7			1			0	0		The Staff.
Ponta Delgada, Azores	30.33	770.3	30.40	772.1	70.5	21.4	62	NE	13.6	6.1			4			0	0		
RUSSIAN SERIES.																			
Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.83	732.3	29.85	758.3	77.4	25.2	44	N	7	3		3ck	0						Capt. Lasarew.
Archangel	30.04	763.1	30.06	763.6	70.9	21.6	47	W	9	4		2cs	0						Capt. Sseliwerstow.
Astrakhan	29.86	758.4	29.78	756.3	88.2	31.2	38	Calm	0	0		1c	0					Light clouds	Capt. Wisganow.
Barnaul	29.30	744.1	29.76	756.0	75.2	24.0	36	NW	4	2			8						Meteorological Obs'y.
Dorpat	29.77	756.1	30.00	762.0	71.2	21.8	34	ENE	7	3			0						Observatory.
Ekaterinburg	28.94	735.1	29.90	759.4	53.8	12.1	94	E	7	3			10					Raining	Meteorological Obs'y.
Kasan	29.51	749.6	29.78	756.3	61.9	16.9	85	NNW	2	1			10n					Raining	Observatory.
Kertch	29.85	758.3	29.87	758.8	77.0	25.0	76	Calm	0	0			2						Lagorio & Sastyrez.
Kieff	29.24	742.7	29.85	758.2	69.6	20.9	42	NE	4	2		ck	4ks						Observatory.
Krotkowo																			Gand. Fatjanow.
Lugan	29.60	751.7	29.80	756.8	69.3	20.7	69	SW	2	1			10			Blank			Meteorological Obs'y.
Moscow	29.31	744.5	29.86	758.4	55.2	12.9	93	NW	4	2			10s						Meteorological Obs'y.
Nertchinsk	27.56	700.0	29.78	756.5	57.4	14.1	87	Calm	0	0			7			0	0		Meteorological Obs'y.
Nikolaiev	29.85	758.1	29.92	759.9	77.2	25.1	52	N	9	4		0	1k						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.79	756.6	29.87	758.8	54.1	12.3	91	Calm			0		1on			0.118	3.0		Lieut. Iwanow.
Pekin, China	29.61	752.2	29.76	755.8	81.9	27.7	51	Calm	0	0		0	3k						Physical Observatory.
St. Petersburg	30.01	762.3	30.03	762.7	69.4	20.8	34	ENE	9	4			0						Central Physical Obs'y.
Tashkend, Laboratory	28.36	720.3	29.83	757.7	84.6	29.2	46	Calm	0	0			1						Teich, A. M.
Tiflis	28.38	720.9	29.70	754.4	90.1	32.3	34	NW	4	2		0	4k						Physical Observatory.
Warsaw	29.52	749.8	29.93	760.2	64.6	18.1	78	NNW	4	2			10cks						Astronomical Obs'y.
Wilna	29.51	749.6	29.91	759.8	75.0	23.9	40	E	2	1			1					Light clouds	Berg, Assistant.
Yeniseisk	29.58	751.2	29.85	758.2	70.9	21.6	59	N	7	3			8						M. O. Marks.
SCOTTISH SERIES.																			
Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.95	760.7	55.8	13.2	82	W			3	0	6k			0	0	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			29.83	757.7	56	13.3	94	WSW			4	5	5	W		0	0	Cloudy	J. Youngclause.
North Unst, Shetland Isl'ds			29.82	757.4				SW			2	3	0	SW					Robert Burnet.
SPANISH SERIES.																			
Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	29.93	760.1	30.03	762.7	78.4	25.8	51	S	5.1	2.3		1c	0			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.11	764.9	30.17	766.3	68.4	20.2	84	N	1.8	0.8			10			0.150	3.8	Covered	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.17	690.0			66.2	19.0	59	NE	8.7	3.9			2			0	0	Lightly cl'dy	Domingo Martin.
Madrid, Royal Obs'y	27.75	704.9	29.83	757.6	90.5	32.5	36	S	7.8	3.5		0	0			0	0	Clear	The Staff.
Murcia, Met. Obs'y	29.86	758.4	30.00	762.0	84.6	29.2	47	SE	5.8	2.6		0	0			0	0	Clear	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.19	741.4	30.07	763.8	62.4	16.9	74	NE	26.6	11.9		3	5	SW		0	0	Almost cov'd	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	30.00	762.0	30.07	763.6	80.1	26.7	79	ENE	6.7	3.0		1c	k	Calm		0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.46	748.2	29.51	749.5	78.7	25.9	100	W	87.2	39.0			10n			4.71	119.6	Heavy raln	Federico Faura, S. J.
San Fernando, Naval Obs'y	29.91	759.8	30.01	762.3	73.8	23.2	76	SSE	13.1	5.9		0	8		S	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.98	761.5	30.07	763.8	84.2	29.0	90	E	6.3	2.8		2c	3k	E	E	0.217	5.5		Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.69	754.2	29.84	757.9	79.2	26.2	92	NE	0	0		0	9kn		NE	0.25	0.1	Covered	José L. Fastovra.
SWEDISH SERIES.																			
Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.01	762.3	30.05	763.3	66.2	19.0	45	S			2		0			0	0		
Umea	29.95	760.8	30.00	762.1	68.0	20.0	41	SSW			2		9			0	0		
Hernosand	29.90	759.4	29.95	760.7	53.1	11.7	78	NE			2		10			0	0		
Stockholm	29.78	756.4	29.96	760.9	58.6	14.8	81	W			2		10			0.185	4.7	Raining	
Wisby	29.87	758.7	29.93	760.2	54.7	12.6	82	NNE			2		10			0.280	7.1		
SUB-SERIES.																			
Upsala	29.74	755.3	29.82	757.5	59.5	15.3	81	S	7.8	3.5			10			0.098	2.5	Raining	S. G. Fineman.
SWISS SERIES.																			
Furnished by the co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.62	727.0	29.99	761.8	72.7	22.6	46	N			2		3			0	0		The Observatory.
Zurich	28.42	721.9	30.02	762.5	66.6	19.2	71	NW			1		6			0.051	1.3	Raining	The Observatory.
TURKISH SERIES.																			
Furnished by the co-operation of A. Comnbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.89	759.1	81.3	27.4	49	SE	6	2.5			0			0	0		The Observatory.
Valona			30.06	763 5	85.6	29.8		Calm			0		0			0	0	Clear	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			29.93	760.1	82.0	27.8	60	W			1	1	0			0	0		Prof. C. V. A. van Dyck.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

UNITED STATES SERIES.

By authority of the Secretary of War.

Furnished by the co-operation of W. B. Hazen, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

Albany, New York	29.66	753.4	29.74	755.4	68	20.0	84	S	5	2.2	.....	.....	10s	.....	.....	0.30	7.6	Cloudy	.....
Alpena, Michigan	29.01	736.8	29.66	753.4	61	16.1	94	W	2	0.9	.....	5k	2s	W	.....	0.36	9.1	Fair	.....
Atlanta, Georgia	28.89	733.8	30.04	763.0	72.2	22.3	85	W	9	4.0	.....	10c;cs	0	Calm	.....	0.57	14.5	Cloudy	.....
Atlantic City, New Jersey	29.82	757.4	29.83	757.7	70	21.1	95	S	10	4.5	.....	2c	Fg	Calm	Calm	0	0	Fair	.....
Augusta, Georgia	29.83	757.7	30.01	762.2	77.4	25.2	73	SW	5	2.2	.....	1cs	0	.....	.....	0	0	Clear	.....
Baltimore, Maryland	29.78	756.4	29.83	757.7	74	23.3	90	SW	6	2.7	.....	2cs	Fg	.....	.....	0.50	12.7	Clear	.....
Barnegat, New Jersey	29.79	756.7	29.81	757.2	67	19.4	95	SW	6	2.7	.....	5k	2s;fg	Calm	Calm	0.05	1.3	Fair	.....
Bismarck, Dakota	28.00	711.2	29.74	755.4	64	17.8	72	NW	3	1.3	.....	0	0	.....	.....	0	0	Clear	.....
Boise City, Idaho	27.00	685.8	29.76	755.9	55.5	13.1	65	W	2	0.9	.....	.....	10s	.....	Calm	0	0	Cloudy	.....
Boston, Massachusetts	29.60	751.8	29.75	755.6	66.5	19.2	94	SW	2	0.9	.....	.....	10s	.....	SW	0.46	11.7	Cloudy	.....
Bracketville, Texas	28.78	731.0	29.78	756.4	76	24.4	86	E	12	5.4	.....	.....	10ks	.....	E	0	0	Cloudy	.....
Brownsville, Texas	29.89	759.2	29.93	760.2	83	28.3	75	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	.....
Buffalo, New York	29.01	736.8	29.70	754.4	62.3	16.8	89	SW	8	3.6	.....	1k	0	.....	.....	0.78	19.8	Clear	.....
Burlington, Vermont	29.36	745.7	29.64	752.8	66	18.9	89	S	17	7.6	.....	5ck	0	SW	.....	0.28	7.1	Fair	.....
Cairo, Illinois	29.59	751.6	29.98	761.5	75	23.9	86	SW	4	1.8	.....	5c	0	Calm	.....	0.01	0.3	Fair	.....
Campo, California	27.34	694.4	29.91	759.7	39.2	4.0	60	S	2	0.9	.....	0	0	.....	.....	0	0	Clear	.....
Camp Thomas, Arizona	27.12	688.8	.....	.....	66	18.9	41	Calm	.....	.....	0	2cs	0	.....	.....	0	0	Clear	.....
Cape Henry, Virginia	29.87	758.7	29.89	759.2	77	25.0	82	SW	16	7.2	.....	0	0	.....	.....	0.01	0.3	Clear	.....
Cape May, New Jersey	29.80	756.9	29.82	757.4	72	22.2	95	S	14	6.3	.....	0	Fg	.....	.....	0.09	2.3	Clear	.....
Castroville, Texas	29.17	740.9	29.83	757.7	83	28.3	67	S	5	2.2	.....	.....	10s	.....	S	0	0	Cloudy	.....
Cedar Keys, Florida	30.04	763.0	30.06	763.5	83	28.3	71	S	8	3.6	.....	5ck	1s	S	.....	0.02	0.5	Fair	.....
Champaign, Illinois	28.93	734.8	29.67	753.6	76.6	24.8	57	W	14	6.3	.....	.....	10s	.....	W	0.10	2.5	Cloudy	.....
Charleston, S. Carolina	29.96	761.0	30.02	762.5	82	27.8	75	SW	8	3.6	.....	5ck	0	W	.....	0.60	15.2	Fair	.....
Charlotte, N. Carolina	29.12	739.6	29.98	761.5	75.2	24.0	81	SW	3	1.3	.....	.....	Fg	.....	.....	0.02	0.5	Dense fog	.....
Chattanooga, Tennessee	29.26	743.2	30.06	763.5	73.0	22.8	87	SW	9	4.0	.....	6ck;cs	Fg	N;O	Calm	0.51	13.0	Fair	.....
Cheyenne, Wyoming	24.02	610.1	29.83	757.7	62.3	16.8	27	NW	8	3.6	.....	2c	0	NW	.....	0	0	Clear	.....
Chicago, Illinois	29.06	738.1	29.74	755.4	72.2	22.3	84	SW	7	3.1	.....	10k	0	W	.....	0	0	Cloudy	.....
Chincoteague, Virginia	29.83	757.7	29.85	758.2	72	22.2	95	SW	10	4.5	.....	0	1s	.....	Calm	0.14	3.6	Clear	.....
Cincinnati, Ohio	29.27	743.4	29.91	759.7	74	23.3	86	SW	4	1.8	.....	.....	10s	.....	W	0.07	1.8	Cloudy	.....
Cleveland, Ohio	29.07	738.4	29.79	756.7	72.2	22.3	83	W	10	4.5	.....	10k	0	NW	.....	0.43	10.9	Cloudy	.....
Coleman City, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Columbus, Ohio	29.01	736.8	29.83	757.7	72	22.2	80	SW	3	1.3	.....	0	8k	.....	W	0.02	0.5	Clearing	.....
Concho, Texas	28.03	711.9	29.91	759.7	76	24.4	77	SE	18	8.0	.....	5ck	2s	S	.....	0.01	0.3	Cloudy	.....
Corsicana, Texas	29.56	750.8	30.02	762.5	80	26.7	78	S	8	3.6	.....	2cs	5ks	.....	S	0	0	Cloudy	.....
Davenport, Iowa	29.22	742.2	29.86	758.4	73	22.8	72	SW	10	4.5	.....	.....	10s	.....	W	0	0	Cloudy	.....
Dayton, Washington T'y	28.15	715.0	29.90	759.4	56	13.3	62	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	.....
Deadwood, Dakota	25.28	642.1	29.83	757.7	56	13.3	81	SW	.....	.....	.....	0	0	.....	.....	0	0	Clear	.....
Decatur, Texas	28.79	731.3	29.89	759.2	82	27.8	63	SE	8	3.6	.....	0	5s	.....	.....	0	0	Fair	.....
Delaware Breakwater, Del.	29.82	757.4	29.84	757.9	73	22.8	90	SW	14	6.3	.....	1k	0	SW	.....	0.03	0.8	Clear	.....
Denison, Texas	29.18	741.2	29.96	761.0	81	27.2	74	S	12	5.4	.....	0	0	.....	.....	0	0	Clear	.....
Denver, Colorado	24.70	627.4	29.76	755.9	66.2	19.0	31	SE	8	3.6	.....	8c	Hz	Calm	Calm	0	0	Fair	.....
Des Moines, Iowa	28.83	732.3	29.71	754.6	79	26.1	87	W	2	0.9	.....	0	0	.....	.....	0	0	Clear	.....
Detroit, Michigan	29.06	738.1	29.73	755.1	71.8	22.1	85	W	14	6.3	.....	.....	10s	.....	Calm	0.14	3.6	Cloudy	.....
Dodge City, Kansas	27.24	691.9	29.73	755.1	74.2	23.4	70	S	15	6.7	.....	0	0	.....	.....	0	0	Clear	.....
Dubuque, Iowa	29.04	737.6	29.72	754.9	75.3	24.1	81	W	3	1.3	.....	1c	Hz	SW	Calm	0	0	Clear	.....
Duluth, Minnesota	28.92	734.6	29.60	751.8	60	15.6	94	NE	3	1.3	.....	5k	Fg	W	Calm	0.15	3.8	Fair	.....
Eagle Pass, Texas	29.16	740.7	29.97	761.2	78.0	25.6	78	SE	7	3.1	.....	0	0	.....	.....	0	0	Clear	.....
Eagle Rock, Idaho	25.14	638.5	29.85	758.2	61	16.1	40	SW	3	1.3	.....	5k	0	SW	.....	0	0	Fair	.....
Eastport, Maine	29.86	758.4	29.93	760.2	54	12.2	93	SE	8	3.6	.....	.....	10s	.....	SE	0	0	Cloudy	.....
El Paso, Texas	26.14	663.9	29.79	756.7	71	21.7	66	NE	3	1.3	.....	0	1s	.....	.....	0	0	Clear	.....
Erie, Pennsylvania	29.03	737.3	29.70	754.4	72	22.2	85	SW	18	8.0	.....	8k	0	W	.....	0.30	7.6	Fair	.....
Escanaba, Michigan	28.95	735.3	29.59	751.6	63	17.2	83	E	4	1.8	.....	0	0	.....	.....	0.42	10.7	Clear	.....
Florence, Arizona	28.34	719.8	29.94	760.5	62	16.7	36	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear	.....
Fort Apache, Arizona	25.03	635.8	29.81	757.2	54	12.2	10	E	5	2.2	.....	0	Sk	.....	Calm	0	0	Dense smoke	.....
Fort Assinnaboine, Montana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Bennett, Dakota	28.13	714.5	29.60	751.8	70	21.1	80	N	8	3.6	.....	1k	0	W	.....	0	0	Clear	.....
Fort Benton, Montana	27.03	686.5	29.77	756.1	61	16.1	55	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	.....
Fort Buford, Dakota	27.87	707.9	29.79	756.7	55	12.8	81	SW	3	1.3	.....	0	0	.....	.....	0	0	Clear	.....
Fort Custer, Montana	26.62	676.1	29.71	754.6	60	15.6	73	N	6	2.7	.....	0	0	.....	.....	0	0	Clear	.....
Fort Davis, Texas	25.17	639.3	30.13	765.3	65	18.3	68	W	8	3.6	.....	0	0	.....	.....	0.03	0.8	Clear	.....
Fort Elliott, Texas	27.15	689.6	30.22	767.6	69	20.6	56	S	8	3.6	.....	0	0	.....	.....	0	0	Clear	.....
Fort Gibson, Indian T'y	29.36	745.7	29.88	758.9	80	26.7	78	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	.....
Fort Grant, Arizona	.....	.....	.....	.....	70	21.1	13	E	3	1.3	.....	2k	2ks	.....	S	0	0	Clear	.....
Fort Griffin, Texas	28.64	727.4	29.83	757.7	82.1	27.8	56	SE	6	2.7	.....	5cs	0	.....	.....	0	0	Fair	.....
Fort Keogh, Montana	27.36	694.9	29.76	755.9	60	15.6	70	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	.....
Fort Macon, North Carolina	29.94	760.5	29.95	760.7	80	26.7	96	SW	9	4.0	.....	5k	2ks	SW	Calm	0	0	Fair	.....
Fort McKavett, Texas	27.74	704.6	29.57	751.1	73.3	22.9	81	SE	7	3.1	.....	1ck	0	NW	.....	0	0	Clear	.....
Fort Missoula, Montana	26.62	676.1	30.00	762.0	46	7.8	77	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear	.....
Fort St. Michaels	29.84	757.9	29.87	758.7	45	7.2	68	SW	11	4.9	.....	.....	10s	.....	.....	0	0	Cloudy	.....
Fort Shaw, Montana	26.29	667.8	29.74	755.4	46	7.8	84	SW	2	0.9	.....	2c	0	SW	.....	0	0	Clear	.....
Fort Sill, Indian Territory	28.68	728.5	29.89	759.2	79	26.1	62	S	6	2.7	.....	2ck	0	.....	.....	0	0	Fair	.....
Fort Stevenson, Dakota	27.96	710.2	29.74	755.4	58	14.4	82	W	4	1.8	.....	2ck	0	W	.....	0	0	Clear	.....
Fort Verde, Arizona	.....	.....	.....	.....	60.3	15.7	49	W	.....	.....	1	0	0	.....	.....	0	0	Clear	.....
Fredericksburg, Texas	28.27	718.0	29.76	755.9	75	23.9	90	SW	4	1.8	.....	9k	0	SW	.....	0	0	Cloudy	.....
Galveston, Texas	29.99	761.7	30.03	762.7	83.5	28.6	75	S	13	5.8	.....	4ck	0	S	.....	0	0	Fair	.....
Grand Haven, Michigan	29.08	738.6	29.73	755.1	63	17.2	94	S	5	2.2	.....	.....	1on	.....	Calm	0.05	1.3	Light rain	.....
Hatteras, North Carolina	29.94	760.5	29.96	761.0	79	26.1	91	SW	16	7.2	.....	0	2s	.....	.....	0	0	Fair	.....
Helena, Montana	25.72	653.3	29.92	760.0	57	13.9	47	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear	.....
Henrietta, Texas	28.90	734.0	29.76	755.9	81	27.2	67	SE	11	4.9	.....	5ck	2s	SE	.....	0	0	Fair	.....
Indianapolis, Indiana	29.06	738.1	29.83	757.7	72.5	22.5	87	SW	3	1.3	.....	6cs;k	4s	Calm	W	0.03	0.8	Cloudy	.....
Indianola, Texas	29.97	761.2	30.00	762.0	82.2	27.9	79	S	11	4.9	.....	1c	2ks	N	S	0	0	Fair	.....
Jacksboro, Texas	28.77	730.7	29.83	757.7	81	27.2	67	S	14	6.3	.....	8ck	0	Calm	.....	0	0	Fair	.....
Jacksonville, Florida	30.01	762.2	30.03	762.7	82	27.8	83	SW	10	4.5	.....	2cs	0	W	.....	0.54	13.7	Fair	.....
Keokuk, Iowa	29.18	741.2	29.82	757.4	72.0	22.2	75	E	8	3.6	.....	.....	10ks	.....	SW	0.64	16.3	Threatening	.....
Key West, Florida	30.08	764.0	30.10	764.5	84.0	28.9	71	E	7	3.1	.....	0	2ks	.....	E	0	0	Clear	.....
Kittyhawk, North Carolina	29.92	760.0	29.94	760.5	78	25.6	86	W	13	5.8	.....	5c	0	W	.....	0.16	4.1	Fair	.....
Knoxville, Tennessee	29.06	738.1	30.06	763.5	71	21.7	88	SW	7	3.1	.....	5c	1s	W	Calm	0.01	0.3	Fair	.....
La Crosse, Wisconsin	28.93	734.8	29.61	752.1	77	25.0	82	S	9	4.0	.....	.....	10s	.....	S	0	0	Cloudy	.....
La Mesilla, New Mexico	26.00	660.4	30.16	766.1	70.7	21.5	49	Calm	0	0	.....	0	1s	.....	.....	0	0	Clear	.....
Laredo, Texas	29.47	748.5	29.80	756.9	80	26.7	82	SE	6	2.7	.....	1c	0	Calm	.....	0	0	Clear	.....
Leavenworth, Kansas	28.92	734.6	29.79	756.7	78	25.6	73	SW	13	5.8	.....	0	0	.....	.....	0	0	Clear	.....
Lewiston, Idaho	29.06	738.1	29.88	758.9	53	11.7	48	E	1	0.4	.....	0	0	.....	.....	0	0	Clear	.....
Little Rock, Arkansas	29.65	753.1	29.96	761.0	78	25.6	91	SW	5	2.2	.....	0	0	.....	.....	0	0	Clear	.....
Los Angeles, California	29.54	750.3	29.91	759.7	59.3	15.2	94	S	2	0.9	.....	.....	Fg	.....	Calm	0	0	Dense fog	.....
Louisville, Kentucky	29.35	745.5	29.90	759.4	73.0	22.8	85	SW	10	4.5	.....	5cs	5s	.....	.....	0.06	1.5	Cloudy	.....
Lynchburg, Virginia	29.22	742.2	29.89	759.2	78	25.6	69	Calm	0	0	.....	7c	0	.....	.....	0.09	2.3	Fair	.....
Madison, Wisconsin	28.71	729.2	29.69	754.1	73	22.8	90	SW	6	2.7	.....	5c	0	W	.....	0	0	Fair	.....
Marquette, Michigan	28.86	733.0	29.57	751.1	66	18.9	84	S	6	2.7	.....	.....	10s	.....	S	0.47	11.9	Cloudy	.....
Mason, Texas	28.36	720.3	30.03	762.7	76	24.4	77	S	1	0.4	.....	0	1s	.....	S	0	0	Clear	.....
Memphis, Tennessee	29.68	753.9	30.01	762.2	78.5	25.8	84	S	2	0.9	.....	1cs	0	Calm	.....	0.28	7.1	Clear	.....
Milwaukee, Wisconsin	29.00	736.6	29.73	755.1	70	21.1	90	SW	22	9.8	.....	2ck	5ks	SW	SW	0	0	Cloudy	.....

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction, Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
United States Series—Continued.																			
Mobile, Alabama	30.02	762.5	30.10	764.5	81	27.2	87	NW	3	1.3		8c	o	W		o	o	Fair	
Montgomery, Alabama	29.84	757.9	30.06	763.5	76.3	24.6	86	SW	2	0.9			10ks		W	0.37	9.4	Cloudy	
Moorhead, Minnesota	28.71	729.2	29.67	753.6	65.1	18.4	78	N	8	3.6		o	o			o	o	Clear	
Morgantown, W. Virginia	28.88	733.5	29.81	757.2	74	23.3	81	SW	6	2.7		2cs	8s		W	Inap.	Inap.	Cloudy	
Mt. Washington, N. H.	23.64	600.4	29.67	753.6	45	7.2	96	W	24	10.7			10n;fg		W	1.66	42.2	Light rain	
Nashville, Tennessee	29.48	748.8	30.00	762.0	75.1	23.9	78	SE	1	0.4		10ck;cs	o			0.21	5.3	Cloudy	
New Haven, Connecticut	29.65	753.1	29.76	755.9	70	21.1	85	SW	5	2.2		8k	Fg	SW		0.35	8.9	Cloudy	
New London, Connecticut	29.76	755.9	29.81	757.2	69	20.6	95	W	3	1.3		o	4ks		Calm	0.70	17.8	Fair	
New Orleans, Louisiana	30.01	762.2	30.06	763.5	82.0	27.8	83	SE	1	0.4		o	Sk			0.60	15.2	Clear	
Newport, Rhode Island	29.74	755.4	29.78	756.4	63.3	17.4	98	SW	14	6.3			Fg			0.41	10.4	Dense fog	
New River, N. Carolina					80	26.7	78	W			1	o	o					Clear	
New Shoreham, Rhode I'd.	29.77	756.1	29.80	756.9	64.5	18.1	100	SW	16	7.2			Fg		SW	0.64	16.3	Dense fog	
New York, New York	29.63	752.6	29.80	756.9	68	20.0	100	SW	6	2.7			Fg			0.36	9.1	Dense fog	
Norfolk, Virginia	29.87	758.7	29.91	759.7	77	25.0	91	SW	9	4.0		2ck	5ks		SW	0.09	2.3	Fair	
North Platte, Nebraska	26.85	682.0	29.67	753.6	67	19.4	87	W	8	3.6		Hz	o			o	o	Light haze	
Olympia, Washington T'y	29.88	758.9	29.92	760.0	54.0	12.2	87	N	3	1.3			10s		Calm	o	o	Cloudy	
Omaha, Nebraska	28.59	726.2	29.73	755.1	82	27.8	79	S	2	0.9		o	1s			o	o	Clear	
Oswego, New York	29.36	745.7	29.68	753.9	69.7	20.9	85	SW	9	4.0		Hz	o			0.79	20.1	Clear	
Pensacola, Florida	30.05	763.3	30.08	764.0	82	27.8	87	W	2	0.9		o	1ks		W	o	o	Clear	
Philadelphia, Pa	29.76	755.9	29.82	757.4	72	22.2	100	W	5	2.2			10s;fg			0.18	4.6	Cloudy	
Phœnix, Arizona	28.72	729.5	30.47	773.9	68	20.0	42	W	1	0.4		o	o			o	o	Clear	
Pike's Peak, Colorado	18.04	458.2	30.25	768.3	46	7.8	33	Calm	0	0		o	o			o	o	Clear	
Pioche, Nevada	24.02	610.1	29.87	758.7	65	18.3	14	S	6	2.7		o	o			o	o	Clear	
Pittsburg, Pennsylvania	29.03	737.3	29.82	757.4	75.8	24.3	74	SW	9	4.0		5c	o	SW		Inap.	Inap.	Fair	
Port Eads, Louisiana	30.09	764.3	30.10	764.5	82.5	28.1	83	S	4	1.8		o	o			o	o	Clear	
Port Huron, Michigan	29.04	737.6	29.70	754.4	71.8	22.1	85	W	9	4.0		2c	o	W		0.22	5.6	Clear	
Portland, Maine	29.71	754.6	29.76	755.9	60	15.6	94	SE	12	5.4			1on		Calm	0.71	18.0	Light rain	
Portland, Oregon	29.87	758.7	29.94	760.5	50.5	10.3	88	N	1	0.4		2k	o	W		o	o	Fair	
Portsmouth, N. Carolina					80	26.7	96	SW	20	8.9		10c	o	W		o	o	Cloudy	
Prescott, Arizona	24.77	629.1	29.84	757.9	50	10.0	32	SW	3	1.3		o	o			o	o	Clear	
Punta Rassa, Florida	30.08	764.0	30.09	764.3	82	27.8	81	E	5	2.2		1c;k	Hz	Calm	Calm	o	o	Fair	
Red Bluff, California	29.37	746.0	29.70	754.4	68.0	20.0	60	S	7	3.1		5ck	o	SW		o	o	Fair	
Rio Grande City, Texas	29.75	755.6	29.96	761.0	79	26.1	82	SE	6	2.7		o	1ks		SE	o	o	Clear	
Rochester, New York	29.08	738.6	29.70	754.4	69	20.6	90	W	6	2.7		o	5s;fg		W	0.61	15.5	Fair	
Roseburg, Oregon	29.34	745.2	29.90	759.4	46.5	8.1	88	Calm	0	0		1ck	o			o	o	Clear	
Sacramento, California	29.69	754.1	29.76	758.9	55.5	13.1	87	SW	13	5.8		o	o			o	o	Clear	
St. Louis, Missouri	29.30	744.2	29.88	758.9	75.0	23.9	90	S	8	3.6		10k;cs	o	W		0.23	5.8	Cloudy	
St. Paul, Minnesota	28.81	731.8	29.65	753.1	71	21.7	90	Calm	0	0		o	o			o	o	Clear	
Salt Lake City, Utah	25.51	647.9	29.71	754.6	76	24.4	20	Calm	0	0		8k	o	SW		o	o	Cloudy	
San Antonio, Texas	29.29	744.0	29.98	761.5	80.2	26.8	78	SE	4	1.8		1c	4ks	Calm	SE	o	o	Fair	
San Diego, California	29.80	756.9	29.87	758.7	63.0	17.2	78	SW	2	0.9			1os			o	o	Cloudy	
Sandusky, Ohio	29.12	739.6	29.78	756.4	73	22.8	85	SW	15	6.7		o	o			0.01	0.3	Clear	
Sandy Hook, New Jersey	29.77	756.1	29.80	756.9	71.2	21.8	94	SW	10	4.5		5k	Fg	W		0.65	16.5	Fair	
San Francisco, California	29.77	756.1	29.84	757.9	53	11.7	93	SW	15	6.7			1os		SW	o	o	Cloudy	
Santa Fé, New Mexico	23.31	592.1	29.82	757.4	66	18.9	41	S	2	0.9		o	o			o	o	Clear	
Savannah, Georgia	29.96	761.0	30.05	763.3	82.5	28.1	69	SW	6	2.7		5cs	2ks			0.05	1.3	Fair	
Shreveport, Louisiana	29.80	756.9	30.03	762.7	80.5	26.9	82	S	1	0.4		1k	o			o	o	Clear	
Silver City, New Mexico	24.24	615.7	29.70	754.4	68	20.0	26	NW	6	2.7		o	o			o	o	Clear	
Sitka Alaska																0.40	10.2		
Smithville, North Carolina	29.95	760.7	29.98	761.5	81	27.2	83	SW	14	6.3		8k	1ks	SW		o	o	Cloudy	
Spokane Falls, Wash. Ter.	27.86	707.6	29.82	757.4	50	10.0	64	SE	2	0.9		o	o			o	o	Clear	
Springfield, Illinois	29.19	741.4	29.85	758.2	70	21.1	90	SW	10	4.5			10ks		W	0.47	11.9	Cloudy	
Springfield, Massachusetts	29.64	752.8	29.76	755.9	70.5	21.4	88	S	4	1.8		4c	1s	SW	S	0.67	17.0	Fair	
Stockton, Texas	26.90	683.2	29.89	759.2	70.3	21.3	80	SE	12	5.4		o	o			o	o	Clear	
St. Vincent, Minnesota	28.79	731.3	29.63	752.6	58	14.4	88	NW	12	5.4		o	o			0.75	19.0	Clear	
Thatcher's Island, Mass.	29.70	754.4	29.75	755.6	60.3	15.7	100	S	5	2.2			Fg			o	o	Dense fog	
Toledo, Ohio	29.08	738.6	29.76	755.9	76	24.4	77	SW	10	4.5		5c	o	SW		0.02	0.5	Fair	
Tucson, Arizona	27.40	695.9	29.69	754.1				SE	3	1.3		o	5s			o	o	Fair	
Umatilla, Oregon	29.56	750.8	29.96	761.0	51.3	10.7	72	S	5	2.2		o	o			o	o	Clear	
Uvalde, Texas	29.00	736.6	29.79	756.7	76	24.4	91	S	6	2.7			10s		Calm	o	o	Cloudy	
Vicksburg, Mississippi	29.86	758.4	30.11	764.8	80	26.7	82	S	6	2.7		10cs	o	NW		o	o	Cloudy	
Visalia, California	29.37	746.0	29.72	754.9	67	19.4	60	W	2	0.9		o	o			o	o	Clear	
Washington, D. C.	29.72	754.9	29.83	757.7	75	23.9	90	S	6	2.7		1ck	o			2.59	65.8	Clear	
Wickenburg, Arizona					59	15.0	33	Calm			0	o	o			o	o	Clear	
Wilmington, N. Carolina	29.90	759.4	29.96	761.0	78	25.6	78	SW	7	3.1		2c;hz	o	Calm		Inap.	Inap.	Fair	
Winnemucca, Nevada	25.49	647.4	29.70	754.4	67	19.4	37	SW	8	3.6		2ck	o	SW		o	o	Clear	
Wood's Holl, Mass.	29.74	755.4	29.78	756.4	65	18.3	100	SW	17	7.6			10s;fg		SW	0.35	8.9	Cloudy	
Yankton, Dakota	28.44	722.4	29.70	754.4	74	23.3	81	NE	4	1.8		o	o			o	o	Clear	
Yuma, Arizona	29.60	751.8	29.74	755.4	72.1	22.3	50	NE	2	0.9		o	o			o	o	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.10	561.3			54.0	12.2	79	Calm	0	0			1on			0.20	5.1	Raining	Thomas Herran
Buff Bay Town, Jamaica.‡	29.78	756.4	30.09	764.3	82	27.8	74	W				2k	2k						
Havana, Cuba, W. I.	30.06	763.5	30.11	764.8	82	27.8	95	Calm	0	0		4cs	o	Calm		o	o	Fair	A. Van Caneghem, Ass't.
Kingston, Jamaica, W. I.	30.00	762.0	30.01	762.2	78.8	26.0	77	N	1	0.4		8cs	2ks			o	o	Fair	Robert Johnstone
Navassa, W. I.	29.92	760.0	30.00	762.0	84	28.9	68	E	13	5.8		2cs	2k;n	SE	E	o	o	Fair	F. M. Everett.
Paramaribo, S. A.	30.03	762.7	30.04	763.0	80	26.7	78	E			2	2c	4k	E		0.050	1.3	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.38	746.2	29.93	760.2	81	27.2	85	Calm	0	0		2cs	8ks	N	Calm	o	o	Cloudy	Francesco J. Cisneros.
Rivas, Nicaragua					77.0	25.		NE			2	9ck	o	NE		o	o		Earl Flint.
Santiago de Cuba, W. I.																			Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.99	761.7	30.04	763.0	62.0	16.7	86	S	7	3.1		o	o			o	o	Clear	J. Fortescue & W Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross																			Comm. A. J. Errington
H. M. S. Alert, Thursday Island, Oceania	29.98	761.5	76	24.4	76	SE			3-4		1							Blue sky	Capt. J. P. Maclear.
H. M. S. Alexandra, Spalato, Dalmatia, Austria	29.84	757.9	79.5	26.4	70	Calm			0		6							D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe.
H. M. S. Arab, Aden, Arabia, Asia	29.69	754.1	87	30.6	79	S			2		3					Sm'h		D. clouds	Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N. 24° 27′, E. 61° 46′	29.63	752.6	85	29.4	79	SSE			2		1	S				2	SSE	Blue sky	Comm. G. W. Hand.
H. M. S. Bittern																			Capt. E. B. Pusey.
H. M. S. Blanche, N. 13° 11′, W. 59° 39′	30.05	763.3	83	28.3	79	ENE			4		7					1	E	D. clouds.	Capt. C. G. F. Knowles.
H. M. S. Boadicea, Ascension I'd, Africa	30.08	764.0	77	25.0	77	SSE			3-4		4	SSE						D. clouds	Com. F. W. Richards.
H. M. S. Champion, S. 36° 34′, W. 54° 27′	29.92	760.0	56	13.3	62	W			3		1					3	N	Blue sky	Capt. G. R. Hope.
H. M. S. Cockatrice																			Capt. H. T. Gerfell.
H. M. S. Comus, N. 39° 10′, E. 120° 31′	29.83	757.7	70	21.1	95	SE			1		4	Var.						D. clouds	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr.
H. M. S. Cruizer, N. 39° 49′, E. 14° 13′	29.82	757.4	79	26.1		S			1		0					2	WSW	Misty	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.10	764.5	58	14.4		NW			2-4		6	WSW						Showery	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.15	765.8	81	27.2	86	SSW			1-2		3	SSW						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 49° 46′, W. 55° 50′	30.06	763.5	52	11.1	93	NW			1		10					1	NE	Overcast	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, N. 0° 20′, E. 78° 08′	29.83	757.7	80	26.7		WSW			2-3		5					2	SW	D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 26° 12′, E. 49° 00′	30.25	768.3	70	21.1		ESE			5		3	ESE				3	E	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, N. 6° 30′, E. 159° 30′	29.92	760.0	82	27.8	87	E			1		4	E						D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Rodrigues Island, Africa	30.14	765.5	75	23.9	72	E			4-6		7	ENE						Showery	Capt. R. D. King.
H. M. S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn, N. 10° 06′, E. 61°43′	29.71	754.6	81.5	27.5	80	SW			6		9					6	SW	Squally	Capt. P. Aldrich.
H. M. S. Flamingo, Lucea, Jamaica, W. I.	29.97	761.2	86	30.0	79	NE			2		2	E						D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd	29.93	760.2	51	10.6	78	W			1		1							Blue sky	Comm. E. G. Bourke.
H. M. S. Garnet, S. 49° 15′, W. 64° 20′	29.28	743.7	43	6.1	75	WSW			6		6	WNW				6	wsw	D. clouds	Capt. L. F. Jones.
H. M. S. Griffon, N. 20° 49′, W. 73° 42′	30.10	764.5	86	30.0	79	E			4		3	E				5	ESE	D. clouds	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, Brindisi, Italy	29.86	758.4	79	26.1	82	NNE			1		1							Blue sky	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.95	760.7	60	15.6		Calm			0		7	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily																			Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	29.74	755.4	83.2	28.4	87	E			1		10					1	E	Misty	Capt. A. Carpenter.
H. M. S. Midge, N. 23° 07′, E. 113° 14′	29.93	760.2				Calm			0		4?	Calm						Raining ?	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. M. S. Modeste, S. 32° 14′, E. 31° 12′	30.12	765.0	69	20.6	79	NNW			5-6		2	NNW				5	wsw	Squally	Capt. J. G. Mead.
H. M. S. Monarch, Tunis, Tunis, N. Africa	29.91	759.7	82	27.8	78	NNW			3		0							Blue sky	Capt. G. Tryon, C. B

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, West Coast of Borneo			83.5	28.6		NW			1		4	NW				2	NW	D. clouds	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	30.03	762.7	58.5	14.7	85	S			1		8	SSE						Misty	Capt. E. B Drummond.
H. M. S. Orontes, N. 12° 54′, W. 32° 19′ *†	30.00	762.0	78.5	25.8	88	NNE			3		10	NNE				3	NNE	Overcast	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.89	759.2	78	25.6	97	NNW			1		7							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin, S. 49° 50′, W. 65° 00.′	29.29	744.0	38	3.3		WSW			5-6		7					7	WSW	Hailing	Capt. A. C. Paget.
H. M. S. Phœnix, N. 30° 50′, W. 65° 13	30.20	767.1	82	27.8	78	WNW			1		6					1	ESE	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.77	756.1	81	27.2		S			2		6							D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 53° 42′, W. 129° 31′	29.98	761.5	45	7.2		SW			2		8							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	30.08	764.0	79.3	26.3	69	SE			3		7					Sm'h		D. clouds	Capt. C. E. Foot.
H. M. S. Salamis.																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 32° 05′, W. 159° 37′	30.39	771.9	73	22.8	85	ENE			4		9					3	SE	Overcast	Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Off Mollenda, Peru	30.00	762.0	62	16.7	94	E			1-2		10					4	NE	Misty	Capt. A. H. Markham.
H. M. S. Turquoise, Sandy Point, Patagonia	29.22	742.2	35	1.7	90	W			4		3							D. clouds	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.			84	28.9		N			1		3							D. clouds	Com. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	30.21	767.3	56	13.3	74	Calm			0		10	SSE						D. clouds	Com. J. C. Wilson, A. D. C
H. M. S. Woodlark, Bahrein, Arabia	29.65	753.1	88.5	31.4	69	N			1-2									Blue sky	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candid dos Reis, Comd't.
India, N. 29° 00′, W. 17° 12′	30.13	765.2	72.5	22.5	70	NNW			2		6		NNW	2 h	ours	1	NNW	D. clouds	A. M. da Sitra.
Quanza, Porto Praya, Cape Verd Id's	30.08	764.1	79.7	26.5	64	NE			1		2		N			2	NE	D. clouds	Carlos M. de Silva Costa, Comd'
Rio Lima																			S. C da Silva Costa, Comd't.
Sado., St. Paul de Loando, Benguela	30.09	754.3	68.0	20.0	87	NW			2		1					1		Blue sky	G. A de Brito Capello, Comd't.
Tamega, Macao, China	29.80	756.9	83.3	28.5	85	ESE			2		5			5 h	ours			Drizzling	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga N. 37° 31′, W. 15° 28′	30.14	765.5	67.1	19.5	72	NE			7		10							Overcast	Capt. M. von Krusenstierna.
H. M. Frigate Vanadis																			Com. Th. Ulner.

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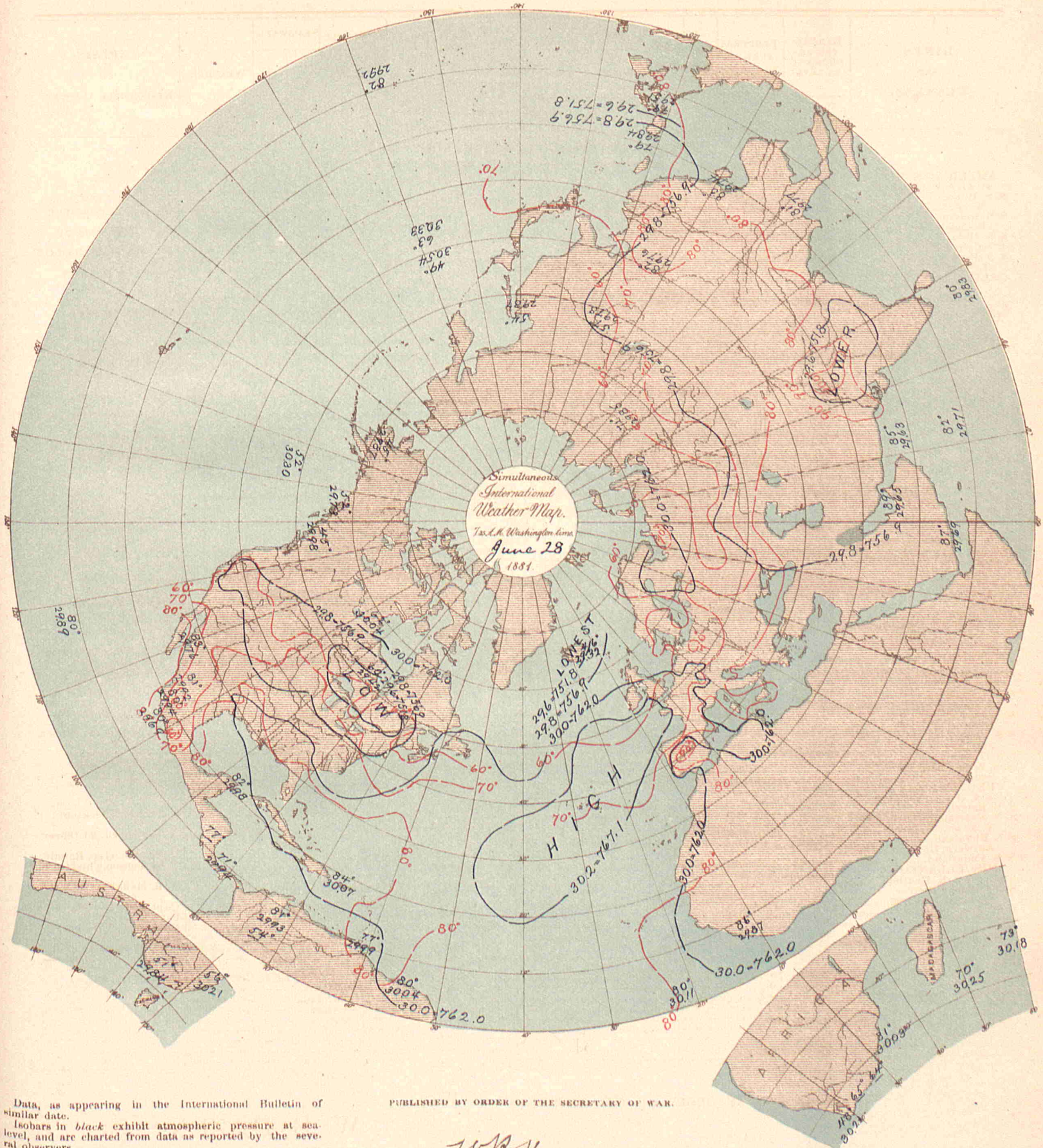
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES NAVAL SERIES.																			
By authority of the Secretary of the Navy.																			
Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.																			
N. Yard, Pensacola, Fla	30.15	765.8	83	28.3	83	NW	3	1.3			8		SE	0	0			Fair	
Naval Hospital, Yokahama, Japan	29.68	753.9	71	21.7	95	Calm			0		10		SSW	0.24	6.1			Misty	
Adams, N. 19° 19′, W. 105° 18′	29.69	754.1	80	26.7	91	N			2		10		E			Long	SW	Cloudy	
Alaska, Ancon, Peru	29.86	758.4	63	17.2	94	W			1		10			1.50	38.1	Sm'h		Drizzling	
Alert, Port Lloyd, Bonin Id. *	29.89	759.2	81	27.2	83	Calm			0		0			0	0	Sm'h		Clear	
Alliance, St. John's, N. F	30.04	763.0	53	11.7	93	WNW			3		10			Light		Sm'h		Cloudy	
Ashuelot, Kobe, Japan	29.87	758.7	71	21.7	95	SW			1		10		Calm					Cloudy	
Colorado, New York, N. Y	29.78	756.4	73	22.8	90	SW	5	2.2			8		SW	0.24	6.1			Foggy	
Constitution, Newport, R. I	29.72	754.9	62	16.7	100	SW			4		0?							Cloudy?	
Franklin, Norfolk, Va	29.83	757.7	76	24.4	100	WSW	10	4.5			8		WSW	0.04	1.0			Cloudy	
Galena, Santander, Spain,	30.17	766.3	66	18.9	89	ENE			2		10					Sm'h		Cloudy	
Independence, N. Yard, Mare I'd, Cal	29.84	757.9	69	20.6	80	SW	3.6	1.6			2		SW	0	0			Clear	
Jamestown, Sitka, Alaska *	29.73	755.1	52	11.1	93	SSE			1		10			0.04	1.0			Cloudy	
Kearsarge, Norfolk, Va	29.94	760.5	76	24.4	82	SSW			2		5		SW			Sm'h		Fair	
Lackawanna, S. 13° 55′, W. 171° 13 †	30.18	766.6	80	26.7	91	E			3-4		5		E					Fair	
Marion, Monte Video, Uruguay * †	29.91	759.7	46	7.8	84	NNW			3							Sm'h		Clear	
Michigan, Detroit, Michigan	29.52	749.8	71	21.7	90	SW			4		10		SW					Cloudy	
Minnesota, Newport, R. I	29.79	756.7	66	18.9	94	SW			2		10					Sm'h		Foggy	
Monocacy, Yokohama, Japan	29.85	758.2	73	22.8	85	WSW			1		8		Calm					Fair	
Nipsic, Antwerp, Belgium	30.04	763.0	65	18.3	78	NNW			2		10					Sm'h		Overcast	
Onward, Callao, Peru †.	29.96	761.0	62	16.7	94	Calm			0		10					Long	W	Cloudy	
Palos, Nagasaki, Japan	29.91	759.7	73	22.8	100	Calm			0		2							Fair	
Passaic, Washington, D. C	29.85	758.2	73	22.8	90	S			2		0							Clear	
Pensacola, Mare Isl'd, Cal	29.83	757.7	54	12.2	93	SW			5-6		10			0	0			Overcast	
Portsmouth, Bristol Harbor, R. I	29.75	755.6	65	18.3	?	SW			3		10					Sm'h		Foggy	
Powhatan, Newport, R. I	29.80	756.9	65	18.3	100	SW			2		10		WSW					Rain & fog	
Ranger, N. 28° 01′, W. 112° 30′ *	29.76	755 9	83	28.3	79	SW			2		2		Calm	0	0	Sm'h		Clear	
Richmond, Kobe, Japan	29.86	758.4	73	22.8	90	SW			1		8		SW	1.10	27.9			Cloudy	
Saratoga, Newport, R. I	29.78	756.4	67	19.4	95	SW			3		10		Calm		Heavy			Hazy	
Shenandoah, Rio de Janeiro, Brazil. *	30.32	770.1	67	19.4	89	N			1		10					Sm'h		Cloudy	
St. Louis, League Island, Pa	29.37	746.0	74	23.3	90	SW	8	3.6			10		SW	0.05	1.3			Cloudy	
Swatara, N. 37° 39′, E. 122° 35′ * †	29.83	757.7	70	21.1	85	SW			2		5		Calm			Sm'h		D. clouds	
Tennessee, Navy Yard, N. Y	29.80	756.9	71	21.7	100	SW	8	3.6			10			0.38	9.7	Sm'h		Foggy	
Ticonderoga, S. 31° 47′, W. 39° 28′	30.25	768.3	67	19.4	100	NNE			3		10		NNE	0	0	Sm'h		Cloudy	
Vandalia, Halifax. Nova Scotia	30.05	763.3	57	13.9	87	S			2		5		SW					Fair	
Wabash, Boston, Massachusetts	29.76	755.9	53	11.7	72	SW	3	1.3			10		SW	0.75	19.0			Drizzling	
Wachusetts, N. Yard, Mare I'd, Cal	29.81	757.2	56	13.3	87	S			3-5		10		S	0	0			Cloudy	
Wyoming, Norfolk, Va	29.94	760.5	75	23.9	95	SW	12	5.4			2		SW	1.34	34.0			Fair	
Yantic, N. 22° 57′, W. 86° 14′ *	29.98	761.5	82	27.8	87	NE			2		1		NE			Sm'h		Clear	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and Kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 7° 42′, W. 117° 52′	29.89	759.2	79.8	26.6	82	SSW			3		4							D. clouds	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 14° 00′, W. 51° 46′	30.06	763.5	82	27.8	79	E			4		5					2	E	D. clouds	W. N. Lailey.
City of Agra, S. 25° 02′, W. 36° 00′	30.37	771.4	73.0	22.8	85	E			5		3							D. clouds	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 18° 36′, W. 37° 02′	30.16	766.1	77.2	25.1	73	NE			5		10							Overcast	Capt. Jas. Buchan.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope, ‡ S. 10° 59′, W. 37° 02′	30.15	765.8	79.5	26.4	87	E			6		8							Showery	Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamports																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			
Naiad, N. 29° 41′, W. 20° 25′	30.10	764.5	71.0	21 7	92	NNE			4		6							D. clouds	Capt. E. W. Turner.
Nairnshire																			Capt. J. Smith.
S. S. Nizam																			Capt. W. Niven.
Queen of Cambria, ‡ N. 47° 05′, W. 14° 39′	30.34	770.6	60	15.6	65	NNW			3		5							D. clouds	Capt. G. W. Brady.
Sierra Estrella, N. 1° 40′, W. 21° 36′	30.11	764.8	80.2	26.8	75	SSE			4		3							D. clouds	Capt. M. Parry.
S. S. Richmond																			Capt. P. Murdoch.
Barque Shun Lee																			Capt. W. H. Stuart.
S. S. Seine																			Capt. John M. Gray.
S. S. Strathleven																			Capt. H. Manning.
Schr. Traveller																			Capt. C. W. Pearson.
S. S. Wyberton																			Capt. A Simpson.
																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, Glasgow, Scotland	29.95	760.7				SW			3		8		W			Sm'h		Showery	
S. S. Circassian																			
S. S. Hibernian																			Capt. W. H. Smith.
S. S. Nova Scotian, off Mine Head, Ireland	30.19	766.8	68	20.0		Calm			0		10		SW			Sm'h		Cloudy	Capt. F. Archer.
CUNARD LINE. *Vernon H. Brown & Co.*																			Capt. Wm. Richardson.
S. S. Algeria																			
S. S. Gallia, N. 49° 34′, W. 24° 52′	30.26	768.6	60	15.6		W			4		8		WNW	0	0	H'vy	WSW	Fine	Capt. W. Watson.
S. S. Scythia																			Capt. W. H. P. Hains.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			Capt. M. Murphy.
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic																			
S. S. Germanic, N. 48° 00′, W. 39° 36′ †	29.92	760.0	57	13.9	87	SE			4		10		SW	6h'rs	h'vy			Raining	Capt. Benj. Gleadell.
S. S. Republic																			Capt. Ch. W. Kennedy
																			Capt. P. I. Irving.
GERMAN MERCHANT--MARINE SERIES.																			
NORTH GERMAN LLOYD--Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C. Phole.
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, N. 40° 24′, W. 53° 23′	30.12	765.0	75.9	24.4		WNW			3		2		NW	0	0	Sm'h	WNW	Clear	
S. S. Köln, N. 39° 29′, W. 59° 46′	30.20	767.1	75.0	23.9	90	S			2-3		8		S	0	0	Sm'h	S	Cloudy	Capt. Th. Jüngst.
S. S. Strassburg, N. 48° 46′, W. 21° 17′	30.25	768.3	59.0	15.0		WNW			4		5		WNW	0	0	Long	WNW; NW	Fair	Capt. C. Helmbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois, N. 39° 11′, W. 67° 08′.....	29.91	759.7	64	17.8	?	SW	.....	.....	4	.....	5	.....	SW	.....	.....	Sm'h	.....	Fair	Capt. J. W. Shackford.
S. S. Indiana, Philadelphia, Pa.....	.....	.....	80	26.7	61	NNW	.....	.....	5	.....	5	.....	NW	0	0	.....	.....	Fair.....	Capt. R. W. Sargent.
S. S. Ohio, off Salters Point, Scotland†*	30.25	768.3	69	20.6	95	W	.....	.....	2	.....	5	.....	W	0	0	Sm'h	W	Fair.....	Wm. Shackford, Chief Off'
S. S. Pennsylvania, Liverpool, England.....†	30.06	763.5	64	17.8	94	N	.....	.....	3	.....	5	.....	N	.....	.....	Sm'h	.....	Fair.....	Capt. Geo H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 37° 34′, E. 156° 09′.....†	30.33	770.4	63	17.2	57	S	.....	.....	1	.....	8	.....	SE	0	0	Light	NE	Cloudy.....	Capt. H. Davison.
S. S. Gaelic.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. W. H. Kidley.
S. S. Oceanic, N. 42° 03′, E. 155° 57′.....	30.54	775.7	49	9.4	71	NW	.....	.....	1	.....	10	.....	NE	0	0	1	ENE	Cloudy.....	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Fred. Bolles.
S. S. Oregon, N. 43° 50′, W. 124° 30′.....†	29.99	761.7	59.0	15.0	97	NNW	.....	.....	1	.....	8	.....	NNW	.....	.....	Mod.	NNW	Cloudy.....	Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, N. 35° 23′, W. 121° 10′...†	29.85	758.2	54	12.2	93	E	.....	.....	2	.....	Fog	.....	.....	0	0	.....	.....	Foggy.....	Capt. J. N. Ingalls.
S. S. Dakota.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. H. G. Morse.
S. S. Idaho, Seattle, Wash. Ter.....†	29.94	760.5	55	12.8	87	N	.....	.....	1	.....	2	.....	N	.....	.....	.....	.....	Fair.....	C. E. Lyons, 1st Officer.
S. S. Orizaba, N. 37° 10′, W. 122° 35′.....†	29.87	758.7	55	12.8	80	NW	.....	.....	3	.....	Fog	.....	NW	.....	.....	Cross	SW to NW	Foggy	Geo. H. Harrison.
S. S. Senator.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Thos. Wallace.
S. S. State of California, Portland, Oregon.....†	29.92	760.0	51	10.6	86	Calm	.....	.....	0	.....	5	.....	.....	.....	.....	.....	.....	Fair.....	Capt. G. Debney.
S. S. Victoria, N. 43° 06′, W. 124° 52′....†	29.99	761.8	57	13.9	94	NW	.....	.....	4	.....	2	.....	.....	.....	.....	Sm'll	W	Clear.....	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Bannerman, 2d Officer.
S. S. City of New York, S. 10° —′, W. 168° —′.....†	29.96	761.0	85	29.4	91	ESE	.....	.....	3	.....	0	.....	.....	0	0	Mod.	E	Clear.	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 32° 55′, W. 118° 33′....†	29.91	759.7	59	15.0	82	Var.	.....	.....	1	.....	10s	.....	NW	0	0	Sm'h	NW	Overcast	Capt. D. S. Austin.
S. S. City of Peking, N. 45° 25′, W. 145° 20′.....†	30.30	769.6	52	11.1	66	WNW	.....	.....	5	.....	8	.....	W	0	0	R'gh	W	Cloudy.....	Capt. G. G. Berry.
S. S. City of Sidney, S. 34° 09′, E. 166° 45′.....*†	30.51	774.9	60	15.6	70	SSW	.....	.....	3	.....	5	.....	SW	.....	.....	Mod.	SW	Drizzling.....	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 22° 18′, E. 114° 10′.....†	29.99	761.7	83	28.3	83	SE	.....	.....	2	.....	10	.....	SW	.....	.....	Mod.	S	Cloudy.....	A. L. Ritchie, 2d Officer.
S. S. Colima, San Blas, Mexico.....†	29.94	760.5	80	26.7	90	SSW	.....	.....	2	.....	8	.....	Calm	0.60	15.2	Sm'h	WNW	Clearing.....	Capt. R. R. Searle.
S. S. Granada.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. W.....	30.07	763.8	52	11.1	48	NW	.....	.....	2	.....	10	.....	W	.....	.....	.....	.....	Fair.....	.....
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. Sam'l Jackson.
S. S. Nederland, ‡ N. 40° 01′, W. 58° 49′.....†	30.06	763.5	71	21.7	95	S	.....	.....	1	.....	8	.....	S	0	0	Sm'h	.....	Fine.....	A. Feddersen, 2d Officer.
S. S. Rhynland, Antwerp, Belgium.....†	30.21	767.3	71	21.7	90	W	.....	.....	4	.....	5	.....	W	0.1	3.	.....	.....	Fair	Capt. Wm. Geo. Randle.
S. S. Vaderland.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, Savannah, Georgia.....	30.10	764.5	79	26.1	74	WSW	.....	.....	.....	.....	8	.....	.....	0.08	2.0	.....	.....	Cloudy.....	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. L. L. Lewis.
Bark Carrie Heckle.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. B. F. Woodbury.
Brigantine George, Monabo, Porto Rica.....†	30.13	765.3	83	28.3	.....	ENE	.....	.....	6	.....	2	.....	.....	Hea	vy	R'gh	.....	.....	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bark Sunbeam, N. 23° 37′, W. 40° 46′.....†	30.32	770.1	78	25.6	82	NE	.....	.....	6	.....	8	.....	ENE	0	0	Mod.	ENE	Cloudy.....	Capt. Jos. Hand.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L,
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON.

BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 29, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours‡			30.10	764.4	79.7	26.5	87	N			1		1			0	0	Very fair	Raynard.
Algiers‡			30.13	765.2	79.5	26.4	59	ENE			3		0			0	0	Clear	Nicolas.
La Calle‡			30.13	765.2	85.6	29.8	59	WSW			1		2					Fair	Fonfrède.
Tunis‡			30.06	763.6															Jacques.
Sfax‡																			Gau.
Saida‡			30.09	764.3	96.4	35.8	12	N			3		1			0	0	Very fair	Dumas.
Tebessa‡			30.11	764.8	74.8	23.8	18	N			4		0			0	0	Clear	Watrin.
Geriville‡					98.6	37.0	11	SW			1		0			0	6	Clear	Lonchamp.
Laghouat‡			30.09	764.2	96.1	35.6	11	E			2		0			0	0	Clear	Herbin.
Biskra‡			30.13	765.4	90.0	32.2	42	SE			1		0			0	0	Clear	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.69	754.1	29.78	756.4	53.0	11.7	67	N	24	10.7			7			0	0	Squally	R. L. J. Ellery.
SUB-SERIES.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.43	747.5	29.95	760.8	77.7	25.4	55	SE			2		2			0.134	3.4		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.28	743.6	30.04	762.9	59.0	15.0	85	NW	8.7	3.9			10			0.807	20.5		Dr. Wierzbicki.
Eperies	29.05	737.9	29.90	759.5	67.3	19.6	70	NW			2	cs	8s		S	0.996	25.3		Julius Mikolik.
Gratz‡	28.77	730.7	29.97	761.2	72.9	22.7	77	S			3		7			0.004	0.1		Andreas Rospini.
Hermannstadt	28.50	724.0	29.86	758.5	79.0	26.1	48	NW			5		0			0	0		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.69	728.7	29.99	761.7	69.1	20.6	71	SSE			1		6			0.276	7.0		The Staff.
Lemberg	28.90	734.0	29.85	758.3	67.1	19.5	77	SE			2		10			0.083	2.1		Dr. T. Stanecki.
Pola	29.84	757.9	29.95	760.6	81.3	27.4	45	E			4		7			0.079	2.0		I. R. HydrographicOffice.
Szathmar	29.47	748.6	29.93	760.1	69.6	20.9	66	W			3		8			0.650	16.5		Beicht Peter, S. J.
Szegedin	29.67	753.5	29.93	760.3	74.7	23.7	51	SW			3		0			0	0		Karl Stancel.
Trieste	29.87	758.6	29.97	761.2	80.4	26.9	41	NNE			2		9			0.307	7.8		Secco.
Vienna	29.32	744.6	30.01	762.2	72.0	22.2	51	NW			2		8			0	0		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.80	756.9	29.90	759.4	60.4	15.8	59	SW	19	8.5			4			0.005	0.1	Blue sky	W. Boswell.
Armagh, Observatory	29.88	758.9	30.11	764.8	56.3	13.5	82	W	8	3.6			7					D. clouds	S. Call.
Bidston, Liverpool Obs'y			30.17	766.3	58.3	14.6	67	W	10	4.5			8					Overcast	John Hartnup.
Bolton, Sharples	29.53	750.0	30.07	763.8	58.9	14.9	64	SW	12	5.4			8					D. clouds	Thomas Mackereth.
Bradford, Yorkshire	29.75	755.6	30.15	765.8	59.8	15.4	57	SW			2.0		10			0.07	1.8	Overcast	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	29.93	760.2	29.96	761.0	83	28.3	69	NE			3		6					Gloomy	Corpl.J.Surgener,A.H.C
Cardington			30.21	767.3	70.4	21.3	51	NW			0.6		6					D. clouds	John McLaren.
Chatham, School M. E.	30.11	764.8	30.24	768.1	66.8	19.3	50	NW			2		9					Gloomy	Corpl. W. Beck, R. E.
Falmouth, Observatory	30.10	764.5	30.33	770.4	63.1	17.3	58	WSW			2		8					Overcast	The Staff.
Fort Napier, Natal	27.81	706.4	30.02	762.5	77.4	25.2	99	NE			1		3					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.65	753.1	29.88	758.9	84	28.9	87	SW			1		4					D. clouds	Sgt. C. E. Keane.
Galway, Queen's College			30.11	764.8	61	16.1	55	W			3		8			0.73	18.5	Overcast	J. O'Donaghue.
Gibraltar, Mediterranean	30.08	764.0	30.14	765.5				NE			4		2					Blue sky	2nd Cpl. O. Baldwin.
Glasgow, Observatory	29.78	756.4	29.98	761.5	56.5	13.6	62	W			8		6					D. clouds	Harry Urquhart.
Greenwich, Royal Obs'y	30.07	763.8	30.24	768.1	65.8	18.8	54	W			1		8					D. clouds	The Staff.
Guernsey	30.07	763.8	30.28	769.1	62.5	16.9	69	NW			3		3					D. clouds	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.21	767.3	30.25	768.3	65.6	18.7	43	W	10	4.5			5					D. clouds	The Staff.
Leicester, Museum	29.94	760.5	30.19	766.8	64.8	18.2	49	NW			2		10					Overcast	J. E. Carryer.
Malta, Mediterranean	29.88	758.9	29.96	761.0	77.4	25.2	80	NE			2		1					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	30.02	762.5	30.07	763.8	84.2	29.0	78	SE			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.69	754.1	30.21	767.3	63.8	17.7	65	WSW			2		5					D. clouds	John Mac Email.
Oxford, Radcliffe Obs'y	30.01	762.2	30.24	768.1	64.1	17.8	52	WSW			2		10					Threatening	The Staff.
Plymouth	30.23	767.8	30.30	769.6	65.4	18.6	62	WSW			3		7					D. clouds	John Merrifield.
Sandwick Manse, Orkneys			29.84	757.9	54.5	12.5	75	W	18	8.0			1					Blue sky	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.83	757.7	29.90	759.4	79.0	26.1	68	SW			1		0					Blue sky	Serg't W. H. Lyne.
Sheffield	29.90	759.4	30.18	766.6	62.3	16.8	77	SW			2		10			0.03	0.8	Overcast	W. F. Cooper.
Silloth Rectory	30.03	762.7	30.06	763.5	58.7	14.8	83	SSW			6		6			0.060	1.5	D. clouds	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.17	766.3	58.0	14.4	65	WSW	20	8.9			10					Overcast	Rev. S. J. Perry.
Stratfield Turgiss	30.04	763.0	30.26	768.6	68.2	20.1	51	W			3		5					Squally	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	30.33	770.4	30.34	770.6	70	21.1	52	NW			4		6					D.clouds	W. Newcombe.
Valencia, Observatory	30.19	766.8	30.22	767.6	59.6	15.3	76	SSW	27	12.1			8					D. clouds	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B.					54.0	12.2		NE	5	2.2			10n			0	0		Hon. J. Ferguson.
Charlottetown, P. E. Island	29.38	746.2	29.42	747.3	57	13.9	95	E	7	3.1			10n			0.770	19.6	Threatening	H. J. Cundall, C. E.
Chatham, N. B.*	29.42	747.3	29.48	748.8	56	13.3	96	N	5	2.2			10n		N	0.60	15.2	Light rain	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario	29.40	746.7	29.58	751.3	62.0	16.7	85	W			3		9s			0.026	0.7	D. clouds	James Smith, M. A
Dalhousie, N. B.	29.47	748.5	29.50	749.3	55.5	13.1		E			2		10ks			0.57	14.5	Gloomy	H. A. Johnson.
Father Point, Quebec*	29.49	749.0	29.57	751.1	49	9.4	76	NE	25	11.2			10n		SE	0.22	5.6	Threatening	J. McWilliams.
Fort Garry, Manitoba*	29.13	739.9	29.92	760.0	63	17.2	89	Calm	0	0		0	Hz			0	0	Hazy	James Stewart.
Fredericton, N. B.	29.33	745.0	29.39	746.5	55.0	12.8	95	NE	11	4.9			10n			1.840	46.7	Raining	Prof. Harrison.
Granton, Ontario	28.69	728.7	29.75	755.6	65.0	18.3	89	NW			1	3cs	0			0	0	Fair	James Grant.
Halifax, N. S.*	29.27	743.4	29.40	746.7	54	12.2	100	SE	9	4.0			10n			1.252	31.8	Heavy rain	A. Allison.
Hamilton, Ontario	29.32	744.7	29.69	754.1	69.0	20.6	84	SW			1	0	0			0.71	18.0	Clear	Geo. Dickson, B. A.
Kingston, Ontario*	29.30	744.2	29.63	752.6	62	16.7	90	W	5	2.2		0	0			0.23	5.8	Clear	S. Woods, M. A.
Little Glace Bay, N. S.	29.47	748.5	29.51	749.5	50.0	10.0	93	SE	4	1.8			10n			0	0	Misty	C. H. Rigby.
Montreal, Quebec*	29.35	745.5	29.54	750.3	63	17.2	80	W	15	6.7		2ck	2ks	N	N	Inap.	Inap.	Fair	C. H. McLeod, C. E.
Moose Factory, Ontario	29.55	750.6	29.58	751.3	57.5	14.2	96	NW			2		10n			0.50	12.7	Raining	J. R. Nason.
Parry Sound, Ontario*	29.02	737.1	29.69	754.1	60	15.6	89	W	5	2.2		2k	0	NW		0.14	3.6	Fair	Rev. R. Moseley.
Peterboro, Ontario	28.95	735.3	29.67	753.6	65.7	18.7	84	W			2		10ks			0.92	23.4	Cloudy	J. F. Jeffers, M. A.
Port Dover, Ontario	29.05	737.9	29.71	754.6	70	21.1	95	N	1	0.4		10ck	0	W		0.34	8.6	Fair	H. Morgan.
Port Stanley, Ontario	29.11	739.4	29.73	755.1	67	19.4	99	W	2	2.2		8ck	0	NW		1.44	36.6	Cloudy	M. Payne.
Quebec, Quebec*	29.14	740.1	29.45	748.0	60	15.6	94	Calm			0		10n			0.06	1.5	Cloudy	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.18	741.2	29.62	752.3	60	15.6	91	NW	6	2.7			8s		NW	0	0	Cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.04	737.6	29.74	755.4	56	13.3	85	N	11	4.9		2cs	0			0.07	1.8	Clear	K. Stewart.
St. Andrews, N. B.	29.26	743.2	29.31	744.5	55	12.8	97	NE	3	1.3			10n			2.13	54.1	Heavy rain	
St. John, N. B.	29.15	740.4	29.31	744.5	57.0	13.9	100	N	14	6.3			10n			0.500	12.7	Light rain	G. Murdock, C. E.
Stratford, Ontario	28.50	723.9	29.72	754.9	65.8	18.8	85	NW	8	3.6		1cs	0			0.115	2.9	Blue sky	C. J. Macgregor, M. A.
Sydney, C. B.*	29.55	750.6	29.59	751.6	53	11.7	99	E	13	5.8			10n			0.14	3.6	Cloudy	T. C. Hill, C. E.
Toronto, Ontario*	29.32	744.7	29.69	754.1	67	19.4	78	NW	13	5.8		2cs	0	NW		0.39	9.9	Clear	Magnetic Observatory
Windsor, N. S.	29.22	742.2	29.31	744.5	56.5	13.6	94	E	10	4.5			10n			0.38	9.7	Heavy rain	
Woodstock, Ontario	28.71	729.2	29.72	754.9	69.2	20.7	82	W	5	2.2		6c	0	W		0.11	2.8	D. clouds	Prof. Wolverton.
Yarmouth, N. S.*	29.20	741.7	29.27	743.4	54	12.2	99	S	2	0.9			Fg			1.79	45.5	Foggy	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.91	759.7	30.16	766.1	56	13.3	81	SE	4	1.8			10n			0	0	Threatening	John Delany.
St. Pierre, N. F.			29.76	755.9	45.7	7.6		S			1					1.42	36.1		N. F. Land, Comd't
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	30.14	765.5			62.5	16.9	80	SW	10.5	4.7		7cs				0	0		John Duthie.
Cape Town, C. G. H. Obs'y	30.16	766.1	30.20	767.1	50.0	10.0		NNW	5.6	2.5		4	4k;ks			0.395	10.0		The Staff, for D. Gill.
Worcester*†	29.06	738.1			58.7	14.8	57	NW			2	4	4			0.04	1.0	Lightly cl'dy	C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.74	755.5	29.77	756.1	74.8	23.8	93	SE	2.9	1.3		0	7k			0.256	6.5	Very cloudy	M. Marc Dechevrens, S.J

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction,		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		

COSTA RICA SERIES.

By authority of the Minister of Foreign Affairs.

Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.

San José	26.21	665.7	29.93	760.2	71.6	22.0	87	SE			1	3ck;cs	3d		E	0.94	24.	Cloudy	Amand Maison.

DANISH SERIES.

Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.

Copenhagen	30.09	764.2	30.13	765.4	67.8	19.9	50	NNE	13	6			7						Oversergent Fischer.
Fanöe	30.13	765.4	30.15	765.9	60.8	16.0	74	WNW			4		5						Overloerer Lauridsen.
Godthaab, Greenland																			S. Kleinschmidt.
Stykkisholm, Iceland	29.65	753.1	29.69	754.2	46.4	8.0		W			4		10					Raining	A. O. Thorlacius.
Thorshavn	29.62	752.3	29.65	753.2	50.7	10.4	88	SW	9	4			7					Raining	Overloerer Bergh.
Vestervig	30.03	762.7	30.12	765.1	61.3	16.3	76	WSW			4		1						Loearer Oesterbol.

FRENCH SERIES.

Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.

Agen, Normal School	29.57	751.0	30.19	766.7	82.4	28	17	NW			1	o	nk		W	o	o		M. Labroue, Director.
Alençon Normal School	29.76	755.8	30.31	769.8	67.3	19.6	79	N			2	o	5kn		N	o	o	Cloudy	M. Nicot, Director.
Arras, Engineer School	30.00	762.0	30.26	768.5	64.8	18.2	47	N				ck	o	NW					M. Klein, Commandant.
Avignon, Normal School	29.98	761.5	30.06	763.5	79.3	26.3	30	NNW			3		o			o	o	Clear	M. Giraud, Director.
Bar-sur-Seine	29.68	753.9	30.23	767.8	67.6	19.8	42	NE			3	o	5kn		NE	o	o	Cloudy	M. Saillard, Director.
Beauvais, Normal School	30.01	762.2	30.26	768.7	68.5	20.3	46	W			2		8		NW	o	o	Very cloudy	M. Frère Eugene Marie.
Besançon, Normal School	29.28	743.7	30.11	764.7	69.4	20.8	50	NW			1	ck	o	SE		o	o		M. Gobin, Director.
Bordeaux, Observatory	30.00	762.0	30.26	768.5	72.9	22.7	35	NW			1		2			o	o	Slightly cl'dy	M. Rayet, Director.
Bourges, Normal School	29.52	749.9	30.06	763.5	72.5	22.5	49	N			1		k		N	⅝	o		M. Postel, Director.
Brest, Naval Observatory	30.13	765.4	30.37	771.5	67.6	19.8	65	Calm			0		7			o	o		M. de Rermaree, Dir.
Caen, Normal School	30.23	767.8	30.30	769.6	68.4	20.2	49	NW			1		2		W	o	o	Slightly cl'dy	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.84	757.8	30.15	765.7	73.0	22.8	48	ENE			1		2			o	o	Slightly cl'dy	M. Jadot, Director.
Charleville, Normal School	29.72	754.9	30.22	767.7	70.5	21.4	69	E			1					o	o		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.87	733.2	30.19	766.9	67.3	19.6	53	N			1		8			o	o	¼ covered	M. Alluard, Director.
Cluny, Normal School	29.37	746.0	30.20	767.0	72.3	22.4	41	W			4		5		NW	o	o		M. de Villemontée, Dir.
Commercy, Normal School	29.34	745.3	30.18	766.6	68.5	20.3	40	NW			4	o	5k		NW	o	o	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.44	697.0	29.86	758.5	77.0	25	31	SE			1	o	k		S	o	o		M. Jeangirard, Director.
Gréasque, du. Rhone	28.94	735.1	30.08	764.1	78.4	25.8	32	NW			4		2		NW	o	o	¼ covered	M. Kina, Director.
Grenoble, Normal School	29.32	744.8	30.06	763.6	75.2	24	45	NNW			3	ck	o			o	o		M. Ablard, Director.
Guéret, Normal School	28.69	728.8	30.24	768.2	66.2	19	39	NNW			2	o	2kn		SSE	o	o	Slightly cl'dy	M. Rivoire, Director.
Lamballe, Normal School	30.05	763.3	30.32	770.1	66.2	19	54	NNW			1				NNW	o	o		M. Ollitrault, Director.
Lescar, Normal School	29.69	754.2	30.35	770.9	69.8	21	73	SW			1				W	o	o		M. Chauvin, Director.
Lorient, Naval Observatory	30.25	768.3	30.35	770.9	72.3	22.4	41	N			1		2		NW	o	o	¼ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.13	739.8	30.16	766.0	70.9	21.6	41	NNW			2		5		NNW	o	o	Cloudy	M. André, Director.
Mans, Normal School	30.01	762.3	30.32	770.1	65.1	18.4	56	NE			1		5		N	o	o	Cloudy	M. Piboeu, Director.
Marseille, Observatory	29.72	754.8	29.98	761.5	78.8	26.0	30	NW			4		o			o	o		M. Stephan, Director.
Montlouis l'Instituteur	25.02	635.6	30.26	768.6	60.8	16.0	63	NW	7.4	3.3			o			o	o		M. Cave, for Dr. Fines.
Montpellier, Normal School	29.95	760.6	30.05	763.3	82.4	28	31	NNW			4		o			o	o	Clear	M. P. Galzin, Director.
Nancy, Normal School	29.41	746.9	30.16	766.0	67.3	19.6	49	NW			2	o	5kn			o	o	Cloudy	M. Hasse.
Nantes, Observatory	30.18	766.6	30.34	770.7	68.4	20.2	46	N			0-1	o	3k		NNW	o	o		M. Larocque, Director.
Nice	29.89	759.2	29.93	760.1	77.0	25.0	68	E			4		5	E	E	o	o	Cloudy	Capt. Boissière, Director.
Perpignan, Observatory	30.04	763.0	30.14	765.6	76.3	24.6	46	N	22.4	10.0			1	W		o	o		Dr. Fines.
Pic-du-Midi, Plantade	22.74	577.5			48.9	9.4					1	o	1k		SW	o	o	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.09	738.9	30.12	765.1	74.3	23.5	33	S			1	o	1k		N	o	o	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.37	644.5			47.5	8.6	81	NW			3	o	5k		N	0.004	0.1	½ covered	M. Alluard, Director.
Rochefort, Naval Obs'y	30.27	768.9	30.30	769.7	75.2	24.0	46	NE			1		2		NE	o	o	¼ covered	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.09	764.2	30.30	769.6	69.1	20.6	51	NW			1		5		N	o	o	Cloudy	M. Mouillot, Director.
Rodez, Normal School	28.07	713.0	30.12	765.0	71.6	22	42	W			4		o			o	o	Clear	M. Richard, Director.
Rouen, Normal School	30.20	767.0	30.28	769.2	69.4	20.8	45	WNW			2		5		SW	o	o	Cloudy	M. Platrier, Director.
Saint Lô, Normal School	30.19	766.8	30.35	770.8	64.2	17.9	57	NW			1		o			o	o	Clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.10	764.6	30.27	768.8	66.4	19.1	43	NW			1		8		NW	o	o		M. Renou, Director.
Toulouse, Observatory	29.56	750.7	30.28	769.2	75.7	24.3	50	WNW			2		2			o	o	Slightly cl'dy	M. Bailland, Director.
Tours	30.10	764.6	30.30	769.6	70.2	21.2	40	NNW			1		5		N	o	o	½ covered	M. de Tastes.
Versailles, Observatory	29.78	756.5	30.28	769.0	68.4	20.2	41	NW			1					o	o		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	29.99	761.7	30.28	769.1	68.7	20.4	42	WNW			1		6		W	o	o		M. Marié Davy, Director.

GERMAN SERIES.

Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.

Bamberg	29.24	742.6	30.10	764.6	67.6	19.8	55	NW			4	o	4k		W	0.004	0.1		Prof. Dr. Hoh.
Berlin	29.90	759.4	30.07	763.7	68.9	20.5	55	N			2		8			o	o		Prof. Dr. Arndt.
Breslau	29.55	750.6	30.08	764.1	69.6	20.9	42	NNW			2		5			o	o		Royal University Obs'y.
Carlsruhe	29.71	754.6	30.13	765.4	64.4	18.0	88	N			1		9	NW		o	o		Albert Senz.
Cassel	29.44	747.8	30.16	766.1	66.6	19.2	64	NNW			5		7	SW		o	o		Dr. H. Möhl.
Frankfort on the Main	29.84	757.8	30.19	766.9	65.8	18.8	63	NNE			2		7			0.043	1.1		Physical Society.
Friedrichshafen	28.68	728.5	30.11	764.7	59.4	15.2	75	W			6		7	SW		0.413	10.5		Wilhelm, Chief Tel.
Hamburg	30.11	764.7	30.18	766.5	64.4	18.0	52	NW			5		3			0.039	1.0		Dr. R. Kleeman.
Kiel	30.09	764.3	30.11	764.7	62.4	16.9	64	NE			2		6			Inap.	Inap.		Prof. Dr. G. Karsten.
Leipsic, Astron'l Obs'y	29.70	754.3	30.11	764.7	65.8	18.8	66	NW			3		8	NW		0.114	2.9		Prof. Dr. Bruhns.
Magdeburg	29.92	759.9	30.10	764.6	68.4	20.2	53	NW			4	o	5k		NW	o	o		Dr. Assmann.
Memel	30.05	763.2	30.10	764.4	61.7	16.5	70	NNW			4		9n						Reinbrecht & Issermann.
Munich	28.29	718.5	30.16	766.0	56.1	13.4	87	SW			4		10	SE		0.335	8.5	Thnd'r str'm	Central Station.
Neufahrwasser	30.09	764.3	30.11	764.7	61.0	16.1	64	ENE			1		10			0.004	0.1		A. Lothes.
Neustadt, Palatinate	29.60	751.7	30.13	765.2	69.8	21.0	59	E			1		3			o	o		Dicknether.
Stuttgart	29.16	740.6	30.03	762.7	68.9	20.5	58	NW			2		5	N		1.035	26.3		Prof. Dr. Schoder.
Weissenburg, Bavaria	28.65	727.7	30.12	765.1	59.7	15.4	75	NW			2		10	NW		1.003	27.0		Prof. Kemlein.
Wustrow	30.06	763.6	30.09	764.3	68.4	20.2	83	W			1	o	8ks			o	o		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.58	751.3	29.95	760.7	88.2	31.2	.....	SW	.....	.....	2.0	.....	.....	.....	.....	.....	.....	Clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.59	751.6	29.64	752.9	91.1	32.8	82	SSW	19.0	8.5	.....	.....	2	SW	.....	0	0	D. clouds	
Deesa	29.10	739.3	29.56	750.9	96.8	36.0	46	SW	.....	.....	.....	.....	3	SSE	SSE	0	0	D. clouds	
Bombay	29.69	754.1	29.73	755.1	84.5	29.2	82	W	12.0	5.4	.....	.....	10	.....	W	0.33	8.4	Overcast	
Poona, Yarrowda.	27.88	708.2	29.73	755.1	79.0	26.1	66	WSW	21.0	9.4	.....	.....	9	Calm	WSW	0	0	D. clouds	
Belgaum	27.23	691.6	29.77	756.0	74.4	23.6	84	SW	10.0	4.5	.....	.....	7	E	SW	.....	.....	Drizzling	
Lahore	28.78	730.9	29.49	749.1	92.1	33.4	47	ENE	6.0	2.7	.....	.....	.....	.....	.....	0.32	8.1	Blue sky	
Roorkee	28.65	727.6	29.53	750.0	85.8	29.9	70	SE	2.3	1.0	.....	.....	7	.....	.....	0.84	21.3	Thund'r st'm	
Agra	29.01	736.9	29.56	750.9	89.2	31.8	60	SW	7.8	3.5	.....	.....	0	.....	.....	0	0	.....	
Nagpur	28.58	726.0	29.63	752.5	74.7	23.7	95	SW	5.0	2.2	.....	.....	10	.....	.....	2.49	63.2	Overcast	
Jubbulpore	28.22	716.8	29.57	751.1	76.8	24.9	91	SE	4.5	2.0	.....	.....	10	.....	.....	0.42	10.7	Overcast	
Lucknow	29.20	741.8	29.57	751.1	89.1	31.7	65	NNE	5.8	2.6	.....	.....	7	NW	.....	0	0	D. clouds	
Allahabad	29.25	743.0	29.56	750.8	85.8	29.9	80	E	2.9	1.3	.....	.....	9	W	.....	0.04	1.0	D. clouds	
Patna	29.41	747.0	29.59	751.6	81.1	27.3	91	SE	4.3	1.9	.....	.....	10	SE	SE	0.08	2.0	Overcast	
Hazaribagh	27.60	701.0	29.58	751.4	80.3	26.8	82	SSW	9.4	4.2	.....	.....	10	.....	.....	.....	.....	Thunder s'm	
Cuttack	29.56	750.7	29.64	752.8	86.4	30.2	78	WSW	3.0	1.3	.....	.....	9	.....	.....	0	0	D. clouds	
Calcutta, Alipore	29.58	751.4	29.60	752.0	84.5	29.2	83	SSW	4.0	1.8	.....	.....	8	SE	.....	1.18	30.0	D. clouds	
Dhubri	29.49	749.0	29.61	752.0	78.6	25.9	95	Calm	0.7	0.3	.....	.....	9	.....	W	0.05	1.3	Gloomy	
Chittagong	29.61	752.1	29.70	754.4	82.9	28.3	83	S	5.3	2.4	.....	.....	5	.....	.....	0	0	Blue sky	
Sibsagar	29.28	743.6	29.61	752.0	84.2	29.0	82	SW	2.0	0.9	.....	.....	10	W	W	0.20	5.1	D. clouds	
Zanzibar, Africa	.....	.....	30.09	764.3	82.8	28.2	50	SSW	8	3.6	.....	.....	1	.....	.....	0	0	Blue sky	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.61	752.1	30.00	762.1	71.1	21.7	62	W	3.1	1.4	.....	.....	10	.....	.....	0	0	.....	Prof. Giovanni Clodig.
Milan	29.53	750.1	30.02	762.6	70.2	21.2	60	ESE	1.3	0.6	.....	.....	9	WSW	.....	0.110	2.8	.....	Prof. Schiaparelli.
Padua	29.93	760.3	30.04	763.0	65.7	18.7	70	NNW	11.2	5.0	.....	.....	10	SSE	.....	0.075	1.9	.....	Prof. Dott. Lorenzoni.
Moncalieri	29.15	740.5	30.03	762.7	70.7	21.5	76	NE	2.5	1.1	.....	.....	7	N	.....	0.087	2.2	.....	Prof. P. F. Denza.
Genoa	29.81	757.2	30.00	761.9	71.6	22.0	44	NE	6.3	2.8	.....	.....	10	W	.....	0	0	.....	Prof. G. M. Garibaldi.
Mondovi	28.16	715.3	30.00	762.1	62.8	17.1	80	W	.....	.....	6	.....	9	.....	.....	0.024	0.6	.....	Prof. D. C. Bruno.
Pesaro	29.88	759.0	29.93	760.2	73.6	23.1	70	SW	.....	.....	.....	.....	7	.....	.....	0	0	.....	Prof. Luigi Guidi.
Florence	29.63	752.7	29.88	758.9	86.5	30.3	39	NW	.....	.....	4	.....	5	.....	.....	0	0	.....	Prof. Costantino Pitter.
Leghorn	29.87	758.6	29.95	760.7	78.1	25.6	69	NW	0.7	0.3	.....	.....	4	.....	.....	0	0	.....	Prof. P. Monte.
Rome	29.77	756.1	29.94	760.4	85.3	29.6	40	SW	14.3	6.4	.....	.....	0	.....	.....	0	0	.....	Prof. P. S. Ferrari.
Lecce	29.71	754.6	29.95	760.7	84.2	29.0	50	SE	10.5	4.7	.....	.....	7	S	.....	0	0	.....	Prof. C. de Giorgi.
Cosenza	29.08	738.5	29.93	760.1	86.0	30.0	67	SSE	1.8	0.8	.....	.....	7	SE	.....	0	0	.....	Prof. D. Conti.
Cagliari	29.75	755.7	29.94	760.5	85.8	29.9	22	NW	.....	.....	4	.....	0	.....	.....	0	0	.....	Prof. A. Pacinotti.
Palermo	29.74	755.4	29.98	761.6	76.6	24.8	60	ENE	5.6	2.5	.....	.....	?	.....	.....	0	0	.....	Prof. G. Ciacciatore.
Syracuse	29.85	758.3	29.90	759.4	83.1	28.4	70	E	8.7	3.9	.....	.....	4	WSW	.....	0	0	.....	Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.42	747.2	29.91	759.7	81.9	27.7	60	W	1.3	0.6	.....	.....	3	SW	.....	0	0	.....	Prof. F. Brioschi.
Stelvio	22.28	566.0	.....	.....	47.1	8.4	53	E	.....	.....	2		1Ckns	.....	.....	0.059	1.5	Covered	Prof. P. F. Denza.
Valdobbia	22.33	567.2	.....	.....	42.3	5.7	81	E	.....	.....	6		10	.....	SE	0	0	Misty	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y	29.82	757.4	29.83	757.7	71.8	22.1	88	SW	0.8	0.4	.....	2cs	0	.....	.....	0	0	Clear	K. Sasaki.
Kioto	29.70	754.4	29.87	758.7	71.5	21.9	86	NNW	0.5	0.2	.....	ck	10s	.....	.....	0	0	Cloudy	M. Tojima.
Nagasaki, I. M. Obs'y	29.69	754.1	29.88	758.9	72.6	22.6	90	WSW	0.9	0.4	.....	0	2s	.....	.....	0.040	1.0	Clear	S. Takehayashi.
Tokei Obs'y, Yeddo	29.81	757.2	29.88	758.9	71.8	22.1	83	ESE	6.3	2.8	.....	.....	10s	.....	.....	0.005	0.1	Overcast	The Staff.
Wakayama	29.81	757.2	29.86	758.4	73.0	22.8	88	SSW	0.9	0.4	.....	0	0	.....	.....	0	0	Clear	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	30.09	764.3	30.28	769.2	72.4	22.4	69	ESE	23.0	10.3	.....	0	7	.....	SE	0	0	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. L. Perez.
Guanajuato	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Vicente Fernandez.
Leon	24.42	620.2	30.02	762.5	65.2	18.4	88	SE	.....	.....	1		10k	.....	NW	0.208	5.3	Covered	Prof. M. Leal.
Mazatlan	29.70	754.2	29.95	760.8	76.5	24.7	91	E	5.3	2.3	.....	.....	10n	.....	E	Inap.	Inap.	Covered	F. Quijano, U. E.
Mexico, Central Obs'y	23.12	587.2	30.05	763.2	57.6	14.2	90	Calm	0	0	.....	0	68k	.....	.....	0.217	5.5	½ cloudy	The Staff.
Pabellon, Aguascalientes	23.95	608.2	29.85	758.3	64.9	18.3	84	Calm	.....	.....	0	2c	7ks	SE	SE	Inap.	Inap.	Cloudy	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.45	595.7	30.02	762.6	54.1	12.3	49	Calm	0	0	.....	0	3	.....	NE	0.079	2.1	Clear	Prof. P. Spina.
San Luis Potosi	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. Barroeta, M. D.
Tlacotalpam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. M. Cházaro.
Vera Cruz	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. J. Rossell.
Zacatecas	22.57	573.4	30.05	763.4	60.8	16.0	86	SW	5.1	2.3	.....	5cs	0	SW	.....	0.551	14.0	½ Cloudy	J. A. Bonilla, M. E.
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.26	768.5	30.26	768.5	65.3	18.5	.....	WNW	.....	.....	4	.....	.....	.....	.....	0	0	.....	
Groningen	30.14	765.6	30.20	767.0	62.6	17.0	.....	W	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Helder	30.20	767.0	30.20	767.0	60.1	15.6	.....	WSW	.....	.....	1	.....	.....	.....	.....	0	0	.....	
Hellevoetsluis	30.22	767.7	30.22	767.7	65.3	18.5	64	NW	.....	.....	2	.....	.....	.....	.....	0	0	.....	
Utrecht	30.19	766.7	30.23	767.9	64.4	18.0	71	WSW	.....	.....	2	.....	8	.....	.....	0	0	Very cloudy	H. van der Brink

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction. Upper. From.	Clouds. Direction. Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	29.93	760.1	29.99	761.7	61.5	16.4	68	SSW	12.8	5.7			5			0	0		
Christiania	29.84	758.0	29.98	761.6	66.0	18.9	49	SSW	9	4			6			0	0		
Gjæsvær	30.00	761.9	30.02	762.5	54.5	12.5		Calm			0		0						
Lodingen	29.97	761.1	30.01	762.3	60.8	16.0	67	Calm			0		1			0.020	0.5		
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.19	766.7	30.20	767.0	67.5	19.7	90	SSE	4.9	2.2			6			0	0		Dr. J. A. Sampaio.
Campo Major	29.11	739.3	30.04	763.1	91.4	33.0	28	SSW	3.1	1.4			8			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	29.99	761.8	30.08	764.0	70.0	21.1	81	Calm	0	0			10			0.299	7.6	Raining	Capt. D. A. de Cunha.
Lisbon, Observatory	29.76	755.8	30.11	764.7	74.5	23.6	62	WSW	8.7	3.9			1			0	0		The Staff.
Ponta Delgada, Azores	30.30	769.6	30.33	770.4	69.1	20.6	73	Calm	0	0			10			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.76	730.5	29.76	756.0	85.6	29.8	29	WSW	7	3		1ck	0						Capt. Lasarew.
Archangel	30.05	763.2	30.07	763.7	69.1	20.6	52	WNW	9	4			0						Capt. Sseliwerstow.
Astrakhan	29.87	758.8	29.79	756.7	85.6	29.8	39	WSW	11	5		0	7ks						Capt. Wisganow.
Barnaul ‡	29.43	747.5	29.91	759.7	66.9	19.4	49	NW	13	6			10						Meteorological Obs'y.
Dorpat	29.80	756.9	30.03	762.7	79.5	26.4	37	SE	4	2		0	4k						Observatory.
Ekaterinburg	28.78	731.0	29.71	754.7	62.6	17.0	88	SE	18	8			10						Meteorological Obs'y.
Kasan	29.42	747.2	29.68	753.8	63.5	17.5	50	NNE	7	3			9						Observatory.
Kertch	29.98	761.5	30.00	762.0	72.7	22.6	53	NE	4	2			0						Lagorio & Sastyrez.
Kieff	29.30	744.2	29.91	759.6	72.7	22.6	47	NNE	2	1		ck	7ks						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.69	754.1	29.89	759.2	71.8	22.1	39	W	13	6			4						Meteorological Obs'y.
Moscow	29.37	746.1	29.90	759.5	69.4	20.8	51	NW	4	2		0	2ks						Meteorological Obs'y.
Nertchinsk	27.59	700.7	29.80	756.9	69.5	15.3	86	Calm	0	0			9			0	0		Meteorological Obs'y.
Nikolaiev	29.93	760.2	30.00	762.0	81.9	27.7	48	Calm	0	0		0	2kn						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.74	755.4	29.83	757.6	58.8	14.9	81	SE			4		10n			0	0		Lieut. Iwanow.
Pekin, China	29.45	748.1	29.60	751.7	78.8	26.0	76	Calm	0	0			9n					Raining	Physical Observatory.
St. Petersburg	30.02	762.6	30.04	763.0	77.2	25.1	35	SE	7	3		0	1ks						Central Physical Obs'y.
Tashkend, Laboratory	28.24	717.4	29.71	754.5	85.3	29.6	35	Calm	0	0			0						Teich, A. M.
Tiflis	28.52	724.3	29.84	758.0	88.7	31.5	21	NW	31	14			0						Physical Observatory.
Warsaw	29.59	751.6	30.01	762.3	56.7	13.7	93	NNW	13	6			10n					Raining	Astronomical Obs'y.
Wilna	29.58	751.2	29.97	761.3	79.0	26.1	41	SSE	4	2			4						Berg, Assistant.
Yeniseisk	29.58	751.2	29.85	758.2	69.3	20.7	68	S	7	3			10						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			30.01	762.2	57.0	13.9	75	W			4	0	8k			0.02	0.5	Cloudy	Andrew Gibb.
Monach Lt. House, Hebrides			29.92	760.0	55	12.8	93	WSW			4	5	5	W		0.2	5.	Showery	J. Youngclause.
North Unst, Shetland Isl'ds			29.87	758.7				S			4	2	4	S		Black			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.04	763.0	30.14	765.6	78.1	25.6	62	SSE	5.1	2.3			0			0	0		Antonio Rave, Director.
Bilbao, Met. Obs'y	30.29	769.3	30.34	770.7	73.4	23.0	52	NW	1.6	0.7		3	5	E		0	0	Almost cov'd	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.29	693.2			63.9	17.7	51	NE	13.0	5.8			0			0	0	Clear	Domingo Martin.
Madrid, Royal Obs'y	27.90	708.6	30.00	761.9	86.5	30.3	36	NW	3.6	1.6		0	0			0	0	Clear	The Staff.
Murcia, Met. Obs'y ‡	29.95	760.8	30.10	764.4	85.3	29.6	46	SE	5.6	2.5		3	3	NNW		0	0	Cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.24	742.7	30.11	764.7	71.6	22.0	52	NE	22.4	10.0			0			0	0	Clear	R. Gil Vallanueva, Dir.
Sub-Series.																			
Havana, Cuba, W. I	29.96	761.0	30.03	762.6	81.0	27.2	77	ESE	5.4	2.4		30;cs	0	N		0	0	Fair	Benito Vines, S. J.
Manilla, Philippine Islands	29.78	756.3	29.83	757.6	77.4	25.2	82	ESE	8.8	4.0			10n			5.48	139.3	Heavy rain	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.03	762.8	30.13	765.2	76.1	24.5	66	SW	3.7	1.7		0	4		SW	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.94	760.4	30.03	762.7	81.3	27.4	92	SW	0	0		1cs	2k	SW	SW	0.059	1.5		Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.61	752.0	29.75	755.7	79.7	26.5	84	SW	4.3	1.9			10kn		SW	0.06	1.5	Covered	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.02	762.6	30.06	763.6	66.2	19.0	56	S			2		0			0	0		
Umea	30.02	762.6	30.08	763.9	71.6	22.0	50	WSW			2		10			0	0		
Hernosand	29.97	761.1	30.02	762.4	58.8	14.9	84	E			2		10			0.047	1.2		
Stockholm	29.84	758.0	30.02	762.5	66.2	19.0	69	E			2		9			0.154	3.9		
Wisby	29.94	760.5	30.00	762.0	60.8	16.0	77	WNW			2		7			0.102	2.6		
Sub-Series.																			
Upsala	29.82	757.4	29.91	759.6	67.3	19.0	70	SE	3.1	1.4			6		W	0.004	0.1		S. G. Fineman.
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.71	729.3	30.08	764.1	72.9	22.7	45	N			4		4			0	0	Cloudy	The Observatory.
Zurich ‡	28.53	724.7	30.13	765.4	65.1	18.4	63	SW			1		6			1.055	26.8	Cloudy	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.96	760.9	82.0	27.8	50	ENE	4	2.0			0			0	0		The Observatory.
Valona			30.11	764.8	84.4	29.1		Calm			0		2			0	0	Slightly cl'd'y	A. Bertraud.
Sub-Series.																			
Beirut, Lee Obs'y, Syria			29.95	760.6	80.4	26.9	63	N			1		0			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
Albany, New York	29.61	752.1	29.69	754.1	71.5	21.9	75	W	6	2.7	.....	5k	0	NW	.....	0.14	3.6	Fair	
Alpena, Michigan	29.15	740.4	29.80	756.9	60	15.6	82	NW	10	4.5	.....	0	2s	.....	.....	0.39	9.9	Fair	
Atlanta, Georgia	29.88	758.9	30.03	762.7	79.0	26.1	73	NW	10	4.5	.....	0	0	.....	.....	0	0	Clear.	
Atlantic City, New Jersey	29.71	754.6	29.72	754.9	75	23.9	81	SW	8	3.6	.....	5c	0	Calm	.....	0	0	Fair.	
Augusta, Georgia	29.80	756.9	29.98	761.5	82.7	28.2	67	W	2	0.9	.....	0	0	.....	.....	0	0	Clear.	
Baltimore, Maryland	29.68	753.9	29.74	755.4	83	28.3	64	SW	10	4.5	.....	2c	0	N	.....	0	0	Clear.	
Barnegat, New Jersey	29.68	753.9	29.70	754.4	75	23.9	86	W	7	3.1	.....	8ck	0	NW;W	.....	0	0	Fair.	
Bismarck, Dakota	28.30	718.8	30.04	763.0	68	20.0	56	SE	3	1.3	.....	8k	0	Calm	.....	0	0	Cloudy.	
Boise City, Idaho	27.00	685.8	29.76	755.9	55.0	12.8	62	SW	1	0.4	.....	0	0	.....	.....	0	0	Clear.	
Boston, Massachusetts	29.43	747.5	29.58	751.3	68.2	20.1	64	W	17	7.6	.....	5ck	0	W	.....	0.33	8.4	Fair.	
Brackettville, Texas	28.79	731.3	29.80	756.9	76	24.4	81	E	13	5.8	.....	0	0	.....	.....	0	0	Clear	
Brownsville, Texas	29.92	760.0	29.96	761.0	78	25.6	91	SE	2	0.9	.....	5ck	0	SE	.....	0	0	Fair.	
Buffalo, New York	29.00	736.6	29.69	754.1	64.2	17.9	86	SW	4	1.8	.....	2c;k	0	NW;W	.....	0.61	15.5	Clear.	
Burlington, Vermont	29.31	744.5	29.59	751.6	67.0	19.4	74	S	3	1.3	.....	2cs	5s	NW	W	0.34	8.6	Fair.	
Cairo, Illinois	29.61	752.1	30.00	762.0	83	28.3	75	SW	6	2.7	.....	5c	0	W	.....	0	0	Fair.	
Campo, California	27.33	694.2	29.90	759.4	37.3	2.9	71	W	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Camp Thomas, Arizona	27.12	688.8	.....	.....	72.5	22.5	32	Calm	.....	.....	0	5ck	5ks	.....	.....	0	0	Cloudy.	
Cape Henry, Virginia	29.79	756.7	29.81	757.2	83	28.3	60	SW	11	4.9	.....	0	0	.....	.....	0	0	Clear.	
Cape May, New Jersey	29.71	754.6	29.74	755.4	75	23.9	85	SW	9	4.0	.....	0	0	.....	.....	0	0	Clear.	
Castroville, Texas	29.19	741.4	29.86	758.4	80	26.7	74	S	5	2.2	.....	.....	10s	.....	S	0	0	Cloudy.	
Cedar Keys, Florida	30.06	763.5	30.08	764.0	80	26.7	82	NE	3	1.3	.....	2ck	2ks	.....	E	0	0	Fair.	
Champaign, Illinois	29.06	738.1	29.80	756.9	77.8	25.4	85	S	2	0.9	.....	.....	Hz	.....	.....	Inap.	Inap.	Dense haze.	
Charleston, S. Carolina	29.92	760.0	29.98	761.5	83	28.3	71	W	8	3.6	.....	0	0	.....	.....	0	0	Clear.	
Charlotte, N. Carolina	29.10	739.1	29.96	761.0	86.0	30.0	55	W	2	0.9	.....	0	Hz	.....	.....	0	0	Clear.	
Chattanooga, Tennessee	29.24	742.7	30.04	763.0	82.5	28.1	81	SW	6	2.7	.....	1cs	Fg	Calm	.....	0	0	Clear.	
Cheyenne, Wyoming	24.03	610.4	29.84	757.9	61.2	16.2	50	NW	2	0.9	.....	.....	10s	.....	.....	Inap.	Inap.	Cloudy.	
Chicago, Illinois	29.03	737.3	29.71	754.6	69.0	20.6	76	NE	5	2.2	.....	.....	10ks	.....	W	0.23	5.8	Cloudy.	
Chincoteague, Virginia	29.76	755.9	29.78	756.4	82	27.8	71	NW	10	4.5	.....	1k	0	.....	.....	0	0	Clear.	
Cincinnati, Ohio	29.26	743.2	29.90	759.4	83	28.3	83	SW	7	3.1	.....	2cs	8ks	.....	W	0	0	Threatening	
Cleveland, Ohio	29.06	738.1	29.78	756.4	74.8	23.8	91	W	9	4.0	.....	.....	10ks	.....	W	0	0	Cloudy.	
Coleman City, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Columbus, Ohio	28.99	736.3	29.81	757.2	80	26.7	82	SW	7	3.1	.....	.....	10s	.....	W	0	0	Cloudy.	
Concho, Texas	28.05	712.5	29.93	760.2	75	23.9	77	SE	8	3.6	.....	0	0	.....	.....	0	0	Clear.	
Corsicana, Texas	29.58	751.3	30.04	763.0	80	26.7	78	S	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Davenport, Iowa	29.18	741.2	29.82	757.4	72	22.2	80	NW	9	4.0	.....	0	5s	.....	NW	0.02	0.5	Fair.	
Dayton, Washington T'y	28.13	714.5	29.88	758.9	55	12.8	68	S	3	1.3	.....	5k	0	S	.....	0.03	0.8	Fair.	
Deadwood, Dakota	25.37	644.4	29.92	760.0	60	15.6	82	W	.....	.....	.....	.....	10ks	.....	W	0.14	3.6	Cloudy.	
Decatur, Texas	28.81	731.8	29.91	759.7	79	26.1	62	SE	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Delaware Breakwater, Del.	29.70	754.4	29.72	754.9	76	24.4	82	W	12	5.4	.....	0	0	.....	.....	0	0	Clear.	
Denison, Texas	29.20	741.7	29.98	761.5	78	25.6	86	S	12	5.4	.....	0	0	.....	.....	0	0	Clear.	
Denver, Colorado	24.73	628.1	29.80	756.9	63.3	17.4	56	S	3	1.3	.....	8cs	Hz	Calm	Calm	0	0	Fair.	
Des Moines, Iowa	29.02	737.1	29.90	759.4	73	22.8	81	E	6	2.7	.....	.....	10s	.....	E	0.10	2.5	Cloudy.	
Detroit, Michigan	29.10	739.1	29.77	756.1	76	24.4	69	NW	8	3.6	.....	5cs	0	W	.....	0	0	Fair.	
Dodge City, Kansas	27.27	692.6	29.76	755.9	75.3	24.1	58	SE	11	4.9	.....	1k	0	.....	.....	0	0	Clear.	
Dubuque, Iowa	29.22	742.2	29.90	759.4	72.1	22.3	80	W	7	3.1	.....	1c	8s	.....	SW	1.35	34.3	Cloudy.	
Duluth, Minnesota	29.22	742.2	29.90	759.4	67	19.4	69	NW	1	0.4	.....	0	0	.....	.....	0.02	0.5	Clear.	
Eagle Pass, Texas	29.17	740.9	29.98	761.5	80.1	26.7	66	SE	9	4.0	.....	0	0	.....	.....	0	0	Clear.	
Eagle Rock, Idaho	25.12	638.0	29.83	757.7	54	12.2	55	Calm	0	0	.....	0	0	.....	.....	0.08	2.0	Cloudy	
Eastport, Maine	29.23	742.4	29.30	744.2	55	12.8	93	N	9	4.0	.....	.....	1on	.....	N	2.84	72.1	Light rain.	
El Paso, Texas	26.11	663.2	29.76	755.9	75	23.9	56	E	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Erie, Pennsylvania	29.03	737.3	29.70	754.4	69	20.6	90	W	6	2.7	.....	5k	5s	W	W	0.26	6.6	Cloudy.	
Escanaba, Michigan	29.18	741.2	29.82	757.4	63	17.2	78	NW	3	1.3	.....	0	0	.....	.....	0	0	Clear.	
Florence, Arizona	28.34	719.8	29.94	760.5	72	22.2	46	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Fort Apache, Arizona	25.02	635.5	29.80	756.9	67	19.4	37	E	2	0.9	.....	.....	10s;sk	.....	Calm	0	0	Dense smoke	
Fort Assinnaboine, Montana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Bennett, Dakota	28.35	720.1	29.82	757.4	66	18.9	79	N	4	1.8	.....	2ck;cs	0	W	.....	0	0	Fair.	
Fort Benton, Montana	26.96	684.8	29.70	754.4	70	21.1	40	Calm	0	0	.....	0	0	.....	.....	0	0	Clear.	
Fort Buford, Dakota	27.93	709.4	29.85	758.2	65	18.3	73	E	20	8.9	.....	2cs	0	W	.....	0	0	Clear.	
Fort Custer, Montana	26.64	676.6	29.73	755.1	63	17.2	72	S	5	2.2	.....	0	0	.....	.....	0	0	Clear.	
Fort Davis, Texas	25.17	639.3	30.13	765.3	70	21.1	48	S	7	3.1	.....	0	0	.....	.....	0	0	Clear.	
Fort Elliott, Texas	27.17	690.1	30.24	768.1	73	22.8	50	S	8	3.6	.....	0	0	.....	.....	0	0	Clear.	
Fort Gibson, Indian T'y	29.40	746.7	29.93	760.2	81	27.2	78	SE	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Fort Grant, Arizona	.....	.....	.....	.....	74	23.3	15	N	5	2.2	.....	2k	2s	.....	.....	Inap.	Inap.	Fair.	
Fort Griffin, Texas	28.67	728.2	29.87	758.7	80.4	26.9	66	SE	12	5.4	.....	0	0	.....	.....	0	0	Clear.	
Fort Keogh, Montana	27.29	693.2	29.70	754.4	66	18.9	73	NE	6	2.7	.....	0	0	.....	.....	0	0	Clear.	
Fort Macon, North Carolina	29.88	758.9	29.89	759.2	80	26.7	91	W	10	4.5	.....	2c	Hz	Calm	Calm	0	0	Fair.	
Fort McKavett, Texas	27.74	704.6	29.57	751.1	73.4	23.0	81	E	11	4.9	.....	2k	0	S	.....	0	0	Fair.	
Fort Missoula, Montana	26.40	672.8	29.87	758.7	55	12.8	87	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear.	
Fort St. Michaels	29.61	752.1	29.64	752.8	42	5.6	83	N	4	1.8	.....	.....	10s	.....	.....	0	0	Cloudy.	
Fort Shaw, Montana	26.13	663.7	29.58	751.3	66	18.9	50	W	4	1.8	.....	5cs	0	SW	.....	0	0	Fair.	
Fort Sill, Indian Territory	28.71	729.2	29.92	760.0	79	26.1	74	S	10	4.5	.....	0	0	.....	.....	0	0	Clear.	
Fort Stevenson, Dakota	28.16	715.3	29.93	760.2	61	16.1	83	NE	1	0.4	.....	0	5ks	.....	Calm	0	0	Fair.	
Fort Verde, Arizona	.....	.....	.....	.....	61.2	16.2	31	W	.....	.....	1	0	2s	.....	W	0	0	Fair.	
Fredericksburg, Texas	28.28	718.3	29.77	756.1	75	23.9	83	SW	10	4.5	.....	1k	0	SW	.....	0	0	Fair.	
Galveston, Texas	30.01	762.2	30.05	763.3	83	28.3	75	S	8	3.6	.....	4ck	0	SW	.....	0.01	0.3	Fair.	
Grand Haven, Michigan	29.13	739.9	29.78	756.4	71	21.7	75	NE	5	2.2	.....	5k	0	W	.....	0.02	0.5	Fair.	
Hatteras, North Carolina	29.86	758.4	29.88	758.9	79	26.1	95	SW	14	6.3	.....	Hz	Hz	.....	.....	0	0	Dense haze.	
Helena, Montana	25.62	650.7	29.82	757.4	61	16.1	71	Calm	0	0	.....	0	0	.....	.....	0.04	1.0	Clear.	
Henrietta, Texas	28.93	734.8	29.78	756.4	83	28.3	67	S	16	7.2	.....	0	0	.....	.....	0	0	Clear.	
Indianapolis, Indiana	29.05	737.9	29.82	757.4	80.5	26.9	87	SW	2	0.9	.....	7cs	3s	Calm	Calm	0	0	Cloudy.	
Indianola, Texas	30.00	762.0	30.03	762.7	81.6	27.6	83	SE	7	3.1	.....	1c	1ks	N	S	Inap.	Inap.	Clear.	
Jacksboro, Texas	28.80	731.5	29.86	758.4	79	26.1	74	S	10	4.5	.....	0	0	.....	.....	0	0	Clear.	
Jacksonville, Florida	30.02	762.5	30.04	763.0	81	27.2	74	W	8	3.6	.....	0	0	.....	.....	0	0	Clear.	
Keokuk, Iowa	29.22	742.2	29.86	758.4	78.0	25.6	78	SW	4	1.8	.....	10cs	0	SW	.....	0	0	Cloudy.	
Key West, Florida	30.02	762.5	30.05	763.3	83.9	28.8	74	E	5	2.2	.....	0	1ks	.....	E	0	0	Clear.	
Kittyhawk, North Carolina	29.85	758.2	29.87	758.7	80	26.7	78	W	12	5.4	.....	5c	0	.....	.....	0	0	Fair.	
Knoxville, Tennessee	29.03	737.3	30.03	762.7	77	25.0	86	SW	4	1.8	.....	2k	2ks	N	Calm	0.04	1.0	Fair.	
La Crosse, Wisconsin	29.08	738.6	29.78	756.4	71	21.7	66	NW	8	3.6	.....	.....	10s	.....	.....	0	0	Cloudy.	
La Mesilla, New Mexico	25.98	659.9	30.13	765.3	70.5	21.4	57	Calm	0	0	.....	5c	0	SW	.....	0	0	Fair.	
Laredo, Texas	29.48	748.8	29.81	757.2	79	26.1	82	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Leavenworth, Kansas	29.02	737.1	29.89	759.2	77	25.0	82	S	4	1.8	.....	9cs;k	0	S	.....	0	0	Cloudy.	
Lewiston, Idaho	28.94	735.1	29.76	755.9	63	17.2	83	E	1	0.4	.....	5k	0	E	.....	0.07	1.8	Fair.	
Little Rock, Arkansas	29.67	753.6	29.98	761.5	78	25.6	86	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Los Angeles, California	29.54	750.3	29.91	759.7	61.2	16.2	88	S	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy.	
Louisville, Kentucky	29.36	745.7	29.91	759.7	85.0	29.4	72	SW	10	4.5	.....	5c	0	.....	.....	0	0	Fair.	
Lynchburg, Virginia	29.19	741.4	29.86	758.4	86	30.0	58	Calm	0	0	.....	8cs	0	NW	.....	0	0	Fair.	
Madison, Wisconsin	28.84	732.5	29.82	757.4	71	21.7	85	SW	6	2.7	.....	8c	0	W	.....	0.22	5.6	Fair.	
Marquette, Michigan	29.11	739.4	29.82	757.4	68	20.0	65	NW	8	3.6	.....	0	0	.....	.....	0	0	Clear.	
Mason, Texas	28.38	720.8	30.05	763.3	79	26.1	70	S	10	4.5	.....	0	1ks	.....	S	0	0	Clear.	
Memphis, Tennessee	29.68	753.9	30.02	762.5	83	28.3	75	SW	4	1.8	.....	0	0	.....	.....	0	0	Clear.	
Milwaukee, Wisconsin	29.04	737.6	29.77	756.1	70	21.1	73	N	5	2.2	.....	2ck	8s	N	N	0.20	5.1	Cloudy.	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	30.04	763.0	30.11	764.8	75	23.9	90	N	4	1.8		8cs	0	W		0.20	5.1	Fair	
Montgomery, Alabama	29.85	758.2	30.07	763.8	74.2	23.4	85	W	1	0.4		0	0			0.87	22.1	Clear	
Moorhead, Minnesota	28.97	735.8	29.93	760.2	66.1	18.9	79	N	3	1.3		0	0			0	0	Clear	
Morgantown, W. Virginia	28.86	733.0	29.78	756.4	77	25.0	86	SW	4	1.8		2k	8s	NW	W	0	0	Cloudy	
Mt. Washington, N. H.	23.40	594.3	29.42	747.3	42	5.6	100	NW	40	17.9			Fg		NW	1.58	40.1	Dense fog	
Nashville, Tennessee	29.46	748.3	29.98	761.5	84.0	28.9	70	SW	3	1.3		0	0			0	0	Clear	
New Haven, Connecticut	29.53	750.0	29.64	752.8	70	21.1	75	NW	2	0.9		0	9s		W	0.66	16.8	Cloudy	
New London, Connecticut	29.58	751.3	29.63	752.6	69	20.6	95	N	6	2.7		7k	0	N		0	0	Fair	
New Orleans, Louisiana	30.01	762.2	30.06	763.5	83	28.3	71	SW	3	1.3		0	1ks		SW	Inap.	Inap.	Clear	
Newport, Rhode Island	29.59	751.6	29.64	752.8	67.2	19.6	83	W	9	4.0			10s		W	0.03	0.8	Cloudy	
New River, N. Carolina																			
New Shoreham, Rhode Id.	30.11	764.8	30.14	765.5	65.0	18.3	84	NW	11	4.9		0	9s		W	0.24	6.1	Cloudy	
New York, New York	29.53	750.0	29.70	754.4	69	20.6	90	SW	4	1.8		0	8s		W	0.09	2.3	Fair	
Norfolk, Virginia	29.80	756.9	29.84	757.9	83	28.3	67	NW	6	2.7		0	0			0	0	Clear	
North Platte, Nebraska	26.95	684.5	29.77	756.1	68	20.0	79	E	14	6.3		10k	0	S		Inap.	Inap.	Cloudy	
Olympia, Washington T'y	29.85	758.2	29.89	759.2	47.5	8.6	88	S	5	2.2		0	2s		W	Inap.	Inap.	Fair	
Omaha, Nebraska	28.73	729.7	29.87	758.7	76.4	24.7	74	E	8	3.6		0	8s		SE	0	0	Cloudy	
Oswego, New York	29.35	745.5	29.67	753.6	62.0	16.7	92	W	4	1.8		0	0			0.43	10.9	Clear	
Pensacola, Florida	30.04	763.0	30.07	763.8	74	23.3	90	NE	4	1.8		5cs	2s	E	E	0.04	1.0	Fair	
Philadelphia, Pa.	29.65	753.1	29.71	754.6	78	25.6	78	W	6	2.7		5cs	Fg	Calm		0	0	Fair	
Phœnix, Arizona	28.60	728.0	30.38	771.6	74	23.3	40	W	1	0.4		0	0			0	0	Clear	
Pike's Peak, Colorado	18.04	458.2	30.25	768.3	46	7.8	54	SW	8	3.6		0	0			0	0	Clear	
Pioche, Nevada	24.00	609.6	29.84	757.9	62	16.7	18	S	4	1.8		0	0			0	0	Clear	
Pittsburg, Pennsylvania	28.99	736.3	29.78	756.4	79	26.1	78	SW	12	5.4		5k	0	SW		0	0	Fair	
Port Eads, Louisiana	30.07	763.8	30.08	764.0	83.3	28.5	79	S	4	1.8		8c	0	S		0	0	Fair	
Port Huron, Michigan	29.12	739.6	29.78	756.4	68.0	20.0	90	Calm	0	0		2c	0	Calm		1.04	26.4	Clear	
Portland, Maine	29.42	747.3	29.47	748.5	67	19.4	74	W	14	6.3		0	2s		Calm	0.64	16.3	Clear	
Portland, Oregon	29.86	758.4	29.93	760.2	52.9	11.6	74	NW	1	0.4		8k	0	SW		0.01	0.3	Cloudy	
Portsmouth, N. Carolina					82	27.8	83	SW	12	5.4		10c	0	Calm		0	0	Cloudy	
Prescott, Arizona	24.77	629.1	29.84	757.9	55	12.8	33	SW	2	0.9		0	0			0	0	Clear	
Punta Rassa, Florida	30.03	762.7	30.04	763.0	82	27.8	77	E	7	3.1		0	Hz		Calm	0.27	6.9	Clear	
Red Bluff, California	29.48	748.8	29.81	757.2	56.5	13.6	69	SE	3	1.3		0	0			0	0	Clear	
Rio Grande City, Texas	29.76	755.9	29.97	761.2	80	26.7	82	SE	10	4.5		5cs	5s	Calm	Calm	0	0	Cloudy	
Rochester, New York	29.08	738.6	29.70	754.4	66	18.9	84	W	7	3.1		5k	Hz	W		0.18	4.6	Fair	
Roseburg, Oregon	29.38	746.2	29.94	760.5	47.4	8.6	82	E	2	0.9		2ck	0			0	0	Fair	
Sacramento, California	29.77	756.1	29.84	757.9	54.3	12.4	87	S	11	4.9		0	5s		S	0	0	Fair	
St. Louis, Missouri	29.36	745.7	29.94	760.5	79.0	25.1	87	S	7	3.1		8c	0	W		0	0	Fair	
St. Paul, Minnesota	29.03	737.3	29.87	758.7	68	20.0	74	NW	4	1.8		8ck	0	NW		0	0	Fair	
Salt Lake City, Utah	25.52	648.2	29.72	754.9	71	21.7	15	SE	4	1.8		0	0			0	0	Clear	
San Antonio, Texas	29.31	744.5	30.00	762.0	78.7	25.9	82	SE	3	1.3		0	4s		SE	0	0	Fair	
San Diego, California	29.81	757.2	29.88	758.9	62.2	16.8	77	Calm	0	0			10s			0	0	Cloudy	
Sandusky, Ohio	29.12	739.6	29.78	756.4	78	25.6	86	SW	12	5.4			10s			0	0	Cloudy	
Sandy Hook, New Jersey	29.67	753.6	29.70	754.4	71.5	21.9	92	W	8	3.6		10s	8n		W	0.70	17.8	Light rain	
San Francisco, California	29.83	757.7	29.89	759.2	52	11.1	86	W	19	8.5		0	Fg		W	0	0	Clear	
Santa Fé, New Mexico	23.31	592.1	29.82	757.4	62	16.7	36	SE	6	2.7		0	0			0	0	Clear	
Savannah, Georgia	29.92	760.0	30.01	762.2	85	29.4	62	W	8	3.6		0	0			0	0	Clear	
Shreveport, Louisiana	29.82	757.4	30.05	763.3	80	26.7	87	Calm	0	0		0	0			0	0	Clear	
Silver City, New Mexico	24.25	615.9	29.71	754.6	65	18.3	26	N	1	0.4		0	0			0	0	Clear	
Sitka Alaska																0	0		
Smithville, North Carolina	29.91	759.7	29.94	760.5	82	27.8	87	SW	12	5.4		0	Hz			0	0	Clear	
Spokane Falls, Wash. Ter.	27.71	703.8	29.66	753.4	56	13.3	62	S	13	5.8		8k	0	SW		0	0	Fair	
Springfield, Illinois	29.23	742.4	29.89	759.2	77	25.0	82	W	6	2.7		8cs	2s	W	W	0	0	Cloudy	
Springfield, Massachusetts	29.51	749.5	29.63	752.6	70.5	21.4	66	W	7	3.1		1cs	0	W		1.32	33.5	Clear	
Stockton, Texas	26.91	683.5	29.90	759.4	73.0	22.8	81	SE	20	8.9		0	0			0	0	Clear	
St. Vincent, Minnesota	29.09	738.9	29.53	760.2	61	16.1	82	E	1	0.4		0	0			0	0	Clear	
Thatcher's Island, Mass.	29.51	749.5	29.56	750.8	66.0	18.9	84	NW	25	11.2		5k	0	NW		0	0	Fair	
Toledo, Ohio	29.11	739.4	29.79	756.7	77	25.0	91	SW	10	4.5			10s		SW	0	0	Threatening	
Tucson, Arizona	27.39	695.7	29.68	753.9	75	23.9	23	SE	3	1.3		2k	0	S		0	0	Clear	
Umatilla, Oregon	29.51	749.5	29.91	759.7	58.0	14.4	53	SW	18	8.0		0	5s		SW	0	0	Fair	
Uvalde, Texas	29.00	736.6	29.78	756.4	76	24.4	86	SE	4	1.8		0	0			0	0	Clear	
Vicksburg, Mississippi	29.86	758.4	30.11	764.8	80	26.7	87	SW	4	1.8		1c	0	W		0	0	Clear	
Visalia, California	29.48	748.8	29.83	757.7	59	15.0	62	NW	1	0.4		0	0			0	0	Clear	
Washington, D. C.	29.65	753.1	29.76	755.9	80	26.7	74	S	4	1.8		1c	0			0	0	Clear	
Wickenburg, Arizona					63	17.2	28	Calm			0	0	2s			0	0	Clear	
Wilmington, N. Carolina	29.87	758.7	29.92	760.0	82	27.8	79	W	4	1.8		0	Hz		Calm	0	0	Clear	
Winnemucca, Nevada	25.44	646.2	29.65	753.1	57	13.9	36	SW	4	1.8		0	0			0	0	Clear	
Wood's Holl, Mass.	29.57	751.1	29.60	751.8	68	20.0	74	NW	16	7.2		5k	5s	NW	NW	0	0	Cloudy	
Yankton, Dakota	28.60	726.4	29.86	758.4	70	21.1	85	NW	6	2.7		5c	0	E		0.30	7.6	Fair	
Yuma, Arizona	29.59	751.6	29.73	755.1	74.3	23.5	47	E	3	1.3		0	0			0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.08	560.8			53.0	11.7	76	Calm	0	0		5ck	0			0.02	0.5	Fair	Thomas Herran
Buff Bay Town, Jamaica.‡	29.77	756.1	30.08	764.0	80	26.7	83	E				0	0						
Havana, Cuba, W. I.	30.01	762.2	30.06	763.5	82	27.8	70	Calm	0	0		4cs	0	Calm		0.10	2.5	Fair	A. Van Caneghem, Ass't.
Kingston, Jamaica, W. I.	30.00	762.0	30.01	762.2	82.0	27.8	72	Calm	0	0		8cs	0			0	0	Fair	Robert Johnstone.
Navassa, W. I.	29.92	760.0	30.00	762.0	82	27.8	75	E	10	4.5		2s	2k	NE	E	0	0	Fair	F. M. Everett.
Paramaribo, S. A.	30.05	763.3	30.06	763.5	80	26.7	78	SE			2	3c	5k	E		0.240	6.1	Fair	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mba	29.37	746.0	29.92	760.0	80	26.7	89	Calm	0	0			10ks		S	0	0	Threatening	Francesco J. Cisneros.
Rivas, Nicaragua					77.0	25		NE			1	1cs	1ks	NE	NE	0.91	23.		Earl Flint.
Santiago de Cuba, W. I.																			Robert Mason.
St. Thomas, W. I.																			G. O. Gyllich.
York Factory, B. A.	29.88	758.9	29.94	760.5	66.0	18.9	87	E	7	3.1		0	0			0	0	Clear	J. Fortescue & W Wood.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0–10	0–10	0–10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.																			
H. M. S. Albatross																			Comm A. J. Errington.
H. M. S. Alert, Thursday Island, Oceania	29.95	760.7	75	23.9	81	SE			2-3		1							Blue sky.	Capt. J. P. Maclear.
H. M. S. Alexandra, N. 44° 13′, E. 15° 00.′	29.94	760.5	75.5	24.2	72	NW			1		5					Sm'h		D. clouds	Capt. Lord Walter Kerr.
H. M. S. Antelope																			Capt. Hon. W. H. Joliffe
H. M. S. Arab, Aden, Arabia, Asia	29.64	752.8	86	30.0	75	SSE			2		1					Sm'h		D. clouds	Comm. R. W. Stopford.
H. M. S. Bacchante																			Capt. Lord C. Scott.
H. M. S. Beacon, N 24° 05′, E. 59° 52′	29.63	752.6	85	29.4	83	SW			2		1	S				2	S	Blue sky	Comm. G. W. Hand.
H. M. S. Bittern																			Capt. E. B. Pusey.
H. M. S. Blanche, N 13° 05′, W. 59° 36′	29.98	761.5	81	27.2	87	ENE			3		9					1	S	Squally	Capt. C. G. F. Knowles.
H. M. S. Boadicea, Ascension I'ds, Africa	30.05	763.3	77	25.0	72	ESE			3-5		3	ESE						Squally	Com. F. W. Richards.
H. M. S. Champion, S. 37° 58′, W. 55° 33′	30.12	765.0	48	8.9	42	SW			2		1	Calm				5	SW	Blue sky	Capt. G. R. Hope.
H. M. S. Cockatrice, N. 50° 10′, W. 4° 21.′	30.32	770.1			61	SSW			3		5	SSW				1	SSW	D. clouds	Capt. H. T. Gerfell.
H. M. S. Comus, N. 38° 55′, E. 121° 45′	29.70	754.4	69	20.6	84	SSE			2		10	SE						D. clouds	Capt. J. W. East.
H. M. S. Condor																			Comm. F. W. Egerton.
H. M. S. Coquette																			Lt. Comm. J. L. Barr
H. M. S. Cruiser, N. 40° 19′, E. 14° 13.′	29.92	760.0	80	26.7		SSW			2		0					1	WSW	Blue sky	Capt. F. A. Wetherall.
H. M. S. Curacoa																			Capt. S. Long.
H. M. S. Danae																			Capt. J. C. Parvis.
H. M. S. Daring																			Capt. F. J. Elliott.
H. M. S. Dido, Simon's Bay, Cape Colony	30.15	765.8	59	15.0		NNW			2		2	WSW						D. clouds	Capt C. Domville.
H. H. S. Dock-Yard, Bermuda, W.I.	30.16	766.1	81	27.2	91	SW			2-3		4	SSW						D. clouds	Capt. J. Barnardiston.
H. M. S. Dragon																			Capt. Hulton.
H. M. S. Druid, N. 50° 02′, W. 55° 57′	29.92	760.0	47	8.3	96	NNW			1		10					1	NE	Foggy	Capt. W. R. Kennedy.
H. M. S. Dryad																			Capt. John Hext.
H. M. S. Eclipse, N. 1° 27′, E. 78° 57′	29.89	759.2	80	26.7		SW			2		8					2	SW	D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 27° 30′, E. 44° 54′	30.33	770.4	72	22.2		ENE			6		9	ENE				6	ENE	Squally	Comm. C. Johnstone.
H. M. S. Emerald, N. 6° 50′, E. 158° 30′	29.87	758.7	83	28.3	91	NE			2-4		5	NE				2	E	D. clouds	Capt. W. H. Maxwell.
H. M. S. Encounter																			Capt. L. Ching.
H. M. S. Euryalus, Rodrigues Island, Africa	30.20	767.1	73	22.8	76	ESE			4-6		9	ESE						Showery	Capt. R. D. King.
H. M .S. Falcon																			Comm. W. H. C. Selby.
H. M. S. Fantome																			Capt. W. C. Karslake.
H. M. S. Fawn, N. 7° 44′, E. 63° 45′	29.80	756.9	82.5	28.1	76	SW			5		10					5	SSW	Overcast	Capt. P. Aldrich.
H. M. S. Flamingo, Lucea, Jamaica, W. I.	30.01	762.2	83	28.3	83	SE			1		2	E						D. clouds	Comm. R. N. Custance.
H. M. S. Flying Fish																			Capt. R. F. Hoskyn.
H. M. S. Gannet, Esquimault, Vancouver I'd.	29.86	758.4	54	12.2	61	WSW			1		7							D. clouds	Comm. E. G. Bourke.
H. M. S. Garnet, S. 46° 00′, W. 61° 15′	29.83	757.7	45	7.2	76	SSW			6		4					6	SSW	Squally	Capt. L. F. Jones.
H. M. S. Griffon, N. 19° 50′, W. 73° 55′	30.03	762.7	85	29.4	79	SE			2		2					3	ENE	D. clouds	Comm. J. Ingles.
H. M. S. Hecla																			Capt. T. L. H. Ward.
H. M. S. Humber,																			Capt. J. L. Way.
H. M. S. Inconstant																			Capt. C. C. P. Fitzgerald.
H. M. S. Iris, N 42° 10,′ E. 16° 45′	29.94	760.5	80	26.7	74	NW			1-2		2	N				1	WNW	D. clouds	Capt. E. H. Seymour.
H. M. S. Iron Duke																			Capt. R. E. Tracey.
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.96	761.0	61	16.1		SW			1		6	Calm						D. clouds	Comm. R. H. Thornton.
H. M. S. Lapwing																			Capt. W. G. Scott.
H. M. S. Lily,																			Capt. S. Grove.
H. M. S. London																			Capt. C. J. Brownrigg.
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	29.77	756.1	85	29.4	83	E			1		3							D. clouds	Capt. A. Carpenter.
H. M. S. Midge, N. 23° 07′, E. 113° 14′	29.90	759.4				E			1		6	Calm						Showery	Capt. W. N. Lang.
H. M. S. Minotaur																			Capt. H. H. Rawson.
H. N. S. Modeste, S. 33° 11′, E. 28° 27′	30.13	765.3	68	20.0	60	WSW			4-5		10					5	WSW	Overcast	Capt. J. G. Mead.
H. M. S Monarch, Tunis, Africa	30.02	762.5	78	25.6	82	NNW			3		1	NNW						Blue sky	Capt. G. C. Tryon

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, West Coast of Borneo			83.5	28.6		NE			1		1	NE						Blue sky	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.41	747.0	58	14.4	97	ESE			2		10	SSE						Raining	Capt. E. B. Drummond.
H. M. S. Orontes, N. 12° 54′, W. 36° 27′ ...*†	30.02	762.5	78.5	25.8	84	NNE			3-4		9	SW				2	NNE	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S Pelican, N. 8° 55′, W. 79° 30′	29.85	758.2	78.5	25.8	97	Calm			0		5							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin, S. 46° 30′, W. 63° 20′	29.85	758.2	42	5.6		W			6-8		6					7	WSW	Showery	Capt. A. C. Paget.
H. M. S. Phœnix																			Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A.C.Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.76	755.9	81	27.2		SW			3		7							D. clouds	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 54° 06′, W. 129° 59′	29.85	758.2	45	7.2		Calm			0		6							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	30.13	765.3	78.3	25.7	72	SE.			3		5					Sm'h		D. clouds	Capt. C. E. Foot.
H. M. S. Salamis																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 34° 12′, W. 159° 45′	30.45	773.4	69	20.6	84	ENE			5		10					4	E	Overcast	Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Off Mollenda, Peru	30.01	762.2	61	16.1	88	E			2		10	SE				7	SE	Misty	Capt. A. H. Markham.
H. M. S. Turquoise, Sandy Point, Patagonia	29.78	756.4	39	3.9	71	SSW			4		4							Squally	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W.I			81	27.2		N			1		3							D. clouds	Com. W. T. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	30.05	763.3	59	15.0	76	NNW			2		10	SSE						D. clouds	Com. J. C. Wilson, A.D.C.
H. M. S. Woodlark, Bahrein, Arabia	29.62	752.3	90.5	32.5	76	NNW			2									Misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt.Comm. G.W.Pollard.
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnishd by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candido dos Reis, Comd't
India, N. 25° 54′, W. 20° 08′	30.24	768.0	74.3	23.5	76	Calm			0		1			½	hour			Blue sky	A. M. Da Sitra.
Quanza, Porto Praya, Cape Verd I'ds	30.17	766.3	79.7	26.5	64	NE			2		7		N			1	NE	D. clouds	Carlos M. da Silva Costa, Com d't
RioLima																			S. C. da Silva Costa, Comd't.
Sado, Loando, Africa	30.08	764.1	68.0	20.0	88	NW			2		2					1		D. clouds	G. A. de Brito Capello, Comd't.
Tamega, Macao, China	29.70	754.4	82.6	28.1	86	NE			2		6			4 ho	urs			Drizzling	P. I. de Rio Carvalho, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga, N. 38° 39′, W. 17° 03′	30.26	768.5	65.5	18.6	73	ENE			5		8							D. clouds	Capt. M. von Krusenstierna.
H. M. Frigate Vanadis																			Comp. Th. Ulner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.17	766.3	79	26.1	82	NE	2	0.9			8		NE	0	0			Fair	
Naval Hospital, Yokahama, Japan	29.68	753.9	73.5	23.1	88	Calm			0		5		SW	0	0			Fair	
Adams, N. 22° 04′, W. 107° 48′	29.69	754.1	81	27.2	91	S			2		8		Calm			Long	S	Cloudy	
Alaska, Ancon, Peru	29.95	760.7	62	16.7	100	Calm			0		10			0	0	Sm'h		Foggy	
Alert, Port Lloyd, Bonin Id.*	29.88	758.9	82	27.8	79	NW			1		0			0	0			Clear	
Alliance, St. John's, N. F	30.06	763.5	46	7.8	100	SE			2		10			0	0	Sm'h		Foggy	
Ashuelot, Kobe, Japan	29.81	757.2	75	23.9	81	SW			1		5?		Calm					Cloudy	
Colorado, New York, N. Y	29.75	755.6	73	22.8	81	SW	3	1.3			8		SW	0	0			Cloudy	
Constitution, Newport, R. I	29.59	751.6	66	18.9	84	NW			3		10		NW					Cloudy	
Franklin, Norfolk, Va	29.76	755.9	81	27.2	74	WSW	8.4	3.8			2		NW	0	0			Fair	
Galena, Santander, Spain,	30.32	770.1	66	18.9	74	NNE			2		0					Sm'h		Clear	
Independence, N. Yard, Mare I'd, Cal	29.86	758.4	63	17.2	67	S	9.6	4.3			5		S	0	0			Fair	
Jamestown, Sitka, Alaska*	29.86	758.4	52	11.1	93	Calm			0		10			0.02	0.5			Cloudy	
Kearsarge, Norfolk, Va	29.87	758.7	79	26.1	78	W			1		2							Fair	
Lackawanna, Pagolago, Samoia Oceania†	30.16	766.1	80	26.7	91	E			3-4		5		E					Fair	
Marion, Monte Video, Uruguay..*†	30.07	763.8	50	10.0	72	S			3		8		Calm			Mod.	S	Overcast	
Michigan, Detroit, Michigan	29.68	753.9	71	21.7	90	NW			1		10		NW					Cloudy	
Minnesota, Newport, R. I	29.65	753.1	71	21.7	80	WNW			3		10		NW			Sm'h		Cloudy	
Monocacy, Yokohama, Japan	29.87	758.7	75	23.9	86	E			1		8		Calm					Fair	
Nipsic, N. 51° 22′, E. 3° 13′	30.24	768.1	64	17.8	73	NW			2		2					Sm'h		Hazy	
Onward, Callao, Peru†	29.97	761.2	62	16.7	94	Calm			0		10					Long	W	Cloudy	
Palos, Nagasaki, Japan	29.88	758.9	72	22.2	100	SW			1		5							Fair	
Passaic, Washington, D. C	29.78	756.4	76	24.4	91	SW			1		2		S					Fair	
Pensacola, Mare Isl'd, Cal	29.89	759.2	55	12.8	87	SW			3		2			0	0			Fair	
Portsmouth, Bristol Harbor, R. I	29.62	752.3	67	19.4	95	NW			2		5					Sm'h		Fair	
Powhatan, N. 42° 13′, W. 70° 25′	29.57	751.1	70	21.1	75	W			3		2		W					Clear	
Quinnebaug, Navy Yard, New York	29.67	753.6	73	22.8	76	SW			1		10		WNW					Overcast	
Ranger, N. 29° 55′, W. 113° 39′*	29.73	755.1	82	27.8	79	Calm			0		2		Calm	0	0	Sm'h		Clear	
Richmond, Kobe, Japan	29.85	758.2	77	25.0	82	SSW			3		10			0	0			Cloudy	
Saratoga, Wickford, R. I	29.61	752.1	65	18.3	94	WSW			1		8		Calm	Light				Cloudy	
Shenandoah, Rio de Janeiro, Brazil.*	30.27	768.8	68	20.0	95	N			1		8					Sm'h		Foggy	
St. Louis, League Island, Pa	29.31	744.5	76	24.4	86	SW	6	2.7			2		SW	0.1	3.			Clear	
Swatara, Chefoo, China*†	29.74	755.4	75	23.9	64	S			3		10		NW			Sm'h		Overcast	
Tennessee, Navy Yard, N. Y	29.69	754.1	72	22.2	90	WNW	2	0.9			10		WNW	0.06	1.5	Sm'h		Hazy	
Ticonderoga, S. 31° 40′, W. 38° 42′	30.29	769.4	67	19.4	100	N			3		2		N	0	0	Sm'h	N	Clear	
Vandalia, Halifax, Nova Scotia	29.88	758.9	56	13.3	100	SE			1		10		Calm					Rainy	
Wabash, Boston, Massachusetts	29.60	751.8	69	20.6	65	WNW	14	6.3			2		W	0.12	3.0			Hazy	
Wachusetts, N. Yard, Mare I'd, Cal	29.86	758.4	56	13.3	87	SSW			2		5		S	0	0			Fair	
Wyoming, Norfolk, Va			78	25.6	78	NW	4	1.8			5			0	0			Fair	
Yantic, N. 24° 20′, W. 84° 00′	29.97	761.2	81	27.2	91	E			2		5		E			Sm'h		Fair	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 7° 12′, W. 117° 38′	29.86	758.4	77.8	25.4	90	SE			4		10							Raining	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 12° 36′, W. 55° 17′	30.06	763.5	80.1	26.7	87	E			4		7					2	E	D. clouds	Capt. W. N. Lalley.
City of Agra, S. 28° 30′, W. 34° 22′	30.42	772.7	73.5	23.1	83	NE			5		3							D. clouds	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 17° 46′, W. 39° 14′	30.14	765.5	78.5	25.8	70	N			3		3							Blue sky	Capt. A. Buchan.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt. W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R.N.R.
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Naiad, N. 27° 56′, W. 21° 26′	30.17	766.3	72.3	22.4	95	N			3		6							D. clouds	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 47° 04′, W. 13° 06′	30.34	770.6	61.3	16.3	76	S			4		2							Blue sky	Capt. M. Parry.
Sierra Estrella, S. 1° 09′, W. 22° 25′	30.09	764.3	76.9	24.9	83	SE			5		3							D. clouds	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven																			Capt. C. W. Pearson.
Sch'r. Traveller																			Capt. A. Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
S. S. Yorkshire																			Capt. H. Longley.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, Glasgow, Scotland	29.90	759.4				S			3		10		SW			Sm'h		Cloudy	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian, Liverpool, England	30.16	766.1	61	16.1														Fair	Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Gallia, N. 48° 00′, W. 31° 48′	29.88	758.9	59	15.0		WNW			6		8		W	0	0	H'vy	W	Cloudy	Capt. W. H. P. Hains.
S. S. Algeria																			Capt. W. Watson.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, N. 45° 41′, W. 47° 36′ †	30.27	768.8	44	6.7	84	Calm			0		10		SW	0	0			Misty	Capt. Ch. W. Kennedy.
S. S. Republic																			Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig																			Capt. C Phole.
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, N. 41° 22′, W. 47° 42′	30.17	766.3	65.8	18.8		E			2		2?		E			Sm'h	ESE	Cloudy ?	
S. S. Köln, N. 38° 41′, W. 64° 32′	29.76	755.9	80.5	26.9	85	WSW			4-5		5		WSW	0	0	Mod.	wsw	Fair	Capt. Th. Jüngst
S. S. Strassburg, N. 48° 00′, W. 26° 53′	29.90	759.4	59.0	15.0		S			6		10		S	7 hours		Long	S	Rainy	Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES. Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO *H. B. Welsh, President.*																			
S. S. Illinois, N. 38° 57′, W. 73° 44′	29.68	753.9	72	22.2	95	WSW			3		2		WSW			Sm'h	wsw	Hazy	Capt. J. W. Shackford.
S. S. Indiana, Philadelphia, Pa			86	30.0	58	NW			6		8		NW	Mod	erate			Rainy	Capt. R. W. Sargent.
S. S. Ohio, Liverpool, England *†	30.00	762.0	65	18.3	94	NW			2		5		W	0	0	Sm'h		Fair	W. Shackford, Chief Off'r
S. S. Pennsylvania, Liverpool, England †	30.16	766.1	63	17.2	94	W			3		5		W			Sm'h		Fair	Capt. Geo. H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 36° 46′, E. 151° 24′ †	29.78	756.4	74	23.3	85	S			6		10			Ra	in	High	SE	Overcast	Capt. H. Davison.
S. S. Gaelic																			Capt. W. H. Kidley.
S. S. Oceanic, N. 44° 15′, E. 161° 33′	30.62	777.7	46	7.8	76	Calm			0		10		NE	0	0	2	ENE	Cloudy	Capt. J. Metcalf.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles
S. S. Oregon, N. 38° 35′, W. 123° 50° †	29.91	759.7	51.5	10.8	83	NW			3		2		NW			Mod.	NW	Fair	Capt. E. Polemann.
PACIFIC COAST S.S. CO. *Goodall, Perkins & Co*																			
S. S. Ancon, N. 33° 57′, W. 119° 03′ †	29.86	758.4	62	16.7	83	SE			2		8		SE	0	0			Foggy	Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, Irondald, Washington Ter †	29.88	758.9	54	12.2	86	Calm			0		10							Rainy	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator																			Capt. Thos. Wallace.
S. S. State of California, Portland, Oregon †	29.89	759.2	54	12.2	73	NW			2		5		W					Fair	Capt. G. Debney.
S. S. Victoria, N. 40° 05′, W. 124° 25′ †	29.94	760.5	54	12.2	87	NW			3		2					Sm'll	NW	Clear	Capt. H. M. Hayward.
PACIFIC MAIL S.S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 2d Officer.
S. S. City of New York, S. 5° 30′, W. 167° — †	29.96	761.0	84	28.9	91	ESE			3		0					Mod.	E	Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, N. 35° 15′, W. 121° 26′ †	29.93	760.2	55	12.8	74	WNW			6	2c	0	NW		0	0	H'vy	WNW	Hazy	Capt. D. S. Austin.
S. S. City of Peking, N. 46° 21′, W. 151° 02′ †	30.29	769.4	53	11.7	93	SSW			5		10		SW	0	0	Light	SW	Misty	Capt. G. G. Berry.
S. S. City of Sidney, S. 34° 03′, E. 160° 51′ *†	30.36	771.1	64	17.8	58	NNW			3		10		NNW	0	0	Sm'h		Cloudy	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 22° 14′, E. 115° 04′ †	29.84	757.9	85	29.4	79	E			3		2		E			Mod.	S	Clear	A. L. Ritchie, 2d Officer
S. S. Colima, N. 19° 32′, W. 105° 16′ †	29.89	759.2	82	27.8	79	ESE			4		8		SE	0.20	5.1	H'vy	SE	Cloudy	Capt. R. R. Searle.
S. S. Granada																			Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. Wales	30.05	763.3	54	12.2	67	NW			1		10?		W					Clear?	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, ‡ N. 39° 50′, W. 52° 38′ †	29.85	758.2	75	23.9	100	S			4		8		S	2 ho	urs	Sm'h		Fine	A. Feddersen, 2d Officer.
S. S. Rhynland, Antwerp, Belgium †	30.44	773.2	71	21.7	95	SW			2		10		WNW	0	0			Cloudy	Capt. W. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			Capt. A. Mehaffey.
Sch'r Addie Fuller, Savannah, Georgia						WSW					8			0	0			Cloudy	Capt. J. Jorgensen.
Sch'r Annie R. Lewis.																			Capt. L. L. Lewis.
Bark Carrie Heckle																			Capt B. F. Woodbury.
Brigantine George, Monabo, Porto Rico †	30.12	765.0	84	28.9		ENE			6		2			Sho	wers	R'gh		Clear	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk																			
Bark Sunbeam, N. 23° 37′, W. 43° 38′ †	30.27	768.8	79	26.1	78	NE			6		2		NE	0	0	Mod.	ENE	Clear	Capt. Jos. Hand.

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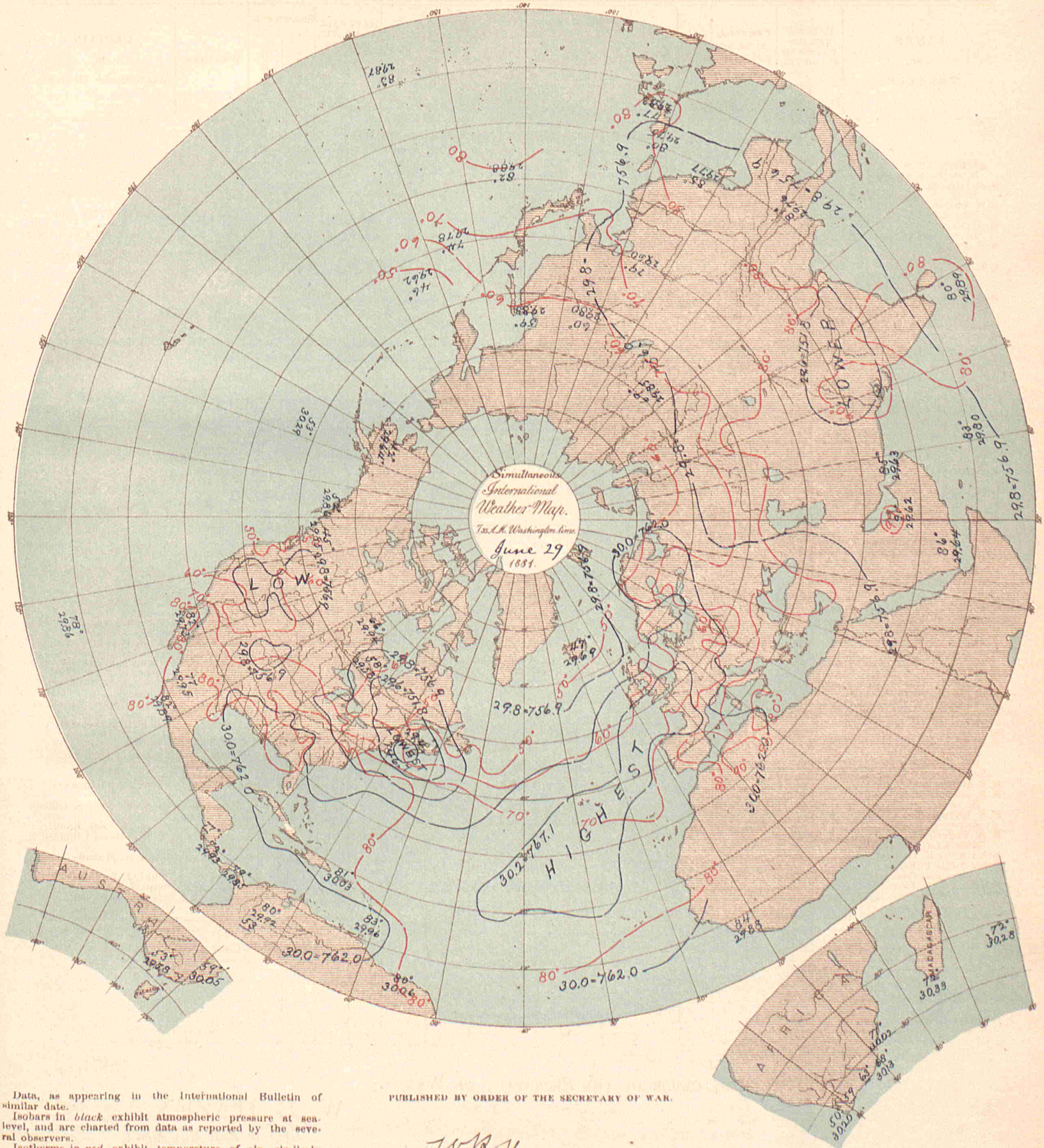
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

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W. B. Hazen

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BULLETIN

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

TAKEN SIMULTANEOUSLY ON JUNE 30, 1881,

7 A. M., Washington Mean Time.

Collated at the Office of the Chief Signal Officer of the Army of the United States, from observations made in each instance in compliance with a special request, and printed for exchange with the co-operating observers.

The time for Simultaneous International Meteorological Observations is now 35 minutes earlier than before January 1st, 1881. For the present any observations taken at 7:35 A. M. will be published with a ‡.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature.		Barometer. Reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind. Direction.	Wind. Velocity.		Wind. Force	Clouds. Amount and kind.		Clouds. Direction.		Rain-fall or melted snow in the past 24 hours.		Weather.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower				
	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
ALGERIAN SERIES. Furnished by the co-operation of General Maritz, Commandant Supérieur du Génie in Algeria.																			
Nemours‡			30.08	763.9	77.5	25.3	80	N			2		1			0	0	Very fair	Raynard.
Algiers‡			30.15	765.7	78.4	25.8	62	NNE			3		0			0	0	Clear	Nicolas.
La Calle‡			30.16	766.1	78.4	25.8	65	NW			5		2			0	0	Fair	Fonfrède.
Tunis‡			30.10	764.6															Jacques.
Sfax‡																			Gau.
Saida‡			30.10	764.5	92.8	33.8	17	N			3		2			0	0	Fair	Dumas.
Tebessa‡			30.13	765.3	79.9	26.6	18	NNW			3		0			0	0	Clear	Watrin.
Geriville‡					99.4	35.8	13	NW			1		0			0	0	Clear	Lonchamp.
Laghouat‡			30.11	764.9	96.4	35.8	11	N			2		0			0	0	Clear	Herbin.
Biskra‡			30.13	765.3	93.6	34.2	47	NW			2		0			0	0	Clear	Baudassé.
AUSTRALIAN SERIES. Furnished by the co-operation of R. L. J. Ellery, Director of the Melbourne Observatory at Melbourne, N. S. W., and the respective observers.																			
Melbourne, Victoria	29.65	753.1	29.74	755.4	46.9	8.3	78	WNW	18	8.0			5			0	0	Fine	R. L. J. Ellery.
Sub-Series.																			
AUSTRO-HUNGARIAN SERIES. Furnished by the co-operation of Professor Dr. Julius Hann, Director of the Imperial and Royal Central Meteorological Institute at Vienna.																			
Agram	29.42	747.3	29.95	760.8	71.1	21.7	55	NE			6		10			Inap.	Inap.		Prof. Ivan Stozir.
Cracow, I. R. Obs'y	29.38	746.2	30.13	765.3	67.3	19.6	63	N	7.4	3.3			10			0	0		Dr. Wierzbicki.
Eperies	29.15	740.5	30.01	762.3	65.1	18.4	68	NW			2		10s			0	0		Julius Mikolik.
Gratz‡	28.91	734.2	30.13	765.2	67.6	19.8	73	NW			4		9			0.571	14.5		Andreas Rospini.
Hermannstadt	28.52	724.4	29.91	759.6	72.1	22.3	90	W			2		10			0.323	8.2		Prof. A. Gottschling.
Kremsmunster, Obs'y	28.90	734.1	30.24	768.0	58.8	14.9	92	SSE			1		10			0.291	7.4		The Staff.
Lemberg	28.97	735.9	29.93	760.3	64.8	18.2	81	E			3		10			0.031	0.8		Dr. T. Stanecki.
Pola	29.90	759.5	30.01	762.2	79.3	26.3	37	ENE			3		2			0	0		I. R. HydrographicOffice.
Szathmar	29.48	748.7	29.93	760.1	76.1	24.5	54	N			2		6			0.059	1.5		Beicht Peter, S. J.
Szegedin	29.68	753.9	29.95	760.7	71.6	22.0	74	NE			2		4			0	0		Karl Stancel.
Trieste	29.98	701.6	30.09	764.2	75.2	24.0	57	NNE			2		10			0	0		Secco.
Vienna	29.43	747.6	30.14	765.5	63.7	17.6	72	NW			2		8			0.177	4.5		I. R. Central Met. Obs'y.
BELGIAN SERIES. Furnished by the co-operation of J. C. Houzeau, Director of the Royal Observatory at Brussels.																			
Brussels																			Royal Observatory.
Furnes																			M. E. de Cae.
Maeseyck																			M. Pierrot.

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STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	OBSERVERS.
BRITISH SERIES.																			
Furnished by the co-operation of the Meteorological Council, London, Robert H. Scott, Esq., F. R. S., Secretary, and the respective observers.																			
Aberdeen	29.91	759.7	30.01	762.2	50.9	10.5	94	S	15	6 7			10			0.200	5.1	Raining	W. Boswell.
Armagh, Observatory	29.66	753.4	29.89	759.2	60.4	15.8	96	SW	14	6.3			10					Raining	S. Call.
Bidston, Liverpool Obs'y			30.10	764.5	56.7	13.7	85	S	18	8.0			10					Overcast	John Hartnup.
Bolton, Sharples	29.57	751.1	30.11	764.8	54.0	12.2	93	S	18	8.0			10					Raining	Thomas Mackereth.
Bradford, Yorkshire	29.72	754.9	30.12	765.0	57.6	14.2	73	SW			2.0		10			0	0	Overcast	J.McLandsborough,F.R.S
Bridgetown, Barbadoes	30.00	762.0	30.02	761.5	81	27.2	83	NE			3		0					Overcast	Corpl.J.Surgener,A.H.C
Cardington			30.22	767.6	72.0	22.2	55	W			0.6		9					Overcast	John McLaren.
Chatham, School M. E.	30.15	765.8	30.28	769.1	69.2	20.7	52	SW			3		3					D. clouds	Corpl. W. Beck, R. E.
Falmouth, Observatory	30.02	762.5	30.25	768.3	62.2	16.8	64	S			4		9					Overcast	The Staff.
Fort Napier, Natal	27.67	702.8	29.89	759.2	78.1	25.6	51	NW			1		2					Blue sky	Pvt. E. K.Anniss, A.H.C.
Free Town, Sierra Leone	29.64	752.8	29.87	758.7	86	30.0	84	SW			1		0					Blue sky	Sgt. C. E. Keane.
Galway, Queen's College			29.83	757.7	58	14.4	100	SW			4		10			0.11	2.8	Raining	J. O'Donaghue.
Gibraltar, Mediterranean	30.06	763.5	30.12	765.0				E			1		3					Blue sky	2nd Cpl. C. Baldwin.
Glasgow, Observatory	29.68	753.9	29.89	759.2	54.8	12.7	95	SSW			1		10					Overcast	Harry Urquhart.
Greenwich, Royal Obs'y	30.10	764.5	30.26	768.6	68.3	20.2	54	SSW			1		4					D. clouds	The Staff.
Guernsey	30.02	762.5	30.24	768.1	65	18.3	65	ESE			1		0					Blue sky	Dr. S. E. Hoskins, F. R. S.
Kew, Observatory	30.23	767.8	30.26	768.6	68.8	20.4	49	SSW	17	7.6			4					D. clouds	The Staff.
Leicester, Museum	29.97	761.2	30.22	767.6	65.6	18.7	71	SW			1		5					D. clouds	J. E. Carryer.
Malta, Mediterranean	29.86	758.4	29.94	760.5	79.4	26.3	68	NW			3		0					Blue sky	F. S. Vine, A. H. C.
Nassau, Bahamas	30.02	762.5	30.06	763.5	86.0	30.0	76	SE			1		4					D. clouds	C. S. Duncombe.
Oscott, St. Mary's College	29.68	753.9	30.20	767.1	59.4	15.2	77	SSW			4		10					Overcast	John Mac Emali.
Oxford, Radcliffe Obs'y	30.02	762.5	30.25	768.3	63.3	17.4	61	SW			2		10					Overcast	The Staff.
Plymouth	30.21	767.3	30.28	769.1	62.7	17.1	69	S			3		10					Overcast	John Merrifield.
Sandwick Manse, Orkneys			29.94	760.5	55.1	12.8	70	SE	24	10.7			10					Misty	Rev. C. Clouston, L. L.D.
Scutari Cemetery, Turkey	29.76	755.9	29.83	757.7	78.8	26.0	56	S			1		1					Blue sky	Serg't. W. H. Lyne.
Sheffield	29.91	759.7	30.19	766.8	59.0	15.0	96	SSW			½		10			0.01	0.3	Overcast	W. F. Cooper.
Silloth Rectory	29.91	759.7	29.94	760.5	56.3	13.5	93	S			6		10			1.902	48.3	Raining	Rev. F. Redford, M. A.
Stonyhurst, Observatory			30.12	765.0	55.0	12.8	89	S	25	11.2			10					Overcast	Rev. S. J. Perry.
Stratfield Turgiss	30.08	764.0	30.29	769.4	69.2	20.7	52	SW			4		4					Squally	Rev.C.H.Griffiths,F.M.S.
Truro, Royal Institution	30.20	767.1	30.21	767.3	68	20.0	65	S			6		5					D. clouds	W. Newcombe.
Valencia, Observatory	29.91	759.7	29.94	760.5	58.6	14.8	95	SSE	40	17.9			10					Raining	The Met'g'l Office.
CANADIAN SERIES.																			
Furnished by the co-operation of Charles Carpmael, A. M., F. R. A. S., Director of the Magnetic Observatory at Toronto and Superintendent of the Meteorological Office of the Dominion of Canada, and the respective observers.																			
Bathurst, N. B					59.0	15.0		N	4	1.8			10n			0	0		Hon. J. Ferguson.
Charlottetown, P. E. Island	29.43	747.5	29.47	748.5	54	12.2	81	NW	12	5.4			10n			1.099	27.9	Threatening	H. J. Cundall, C. E.
Chatham, N. B.*	29.48	748.8	29.54	750.3	58	14.4	78	NW	8	3.6		8ck	2ks	NW	NW	0.02	0.5	Fair	G. A. Blair.
Chicontimi, Quebec																			Rev. V. A. Huart.
Cornwall, Ontario	29.51	749.5	29.69	754.1	64.0	17.8	81	NW			1		10s			0.013	0.3	D. clouds	James Smith, M. A
Dalhousie, N. B	29.52	749.8	29.55	750.6	63.0	17.2		W			1	0	0			0.13	3.3	Blue sky	H. A. Johnson.
Father Point, Quebec*	29.62	752.3	29.64	752.8	48	8.9	96	NW	2	0.9			10n			0	0	Cloudy	J. McWilliams.
Fort Garry, Manitoba*	29.26	743.2	30.07	763.8	60	15.6	83	SE	2	0.9		0	Hz			0	0	Hazy	James Stewart.
Fredericton, N. B	29.54	750.3	29.60	751.8	58.5	14.7	78	N	3	1.3			10s			0.095	2.4	Cloudy	Prof. Harrison.
Granton, Ontario	28.85	732.8	29.94	760.5	53.0	11.7	93	NW			1		10n			0	0	Gloomy	James Grant.
Halifax, N. S.*	29.41	747.0	29.54	750.3	58	14.4	83	NW	6	2.7		4k	6	NW		0.508	12.9	Fair	A. Allison.
Hamilton, Ontario	29.48	748.8	29.86	758.4	60.3	15.7	82	SW			1	0	0			0	0	Clear	Geo. Dickson, B. A.
Kingston, Ontario*	29.42	747.3	29.74	755.4	65	18.3	81	NW	4	1.8		0	0			0.13	3.3	Clear	S. Woods, M. A.
Little Glace Bay, N. S	29.27	743.4	29.31	744.5	57.0	13.9	84	W	6	2.7		0	5ks			1.23	31.2	Fair	C. H. Rigby.
Montreal, Quebec*	29.48	748.8	29.67	753.6	62	16.7	83	NW	5	2.2		5c	5ks	N	NW	0.10	2.5	Cloudy	C. H. McLeod, C. E.
Moose Factory, Ontario	29.96	761.0	30.00	762.0	56.5	13.6	78	NE			2	0	0			0.29	7.4	Blue sky	J. R. Nason.
Parry Sound, Ontario*	29.19	741.4	29.86	758.4	62	16.7	76	N	10	4.5		0	0			0	0	Clear	Rev. R. Moseley.
Peterboro, Ontario	29.08	738.6	29.81	757.2	64.7	18.2	77	W			2	3k	0			0.02	0.5	Clear	J. F. Jeffers, M. A.
Port Dover, Ontario	29.19	741.4	29.87	758.7	57	13.9	94	NW					Hz			0	0	Hazy	H. Morgan.
Port Stanley, Ontario	29.25	742.9	29.89	759.2	57	13.9	87	N	5	2.2			10n		NW	0	0	Cloudy	M. Payne.
Quebec, Quebec*	29.38	746.2	29.70	754.4	54	12.2	93	NE			1		10n		NE	0.15	3.8	Light rain	Capt. Ashe, R. N.
Rockliffe, Ontario*	29.35	745.5	29.80	756.9	60	15.6	82	NW	8	3.6			8ks		N	Inap.	Inap.	Cloudy	W. H. McIntyre.
Saugeen, Ontario*	29.20	741.7	29.91	759.7	56	13.3	92	N	11	4.9		0	Hz			0	0	Hazy	K. Stewart.
St. Andrews, N. B	29.54	750.3	29.60	751.8	58	14.4	82	NW	4	1.8		0	2ks			0.62	15.7	Clear	
St. John, N. B	29.43	747.5	29.59	751.6	60.0	15.6	73	NW	5	2.2		5ck	0			0.905	23.0	D. clouds	G. Murdock, C. E.
Stratford, Ontario	28.65	727.7	29.91	759.7	53.9	12.2	93	NW	5	2.2		2cs	2s			0	0	Blue sky	C. J. Macgregor, M. A.
Sydney, C. B.*	29.26	743.2	29.30	744.2	58	14.4	83	W	17	7.6		8ck	2ks	NW	W	1.30	33.0	Fair	T. C. Hill, C. E.
Toronto, Ontario*	29.47	748.5	29.85	758.2	61	16.1	76	NW	14	6.3		0	0			0	0	Clear	Magnetic Observatory
Windsor, N. S	29.92	760.0	30.02	762.5	57.0	13.9	73	NW	14	6.3		3k	2s			1.11	28.2	Fair	
Woodstock, Ontario	28.84	732.5	29.88	758.9	59.9	15.5	78	NW	7	3.1		0	0			0	0	Blue sky	Prof. Wolverton.
Yarmouth, N. S*	29.54	750.3	29.60	751.8	53	11.7	97	W	1	0.4		5k	0	NW		0.05	1.3	Fair	Lt. F. E. Wilmot, R. N
Sub-Series.																			
St. Johns, Newfoundland	29.66	753.4	29.91	759.7	56	13.3	100	S	4	1.8			10			0	0	Stormy	John Delany.
St. Pierre, N. F			29.20	741.7	50.0	10.0		SW			2					1.97	50.0		N. F. Land, Comd't.
Stations marked with a * are telegraphed daily to the office of the Chief Signal Officer of the Army.																			
CAPE COLONY SERIES.																			
Furnished by the co-operation of the Meteorological Commission of Cape Colony, Cape Town, and the respective observers.																			
Cape St. Francis Lt. House	30.03	762.7			59.0	15.0	81	SW	13.9	6.2			10ks			0	0	Threatening	John Duthie.
Cape Town, C. G. H. Obs'y	30.19	766.8	30.23	767.8	58.0	14.4		W					10ks					Rainy	The Staff, for D. Gill.
Worcester*†	29.07	738.4			50	10.0	69	WNW			1	5	5			0.09	2.3	Drizzling	C. Stokes.
CHINESE SERIES.																			
Furnished by the co-operation of Marc Dechevrens, S. J., Director of the Meteorological Observatory at Zi-Ka-Wei.																			
Sub-Series.																			
Zi-Ka-Wei, near Shanghai	29.77	756.1	29.80	756.8	79.2	26.2	92	S	4.7	2.1		0	5			0	0	Cloudy	M. Marc Dechevrens, S.J

STATIONS.	Barometer. Corrected for instru'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
COSTA RICA SERIES.																			
By authority of the Minister of Foreign Affairs.																			
Furnished by the co-operation of Senor Amand Maison, Director of the Central Office of Statistics and Meteorology.																			
San José	26.20	665.5	29.92	760.0	68.4	20.2	93	SE			1	9ck	1d		E	0	0	Cloudy	Amand Maison.
DANISH SERIES.																			
Furnished by the co-operation of Captain N. Hoffmeyer, Director of the Royal Danish Meteorological Institute at Copenhagen.																			
Copenhagen	30.24	768.2	30.29	769.4	64.0	17.8	46	WNW	13	6		2							Oversergent Fischer.
Fanöe	30.25	768.3	30.27	768.8	62.6	17.0	74	W			4	3							Overloerer Lauridsen.
Godthaab, Greenland																			S. Kleinschmidt.
Stykkisholm, Iceland	29.75	755.6	29.79	756.7	50.4	10.2		N			4	8							A. O. Thorlacius.
Thorshavn	29.86	758.5	29.90	759.4	54.9	12.7	77	SSE			4	8						Raining	Overloerer Bergh.
Vestervig	30.13	765.3	30.22	767.7	61.0	16.1	77	WSW			2	1							Loearer Oesterbol.
FRENCH SERIES.																			
Furnished by the co-operation of the Central Meteorological Office of France, Prof. E. Mascart, Director, and the respective observers.																			
Agen, Normal School	29.60	751.8	30.22	767.5	82.0	27.8	13	NE			1	1c	o			o	o	Clear	M. Labroue, Director.
Alençon Normal School	29.84	758.0	30.39	772.0	65.5	18.6	77	S			2		o			o	o	Clear	M. Nicot, Director.
Arras, Engineer School	30.07	763.8	30.28	769.1	70.3	21.3	40	S				1c	o					Clear	M. Klein, Commandant.
Avignon, Normal School	30.06	763.5	30.14	765.5	80.2	26.8	34	NNW			4		o			o	o	Clear	M. Giraud, Director.
Bar-sur-Seine	29.77	756.2	30.32	770.0	71.2	21.8	39	NNE			1	o	5kn		NE	o	o	Cloudy	M. Saillard, Director.
Beauvais, Normal School	30.10	764.6	30.36	771.1	68.9	20.5	46	SE			2		2		SE	o	o	Slightly cl'dy	M. Frère Eugene Marie.
Besançon, Normal School	29.42	747.2	30.25	768.4	70.7	21.5	62	NE			1					o	o		M. Gobin, Director.
Bordeaux, Observatory	29.94	766.4	30.19	766.8	77.4	25.2	25	E			1		o			o	o	Clear	M. Rayet, Director.
Bourges, Normal School	29.82	757.4	30.36	771.2	75.2	24	28	NE			1		1		NE	o	o	Clear	M. Postel, Director.
Brest, Naval Observatory	30.06	763.4	30.30	769.6	73.4	23.0	63	SSW			1		2		SW	o	o		M. de Kermaree, Dir.
Caen, Normal School	30.24	768.1	30.32	770.0	74.3	23.5	43	S			1		o			o	o	Clear	M. Blétrix, Director.
Châlons-sur-Marne, N.Sch'l	29.96	761.0	30.27	768.9	77.0	25.0	39	SW			1		o			o	o	Clear	M. Jadot, Director.
Charleville, Normal School	29.83	757.6	30.33	770.4	74.5	23.6	73	S			1					c	o		M. Grimard, Director.
Clermont-Ferrand Obs'y	28.94	735.0	30.20	768.5	72.3	22.4	37	NNE			1		o			o	o	Clear	M. Alluard, Director.
Cluny, Normal School	29.46	748.2	30.28	769.2	74.8	23.8	33	N			2		o			o	o		M. de Villemontée, Dir.
Commercy, Normal School	29.50	749.2	30.35	771.0	70.7	21.5	38	NE			3	o	5k		NE	o	o	Cloudy	Dr. Coulet, Director.
Gap, Normal School	27.61	701.2	30.04	763.1	76.1	24.5	41	SW			2	o	k		S	o	o		M. Jeangirard, Director.
Gréasque, du. Rhone	29.06	738.1	30.20	767.1	86.0	30.0	35	W			1		2		SW	o	o	¼ covered	M. Klna, Director.
Grenoble, Normal School	29.45	748 0	30.19	766.9	74.3	23.5	47	WNW			2	ck	o			o	o		M. Ablard, Director.
Guéret, Normal School	28.71	729.3	30.25	768.3	72.5	22.5	35	E			2		o			o	o	Clear	M. Rivoire, Director.
Lamballe, Normal School	30.10	764.0	30.37	771.4	73.4	23	47	S			1				S	o	o		M. Ollitrault, Director.
Lescar, Normal School	29.62	752.4	30.27	768.8	77.0	25	36	NE			1					o	o		M. Chauvin, Director.
Lorient, Naval Observatory	30.22	767.7	30.33	770.3	75.2	24.0	53	SSE			2		2		SE	o	o	¼ covered	Lt. T. Carré, Director.
Lyon Obs'y, Park Station	29.23	742.4	30.27	768.8	71.4	21.9	37	N			2		o			o	o	Clear	M. André, Director.
Mans, Normal School	30.04	762.9	30.22	767.6	70.7	21.5	43	SSW			1		o			o	o	Clear	M. Piboen, Director.
Marseille, Observatory	29.85	758.1	30.11	764.7	80.8	27.1	33	NW			1		1		NW	o	o		M. Stephan, Director.
Montlouis l'Instituteur	25.08	637.0	30.32	770.0	65.8	18.8	30	E	3.8	1.7			o			o	o		M. Cave, for Dr. Fines.
Montpellier, Normal School	30.04	762.9	30.14	765.6	83.5	28.6	24	N			3		o			o	o	Clear	M. P. Galzin, Director.
Nancy, Normal School	29.56	750.9	30.32	770.0	71.6	22	34	NNW			1	o	2kn			o	o	Slightlycl'dy	M. Hasse.
Nantes, Observatory	30.15	765.8	30.32	770.0	78.8	26	37	E			1-2	2c	o			o	o	Hazy	M. Larocque, Director.
Nice	30.06	763.5	30.10	764.4	77.7	25.4	61	E			2		1	E	E	o	o	Clear	Capt. Boissière, Director.
Perpignan, Observatory	30.05	763.3	30.15	765.9	82.8	28.2	24	N	11.2	5.0			o			o	o		Dr. Fines.
Pic-du-Midi, Plantade	22.80	579.2			58.8	14.9							o			o	o	Clear	Gen'l de Nansouty, Dir.
Privas, Normal School	29.18	741.2	30.21	767.3	77.0	25	23	N			1		o			o	o	Clear	M. Tallieu.
Puy de Dôme Obs'y, Summit	25.43	646.0			48.0	8.9	61	ENE			4		o			o	o	Clear	M. Alluard, Director.
Rochefort, Naval Obs'y	30.25	768.4	30.28	769.2	79.2	26.2	41	E			1		o			o	o	Clear	Lt. E. Decante, Director.
Roche-sur-Yon, N. School	30.07	763.8	30.28	769.1	75.9	24.4	42	N			2		5		W	o	o	Cloudy	M. Mouillot, Director.
Rodez, Normal School	28.68	713 2	30.13	765.2	72.0	22.2	60	NW			2		o			o	o	Clear	M. Richard, Director.
Rouen, Normal School	30.24	768.2	30.33	770.4	72.3	22.4	43	SSE			1		o			o	o	Clear	M. Platrier, Director.
Saint Lô, Normal School	30.17	766.3	30.33	770.3	72.3	22.4	50	S			2		o			o	o	Clear	M. Delaplanche, Dir.
Saint Maur, Observatory	30.17	766.3	30.34	770.5	72.7	22.6	40	S			1		3		SE	o	o		M. Renou, Director.
Toulouse, Observatory	29.57	751.0	30.30	709.5	80.6	27.0	26	NW			1		o			o	o	Clear	M. Bailland, Director.
Tours	30.10	764.4	30.29	769.4	69.8	21.0	41	NE			1		1		NE	o	o	Clear	M. de Tastes.
Versailles, Observatory	29.84	758.0	30.33	770.4	70.5	21.4	39	SE			1					o	o		Dr. A. Bérigny, Director.
Sub-Series.																			
Paris, Montsouris Obs'y	30.06	763.6	30.35	771.0	71.8	22.1	42	SE			1		4		ENE	o	o		M. Marié Davy, Director.
GERMAN SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
Bamberg	29.44	747.8	30.31	769.9	70.0	21.1	40	N			1	o	3k		N	o	o		Prof. Dr. Hoh.
Berlin	30.08	764.1	30.25	768.4	70.7	21.5	34	NW			3		8			o	o		Prof. Dr. Arndt.
Breslau	29.69	754.2	30.23	767.8	68.0	20.0	43	NW			2		8			o	o		Royal University Obs'y.
Carlsruhe	29.90	759.5	30.33	770.3	68.4	20.2	60	NE			1		9	NW		o	o		Albert Senz.
Cassel	29.60	751.9	30.32	770.2	68.4	20.2	38	NW			4		5	NW		o	o		Dr. H. Möhl.
Frankfort on the Main	30.01	762.2	30.37	771.3	69.8	21.0	40	NNE			1		5			o	o		Physical Society.
Friedrichshafen	28.89	733.7	30.30	769.6	66.2	19.0	69	S			2		5	W		o	o		Wilhelm, Chief Tel.
Hamburg	30.24	768.1	30.31	769.9	68.7	20.4	65	W			3		6			o	o		Dr. R. Kleeman.
Kiel	30.26	768.6	30.28	769.0	63.5	17.5	61	SW			2		8			o	o		Prof. Dr. G. Karsten.
Leipsic, Astrom'l Obs'y	29.91	759.6	30.32	770.2	65.1	18.4	49	NW			2		6	NW		o	o		Prof. Dr. Bruhns.
Magdeburg	30.11	764.9	30.30	769.6	68.0	20.0	40	NW			3	o	6ks		NW	o	o		Dr. Assmann.
Memel	30.10	764.5	30.15	765.7	59.0	15.0	87	NNW			3	o	9ks						Reinbrecht & Issermann.
Munich	28.49	723.6	30.37	771.5	65.5	18.6	39	NW			4		4	NW		0.394	10.0		Central Station.
Neufahrwasser	30.17	766.3	30.19	766.7	64.4	18.0	73	N			3		1			0.031	0.8		A. Lothes.
Neustadt, Palatinate	29.79	756.7	30.32	770.2	70.2	21.2	49	W			1		4			o	o		Dicknether.
Stuttgart	29.37	746.0	30.25	768.3	67.6	19.8	46	E			3		3	E		o	o		Prof. Dr. Schoder.
Weissenburg, Bavaria	28.83	732.3	30.31	769.9	65.7	18.7	45	N			4		7	N		o	o		Prof. Kemlein.
Wustrow	30.27	768.8	30.30	769.5	61.3	16.3	61	WSW			3	o	5s			o	o		Brandes & Reimer.

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Barometer. Corrected for instrum'tal error and temperature. Mill	Barometer. Reduced to sea-level. Inch.	Barometer. Reduced to sea-level. Mill.	Temperature of the Air. Fah.	Temperature of the Air. Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Wind. Velocity. Miles p. h'r	Wind. Velocity. Mtrs p. sec	Wind. Force 0—10	Clouds. Amount and kind. Up'er 0—10	Clouds. Amount and kind. Lo'er 0—10	Clouds. Direction, Upper. From.	Clouds. Direction, Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Rain-fall or melted snow in the past 24 hours. Mill.	Weather.	Observers.
GREEK SERIES. Furnished by the co-operation of Prof. Dr. J. F. Julius Schmidt, Director of the Royal Observatory at Athens.																			
Athens	29.49	749.1	29.87	758.6	87.6	30.9		SW			1.5		0					Clear	Schmidt & Wourlisch.
INDIAN SERIES. Furnished by the co-operation of H. F. Blanford, Meteorological Reporter to the Government of India, at Calcutta.																			
Kurrachee	29.48	748.7	29.53	750.0	90.0	32.2	80	SW	44.0	19.7		4		WSW		0	0	D. clouds	
Deesa	29.04	737.6	29.50	749.2	96.9	36.1	46	SSW	15.2	6.8		4		WSW		0	0	D. clouds	
Bombay	29.66	753.2	29.69	754.2	84.4	29.1	81	W	12.0	5.4		10		SW		0.12	3.0	Overcast	
Poona, Yarrowda.	27.84	707.2	29.68	753.8	81.3	27.4	58	WNW	19.0	8.5		9		W		0.01	0.3	Overcast	
Belgaum	27.22	691.4	29.78	756.4	69.6	20.9	92	W	14.0	6.3		10				0.04	1.0	Showery	
Lahore	28.73	729.8	29.46	748.2	86.0	30.0	55	N	4.1	1.8		10				0	0	Overcast	
Roorkee	28.56	725.5	29.45	748.1	79.0	26.1	74	N	1.9	0.8		9				0.02	0.5		
Agra	28.85	732.8	29.39	746.4	100.7	38.2	42	Calm	5.5	2.5		6		W		0	0		
Nagpur	28.52	724.4	29.55	750.5	81.0	27.2	79	N	4.0	1.8		9		N		1.12	28.4	Gloomy	
Jubbulpore	28.21	716.4	29.54	750.4	81.8	27.7	73	SW	3.7	1.6		10				0.17	4.3	Overcast	
Lucknow	29.07	738.3	29.43	747.4	97.0	36.1	39	NNE	2.1	0.9		4		ESE		0	0	Blue sky	
Allahabad	29.09	738.9	29.39	746.5	91.7	33.2	62	Calm	1.2	0.5		6				0	0	D. clouds	
Patna	29.29	744.0	29.47	748.4	89.0	31.7	72	Calm	1.8	0.8		8				0	0	D. clouds	
Hazaribagh	27.52	669.1	29.50	749.3	81.6	27.6	79	NW	7.5	3.4		8		SE	SE	0.21	5.3	Showery	
Cuttack	29.50	749.2	29.58	751.2	81.0	27.2	84	Calm	1.0	0.4		10				1.09	27.7	Drizzling	
Calcutta, Alipore	29.48	748.8	29.50	749 3	85.5	29.7	85	SSW	5.0	2.2		8		W	W	0	0	D. clouds	
Dhubri	29.40	746.8	29.52	749.8	79.0	26.1	94	Calm	1.4	0.6		10			W	1.04	26.4	Overcast	
Chittagong	29.51	749.5	29.60	751.8	81.7	27.6	88	S	6.5	2.9		6				0	0	Blue sky	
Sibsagar	29.19	741.4	29.52	749.7	85.3	29.6	82	SW	2.9	1.3		10		W	W	0.20	5.1	D. clouds	
Zanzibar, Africa			30.11	764.8	79.7	26.5	67	SSW	8	3.6		9			S	0	0	Gloomy	
ITALIAN SERIES. By authority of the Minister of Agriculture, Industry and Commerce. Furnished by the co-operation of Prof. P. Tacchini, Director of the Central Meteorological Office at Rome, and the respective observers.																			
Udine	29.68	753.8	30.07	763.8	76.3	24.6	54	SW	2.5	1.1		6				0.520	13.2		Prof. Giovanni Clodig.
Milan	29.57	751.0	30.06	763.5	79.3	26.3	49	SSW	1.8	0.8		1				0	0		Prof. Schiaparelli.
Padua	29.98	701.5	30.05	763.2	74.8	23.8	50	WNW	9.8	4.4		8		NNE		0.094	2.4		Prof. Dott. Lorenzoni.
Moncalieri	29.21	742.0	30.09	764.2	79.9	26.6	26	SSE	3.1	1.4		0				0	0		Prof. P. F. Denza.
Genoa	29.90	759.4	30.08	764.1	79.5	26.4	27	NW	7.4	3.3		0				0	0		Prof. G. M. Garibaldi.
Mondovi	28.24	717.3	30.08	764.1	73.8	23.2	25	W			2	0				0	0		Prof. D. C. Bruno.
Pesaro	30.01	762.2	30.06	763.4	72.0	22.2	60	N				7				1.063	27.0		Prof. Luigi Guidi.
Florence	29.82	757.3	30.06	763.5	75.9	24.4	56	N			6	3				0	0		Prof. Costantino Pitter.
Leghorn	30.01	762.3	30.10	764.4	78.4	25.8	37	NW	3.1	1.4		3				0	0		Prof. P. Monte.
Rome	29.75	755.6	29.92	759.9	77.9	25.5	39	N	19.9	8.9		0				0	0		Prof. P. S. Ferrari.
Lecce	29.64	752.9	29.88	759.0	74.8	23.8	63	NW	15.4	6.9		9		N		0.071	1.8		Prof. C. de Giorgi.
Cosenza	29.06	738.0	29.91	759.6	81.7	27.6	67	SE	3.8	1.7		7		ESE		0.480	12.2		Prof. D. Conti.
Cagliari	29.83	757.7	30.02	762.5	83.8	28.8	29	NNW			2	0				0	0		Prof. A. Pacinotti.
Palermo	29.76	756.0	30.01	762.2	77.0	25.0	54	NW	15.4	6.9		3		NW		0	0		Prof. G. Ciacciatore.
Syracuse	29.83	757.7	29.87	758.8	80.4	26.9	76	E	3.9	1.7		5		WSW		0	0		Prof. Vincenzo Guiliano.
Sub-Series.																			
Naples, S. R	29.35	745.4	29.85	758.2	77.5	25.3	62	S	6.3	2.8		7		W		0	0		Prof. F. Brioschi.
Stelvio	22.43	569.6			44.6	7.0	44	NE			2	4ck		N		0	0	Misty	Prof. P. F. Denza.
Valdobbia	22.44	570.0			50.9	10.5	41	N			2	0	1k		NE	0	0	Clear	Prof. P. F. Denza.
JAPANESE SERIES. Furnished by the co-operation of I. Arai, Director of the Imperial Meteorological Observatory at Tokei.																			
Hiroshima, I. M. Obs'y. †	29.82	757.4	29.84	757.9	74.8	23.8	82	WNW	3.2	1.4			10s;ks			1.500	38.1	Overcast	K. Sasaki.
Kioto	29.72	754.9	29.89	759.2	75.4	24.1	82	SW	0.1	0.04		ck	10s			0.185	4 7	Cloudy	M. Tojima.
Nagasaki, I M. Obs'y	29.66	753.3	29.86	758.4	73.5	23.1	99	SSW	8.9	4.0			10n			2.210	56.1	Raining	S. Takehayashi.
Tokei Obs'y, Yeddo	29.85	758.2	29.91	759.7	73.0	23.1	87	SSW	4.4	2.0		0	3s			0.170	4.3	Fair	The Staff.
Wasayama	29.85	758.2	29.90	759.4	76.2	24.0	74	S	7.5	3.3		ck	7ks	SSW	SSW	0.015	0.4	Cloudy	Y. Kuwamuca.
MAURITIUS SERIES. Furnished by the co-operation of C. Meldrum, Secretary of the Meteorological Society of Mauritius.																			
Mauritius Obs'y, Mauritius	30.12	765.0	30.31	769.9	72.8	22.7	62	ESE	28.0	12.5		0	8		ESE	0.01	0.3	Cloudy	A. N. Figon.
MEXICAN SERIES. By authority of the Secretary of Public Works. Furnished by the co-operation of Senor Mariano Bárcena, Director of the Central Meteorological Observatory in the City of Mexico, and the respective observers.																			
Guadalajara																			Prof. L. Perez.
Guanajuato																			Vicente Fernandez.
Leon	24.45	621.0	30.10	764.4	62.3	16.8	86	E			1		10n			0.851	21.6	Raining	Prof. M. Leal.
Mazatlan	29.67	753.7	29.93	760.2	75.0	23.9	90	N	1.6	0.8		10s	8n		NE	0.039	1.0	Very cloudy	F. Quijano, U. E.
Mexico, Central Obs'y	23.15	587.9	30.15	765.8	55.9	13.3	90	Calm	0	0		0	9k		E	0.256	6.5		The Staff.
Pabellon, Aguascalientes	23.93	607.7	29.89	759.2	62.2	16.8	92	S			2		10n		S	0.57	14.4	Raining	M. V. de Leon, M. E.
Puebla, Catholic Institute	23.45	595.8	30.23	760.0	52.7	11.5	49	Calm	0	0		0	4		E	0.030	0.8	Clear	Prof. P. Spina.
Puebla, Catholic Institute																			G. Barroeta, M. D.
San Luis Potosi																			Prof. M. Cházaro.
Tlacotalpam																			Prof. J. Rossell.
Vera Cruz																			J. A. Bonilla, M. E.
Zacatecas	22.57	573.3	30.17	766.3	53.6	12.0	89	Calm	0	0			10n			0.342	8.7	Covered	
NETHERLANDS SERIES. Furnished by the co-operation of Professor Buys Ballot, Director of the Royal Meteorological Institute of the Netherlands at Utrecht.																			
Flushing	30.35	770.8	30.35	770.8	72.3	22.4		WSW			3					0	0		
Groningen	30.25	768.4	30.31	769.8	66.7	19.3		NW			2					0	0		
Helder	30.29	769.3	30.29	769.3	66.2	19.0		SW			2					0	0		
Hellevoetsluis	30.32	770.1	30.32	770.1	72.9	22.7	56	WSW			2					0	0		
Utrecht	30.28	769.0	30.32	770.2	71.8	22.1	55	WSW			2		5			0	0	Cloudy	H. van der Brink

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature.		BAROMETER. Reduced to sea-level.		TEMPERATURE OF THE AIR.		REL. HUM.	WIND. Direction.	WIND. Velocity.		WIND. Force	CLOUDS. Amount and kind.		CLOUDS. Direction.		RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS.		WEATHER.	OBSERVERS.
												Up'er	Lo'er	Upper.	Lower.				
	Inch.	Mill	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.		
NORWEGIAN SERIES. Furnished by the co-operation of Prof. H. Mohn, Director of the Royal Norwegian Meteorological Institute at Christiania.																			
Bergen	30.08	763.9	30.14	765.5	58.3	14.6	65	SW	20.1	9.0			5			0.260	6.6		
Christiania	29.90	759.3	30.04	763.1	69.4	20.8	37	SW	13	6			3			0	0		
Gjæsvær	29.98	761.6	30.01	762.2	57.2	14.0		Calm			0		8						
Lodingen	29.97	761.2	30.02	762.4	57.4	14.1	78	SW			2		5			0	0	Foggy	
PORTUGUESE SERIES. Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Angra, Azores	30.24	768.1	30.25	768.5	67.6	19.8	92	SSE	8.7	3.9			5			0	0		Dr. J. A. Sampaio.
Campo Major	29.13	740.0	30.07	763.8	92.3	33.5	33	ESE	1.3	0.6			1			0	0		Dr. A. M. R. dos Santos.
Funchal, Madeira	30.10	764.5	30.19	766.7	71.4	21.9	81	SW	1.3	0.6			10			1.055	26.8		Capt. D. A. de Cunha.
Lisbon, Observatory	29.79	756.7	30.14	765.5	78.1	25.6	59	SSW	7.4	3.3			3			0.008	0.2		The Staff.
Ponta Delgada, Azores	30.35	770.8	30.42	772.6	70.5	21.4	65	N	2.5	1.1			3			0	0		
RUSSIAN SERIES. Furnished by the co-operation of Professor H. Wild, Director of the Imperial Central Physical Observatory of Russia at St. Petersburg.																			
Akmolinski	28.62	727.0	29.61	752.0	90.7	32.6	23	SW	9	4		0	2k						Capt. Lasarew.
Archangel	30.00	762.1	30.02	762.6	71.2	21.8	52	W	13	6			0						Capt. Ssellwerstow.
Astrakhan	29.90	759.4	29.82	757.3	81.1	27.3	32	W	11	5			9k						Capt. Wisganow.
Barnaul ‡	29.33	745.0	29.81	757.1	73.2	22.9	44	NW	2	1			8						Meteorological Obs'y.
Dorpat	29.79	756.7	30.02	762.6	77.0	25.0	37	NNE	4	2			0						Observatory.
Ekaterinburg	28.60	725.4	29.52	749.8	64.0	17.8	89	E	4	2			10					Light rain	Meteorological Obs'y.
Kasan	29.24	742.6	29.50	749.3	53.6	12.0	94	NW	4	2			10n					Raining	Observatory.
Kertch	29.92	759.9	29.94	760.4	74.1	23.4	60	NNE	4	2			4						Lagorio & Sastyrez.
Kieff	29.30	744.2	29.91	759.8	70.2	21.2	52	N	4	2		c;cs	4ks;k						Observatory.
Krotkowo																			Cand. Fatjanow.
Lugan	29.66	753.4	29.86	758.4	76.8	24.9	31	W	9	4			5						Meteorological Obs'y.
Moscow	29.33	744.9	29.85	758.2	72.5	22.5	42	NW	7.8	3.5		0	2ks						Meteorological Obs'y.
Nertchinsk	27.68	703.0	29.89	759.2	61.5	16.4	75	Calm	0	0			3			0	0		Meteorological Obs'y.
Nikolaiev	29.89	759.3	29.97	761.1	71.1	21.7	71	NNE	4	2			10n						Capt. Kurdakow.
Nikolaievsk, on the Amoor	29.79	756.7	29.88	758.9	55.9	13.3	82	Calm			0		10n			0	0		Lieut. Iwanow.
Pekin, China	29.44	747.8	29.58	751.4	74.1	23.4	98	Calm	0	0			10n					Thund'rst'm	Physical Observatory.
St. Petersburg	29.97	761.3	29.99	761.7	75.7	24.3	50	NW	11	5		0	2k;ks						Central Physical Obs'y.
Tashkend, Laboratory	28.22	716.9	29.68	753.9	88.5	31.4	45	Calm	0	0			0						Tefth, A. M.
Tiflis	28.47	723.2	29.79	756.6	92.3	33.5	30	SE	4	2		0	3k						Physical Observatory.
Warsaw	29.71	754.6	30.13	765.3	61.3	16.3	74	N	11	5			10cks						Astronomical Obs'y.
Wilna	29.60	751.8	30.00	762.0	74.1	23.4	59	W	11	5			4						Berg, Assistant.
Yeniseisk	29.62	752.3	29.90	759.4	61.0	16.1	77	SSW	7	3			10						M. O. Marks.
SCOTTISH SERIES. Furnished by the co-operation of Alexander Buchan, M. A., F. R. S. E., Secretary of the Scottish Meteorological Society at Edinburgh, and the respective observers.																			
Leith, Restalrig Park			29.93	760.2	55.0	12.8	97	S			2		10ks			0.43	10.9	Raining	Andrew Gibb.
Monach Lt. House, Hebrides			29.69	754.1	54	12.2	93	S			6		10			0.2	5.	Raining	J. Youngclause.
North Unst, Shetland Isl'ds			29.97	761.2				SW			2	4	4	S		Blank			Robert Burnet.
SPANISH SERIES. Furnished by the co-operation of Antonio Aguilar, Director of the Royal Observatory at Madrid, and the respective observers.																			
Barcelona, Met. Obs'y	30.11	764.8	30.21	767.4	79.5	26.4	61	SSE	4.7	2.1			0			0	0	Clear	Antonio Rave, Director.
Bilbao, Met. Obs'y	30.16	766.1	30.22	767.5	82.0	27.8	55	E	1.3	0.6		0	0			0	0	Clear	Prof. Manuel de Naveran
Burgos, Met. Obs'y	27.27	692.6			78.8	26.0	36	NE	9.4	4.2			0			0	0	Clear.	Domingo Martin.
Madrid, Royal Obs'y	27.96	710.1	30.08	764.0	88.0	31.1	38	S	6.7	3.0		0	0			0	0	Clear	The Staff.
Murcia, Met. Obs'y ‡	30.06	763.4	30.20	767.0	86.0	30.0	43	ESE	3.1	1.4		2	3	W		0	0	Cloudy	Olayo Diaz, Director.
Santiago, Met. Obs'y	29.18	741.1	30.01	762.3	88.9	31.6	43	SW	3.8	1.7			0			0	0	Clear	R. Gil Vallanueva, Dir.
SUB-SERIES.																			
Havana, Cuba, W. I	29.96	761.0	30.02	762.6	80.6	27.0	81	Calm	0	0		0	0			0	0	Clear	Benito Vines, S. J.
Manilla, Philippine Islands	29.78	756.1	29.82	757.4	78.7	25.9	77	SE	2.2	1.0			10n			2.99	53.0	Raining	Federico Faura, S. J.
San Fernando, Naval Obs'y	30.03	762.8	30.13	765.2	83.3	28.5	48	ESE	11.7	5.3			10		ESE	0	0		Capt. C. Pujazon, R. N., Dir.
San Juan de Porto Rico, W. I	29.95	760.6	30.04	762.9	83.1	28.4	92	E	10.7	4.8			10kn		E	0.217	5.5	Overcast	Enrique Gadea, Chief Engineer.
Tuguegarao, Philippine Ids	29.61	752.1	29.76	755.8	75.9	24.4	91	S	11.5	5.9			10n		S	0.39	10.0	Covered	José L. Fastovra.
SWEDISH SERIES. Furnished by the co-operation of Prof. R. Rubenson, Director of the Royal Swedish Meteorological Institute, and of Prof. H. H. Hildebrandsson, Director of the Meteorological Observatory of the Upsala University.																			
Haparanda	30.00	762.1	30.04	763.1	75.6	24.2	56	S			2		0			0	0		
Umea	30.00	762.0	30.05	763.3	66.6	19.2	64	SW			2		10			0	0		
Hernosand	29.96	760.9	30.01	762.2	58.1	14.5	73	SSW			2		10			0.012	0.3		
Stockholm	29.91	759.6	30.08	764.1	68.0	20.0	35	W			2		1			0.020	0.5		
Wisby	30.03	762.7	30.09	764.2	59.7	15.4	77	W			2		0			0.083	2.1		
SUB-SERIES.																			
Upsala	29.88	758.9	29.97	761.1	70.0	21.1	37	SW	8.9	4.0			0			0	0		S. G. Fineman.
SWISS SERIES. Furnished bythe co-operation of Prof. Rob. Billwiller, Director of the Central Meteorological Institute of Switzerland, at Zurich, and Prof. E. Plantamour, Director of the Observatory at Geneva.																			
Geneva	28.85	732.8	30.23	767.9	69.8	21.0	45	NE			4		0			0.016	0.4	Clear	The Observatory.
Zurich ‡	28.69	728.7	30.28	769.1	98.4	20.2	62	N			2		4			0.004	0.1	Fair	The Observatory.
TURKISH SERIES. Furnished by the co-operation of A. Coumbary, Effendi, Director of the Central Observatory at Constantinople, and of Prof. C. V. A. van Dyck, Superintendent of the Lee Observatory at Beirut.																			
Constantinople			29.87	758.6	86.9	30.5	39	ENE	13.	6.0			0			0	0		The Observatory.
Valona			30.04	762.9	82.0	27.8		Calm			0		5			1.97	50.	Cloudy	A. Bertrand.
SUB-SERIES.																			
Beirut, Lee Obs'y, Syria			29.87	758.7	81.0	27.2	68	WNW			1		0			0	0		Prof. C. V. A. van Dyck.

UNITED STATES SERIES.

By authority of the SECRETARY OF WAR.

Furnished by the co-operation of W. B. HAZEN, Brigadier and Brevet Major General, Chief Signal Officer, U. S. Army.

STATIONS.	BAROMETER. Corrected for instrum'tal error and temperature. Inch.	Mill.	BAROMETER. Reduced to sea-level. Inch.	Mill.	TEMPERATURE OF THE AIR. Fah.	Cent.	REL. HUM. Per Ct.	WIND. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	CLOUDS. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	RAIN-FALL OR MELTED SNOW IN THE PAST 24 HOURS. Inch.	Mill.	WEATHER.	OBSERVERS.
Albany, New York	29.67	753.6	29.75	755.6	72	22.2	58	W	8	3.6	.....	5k	Hz	W	.....	Inap	Inap.	Fair	
Alpena, Michigan	29.32	744.7	29.96	761.0	55.5	13.1	81	NW	9	4.0	.....	0	2s	.....	Calm	0	0	Fair	
Atlanta, Georgia	28.83	732.3	29.98	761.5	81.0	27.2	70	W	7	3.1	.....	5c	0	Calm	.....	0	0	Fair	
Atlantic City, New Jersey	29.80	756.9	29.81	757.2	71	21.7	66	N	8	3.6	.....	1c	0	Calm	.....	0.90	22.9	Clear	
Augusta, Georgia	29.78	756.4	29.96	761.0	77.4	25.2	86	S	1	0.4	.....	2ck	2s	.....	.....	0.61	15.5	Fair	
Baltimore, Maryland	29.82	757.4	29.87	758.7	76	24.4	52	NW	4	1.8	.....	8cs	0	W	.....	0.39	9.9	Fair	
Barnegat, New Jersey	29.77	756.1	29.79	756.7	74	23.3	59	NW	10	4.5	.....	2cs	0	Calm	.....	0	0	Clear	
Bismarck, Dakota	28.16	715.3	29.90	759.4	64	17.8	78	E	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Boise City, Idaho	27.04	686.8	29.80	756.9	56.0	13.3	63	W	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Boston, Massachusetts	29.52	749.8	29.67	753.6	69.0	20.6	63	W	3	1.3	.....	0	0	.....	.....	0.01	0.3	Clear	
Bracketville, Texas	28.79	731.3	29.81	757.2	74	23.3	90	E	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Brownsville, Texas	29.91	759.7	29.95	760.7	78	25.6	91	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Buffalo, New York	29.14	740.1	29.84	757.9	59.8	15.4	77	NW	6	2.7	.....	0	Hz	.....	.....	0	0	Clear	
Burlington, Vermont	29.41	747.0	29.69	754.1	66.0	18.9	74	N	7	3.1	.....	0	5s	.....	NW	0.05	1.3	Fair	
Cairo, Illinois	29.57	751.1	29.96	761.0	84	28.9	79	W	4	1.8	.....	8c	0	W	.....	0	0	Fair	
Campo, California	27.34	694.4	29.91	759.7	37.5	3.1	49	W	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Camp Thomas, Arizona	27.16	689.9	.....	.....	68.5	20.3	47	NW	.....	.....	1	2k	5ks	.....	SE	0	0	Cloudy	
Cape Henry, Virginia	29.84	757.9	29.86	758.4	77	25.0	82	NW	14	6.3	.....	8k	2ks	.....	.....	0.70	17.8	Cloudy	
Cape May, New Jersey	29.81	757.2	29.84	757.9	73	22.8	85	NW	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Castroville, Texas	29.19	741.4	29.86	758.4	80	26.7	74	SE	5	2.2	.....	.....	10s	.....	S	0	0	Cloudy	
Cedar Keys, Florida	30.03	762.7	30.05	763.3	84	28.9	71	W	7	3.1	.....	0	5ks	.....	W	0	0	Fair	
Champaign, Illinois	29.14	740.1	29.89	759.2	72.0	22.2	76	NE	7	3.1	.....	.....	10s	.....	SW	0	0	Cloudy	
Charleston, S. Carolina	29.89	759.2	29.95	760.7	80	26.7	74	N	2	0.9	.....	5c	0	Calm	.....	0.19	4.8	Fair	
Charlotte, N. Carolina	29.06	738.1	29.92	760.0	77	25.0	81	SW	3	1.3	.....	10cs	Hz	SW	.....	0.38	9.7	Cloudy	
Chattanooga, Tennessee	29.21	741.9	30.01	762.2	77.0	25.0	71	NE	3	1.3	.....	5k;cs	0	Calm	.....	0	0	Fair	
Cheyenne, Wyoming	24.13	612.9	29.94	760.5	56.3	13.5	81	W	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Chicago, Illinois	29.30	744.2	29.98	761.5	63.0	17.2	72	NE	7	3.1	.....	9c	0	W	.....	Inap.	Inap.	Cloudy	
Chincoteague, Virginia	29.82	757.4	29.84	757.9	74	23.3	76	NW	10	4.5	.....	9k	0	NW	.....	0.15	3.8	Fair	
Cincinnati, Ohio	29.29	744.0	29.93	760.2	78	25.6	82	SW	3	1.3	.....	6c;cs	2ks;s	NW	W	1.00	25.4	Cloudy	
Cleveland, Ohio	29.21	741.9	29.93	760.2	66.6	19.2	71	N	9	4.0	.....	1c	0	.....	.....	0.29	7.4	Clear	
Coleman City, Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Columbus, Ohio	29.06	738.1	29.88	758.9	73	22.8	76	NW	7	3.1	.....	2k	0	W	.....	0.29	7.4	Clear	
Concho, Texas	28.08	713.2	29.96	761.0	74	23.3	81	SE	4	1.8	.....	0*	0	.....	.....	0	0	Clear	
Corsicana, Texas	29.56	750.8	30.02	762.5	80	26.7	74	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Davenport, Iowa	29.31	744.5	29.95	760.7	72	22.2	85	NW	1	0.4	.....	.....	10ks	.....	NW	0.31	7.9	Cloudy	
Dayton, Washington T'y	28.19	716.0	29.94	760.5	50.5	10.3	58	S	1	0.4	.....	0	8s	.....	S	0	0	Fair	
Deadwood, Dakota	25.35	643.9	29.90	759.4	70	21.1	53	SW	.....	.....	.....	0	0	.....	.....	0	0	Clear	
Decatur, Texas	28.81	731.8	29.91	759.7	80	26.7	74	S	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Delaware Breakwater, Del.	29.84	757.4	29.84	757.9	72	22.2	80	NW	12	5.4	.....	4ck	0	SW	.....	0	0	Fair	
Denison, Texas	29.17	740.9	29.95	760.7	79	26.1	78	S	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Denver, Colorado	24.83	630.7	29.90	759.4	66.4	19.1	44	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Des Moines, Iowa	29.08	738.6	29.96	761.0	71	21.7	90	SE	4	1.8	.....	.....	10s	.....	E	0.09	2.3	Cloudy	
Detroit, Michigan	29.26	743.2	29.93	760.2	62.0	16.7	72	NW	11	4.9	.....	0	0	.....	.....	0	0	Clear	
Dodge City, Kansas	27.31	693.7	29.80	756.9	72.3	22.4	80	SE	17	7.6	.....	1cs	1s	W	.....	0.12	3.0	Fair	
Dubuque, Iowa	29.27	743.4	29.95	760.7	71.3	21.8	87	S	1	0.4	.....	.....	10s	.....	Calm	Inap.	Inap.	Cloudy	
Duluth, Minnesota	29.41	747.0	30.09	764.3	59	15.0	82	Calm	0	0	.....	.....	10s	.....	Calm	0	0	Cloudy	
Eagle Pass, Texas	29.18	741.2	29.99	761.7	78.1	25.6	78	SE	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Eagle Rock, Idaho	25.14	638.5	29.85	758.2	65	18.3	35	S	11	4.9	.....	0	0	.....	.....	0	0	Clear	
Eastport, Maine	29.52	749.8	29.59	751.6	59	15.0	70	NW	5	2.2	.....	8ck	0	NW	.....	0.33	8.4	Fair	
El Paso, Texas	26.16	664.5	29.81	757.2	75	23.9	56	E	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Erie, Pennsylvania	29.17	740.9	29.86	758.4	65	18.3	68	NW	4	1.8	.....	Hz	0	.....	.....	0	0	Clear	
Escanaba, Michigan	29.38	746.2	30.02	762.5	60	15.6	77	N	9	4.0	.....	2c	2s	Calm	Calm	0	0	Fair	
Florence, Arizona	28.36	720.3	29.96	761.0	75	23.9	37	NE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Fort Apache, Arizona	25.04	636.0	29.82	757.4	58	14.4	27	E	3	1.3	.....	0	5s	.....	Calm	0	0	Fair	
Fort Assinnaboine, Montana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Fort Bennett, Dakota	28.34	719.8	29.80	756.9	68	20.0	95	SE	10	4.5	.....	.....	10s	.....	.....	Inap.	Inap.	Cloudy	
Fort Benton, Montana	27.06	687.3	29.80	756.9	60	15.6	77	E	2	0.9	.....	0	0	.....	.....	0.10	2.5	Clear	
Fort Buford, Dakota	27.96	710.2	29.88	758.9	65	18.3	84	E	11	4.9	.....	0	0	.....	.....	0	0	Clear	
Fort Custer, Montana	26.74	679.2	29.83	757.7	62	16.7	72	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Fort Davis, Texas	25.19	639.8	30.15	765.8	67	19.4	64	S	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Fort Elliott, Texas	27.26	692.4	30.33	770.4	73	22.8	63	SE	8	3.6	.....	.....	10s	.....	SE	0	0	Cloudy	
Fort Gibson, Indian T'y	29.37	746.0	29.90	759.4	79	26.1	78	SE	4	1.8	.....	.....	10s	.....	E	0	0	Cloudy	
Fort Grant, Arizona	.....	.....	.....	.....	71	21.7	25	N	4	1.8	.....	5c;ck	2s	.....	.....	0	0	Fair	
Fort Griffin, Texas	28.69	728.7	29.89	759.2	80.0	26.7	59	SE	8	3.6	.....	5cs	0	.....	.....	0	0	Fair	
Fort Keogh, Montana	27.35	694.7	29.76	755.9	67	19.4	83	NE	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Fort Macon, North Carolina	29.90	759.4	29.91	759.7	76	24.4	91	W	6	2.7	.....	10k	0	W	.....	0.90	22.9	Cloudy	
Fort McKavett, Texas	27.75	704.8	29.58	751.3	76	24.4	76	S	11	4.9	.....	7cs	0	S	.....	0	0	Fair	
Fort Missoula, Montana	26.60	675.6	29.98	761.5	55	12.8	68	S	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Fort St. Michaels	29.48	748.8	29.51	749.5	48	8.9	85	SW	7	3.1	.....	.....	10s	.....	.....	Inap.	Inap	Cloudy	
Fort Shaw, Montana	26.26	667.0	29.71	754.6	53	11.7	86	W	5	2.2	.....	0	0	.....	.....	0	0	Clear	
Fort Sill, Indian Territory	28.72	729.5	29.94	760.5	77	25.0	69	S	3	1.3	.....	8c	0	.....	.....	0	0	Fair	
Fort Stevenson, Dakota	28.14	714.7	29.92	760.0	64	17.8	78	NE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Fort Verde, Arizona	.....	.....	.....	.....	67.3	19.6	29	W	.....	.....	1	0	0	.....	.....	0	0	Clear	
Fredericksburg, Texas	28.27	718.0	29.77	756.1	74	23.3	90	SW	8	3.6	.....	.....	10ks	.....	SW	0	0	Cloudy	
Galveston, Texas	30.00	762.0	30.04	763.0	83	28.3	75	S	6	2.7	.....	1k	0	.....	.....	0	0	Clear	
Grand Haven, Michigan	29.36	745.7	30.01	762.2	63	17.2	67	NE	10	4.5	.....	.....	10s	.....	W	0	0	Cloudy	
Hatteras, North Carolina	29.88	758.9	29.90	759.4	77	25.0	86	SW	11	4.9	.....	.....	10s	.....	SW	0.20	5.1	Cloudy	
Helena, Montana	25.67	652.0	29.87	758.7	62	16.7	83	S	7	3.1	.....	0	0	.....	.....	0.08	2.0	Clear	
Henrietta, Texas	28.95	735.3	29.81	757.2	84	28.9	64	SE	8	3.6	.....	0	8s	.....	S	0	0	Cloudy	
Indianapolis, Indiana	29.14	740.1	29.91	759.7	76	24.4	69	NE	6	2.7	.....	4ck	0	W	.....	0	0	Fair	
Indianola, Texas	29.98	761.5	30.01	762.2	81.2	27.3	83	S	6	2.7	.....	1k	1ks	S	S	0	0	Clear	
Jacksboro, Texas	28.83	732.3	29.88	758.9	80	26.7	70	S	10	4.5	.....	5cs	0	E	.....	0	0	Fair	
Jacksonville, Florida	29.99	761.7	30.01	762.2	84	28.9	75	SW	3	1.3	.....	2k	0	SW	.....	0	0	Fair	
Keokuk, Iowa	29.29	744.0	29.93	760.2	71.2	21.8	90	NE	6	2.7	.....	.....	10n	.....	NE	0.58	14.7	Light rain	
Key West, Florida	30.02	762.5	30.05	763.3	84.0	28.9	71	SE	5	2.2	.....	0	1ks	.....	.....	0	0	Clear	
Kittyhawk, North Carolina	29.88	758.9	29.90	759.4	77	25.0	77	NW	12	5.4	.....	0	8s	.....	NW	0.15	3.8	Cloudy	
Knoxville, Tennessee	29.00	736.6	30.00	762.0	70.3	21.3	89	W	4	1.8	.....	5c	0	Calm	.....	0.02	0.5	Fair	
La Crosse, Wisconsin	29.20	741.7	29.91	759.7	68	20.0	70	N	5	2.2	.....	.....	10s	.....	.....	0	0	Cloudy	
La Mesilla, New Mexico	26.00	660.4	30.15	765.8	68.6	20.3	65	Calm	0	0	.....	0	2s	.....	.....	0	0	Fair	
Laredo, Texas	29.49	749.0	29.82	757.4	78	25.6	86	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Leavenworth, Kansas	29.06	738.1	29.93	760.2	73	22.8	81	SE	4	1.8	.....	.....	10s	.....	SE	0.40	10.2	Cloudy	
Lewiston, Idaho	29.08	738.6	29.91	759.7	59	15.0	66	E	1	0.4	.....	.....	10s	.....	Calm	0	0	Cloudy	
Little Rock, Arkansas	29.64	752.8	29.95	760.7	78	25.5	86	SW	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Los Angeles, California	29.55	750.6	29.92	760.0	58.8	14.9	82	S	1	0.4	.....	0	1s	.....	Calm	0	0	Clear	
Louisville, Kentucky	29.36	745.7	29.91	759.7	77.5	25.3	77	SW	3	1.3	.....	5c	0	.....	.....	0.30	7.6	Fair	
Lynchburg, Virginia	29.22	742.2	29.89	759.2	78	25.6	61	Calm	0	0	.....	4c	0	SW	.....	0.01	0.3	Fair	
Madison, Wisconsin	29.02	737.1	30.00	762.0	66	18.9	74	E	11	4.9	.....	.....	10s	.....	SW	0	0	Cloudy	
Marquette, Michigan	29.34	745.2	30.05	763.3	56	13.3	75	NW	10	4.5	.....	0	Hz	.....	.....	0	0	Clear	
Mason, Texas	28.36	720.3	30.05	763.3	77	25.0	73	S	8	3.6	.....	0	1ks	.....	S	0	0	Clear	
Memphis, Tennessee	29.68	753.9	30.01	762.2	82	27.8	79	SW	4	1.8	.....	9c	Hz	Calm	Calm	0	0	Fair	
Milwaukee, Wisconsin	29.28	743.7	30.01	762.2	60	15.6	71	N	9	4.0	.....	10cs	0	.....	.....	0	0	Cloudy	

STATIONS.	Barometer. Corrected for instrum'tal error and temperature. Inch.	Mill.	Reduced to sea-level. Inch.	Mill.	Temperature of the Air. Fah.	Cent.	Rel. Hum. Per Ct.	Wind. Direction. From.	Velocity. Miles p. h'r	Mtrs p. sec	Force 0—10	Clouds. Amount and kind. Up'er 0—10	Lo'er 0—10	Direction. Upper. From.	Lower. From.	Rain-fall or melted snow in the past 24 hours. Inch.	Mill.	Weather.	Observers.
UNITED STATES SERIES—Continued.																			
Mobile, Alabama	29.99	761.7	30.06	763.5	80	26.7	76	N	3	1.3	.....	8cs	0	.....	.....	Inap.	Inap.	Fair	
Montgomery, Alabama	29.81	757.2	30.03	762.7	77.3	25.2	82	W	3	1.3	.....	0	0	.....	.....	0.26	6.6	Clear	
Moorhead, Minnesota	29.02	737.1	29.98	761.5	65	18.3	84	E	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Morgantown, W. Virginia	28.90	734.0	29.84	757.9	73	22.8	81	SW	7	3.1	.....	2cs	5s	.....	SW	0.15	3.8	Fair	
Mt. Washington, N. H.	23.53	597.7	29.56	750.8	42	5.6	100	NW	30	13.4	.....	.....	Fg	.....	NW	0.37	9.4	Dense fog	
Nashville, Tennessee	29.43	747.5	29.95	760.7	81.9	27.7	79	SW	2	0.9	.....	5k	0	W	.....	0	0	Fair	
New Haven, Connecticut	29.62	752.3	29.73	755.1	70	21.1	57	NW	7	3.1	.....	0	0	.....	.....	0	0	Clear	
New London, Connecticut	29.67	753.6	29.72	754.9	70	21.1	90	N	8	3.6	.....	0	0	.....	.....	0	0	Clear	
New Orleans, Louisiana	29.98	761.5	30.03	762.7	81.5	27.5	78	S	1	0.4	.....	1c	Sk	.....	.....	Inap.	Inap.	Clear	
Newport, Rhode Island	29.64	752.8	29.68	753.9	72.3	22.4	66	NW	6	2.7	.....	1c	0	Calm	.....	0	0	Clear	
New River, N. Carolina	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
New Shoreham, Rhode I'd	29.67	753.6	29.70	754.4	68.2	20.1	79	NW	12	5.4	.....	0	0	.....	.....	0	0	Clear	
New York, New York	29.62	752.3	29.79	756.7	68	20.0	65	W	9	4.0	.....	0	Hz	.....	.....	0	0	Clear	
Norfolk, Virginia	29.84	757.9	29.88	758.9	80	26.7	66	N	4	1.8	.....	5c	2s	.....	.....	0.03	0.8	Fair	
North Platte, Nebraska	27.09	688.1	29.91	759.7	65	18.3	92	E	10	4.5	.....	.....	Fg	.....	.....	0	0	Dense fog	
Olympia, Washington T'y	29.99	761.7	30.03	762.7	43.5	6.4	88	NE	1	0.4	.....	1cs	0	Calm	.....	Inap.	Inap.	Clear	
Omaha, Nebraska	28.81	731.8	29.95	760.7	73.5	23.1	83	SW	1	0.4	.....	.....	10s	.....	N	1.75	44.4	Cloudy	
Oswego, New York	29.45	748.0	29.77	756.1	59.5	15.3	84	W	3	1.3	.....	5k	5s	NW	NW	0	0	Fair	
Pensacola, Florida	30.02	762.5	30.05	763.3	79	26.1	87	N	3	1.3	.....	0	8ks	.....	NE	0.18	4.6	Fair	
Philadelphia, Pa	29.76	755.9	29.82	757.4	72	22.2	54	N	15	6.7	.....	0	Hz	.....	Calm	0.13	3.3	Clear	
Phœnix, Arizona	28.76	730.5	30.50	774.7	73	22.8	50	Calm	0	0	.....	2c	2s	.....	.....	0	0	Fair	
Pike's Peak, Colorado	18.11	460.0	30.32	770.1	47	8.3	55	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	
Pioche, Nevada	24.02	610.1	29.87	758.7	60	15.6	20	S	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Pittsburg, Pennsylvania	29.10	739.1	29.89	759.2	65.5	18.6	87	W	2	0.9	.....	.....	Fg	.....	Calm	0.15	3.8	Dense fog	
Port Eads, Louisiana	30.05	703.3	30.00	703.5	82.3	27.9	79	Calm	0	0	.....	0	2ks	.....	SW	0.24	6.1	Fair	
Port Huron, Michigan	29.28	743 7	29.94	760.5	58.2	14.6	82	N	8	3.6	.....	10cs	0	W	.....	0	0	Cloudy	
Portland, Maine	29.58	751.3	29.63	752.6	67	19.4	74	E	3	1.3	.....	5k	2s	NE	Calm	0.02	0.5	Fair	
Portland, Oregon	29.94	760.5	30.02	762.5	49.2	9.6	89	SE	2	0.9	.....	0	1s	.....	S	0	0	Clear	
Portsmouth, N. Carolina	.....	.....	.....	.....	79	26.1	82	SW	16	7.2	.....	10c	0	Calm	.....	0.52	13.2	Cloudy	
Prescott, Arizona	24.77	629.1	29.84	757.9	57	13.9	47	SW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Punta Rassa, Florida	30.02	762.5	30.03	762.7	84	28.9	75	SE	7	3.1	.....	1k	0	E	.....	0	0	Clear	
Red Bluff, California	29.51	749.5	29.84	757.9	55.0	12.8	74	S	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Rio Grande City, Texas	29.77	756.1	29.98	761.5	78	25.6	91	SE	12	5.4	.....	.....	10s	.....	SE	0	0	Cloudy	
Rochester, New York	29.18	741.2	29.80	756.9	61	16.1	77	W	5	2.2	.....	5cs	0	Calm	.....	0	0	Fair	
Roseburg, Oregon	29.42	747.3	29.98	761.5	46	7.8	92	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Sacramento, California	29.82	757.4	29.89	759.2	50.5	10.3	79	SE	6	2.7	.....	0	0	.....	.....	0	0	Clear	
St. Louis, Missouri	29.35	745.5	29.93	760.2	75.5	24.2	79	Calm	0	0	.....	8c	0	SW	.....	0.10	2.5	Fair	
St. Paul, Minnesota	29.18	741.2	30.02	762.5	68	20.0	65	E	5	2.2	.....	5ck	0	NW	.....	0	0	Fair	
Salt Lake City, Utah	25.58	649.7	29.78	756.4	69	20.6	27	SE	4	1.8	.....	0	0	.....	.....	0	0	Clear	
San Antonio, Texas	29.31	744.5	30.00	762.0	77.3	25.2	91	SE	2	0.9	.....	.....	9s	.....	SE	0	0	Cloudy	
San Diego, California	29.82	757.4	29.89	759.2	62.3	16.8	77	Calm	0	0	.....	.....	10s	.....	.....	0	0	Cloudy	
Sandusky, Ohio	29.26	743.2	29.92	760.0	68	20.0	74	N	21	9.4	.....	0	0	.....	.....	0.54	13.7	Clear	
Sandy Hook, New Jersey	29.75	755.6	29.78	756.4	70.5	21.4	75	W	8	3.6	.....	0	0	.....	.....	0.01	0.3	Clear	
San Francisco, California	29.87	758.7	29.94	760.5	52	11.1	93	W	11	4.9	.....	0	Fg	.....	W	0	0	Clear	
Santa Fé, New Mexico	23.38	593.8	29.89	759.2	65	18.3	26	NE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Savannah, Georgia	29.88	758.9	29.97	761.2	85	29.4	64	W	6	2.7	.....	2c	0	.....	.....	Inap	Inap.	Fair	
Shreveport, Louisiana	29.80	756.9	30.03	762.7	80	26.7	82	SW	3	1.3	.....	2c	0	.....	.....	0	0	Fair	
Silver City, New Mexico	24.27	616.4	29.73	755.1	68	20.0	26	NW	8	3.6	.....	2c	0	NW	.....	0	0	Clear	
Sitka Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.04	1.0	.....	
Smithville, North Carolina	29.89	759.2	29.92	760.0	78	25.6	91	Calm	0	0	.....	5c	Hz	.....	.....	0.01	0.3	Fair	
Spokane Falls, Wash. Ter.	27 92	709.2	29.88	758.9	55	12.8	68	W	3	1.3	.....	.....	10s	.....	.....	0	0	Cloudy	
Springfield, Illinois	29.29	744.0	29.95	760.7	74.5	23.6	83	N	4	1.8	.....	.....	10ks	.....	W	0.97	24.6	Cloudy	
Springfield, Massachusetts	29.58	751.3	29.70	754.4	73.5	23.1	63	W	3	1.3	.....	0	0	.....	.....	0	0	Clear	
Stockton, Texas	20.93	684.0	29.92	760.0	72.3	22.4	80	SE	16	7.2	.....	0	0	.....	.....	0	0	Clear	
St. Vincent, Minnesota	29.20	741.7	30.04	763.0	61	16.1	82	SE	8	3.6	.....	0	0	.....	.....	0	0	Clear	
Thatcher's Island, Mass	29.61	752.1	29.66	753.4	70.0	21.1	90	NW	14	6.3	.....	5k	0	SW	.....	0	0	Fair	
Toledo, Ohio	29.26	743.2	29.94	760.5	64	17.8	68	NW	6	2.7	.....	5c	0	W	.....	0.21	5.3	Fair	
Tucson, Arizona	27.41	696.2	29.70	754.4	80	26.7	25	SE	2	0.9	.....	0	0	.....	.....	0	0	Clear	
Umatilla, Oregon	29.00	751.8	30.00	762.0	56.0	13.3	57	E	2	0.9	.....	0	8s	.....	SW	0	0	Cloudy	
Uvalde, Texas	28.99	736.3	29.77	756.1	78	25.6	82	SE	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Vicksburg, Mississippi	29.85	758.2	30.10	764.5	81	27.2	78	SW	4	1.8	.....	10cs	0	Calm	.....	0	0	Cloudy	
Visalia, California	29.50	749.3	29.86	758.4	55	12.8	62	NW	1	0.4	.....	0	0	.....	.....	0	0	Clear	
Washington, D. C.	29.77	756.1	29.88	758.9	73	22.8	63	NW	1	0.4	.....	7c	0	.....	.....	0.03	0.8	Fair	
Wickenburg, Arizona	.....	.....	.....	.....	66	18.9	41	Calm	.....	.....	0	0	2s	.....	.....	0	0	Fair	
Wilmington, N. Carolina	29.84	757.9	29.89	759.2	77	25.0	82	W	1	0.4	.....	8c	0	Calm	.....	0.08	2.0	Fair	
Winnemucca, Nevada	25.46	646.7	29.67	753.6	53	11.7	31	SW	10	4.5	.....	0	0	.....	.....	0	0	Clear	
Wood's Holl, Mass	29.64	752.8	29.68	753.9	69	20.6	75	NW	4	1.8	.....	0	0	.....	.....	0	0	Clear	
Yankton, Dakota	28.71	729.2	29.97	761.2	72	22.2	90	Calm	0	0	.....	.....	10s	.....	E	0	0	Cloudy	
Yuma, Arizona	29.59	751.6	29.73	755.1	79.7	26.5	44	S	6	2.7	.....	0	0	.....	.....	0	0	Clear	
Sub-Series.																			
Bogota, U. S. Columbia	22.08	560.8	.....	.....	54.0	12.2	72	Calm	0	0	.....	5k	2ks	.....	.....	0	0	Cloudy	Thomas Herran.
Buff Bay Town, Jamaica.‡	29.75	755.6	30.06	763.5	82	27.8	70	E	.....	.....	.....	2c	9	.....	.....	.....	.....	.....	
Havana, Cuba, W. I.	30.01	762.2	30.06	763.5	82	27.8	70	Calm	0	0	.....	0	0	.....	.....	0	0	Clear	A. Van Caneghem, Ass't.
Kingston, Jamaica, W. I.	29.97	761.2	29.98	761.5	79.5	26.4	71	N	1	0.4	.....	5cs	0	.....	.....	0	0	Fair	Robert Johnstone.
Navassa, W. I.	29.88	758.9	29.96	761.0	81	27.2	78	E	15	6.7	.....	0	2k	.....	E	0.01	0.3	Fair	F. M. Everett.
Paramaribo, S. A.	30.04	763.0	30.05	763.3	79	26.1	83	SE	.....	.....	3	3c	0	.....	.....	0.190	4.8	Clear	Dr. C. J. Hering.
Puerto Berrio, U. S. Col'mbia	29.42	747.3	29.97	761.2	79	26.1	95	Calm	0	0	.....	.....	Fg	.....	.....	0	0	Foggy	Francesco J. Cisneros.
Rivas, Nicaragua	.....	.....	.....	.....	76.1	24.5	.....	NE	.....	.....	2	7ck	6ks	NE	NE	0.24	6.	.....	Earl Flint.
Santiago de Cuba, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Robert Mason.
St. Thomas, W. I.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. O. Gyllich.
York Factory, B. A.	29.80	756.9	29.85	758.2	71.0	21.7	83	NW	10	4.5	.....	1ck	0	NW	.....	0	0	Fair	J. Fortescue & W Wood.

BRITISH NAVAL SERIES.

Furnished by the co-opertaion of the Meteorological Council, London, Robert H. Scott, Esq., F.R. S., Secretary.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	CAPTAIN OR Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
H. M. S. Albatross																			Comm. A. J. Errington
H. M. S. Alert, Thursday Island, Oceania	29.97	761.2	74.5	23.6	84	SE			3		8							D. clouds	Capt. J. P. Maclear.
H. M. S. Alexandra, Zara, Dalmatia, Austria	29.97	761.2	73	22.8	58	NE			3-5		5							Squally	Capt. Lord Walter Kerr. Capt. Hon. W. H. Joliffe.
H. M. S. Antelope																			
H. M. S. Arab, Aden, Arabia, Asia	29.68	753.9	88	31.1	72	S			2		2					Sm'h		D. clouds	Comm. R. W. Stopford. Capt. Lord C. Scott.
H. M. S. Bacchante																			
H. M. S. Beacon, N. 23° 38′, E. 58° 36′	29.63	752.6	87	30.6	88	SE			1		0							Misty	Comm. G. W. Hand. Capt. E. B. Pusey.
H. M. S. Bittern																			
H. M. S. Blanche, N. 13° 05′, W. 59° 36′	30.03	762.7	80	26.7	91	ESE			2		10							Overcast	Capt. C. G. F. Knowles.
H. M. S. Boadicea, Ascension I'd, Africa	30.14	765.5	78	25.6	77	SE			3-5		3	ESE						Squally	Com. F. W. Richards.
H. M. S. Champion, S. 38° 50′, W. 57° 00′	30.35	770.9	52	11.1	72	SSW			2		8	SW				6	SSW	D. clouds	Capt. G. R. Hope.
H. M. S. Cockatrice, N. 47° 50′, W. 6° 16′	30.24	768.1	64	17.8		SSE			2		3	S				3	WSW	D. clouds	Capt. H. T. Gerfell.
H. M. S. Comus, N. 38° 55′, E. 121° 45′	29.55	753.1	67	19.4	94	SSE			1		10							D. clouds	Capt. J. W. East. Comm. F. W. Egerton.
H. M. S. Condor																			Lt. Comm. J. L. Barr.
H. M. S. Coquette																			
H. M. S. Cruizer, N. 40° 46′, E. 14° 14′	29.88	758.9	79	26.1		SW			4		3	WNW				1	WSW	D. clouds	Capt. F. A. Wetherall. Capt. S. Long.
H. M. S. Curacoa																			Capt. J. C. Parvis.
H. M. S. Danae																			Capt. F. J. Elliott.
H. M. S. Daring																			
H. M. S. Dido, Simon's Bay, Cape Colony	30.22	767.6	54	12.2		SW			1-4		6	SSW						Showery	Capt. C. Domville.
H. M. Dock-Yard, Bermuda, W. I.	30.05	763.3	82	27.8	89	SSW			2-3		2	SSW						D. clouds	Capt. J. Barnardiston. Capt. Hulton.
H. M. S. Dragon																			
H. M. S. Druid, N. 51° 04′, W. 55° 46′	30.32	770.1	43.5	6.4	89	NE			2-4		10							Rain & fog	Capt. W. R. Kennedy. Capt. John Hext.
H. M. S. Dryad																			
H. M. S. Eclipse, N. 3° 31′, E. 80° 41′	29.92	760.0	80	26.7		WSW			4-5		4					5	SW	D. clouds	Capt. E. St. J. Garforth.
H. M. S. Egeria, S. 28° 20′, E. 40° 40′	30.22	767.6	73	22.8		N			4		9	ENE				4	N	D. clouds	Comm. C. Johnstone.
H. M. S. Emerald, N. 6° 50′, E. 158° 30′	29.82	757.4	83	28.3	95	ENE			2-6		9	NE						Showery	Capt. W. H. Maxwell. Capt. L. Ching.
H. M. S. Encounter																			
H. M. S. Euryalus, Rodrigues Island, Africa	30.26	768.6	73	22.8	76	E			5-6		8	ESE						Showery	Capt. R. D. King. Comm. W. H. C. Selby.
H. M. S. Falcon																			Capt. W. C. Karslake.
H. M. S. Fantome																			
H. M. S. Fawn, N. 5° 30′, E. 65°48′	29.85	758.2	80.5	26.9	87	SSW			3		9					3	SW	Showery	Capt. P. Aldrich.
H. M. S. Flamingo, Lucea, Jamaica, W. I.	29.99	761.7	83	28.3	87	Calm			0									D. clouds	Comm. R. N. Custance. Capt. R. F. Hoskyn.
H. M. S. Flying Fish																			
H. M. S. Gannet, Esquimault, Vancouver I'd	30.02	762.5	46.5	8.1	89	NNW			1		0							Blue sky	Comm. E. G. Bourke.
H. M. S. Garnet, S. 43° 00′, W. 58° 50′	30.23	767.8	45	7.2	84	NNW			4		5					5	Con.	D. clouds	Capt. L. F. Jones.
H. M. S. Griffon, N. 18° 10′, W. 74° 40′	30.09	764.3	86	30.0	79	SE			3		1	SE				5	SE	D. clouds	Comm. J. Ingles. Capt. T. L. H. Ward.
H. M. S. Hecla																			Capt. J. L. Way.
H. M. S. Humber																			Capt. C. C. P. Fitzgerald.
H. M. S. Inconstant																			Capt. E. H. Seymour.
H. M. S. Iris																			Capt. R. E. Tracey.
H. M. S. Iron Duke																			
H. M. S. Kingfisher, S. 12° 04′, W. 77° 11′	29.97	761.2	61	16.1		S			1		3	N						D. clouds	Comm. R. H. Thornton. Capt. W. G. Scott.
H. M. S. Lapwing																			Capt. S. Grove.
H. M. S. Lily																			Capt. C. J. Brownrigg.
H. M. S. London																			
H. M. S. Magpie, N. 20° 04′, E. 110° 18′	29.63	752.6	85.8	29.9	81	E			2-3		3					1	E	Misty	Capt. A. Carpenter.
H. M. S. Midge, N. 23° 07′, E. 113° 14′	29.86	758.4				E			1		5	Calm						D. clouds	Capt. W. N. Lang. Capt. H. H. Rawson.
H. M. S. Minotaur																			
H. M. S. Modeste, S. 34° 00′, E. 26° 06′	30.07	763.8	62	16.7	83	WSW			4-5		10					5	WSW	Overcast	Capt. J. G. Mead.
H. M. S. Monarch, Tunis, Tunis, N. Africa	30.07	763.8	78	25.6	73	NNW			6		1	NNW						Blue sky	Capt. G. Tryon, C. B.

STATIONS AND VESSELS.	Barometer reduced to sea-level		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH NAVAL SERIES—Continued.																			
H. M. S. Moorhen, West Coast of Borneo			81.5	27.5		SE			2		10	SE						Overcast	Capt. J. H. Corfe.
H. M. S. Northampton, Halifax, Nova Scotia	29.48	748.8	58	14.4	69	NW			4		4	NNW						D. clouds	Capt. E. B Drummond.
H. M. S. Orontes, N. 13° 00′, W. 39° 55′	30.00	762.0	78.5	25.8	82	NE			3-4		5	NE				3	NNE	D. clouds	Capt. R. P. Kinahan.
H. M. S. Pegasus																			Capt. T. G. Jones.
H. M. S. Pelican, N. 8° 55′, W. 79° 30′	29.80	756.9	79.5	26.4	97	NW			2		8							D. clouds	Capt. F. R. Dicken.
H. M. S. Penguin, S. 43° 40′, W. 61° 40′	30.07	763.8	48	8.9		NNW			6		9					7	NW	Squally	Capt. A. C. Paget.
H. M. S. Phœnix, N. 34° 01′, W. 64° 11	29.96	761.0	77	25.0	90	SW			5-6		6					3	SW	D. clouds	Capt. H. H. Grenfel.
H. M. S. Rambler																			Capt. Hon. A. C. Littleton.
H. M. S. Ready, N. 16° 45′, E. 97° 33′	29.70	754.4	81	27.2		SW			2-5		6							Squally	Comm. W. H. Edwards.
H. M. S. Rifleman																			Comm. P. H. W. Mayow.
H. M. S. Rocket, N. 54° 30′, W. 130° 37′	30.04	763.0	48	8.9		WNW			2		8							D. clouds	Capt. V. B. Orlebar.
H. M. S. Ruby, S. 6° 10′, E. 39° 11′	30.13	765.3	78.3	25.7	72	ESE			3		4					Sm'h		D. clouds	Capt. C. E. Foot.
H. M. S. Salamis.																			Capt. A. Fitz George.
H. M. S. Sea Gull																			Comm. W. Byles.
H. M. S. Seraphis																			Capt. G. O. Twiss.
H. M. S. Shannon																			Capt. J. D'Arcy.
H. M. S. Superb																			Capt. T. L. H. Ward.
H. M. S. Tenedos																			Capt. C. G. Fane.
H. M. S. Thetis, S. 36° 30′, W. 158° 54′	30.47	773.9	66	18.9	90	E			[illegible]		10					4	E	Overcast	Capt. P. W. Stephens.
H. M. S. Thunderer																			Capt. P. H. Colomb.
H. M. S. Triumph, Off Mollendo, Peru	29.98	761.5	61	16.1	82	Calm			0		10	Calm				6	SE	D. clouds	Capt. A. H. Markham.
H. M. S. Turquoise, Sandy Point, Patagonia	29.42	747.3	43	6.1	83	WSW			5-8		8							Squally	Capt. M. B. Medlycott.
H. M. S. Tweed																			
H. M. S. Tyne																			Capt. J. E. Stokes.
H. M. S. Urgent, Port Royal, Jamaica, W. I.			80	26.7		NE			1		4							D. clouds	Com. W. S. Brown.
H. M. S. Wild Swan																			Capt. S. H. P. Dacres.
H. M. S. Wolverene, Sydney, N. S. W.	29.84	757.9	60	15.6	59	WSW			3-4		5	ENE						Showery	Com. J. C. Wilson, A. D. C
H. M. S. Woodlark, Bahrein, Arabia	29.57	751.1	90.5	32.5	63	NNE			2									Misty	Capt. T. P. Nesham.
H. M. S. Zephyr																			Lt. Comm. G. W. Pollard
GERMAN NAVAL SERIES.																			
Furnished by the co-operation of Professor Dr. G. Neumayer, Director of the German Marine Observatory at Hamburg.																			
PORTUGUESE NAVAL SERIES.																			
Furnished by the co-operation of J. C. de Brito Capello, Director of the Meteorological Observatory of the Infante Dom Luiz at Lisbon.																			
Bengo																			Carlos Candid dos Reis, Comd't.
India, N. 22° 27′, W. 22° 21′	30.17	766.4	77.0	25.0	88	NE			3		2		NE			1	NE	D. clouds	A. M. da Sitra.
Quanza, Porto Praya, Cape Verd Id's	30.00	762.1	79.2	26.2	64	NE			1		7		E			1	NE	D. clouds	Carlos M. de Silva Costa, Comd'
Rio Lima																			S. C da Silva Costa, Comd't.
Sado., St. Paul de Loando, Benguela	30.11	764.7	72.0	22.2	82	NW			1		8							Gloomy	G. A de Brito Capello, Comd't.
Tamega, Macao, China	29.62	752.3	86.0	30.0	71	E			2		1			3 h	ours			Overcast	P. I. de Rio Carvallio, Comd't.
SWEDISH NAVAL SERIES.																			
Furnished by the co-operation of E. Malmberg, Director of the Nautical Meteorological Bureau at Stockholm.																			
H. M. Corvette Saga, N. 39° 45′, W. 18° 59′	30.33	770.4	67.3	19.6	78	NNE			2		10							Overcast	Capt. M. von Krusenstierna.
H. M. Frigate Vanadis																			Com. Th. Uiner.

UNITED STATES NAVAL SERIES.

By authority of the SECRETARY OF THE NAVY.

Furnished by the co-operation of the Navy Department, through Commodore William D. Whiting, U. S. N., Chief of Bureau of Navigation.

STATIONS AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Observers.
						Direction.	Velocity.		Force	Amount and kind.		Direction.							
										Up'er	Lo'er	Upper	Lower.			Character.	Dir'n from.		
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
N. Yard, Pensacola, Fla	30.16	766.1	77	25.0	91	NW	2	0.9			8		NW	0.40	10.2			Fair	
Naval Hospital, Yokahama, Japan	29.74	755.4	73.5	23.1	90	SSW			2		0			0	0			Clear	
Adams, N. 23° 57', W. 109° 34'	29.66	753.4	84	28.9	79	SW			1		8		Calm			Sm'h		Cloudy	
Alaska, Ancon, Peru	29.90	759.4	63	17.2	94	N			1		10			0	0			Overcast	
Alert, Port Lloyd, Bonin Id.*	29.89	759.2	83	28.3	83	SSE			1		2			0	0	Sm'h		Clear.	
Alliance, N. 50° 06', W. 49° 10'	29.81	757.2	48	8.9	100	SSE			6		10			He	avy	Mod.		Squally	
Ashuelot, Kobe, Japan	29.89	759.2	75	23.9	86	WNW			2		10		Calm					Overcast	
Colorado, New York, N. Y.	29.80	756.9	70	21.1	70	WNW	3	1.3			0			0	0			Clear.	
Constitution, Newport, R. I.	29.59	751.6	69	20.6	70	N			2		8?							Clear?	
Franklin, Norfolk, Va.	29.79	756.7	76	24.4	95	NNW	7	3.1			1		W	0	0			Clear	
Galena, Santander, Spain,	30.28	769.1	67	19.4	84	ENE			4		0					Sm'h		Clear.	
Independence, N. Yard, Mare I'd, Cal.	29.95	760.7	71	21.7	52	SSW	9.6	4.3			0			0	0			Clear	
Jamestown, Sitka, Alaska*	29.82	757.4	52	11.1	93	E			4		10			0.02	0.5			Cloudy	
Kearsarge, Norfolk, Va.	29.88	758.9	76	24.4	82	N			1		5							Fair	
Lackawanna. Pagolago, Samoia Oceania†	30.16	766.1	79	26.1	91	ESE			4		8		E					Fair	
Marion, Monte Video, Uruguay.*†	30.20	767.1	50	10.0	65	SE			4		0					Sm'h		Clear	
Michigan, Detroit, Michigan	29.83	757.7	63	17.2	78	N			3		0							Clear	
Minnesota, Newport, R. I.	29.71	754.6	71	21.7	71	NNW			2		0					Sm'h		Clear	
Monocacy, Yokohama, Japan	29.92	760.0	75	23.9	86	S			1		5		Calm					Fair	
Nipsic, N. 54° 25', E. 4° 51'	30.30	769.6	64	17.8	78	SW			2		2					Sm'h		Hazy	
Onward, Callao, Peru†	29.97	761.2	61	16.1	100	SSE			2		8		N			Long	W	Cloudy.	
Palos, Nagasaki, Japan	29.84	757.9	74	23.3	100	SSW			1		10							H'y showers	
Passaic, Washington, D. C.	29.91	759.7	74	23.3	90	W			2		0							Clear.	
Pensacola, Mare Isl'd, Cal.	29.95	760.7	53	11.7	86	SW			3		0			0	0			Hazy	
Portsmouth, Off Rocky Point, R. I.	29.66	753.4	66	18.9	100	NW			3-5		5?		NW			Sm'h		Clear?	
Powhatan. Boston, Mass.	29.69	754.1	69	20.6	80	NNW			2		0							Clear	
Quinnebaug Navy Yard, New York	29.74	755.4	72	22.2	76	W			2		0							Clear	
Ranger, N. 29° 52', W. 114° 01'*	29.72	754.9	83	28.3	90	S			3		0			0	0	Sm'h		Clear	
Richmond, Kobe, Japan	29.89	759.2	79	26.1	82	SW			2		10			0	0			Cloudy	
Saratoga, Off Point Judith, R. I.	29.68	753.9	62	16.7	88	WNW			3		2		Calm	0	0			Fair.	
Shenandoah, Rio de Janeiro, Brazil.*	30.39	771.9	71	21.7	80	NNE			1		5		NW			Sm'h		Fair	
St. Louis, League Island, Pa.	29.39	746.5	71	21.7	62	NW	10	4.5			0			0.46	11.7			Clear.	
Swatara, Chefoo, China*†	29.65	753.1	74	23.3	86	SE			3		10		SE			Mod.	SE	Overcast	
Tennessee, Navy Yard, N. Y.	29.79	756.7	72	22.2	62	WNW	9	4.0			0			0	0	Sm'h		Clear.	
Ticonderoga, S. 31° 03', W. 36° 35'.	30.40	772.1	68	20.0	95	N			3		10		N	0.05	1.3	Sm'h	N	Cloudy	
Vandalia, Halifax. Nova Scotia	29.52	749.8	57	13.9	87	N			4		5		N					Fair	
Wabash, Boston, Massachusetts	29.68	753.9	69	20.6	65	NW	6	2.7			2		NW	0.12	3.0			Clear.	
Wachusetts, N. Yard, Mare I'd, Cal.	29.93	760.2	59	15.0	70	SW			2		0			0	0			Clear	
Wyoming, Norfolk, Va.	29.83	757.7	79	26.1	66	NW	6	2.7			5		NW	0	0			Fair	
Yantic, Key West, Florida*	29.98	761.5	82	27.8	87	E			2		2		E			Sm'h		Clear	

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
BRITISH MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the British Meteorological Office, and the owners of the respective lines and vessels.																			
S. S. Algeria																			Capt. W. Gill.
Barque Astarte																			Capt. G. F. Parson.
Ship Baroda																			Capt. C. J. Russell.
S. S. Bateshire																			Capt. John Arbuckle.
Barque Belleisle																			Capt. A. J. Brown.
British Merchant, ‡ N. 6° 16′, W. 118° 48′	29.91	759.7	77	25.0	95	SSE			4		7							Raining	Capt. E. J. Molony.
Chin Yang																			Capt. H. Youlden.
S. S. Cipero, N. 11° 08′, W. 58° 46′	30.02	762.5	80.2	26.8	91	SSE			3		5					2	SSE	D. clouds	W. N. Lalley.
City of Agra, S. 31° 00′, W. 32° 05′	30.49	774.4	69.0	20.6	90	N			4		8							D. clouds	Capt. T. Young.
Barque Commewyne																			Capt. W. Scott.
Barque Coppename, N. 17° 04′, W. 41° 18′	30.13	765.3	78.0	25.6	78	NNE			5		3							Blue sky	Capt. Jas. Buchan.
Barque Dochra																			Capt. H. Spalding.
Ship Ellen Stuart																			Capt. J. E. C. Patterson.
Barque Elissa																			Capt. A. Watson.
S. S. Ethiopia																			Capt. A. Campbell.
S. S. Fleurs Castle																			Capt. J. Kidder.
Barque Gem																			Capt. H. Park.
S. S. Gordon Castle																			Capt. W. Waring.
S. S. Han Kow																			Capt. W. Symington.
Barque Harvest Moon																			Capt. H. H. Williams.
Barquentine Hope																			Capt. Jas. Campbell.
Ship Iron Cross																			Capt. W. Randall.
S. S. Kangaroo																			Capt. A. Kellett.
Kryolith																			Capt. Alex. Wilson.
S. S. Lamperts																			Capt. G. H. Jones.
Laomene																			Capt W. P. Hughes.
Ship Lochee																			Capt. J. Raeburn, R. N.R
S. S. Lusitania																			Capt. C. A. F. Powell.
Majestic																			Capt. W. Ellery.
Barque Markland																			Capt. H. W. Dyke.
Barque Mertola																			Capt. E. W. Turner.
Naiad, N. 26° 36′, W. 21° 55′	30.25	768.3	75.1	23.9	82	NNE			2		4							D. clouds	Capt. J. Smith.
Nairnshire																			Capt. W. Niven.
S. S. Nizam																			Capt. G. W. Brady.
Queen of Cambria, ‡ N. 49° 05′, W. 9° 40′	30.19	766.8	61	16.1	88	SSW			5		10							Overcast	Capt. M. Parry.
Sierra Estrella, S. 5° 02′, W. 24° 30′	30.09	764.3	77.5	25.3	86	ESE			6		9							Raining	Capt. P. Murdoch.
S. S. Richmond																			Capt. W. H. Stuart.
Barque Shun Lee																			Capt. John M. Gray.
S. S. Seine																			Capt. H. Manning.
S. S. Strathleven																			Capt. C. W. Pearson.
Schr. Traveller																			Capt. A Simpson.
S. S. Wyberton																			Capt. R. J. Blacklin.
ALLAN LINE. *A. Schumacher & Co.*																			
S. S. Buenos Ayrean, Glasgow, Scotland	29.88	758.9				SE			3		10		SE			Sm'h		Raining	
S. S. Circassian																			Capt. W. H. Smith.
S. S. Hibernian																			Capt. F. Archer.
S. S. Nova Scotian																			Capt. Wm. Richardson.
CUNARD LINE. *Vernon H. Brown & Co.*																			
S. S. Algeria																			Capt. W. Watson.
S. S. Gallia, N. 46° 08′, W. 38° 46′	30.21	767.3	57	13.9		SSE			4		8		S	0	0	Light	WNW	Hazy	Capt. W. H. P. Hains.
S. S. Scythia																			Capt. M. Murphy.
WHITE STAR LINE. *Ismay, Imrie & Co.*																			
S. S. Adriatic																			Capt. J. W. Jennings.
S. S. Baltic																			Capt. H. Parsell.
S. S. Britannic																			Capt. H. Perry.
S. S. Celtic																			Capt. Benj. Gleadell.
S. S. Germanic, N. 43° 50′, W. 55° 30′ †	29.64	752.8	53	11.7	61	SW			4		0			9h'rs	h'vy	Mod.	W	Misty	Capt. Ch. W. Kennedy
S. S. Republic, N. 51° 10′, W. 14° 42′ †	30.04	763.0	61	16.1	84	SSW			6		5		W	Drizzles		Mod.	SSW	Cloudy	Capt. P. I. Irving.
GERMAN MERCHANT-MARINE SERIES.																			
NORTH GERMAN LLOYD—Of Bremen. *A. Schumacher & Co.*																			
S. S. Braunschweig, N. 51° 50′, E. 2° 30′	30.25	768.3	70.0	21.1	66	Calm			0		2		W			Sm'h		Fair	Capt. C. Phole.
S. S. Hermann																			Capt. H. Baur.
S. S. Hohenzollern, N. 42° 53′, W. 41° 40′	30.13	765.3	66.9	19.4		SE			4		2		SE	0	0	Mod.	ESE	Clear	
S. S. Köln, N. 37° 57′, W. 69° 10′	29.78	756.4	85.5	29.7	76	W			4		5		W	0	0	Mod.	W	Fair	Capt. Th. Jüngst.
S. S. Strassburg, N. 47° 28′, W. 30° 46′	30.34	770.6	56.3	13.5		NW			4		10		NW	0	0	Long	WNW	Cloudy	Capt. C. Heimbourh.
SWEDISH MERCHANT-MARINE SERIES.																			
Barque Adolf Fredholm																			Capt. Albert Fredholm.
Barque Fredrik																			Capt. Sjöström.
Ship Peru																			Capt. O. F. Sköldebrand.

LINES AND VESSELS.	Barometer reduced to sea-level.		Temperature of the Air.		Rel. Hum.	Wind.				Clouds.				Rain-fall or melted snow in the past 24 hours.		Sea-swell.		Weather.	Captain or Responsible Officer.
						Direction.	Velocity.		Force	Amount and kind.		Direction.				Character.	Dir'n from.		
										Up'er	Lo'er	Upper.	Lower.						
	Inch.	Mill.	Fah.	Cent.	Per Ct.	From.	Miles p. h'r	Mtrs p. sec	0—10	0—10	0—10	From.	From.	Inch.	Mill.				
UNITED STATES MERCHANT-MARINE SERIES.																			
Furnished by the co-operation of the owners and agents of the respective lines and vessels.																			
AMERICAN S. S. CO. *H. B. Welsh, President.*																			
S. S. Illinois. Philadelphia, Pa	29.68	753.9	81	27.2	95	NNW			2		0							Fine	Capt. J. W. Shackford.
S. S. Indiana, Philadelphia, Pa			83	28.3	67	W			4		2		W	0	0			Clear	Capt. R. W. Sargent.
S. S. Ohio, Liverpool, England†*	30.10	764.5	60	15.6	100	S			3		10		S	Light				Raining	Wm. Shackford, Chief Off'r
S. S. Pennsylvania, Liverpool, England†*	30.11	764.8	60	15.6	94	SW			4		10		SW			Sm'h		Fair	Capt. Geo H. Dodge.
CALIFORNIAN & MEXICAN S. S. CO. *J. Birmingham.*																			
S. S. Newbern																			Capt. W. Metzger.
OCCIDENTAL & ORIENTAL S. S. CO. *Leland Stanford, President.*																			
S. S. Belgic, N. 36° 13′, E. 147° 04′†	30.09	764.3	70	21.1	85	NW			2		2		NW	0	0	Light	SE	Clear	Capt. H. Davison.
S. S. Gaelic																			Capt. W. H. Kidley.
S. S. Oceanic, N. 45° 52′, E. 167° 46′	30.56	776.2	46	7.8	85	W			2		10		NW	0	0	1	ENE	Cloudy	Capt. J. Metcalfe.
OREGON RAILWAY & NAVIGATION CO. *K. Van Oterendorp.*																			
S. S. Columbia																			Capt. Fred. Bolles.
S. S. Oregon																			Capt. E. Polemann.
PACIFIC COAST S. S. CO. *Goodall, Perkins & Co.*																			
S. S. Ancon, N. 32° 50′, W. 117° 18′...†	29.92	760.0	62	16.7	88	SE			2		8		SE	0	0			Foggy	Capt. J. N. Ingalls.
S. S. Dakota																			Capt. H. G. Morse.
S. S. Idaho, Esquimalt, Vancouver Isl'd†	30.04	763.0	48	8.9	79	Calm			0		0							Clear	C. E. Lyons, 1st Officer.
S. S. Orizaba																			Geo. H. Harrison.
S. S. Senator																			Capt. Thos. Wallace.
S. S. State of California, Portland, Oregon†	29.97	761.2	49	9.4	86	NW			3		2							Clear	Capt. G. Debney.
S. S. Victoria, San Francisco, Cal.†	29.96	761.0	51	10.6	93	NW			2		2					Sm'h		Clear	Capt. H. M. Hayward.
PACIFIC MAIL S. S. CO. *J. B. Houston, President.*																			
S. S. Australia																			A. Bannerman, 2d Officer.
S. S. City of New York, N. 1° —′, W. 166° —′†	29.93	760.2	84	28.9	95	ESE			4		0			0	0	Mod.	E	Clear	Wm. H. Hawes, 2d Officer.
S. S. City of Panama, San Francisco, Cal.†	29.94	760.5	53	11.7	86	NW			1		5ks		NW	0	0	Sm'h	WNW	Hazy	Capt. D. S. Austin.
S. S. City of Peking, N. 47° 10′, W. 157° 07′†	30.18	766.6	54	12.2	93	S			5		10		SSW	0	0	Mod.	SW	Foggy	Capt. G. G. Berry.
S. S. City of Sidney, S. 33° 59′, E. 154° 59′*†	29.79	756.7	58	14.4	57	W			5		8		SW	0	0	Mod.	W	Threatening	Capt. H. C. Dearborn.
S. S. City of Tokio, N. 24° 22′, E. 119° 00′†	29.83	757.7	83	28.3	78	ENE			4		5		E			Long	S	Fair	A. L. Ritchie, 2d Officer.
S. S. Colima, N. 17° 58′, W. 103° 05′†	29.92	760.0	81	27.2	83	ESE			3		8		Calm	0	0	H'vy	S	Cloudy	Capt. R. R. Searle.
S. S. Granada																			Capt. M. Connolly.
S. S. Zealandia, Sydney, N. S. W	30.09	764.3	56	13.3	68	W			3		10		W					Cloudy	
RED STAR LINE. *Jas. A. Wright, President.*																			
S. S. Belgenland																			Capt. Sam'l Jackson.
S. S. Nederland, ‡ N. 40° 48′, W. 46° 30′†	30.02	762.5	78	25.6	72	SSW			5		8		SW	0	0	Light		Fine	A. Feddersen, 2d Officer.
S. S. Rhyniand, Antwerp, Belgium†	30.53	775.4	74	23.3	90	SW			2		10?		SW	0	0			Clear?	Capt. Wm. Geo. Randle.
S. S. Vaderland																			T. H. Tobson, Chief Off'r.
MISCELLANEOUS.																			
Sch'r Abby K. Bentley																			A. R. Mehaffey, 2d Mate.
Sch'r Addie Fuller, Savannah, Georgia	29.95	760.7	84	28.9	68	SW					2			0.07	1.8			Clear	Capt J. Jorgensen.
Sch'r Annie R. Lewis																			Capt. L. L. Lewis.
Bark Carrie Heckle																			Capt. B. F. Woodbury.
Brigantine George, Monabo, Porto Rico†*	30.13	765.3	83	28.3		ENE			7		10			Hea	vy	Very h'vy		Raining	Capt. W. H. Champlin.
U. S. F. C. S. Fish Hawk																			
Bark Sunbeam, N. 23° 47′, W. 46° 34′†	30.27	768.8	82	27.8	74	ENE			6		2		ENE	0	0	Mod.	ENE	Clear	Capt. Jos. Hand.

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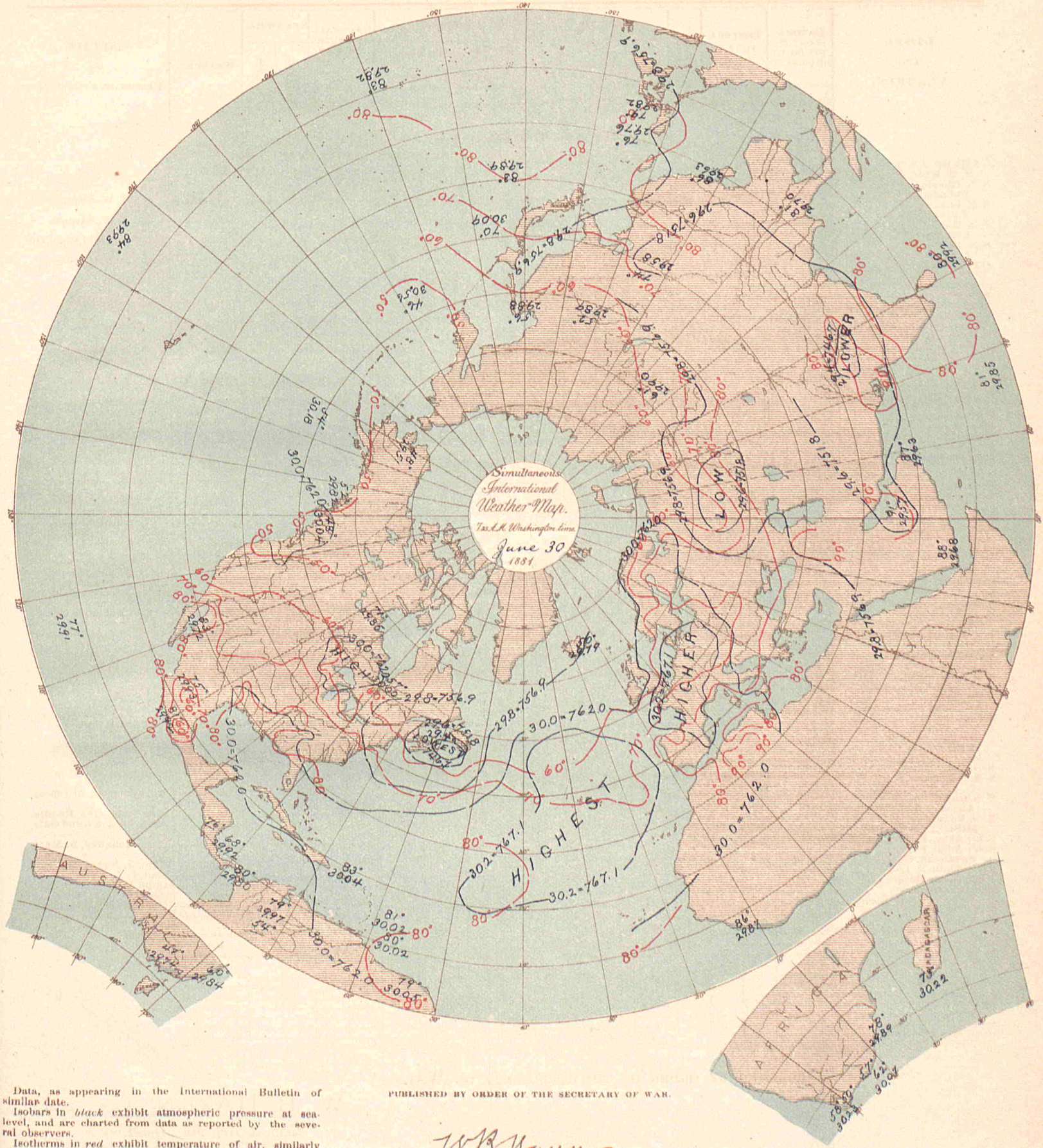
W. B. HAZEN,
Brig. & Bvt. Maj. Gen'l,
Chief Signal Officer, U. S. A.



Data, as appearing in the International Bulletin of similar date.

Isobars in *black* exhibit atmospheric pressure at sea-level, and are charted from data as reported by the several observers.

Isotherms in *red* exhibit temperature of air, similarly charted.

Broken or dotted lines indicate that the lines so broken are doubtful.

Arrows, when charted, fly with the wind and exhibit wind-direction and force.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR.

W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

THE HELIOTYPE PRINTING CO 211 TREMONT ST BOSTON

MONTHLY SUMMARY

OF

INTERNATIONAL METEOROLOGICAL OBSERVATIONS,

JUNE, 1881.

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for June, 1881.																		Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.													
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0-10	Inch.	Mill.
Algerian Series.	° ′	° ′																								
Nemours	N. 35 06	W. 1 51	12.01 p.m.	20	6	.....	.....	29.98	761.5	74.5	23.6	84.0	14	2	11	.....	.....	.....	3	.....	.....	.....	.....	2	0.73	18.5
Algiers	N. 36 47	E. 3 04	0.20 p.m.	325	99	.....	.....	30.02	762.6	73.4	23.0	70.2	9	3	8	.....	.....	.....	.....	10	.....	.....	.....	2	1.84	46.8
La Calle	N. 36 54	E. 8 26	0.42 p.m.	36	11	.....	.....	30.02	762.6	75.7	24.3	73.7	.....	10	1	6	2	3	4	4	.....	.....	.....	3	0.92	23.5
Tunis	N. 36 47	E. 10 11	0.49 p.m.	46	14	.....	.....	30.02	762.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sfax	N. 34 45	E. 10 36	0.50 p.m.	?	?	.....	.....	30.11	764.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Saida	N. 34 51	E. 0 10	0.09 p.m.	2844	867	.....	.....	30.03	762.7	78.4	25.8	39.1	17	6	.....	2	3	1	.....	1	.....	.....	.....	3	1.44	36.7
Tebessa	N. 35 24	E. 8 06	0.40 p.m.	2890	881	.....	.....	30.04	763.1	77.5	25.3	28.5	4	5	3	3	2	2	3	.....	8	.....	.....	4	0.78	19.9
Geriville	N. 33 45	E. 1 10	0.13 p.m.	4285	1306	.....	.....	.....	.....	82.6	28.1	29.5	3	7	2	3	.....	13	.....	2	.....	.....	.....	1	0.28	7.1
Laghouat	N. 33 48	E. 2 51	0.19 p.m.	2526	770	.....	.....	30.03	762.8	85.3	29.6	19.3	8	.....	4	1	6	1	9	1	.....	.....	.....	1	0.05	1.2
Biskra	N. 34 51	E. 5 40	0.31 p.m.	410	125	.....	.....	30.06	763.4	89.4	31.9	52.3	.....	10	.....	.....	.....	20	.....	.....	.....	.....	.....	1	0	0
Australian Series.																										
Melbourne	S. 37 50	E. 144 58	9.47 p.m.	91	28	29.93	760.2	30.02	762.5	47.1	8.4	82.4	11a	2	4	5	2	3	1	1	.....	.....	.....	6	2.24	56.9
Sub-Series.																										
Austro-Hungarian Series.																										
Agram	N. 45 48	E. 15 53	1.12 p.m.	536	163	29.37	746.0	29.91	759.6	72.9	22.7	54.0	2	.....	2	6	5	5	2	6	2	.....	.....	5	3.05	77.4
Cracow	N. 50 04	E. 20 00	1.28 p.m.	722	220	29.13	739.9	29.87	758.8	66.6	19.2	62.1	3	4	16	2	2	1	2	.....	.....	.....	.....	8	3.91	99.3
Eperies	N. 48 58	E. 21 15	1.33 p.m.	820	250	28.98	736.2	29.84	757.9	68.4	20.2	63.9	7	4	.....	.....	5	2	.....	.....	12	.....	.....	8	3.91	99.4
Gratz	N. 47 04	E. 15 28	1.10 p.m.	1171	357	28.7c	729.0	29.91	759.8	68.9	20.5	67.2	2	4	1	6	10	3	3	1	.....	.....	.....	6	4.79	121.7
Hermannstadt	N. 45 47	E. 24 13	1.45 p.m.	1352	412	28.48	723.3	29.85	758.2	71.2	21.8	55.3	3	17	2	2	1	3	1	1	.....	.....	.....	6	4.28	108.7
Kremsmünster	N. 48 04	E. 14 08	1.04 p.m.	1260	384	28.61	726.8	29.92	759.9	66.0	18.9	67.3	.....	2	5	9	2	4	.....	8	.....	.....	.....	7	4.62	117.4
Lemberg	N. 49 50	E. 24 00	1.44 p.m.	978	298	28.86	733.1	29.83	757.7	66.4	19.1	66.7	.....	12	.....	4	.....	8	1	5	.....	.....	.....	8	2.41	61.3
Pola	N. 44 52	E. 13 51	1.03 p.m.	105	32	29.84	757.8	29.93	760.3	74.8	23.8	58.3	.....	.....	10	2	6	8	3	1	.....	.....	.....	4	1.88	47.8
Szathmar	N. 47 46	E. 22 53	1.39 p.m.	430	131	29.41	747.1	29.86	758.5	70.5	21.4	69.9	1	7	4	5	4	6	1	2	.....	.....	.....	7	4.73	120.2
Szegedin	N. 46 15	E. 36 49	2.35 p.m.	256	78	29.61	752.0	29.87	758.8	71.4a	21.9a	69.0a	2a	4	3	5	9	.....	.....	1	4	.....	.....	5	0.79	20.1
Trieste	N. 45 39	E. 13 46	1.04 p.m.	85	26	29.86	758.4	29.96	761.0	74.1	23.4	58.3	2	6	4	5	2	2	2	2	5	.....	.....	6	3.94	100.1
Vienna	N. 48 12	E. 16 22	1.14 p.m.	663	202	29.24	742.6	29.93	760.1	68.5	20.3	57.3	3	9	8	1	1	5	2	1	.....	.....	.....	6	1.01	30.8
Belgian Series.																										
Brussels	N. 50 51	E. 4 22	0.26 p.m.	187	57	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Furnes	N. 51 04	E. 2 40	0.19 p.m.	20	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maeseyck	N. 51 06	E. 5 48	0.32 p.m.	115	35	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
British Series.																										
Aberdeen	N. 57 10	W. 2 06	0.00 m.	86	26	29.78	756.4	29.87	758.7	54.3	12.4	67.6	4	5	.....	2	8	10	2	.....	.....	.....	.....	7	2.98	75.7
Armagh	N. 54 21	W. 6 39	11.42 a.m.	206	63	29.67	753.6	29.89	759.2	57.8a	14.3a	71.1a	5	3	3	9	3	7	.....	.....	.....	.....	.....	6	.....	.....
Bidston	N. 53 24	W. 3 04	11.56 a.m.	180	85	.....	.....	29.93	760.2	57.3	14.1	65.8	.....	3	11	5	3	6	2	.....	.....	.....	.....	6	.....	.....
Bolton	N. 53 35	W. 2 28	11.58 a.m.	481	145	29.45	748.0	29.99	761.7	57.4	14.1	63.1	2	4	3	4	3	1	2	.....	.....	.....	.....	7	.....	.....
Bradford	N. 53 48	W. 1 47	0.01 p.m.	362	110	29.53	750.0	29.93	760.2	59.9	15.5	65.6	2	3	1	10	2	3	1	3	.....	.....	.....	7	2.13	54.1
Bridgetown	N. 13 04	W. 59 37	8.10 a.m.	28	9	29.96	761.0	29.99	761.7	84.1	28.9	72.0	.....	.....	.....	.....	.....	.....	.....	30	.....	.....	.....	5	.....	.....
Cardington	N. 52 08	W. 0 27	0.06 p.m.	109	33	.....	.....	29.98	761.5	69.4	20.8	59.6	.....	5	1	5	6	.....	1	.....	.....	.....	.....	7	.....	.....
Chatham	N. 51 25	E. 0 33	0.10 p.m.	120	37	29.86	758.4	29.99	761.7	63.4	17.4	64.8	6	4	.....	8	4	2	1	4	1	.....	.....	7	.....	.....
Falmouth	N. 50 09	W. 5 04	11.48 a.m.	200	61	29.78	756.4	30.01	762.2	60.4	15.8	68.5	1	11	2	6	7	3	.....	.....	.....	.....	.....	7	.....	.....
Fort Napier	S. 30 00	E. 31 00	2.12 p.m.	2200	671	.....	.....	30.06	763.5	68.0	20.0	68.1	1	3	1	2	.....	3	1	7	12	.....	.....	1	.....	.....
Free Town	N. 8 30	W. 13 14	11.15 a.m.	224	68	29.64	752.8	29.87	758.7	85.8	29.9	84.1g	.....	2	12	10	2	2	.....	2	.....	.....	.....	1	.....	.....
Galway	N. 53 15	W. 9 03	11.32 a.m.	25	8	.....	.....	29.85a	758.2	58.6	14.8	72.9	3	5	8	10	2	.....	2	.....	.....	.....	.....	7	3.16	80.3
Gibraltar	N. 36 09	W. 5 21	11.47 a.m.	50	15	30.00	762.0	30.05	763.3	73.0c	22.8	85.4c	.....	1	5	7	1	.....	12	4	.....	.....	.....	3	.....	.....
Glasgow	N. 55 53	W. 4 17	11.51 a.m.	90	27	29.65	753.1	29.85	758.2	58.0	14.4	64.0	3	.....	5	9	5	2	1	5	.....	.....	.....	7	.....	.....
Greenwich	N. 51 29	0 00	0.08 p.m.	159	48	29.81	757.2	29.98	761.5	65.4	18.6	58.3	6	1	3	7	6	3	2	2	.....	.....	.....	7	.....	.....
Guernsey	N. 49 27	W. 2 41	11.58 a.m.	204	62	29.78	756.4	29.99	761.7	60.5	15.8	71.1a	.....	8	4	3	8	6	1	3	.....	.....	.....	4	.....	.....
Kew	N. 51 28	W. 0 19	0.07 p.m.	34	10	29.95	760.7	29.98	761.5	64.2	17.9	54.4	4	5	3	7	8	2	.....	1	.....	.....	.....	7	.....	.....
Leicester	N. 52 39	W. 1 08	0.04 p.m.	245	75	29.70	754.4	29.95	760.7	62.6	17.0	69.6	.....	7	1	15	2	1	.....	3	1	.....	.....	8	.....	.....
Malta	N. 36 00	E. 14 30	1.06 p.m.	111	34	29.90	759.4	29.98	761.5	75.1	23.9	68.3	2	9	2	1	2	2	4	8	.....	.....	.....	2	.....	.....
Nassau	N. 25 04	W. 77 22	6.58 a.m.	44	13	29.98	761.5	30.03	762.7	84.8	29.3	79.0	3	1	1	1	8	5	9	2	.....	.....	.....	5	.....	.....
Oscott	N. 52 28	W. 1 55	0.00 m.	483	147	29.41	747.0	29.85	758.2	61.2	16.2	68.3	3	6	4	4	8	4	.....	1	.....	.....	.....	7	.....	.....
Oxford	N. 51 46	W. 1 17	0.03 p.m.	212	64	29.75	755.6	29.98	761.5	62.4	16.8	60.5	2	3	7	7	6	2	.....	2	1	.....	.....	8	.....	.....
Plymouth	N. 50 22	W. 4 10	11.51 a.m.	69	21	29.91	759.7	29.99	761.7	62.2	16.8	74.2	4	3	3	7	13	.....	.....	.....	.....	.....	.....	8	.....	.....
Sandwick Manse	N. 59 05	W. 3 20	11.54 a.m.	94	29	.....	.....	29.97	761.2	51.1	10.6	78.9	7	3	5	4	2	7	1	.....	1	.....	.....	7	.....	.....
Scutari Cemetery	N 41 00	E. 29 03	2.04 p.m.	60	18	29.82	757.4	29.88	758.9	77.3	25.2	60.2	4	.....	1	10	4	.....	.....	9	2	.....	.....	3	.....	.....
Sheffield	N. 53 23	W. 1 28	0.02 p.m.	260	79	29.70	754.4	29.97	761.2	63.3	17.4	73.1	1	2	3	11	6	.....	2	4	1	.....	.....	7	.....	.....
Silloth Rectory	N. 54 52	W. 3 22	11.54 a.m.	28	9	29.88	758.9	29.91	759.7	61.0	16.1	73.3	.....	3	12	6	4	.....	1	.....	3	.....	.....	6	3.15	80.0
Stonyhurst	N. 53 51	W. 2 28	11.58 a.m.	363	110	.....	.....	29.96	761.0	59.0a	15.0a	65.6b	2	.....	7	9	6	1	2	3	.....	.....	.....	8	.....	.....
Stratfield Turgiss	N. 51 17	W. 0 53	0.04 p.m.	197	60	29.78	756.4	29.99	761.7	64.5	18.1	60.2	2	2	3	15	2	1	.....	5	.....	.....	.....	6	.....	.....
Truro	N. 50 16	W. 5 04	11.53 a.m.	43	13	29.99	761.7	30.00	762.0	64.3	17.9	66.1	8	9	2	4	6	1	.....	.....	.....	.....	.....	6	.....	.....
Valencia	N. 51 55	W. 10 18	11.27 a.m.	20	6	29.88	758.9	29.90	759.4	57.7	14.3	75.3	2	8	4	6	4	6	.....	.....	.....	.....	.....	8	.....	.....

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for June, 1881.						Wind.										Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Directions.								Total Movement.			
				Feet.	Met'rs	Actual.		Reduced.					N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.		Inch.	Mill.
						Inch.	Mill.	Inch.	Mill.	Fah.	Cent													0–10		
Canadian Series	° ′	° ′																								
Bathurst ..... *d*	N. 47 39	W. 65 43	7.45 a.m.	9	3	.....	.....	.....	.....	54.4	12.4	.....	4	6	1	3	3	1	1	2	5	.....	.....	6	.....	.....
Charlottetown	N. 46 14	W. 63 10	7.55 a.m.	38	12	29.81	757.2	29.85	758.2	52.6	11.4	78.2	.....	5	3	6	7	3	2	2	2	4924	7924	6	4.86	123.4
Chatham	N. 47 03	W. 65 29	7.45 a.m.	56	17	29.79	756.7	29.85	758.2	51.3	10.7	80.9	2	5	5	2	7	3	1	3	2	3541	5699	6	3.61	91.7
Chicontimi	.....	.....	.....	159	48	.....	.....	.....	.....	50.0*f*	f10.0	.....	1*h*	15	.....	.....	.....	4	.....	.....	2	.....	.....	4	0.39	9.9
Cornwall	N. 45 01	W. 74 43	7.09 a.m.	175	53	29.68	753.9	29.87	758.7	55.0	12.8	79.9	3	7	6	5	2	2	3	2	.....	.....	.....	6	1.08	27.4
Dalhousie ..... *c*	N. 48 04	W. 66 21	7.32 a.m.	150	46	29.78	756.4	29.81	757.2	52.8	11.6	.....	.....	2	14	.....	.....	1	9	.....	1	.....	.....	.....	1.61	40.9
Father Point	N. 48 31	W. 68 28	7.34 a.m.	20	6	29.81	757.2	29.83	757.7	50.7	10.4	79.8	4	12	3	2	1	.....	.....	3	5	10533	16951	4	1.76	44.7
Fort Garry	N. 49 51	W. 97 07	5.39 a.m.	758	231	29.05	737.9	29.85	758.2	56.0	13.3	87.7	3	2	3	4	2	6	3	4	3	4956	7976	5	2.56	65.0
Fredericton	N. 45 57	W. 66 39	7.41 a.m.	59	18	29.82	757.4	29.88	758.9	53.8	12.3	73.8	1	7	7	2	1	6	1	3	2	.....	.....	5	4.12	104.6
Granton	N. 43 12	W. 81 21	6.43 a.m.	1015	309	28.86	733.0	29.95	760.7	54.1	12.1	86.5	4	4	4	.....	1	1	4	4	8	.....	.....	4	5.23	132.8
Halifax	N. 44 39	W. 63 36	7.53 a.m.	122	37	29.73	755.1	29.88	758.9	52.1	11.2	88.7	1	6	3	2	3	6	5	3	1	.....	.....	6	5.36	136.1
Hamilton	N. 43 16	W. 79 53	6.49 a.m.	338	103	29.55	750.6	29.93	760.2	58.5	14.7	82.1	2	.....	2	12	.....	1	1	12	.....	.....	.....	4	2.21	56.1
Kingston	N. 44 14	W. 76 30	7.02 a.m.	335	102	29.57	754.1	29.90	759.4	57.1	13.9	77.6	8	5	4	4	3	1	2	2	1	3797	6111	5	2.06	52.3
Little Glace Bay ..	N. 46 12	W. 59 58	8.08 a.m.	34	10	29.81	757.2	29.85	758.2	51.7	10.9	77.4	3	1	4	11	4	2	1	1	3	.....	.....	6	3.72	94.5
Montreal	N. 45 31	W. 73 33	7.13 a.m.	187	57	29.68	753.9	29.87	758.7	58.0	14.4	67.7	1	7	7	6	3	1	1	4	.....	.....	.....	5	1.38	35.1
Moose Factory ..	N. 51 16	W. 80 56	6.44 a.m.	30	9	29.89	759.2	29.93	760.2	47.7	8.7	73.4	8	3	3	6	1	4	.....	2	3	.....	.....	6	3.53	89.7
Parry Sound	N. 45 19	W. 80 01	6.48 a.m.	641	195	29.26	743.2	29.94	760.5	55.2	12.9	76.4	6	1	5	.....	.....	7	1	6	4	5173	8325	4	1.41	35.8
Peterborough ..... *c*	N. 44 17	W. 78 20	6.54 a.m.	688	210	29.21	741.9	29.95	760.7	59.5	15.3	70.9	2	2	8	.....	.....	1	6	1	5	.....	.....	5	1.74	44.2
Port Dover	N. 42 47	W. 80 13	6.47 a.m.	635	194	29.25	742.9	29.93	760.2	56.8	13.8	91.1	8	2	1	4	1	.....	1	9	4	4720	7596	6	4.18	106.2
Port Stanley	N. 42 40	W. 81 13	6.43 a.m.	592	180	29.29	744.0	29.93	760.2	57.0	13.9	85.7	5	5	6	1	.....	.....	7	6	.....	.....	.....	5	5.52	140.2
Quebec	N. 46 48	W. 71 12	7.23 a.m.	293	89	29.56	750.8	29.88	758.9	52.4	11.3	75.9	2	5	7	.....	.....	1	1	11	5	.....	.....	4	1.32	33.5
Rockliffe	N. 46 10	W. 77 48	6.57 a.m.	418	127	29.47	748.5	29.93	760.2	52.0	11.1	76.3	4	16	2	.....	.....	.....	2	2	4	4413	7102	4	1.77	45.0
Sangeen	N. 44 30	W. 81 21	6.42 a.m.	641	208	29.23	742.4	29.94	760.5	53.4	11.9	81.8	5	1	1	4	3	4	6	5	1	5694	9163	5	1.60	40.6
St. Andrews	N. 43 04	W. 81 06	6.34 a.m.	?	?	29.81	757.2	29.86	758.4	50.5	10.3	82.2	2	8	2	.....	4	7	.....	4	3	.....	.....	3	4.96	126.0
St. John, N.B. ...	N. 45 17	W. 66 03	7.44 a.m.	150	46	29.69	754.1	29.86	758.4	52.3	11.3	77.0	3	6	.....	5	8	4	1	2	1	.....	.....	5	3.67	93.2
Stratford	N. 43 23	W. 81 00	6.44 a.m.	1182	360	28.67	728.2	29.93	760.2	54.1	12.3	85.9	2	7	2	1	.....	6	2	2	4	.....	.....	5	3.21	81.6
Sydney	N. 46 08	W. 60 10	8.07 a.m.	37	11	29.83	757.7	29.87	758.7	53.5	11.9	79.6	1	.....	5	13	3	.....	3	4	1	4668	7512	7	3.89	98.8
Toronto	N. 43 39	W. 79 23	6.50 a.m.	350	107	29.57	751.1	29.95	760.7	57.2	14.0	76.2	6	8	2	.....	2	.....	4	7	1	6279	10105	5	2.56	65.0
Windsor	N. 44 59	W. 63 58	7.53 a.m.	87	26	29.77	756.1	29.87	758.7	52.5	11.4	84.4	5*b*	1	7	2	8	1	4	.....	.....	.....	.....	7	5.17	131.3
Woodstock	N. 43 08	W. 80 47	6.48 a.m.	980	299	28.88	733.5	29.92	760.0	57.6	14.2	78.9	3	10	3	3	.....	2	1	8	.....	.....	.....	5	4.49	114.0
Yarmouth	N. 43 50	W. 66 02	7.44 a.m.	61	19	29.81	757.2	29.87	758.7	50.9	10.5	89.2	.....	4	6	3	6	2	5	1	3	.....	.....	4	4.06	103.1
Sub-Series.																										
St. Johns, N. F.	N. 47 34	W. 52 42	8.37 a.m.	230	70	29.77	756.1	30.02	762.5	54.4	12.4	83.7	2	.....	2	10	3	6	3	4	.....	.....	.....	5	6.24	158.5
St. Pierre	N. 46 47	W. 56 08	8.24 a.m.	?	?	.....	.....	29.82	757.4	49.6	9.8	.....	1	6	3	11	3	2	1	1	2	.....	.....	.....	14.27	362.4
Cape Colony Series.																										
Cape St. Francis‡ ..	S. 34 10	E. 24 50	1.47 p.m.	25	7	30.17	766.3	30.20	767.1	64.2*a*	a17.9	72.3*a*	2*a*	8	7	6	1	1	2	1	1	.....	.....	6	2.89	73.4
Cape Town	S. 34 05	E. 18 29	1.22 p.m.	27	8	30.15	765.8	30.19	766.8	51.2	10.7	.....	2	14	2	2	3	7	.....	.....	.....	.....	.....	6	3.27	83.1
Worcester	S. 33 36	E. 19 26	1.26 p.m.	?	?	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chinese Series.																										
Zi-Ka-Wei	N. 31 12	E. 121 26	8.14 p.m.	23	7	29.77	756.2	29.80	756.8	72.3	22.4	90.9	.....	1	.....	1	3	14	7	.....	4	.....	.....	8	6.70	170.3
Costa Rican Series.																										
San José	N. 9 56	W. 84 00	6.15 a.m.	3757	1145	26.20	665.5	29.92	760.0	68.2	2c.1	90.7	.....	.....	.....	.....	.....	14	.....	7	9	.....	.....	8	0.61	15.4
Danish Series.																										
Copenhagen	N. 55 41	E. 12 36	0.58 p.m.	43	13	29.87	758.7	29.92	759.9	61.9	16.6	60.6	5	10	4	2	3	2	1	3	.....	.....	.....	6	.....	.....
Fanöe ..... *b*	N. 55 27	E. 8 24	0.42 p.m.	20	6	29.90	759.5	29.92	760.0	59.9	15.5	72.7	.....	6	12	5	2	2	.....	.....	.....	.....	.....	6	.....	.....
Godthaab ..... *j*	N. 64 11	W. 51 46	8.41 a.m.	36	11	29.73	755.1	29.77	756.2	40.6	4.8	78.1	2	3	1	4	4	.....	.....	4	2	.....	.....	7	.....	.....
Stykkisholm	N. 65 05	W. 22 46	10.37 a.m.	36	11	29.69	754.1	29.73	755.2	47.3	8.5	.....	1	4	3	2	5	5	5	.....	.....	.....	.....	7	.....	.....
Thorshavn	N. 62 02	W. 6 44	11.41 a.m.	29	9	29.81	757.1	29.84	758.0	48.6	9.2	78.4	4	.....	2	7	2	4	4	6	1	.....	.....	7	.....	.....
Vestervig	N. 56 47	E. 8 20	0.41 p.m.	82	25	29.80	757.0	29.90	759.4	58.3	14.6	.....	2	8	4	7	4	2	1	.....	2	.....	.....	6	.....	.....
French Series.																										
Agen	N. 44 12	E. 0 38	0.11 p.m.	604	184	29.42	747.2	30.05	763.3	70.0	21.1	54.7	2	11	2	6	2	5	.....	2	.....	.....	.....	.....	7.28	184.8
Alençon	N. 48 25	E. 0 06	0.09 p.m.	476	145	29.53	750.0	30.08	764.0	65.1	18.4	78.9	7	3	1	8	6	1	.....	4	.....	.....	.....	5	1.67	42.5
Arras ..... *b*	N. 50 18	E. 2 47	0.19 p.m.	239	73	29.74	755.4	29.98	761.6	63.9	17.7	59.8*a*	5	6	4	5	2	2	2	2	.....	.....	.....	6	0	0
Avignon	N. 43 57	E. 4 38	0.26 p.m.	65	20	29.90	759.5	29.98	761.5	77.5	25.3	43.5	17	3	1	3	2	4	.....	.....	.....	.....	.....	3	0.75	19.0
Bar-sur-Seine	N. 48 06	E. 4 22	0.25 p.m.	518	158	29.45	748.0	29.99	761.8	69.4	20.8	51.6*a*	2	4	4	5	3	1	3	8	.....	.....	.....	7	1.61	40.8
Beauvais	N. 49 26	E. 2 04	0.16 p.m.	246	75	29.76	756.0	30.02	762.5	67.3	19.6	53.1	4	2	8	6	3	2	.....	5	.....	.....	.....	7	2.28	57.9
Besançon	N. 47 14	E. 6 01	0.32 p.m.	829	252	29.13	739.9	29.95	760.7	69.1	20.6	56.6	1	1	1	6	11	.....	.....	10	.....	.....	.....	.....	5.41	37.5
Bordeaux	N. 44 50	E. 0 32	0.06 p.m.	243	74	29.79	756.6	30.04	763.0	71.2	21.8	51.4	3	4	4	5	3	4	3	4	.....	.....	.....	7	1.46	137.1
Bourges	N. 47 10	E. 2 24	0.17 p.m.	510	156	29.49	749.1	30.03	762.7	69.6	20.9	50.9	9	1	10	2	2	2	.....	4	.....	.....	.....	.....	2.16	54.9
Brest	N. 48 23	W. 4 29	11.50 a.m.	213	65	29.84	758.0	30.08	764.1	64.4	18.0	70.8	6	5	2	10	4	.....	.....	1	2	.....	.....	7	1.88	47.7
Caen	N. 49 11	W. 0 21	0.07 p.m.	69	21	29.94	760.4	30.01	762.2	66.6	19.2	67.9	7	6	5	2	8	1	.....	1	.....	.....	.....	4	1.85	46.9
Châlons-sur-Marne ...	N. 48 57	E. 4 23	0.25 p.m.	294	90	29.66	753.4	29.97	761.2	71.8	22.1	55.3	8	.....	3	3	2	3	3	6	2	.....	.....	5	2.02	51.2
Charleville	N. 49 46	E. 4 42	0.27 p.m.	476	145	29.49	749.1	29.99	761.7	69.1	20.6	64.6	1	3	3	10	5	1	6	.....	1	.....	.....	.....	1.56	39.6
Clermont-Fd	N. 45 45	E. 3 04	0.20 p.m.	1273	388	28.66	728.0	29.98	761.5	69.1	20.6	55.5	10	3	3	2	6	.....	1	5	.....	.....	.....	6	3.52	89.4
Cluny	N. 46 26	E. 4 39	0.27 p.m.	787	240	29.19	741.5	30.00	762.1	72.7	22.6	55.3	5	2	3	4	7	2	1	6	.....	.....	.....	4	3.02	76.8
Commercy ..... *o*	N. 48 45	E. 5 35	0.30 p.m.	817	249	29.14	740.2	29.98	761.6	68.9	20.5	49.0	1	5	17	1	.....	2	1	3	.....	.....	.....	6	1.52	38.6
Gap	N. 44 34	E. 6 04	0.32 p.m.	2427	740	27.48	697.9	29.92	760.0	71.6	22.0	43.3	7*a*	3	2	6	2	5	2	2	.....	.....	.....	.....	0.87	22.1
Gréasque	N. 43 24	E. 5 37	0.31 p.m.	1056	322	28.90	734.1	30.04	763.1	76.1	24.5	38.2	.....	.....	.....	.....	2	13	8	7	.....	.....	.....	4	1.27	32.2
Grenoble	N. 45 11	E. 5 43	0.31 p.m.	715	218	29.21	741.9	29.95	760.7	71.4	21.9	53.0	1	15	8	.....	1	.....	3	2	.....	.....	.....	.....	1.36	34.5
Guéret	N. 46 10	E. 1 52	0.16 p.m.	1486	453	28.47	723.2	30.03	762.7	65.3	18.5	57.1	1	4	3	11	1	3	4	3	.....	.....	.....	.....	2.68	68.1
Lamballe	N. 48 28	W. 2 31	11.59 a.m.	252	77	29.79	756.7	30.06	763.5	63.9	17.7	69.8	6	7	4	3	3	3	.....	.....	.....	.....	.....	.....	2.35	59.6
Lescar	N. 43 21	W. 0 26	0.06 p.m.	525	160	29.48	748.8	30.14	765.6	68.5	20.3	67.8	3	3	14	2	2	1	2	3	.....	.....	.....	.....	7.27	184.7
Lorient	N. 47 44	W. 3 21	11.55 a.m.	86	26	30.00	762.0	30.10	764.5	66.4	19.1	64.2	3	2	8	6	9	2	.....	.....	.....	.....	.....	7	1.66	42.2
Lyons	N. 45 45	E. 4 49	0.27 p.m.	574	175	28.97	735.7	30.00	761.9	69.8	21.0	53.2	9	6	1	3	1	4	5	1	.....	.....	.....	7	2.59	65.8
Mans	N. 48 01	E. 0 12	0.09 p.m.	285	87	29.74	755.3	30.03	762.8	65.8	18.8	64.9	8	4	5	5	4	.....	1	3	.....	.....	.....	5	1.81	46.0
Marseilles	N. 43 18	E. 5 23	0.29 p.m.	246	75	29.69	754.1	30.05	760.8	74.3	23.5	45.7	.....	5	11	7	2	5	.....	.....	.....	.....	.....	4	0.14	3.5
Mont-Louis	N. 42 30	E. 2 07	0.16 p.m.	5203	1586	24.84	631.0	30.08	764.0	56.3	13.5	63.2	2	5	4	6	.....	2	10	1	.....	.....	.....	6	1.69	43.0
Montpelier ‡	N. 43 36	E. 3 54	0.24 p.m.	102	31	29.87	758.7	29.98	761.4	74.8	23.8	58.6	6	3	4	2	9	5	.....	1	.....	.....	.....	3	0.48	12.2
Nancy	N. 48 41	E. 6 11	0.33 p.m.	712	217	29.23	742.5	29.98	761.5	68.9	20.5	49.3	2	10	8	6	4	.....	.....	.....	.....	.....	.....	5	1.61	41.0
Nantes	N. 47 13	W. 1 33	0.02 p.m.	134	41	29.89	759.3	30.06	763.4	68.2	20.1	57.3	3*a*	5	6	7	4	.....	2	2	.....	.....	.....	8	1.96	49.7
Nice	N. 43 41	E. 7 16	0.37 p.m.	29	9	29.90	759.4	29.93	760.3	72.7	22.6	58.7	1	.....	4	1	2	8	14	.....	.....	.....	.....	3	0.42	10.8
Perpignan	N. 42 41	E. 2 53	0.19 p.m.	98	30	29.90	759.5	30.00	762.1	71.1	21.7	52.7	11	1	.....	1	2	14	.....	1	.....	.....	.....	5	0.78	19.8
Pic du Midi (Pitde) ...	N. 42 15	W. 0 08	0.08 p.m.	7763	2366	22.61	574.2	.....	.....	43.7	6.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5	11.36	288.5
Privas	N. 44 45	E. 4 35	0.26 p.m.	997	304	28.97	735.7	30.00	761.9	72.9	22.7	45.2	14	2	.....	.....	12	.....	.....	2	.....	.....	.....	3	0.56	14.2
Puy de Dome	N. 45 46	E. 2 58	0.20 p.m.	4813	1467	25.20	640.1	.....	.....	48.4	9.1	85.3	1	7	4	5	3	5	2	3	.....	.....	.....	8	5.39	136.8
Rochefort	N. 45 56	W. 0 58	0.04 p.m.	29	9	30.05	763.2	30.08	764.0	72.1	22.3	71.7	1	4	6	6	3	3	1	5	1	.....	.....	7	1.77	44.9?
Roche-sur-Yon	N. 46 40	W. 1 26	0.02 p.m.	198	60	29.84	757.8	30.04	763.0	69.3	20.7	59.9	8	3	14	3	.....	.....	2	.....	.....	.....	.....	5	0.49	12.4
Rodez	N. 44 21	E. 2 35	0.18 p.m.	2050	625	27.91	708.8	30.00	762.0	65.1	18.4	65.1	1*a*	11	10	1	1	2	3	.....	.....	.....	.....	7	3.12	79.3
Rouen	N. 49 26	E. 1 14	0.13 p.m.	80	24	29.93	760.1	30.01	762.3	67.5	19.7	57.7	4	2	8	3	4	6	1	2	.....	.....	.....	6	1.46	37.0
Saint Lô	N. 49 06	W. 1 05	0.04 p.m.	134	41	29.89	759.1	30.04	763.1	63.9	17.7	64.0	4	9	8	4	5	.....	.....	.....	.....	.....	.....	5	7.15	181.5
Saint Maur	N. 48 48	E. 2 21	0.18 p.m.	162	49	29.85	758.3	30.02	762.5	68.0	20.0	54.1	6	4	6	5	7	.....	.....	1	.....	.....	.....	2	1.06	26.8
Toulouse	N. 43 37	E. 1 27	0.14 p.m.	636	194	29.37	746.0	30.10	764.5	70.9	21.6	62.8	.....	14	6	1	.....	8	1	.....	.....	.....	.....	6	2.50	63.6
Tours ..... *a*	N. 47 24	E. 0 41	0.11 p.m.	171	52	29.84	757.8	30.03	762.8	69.3	20.7	56.7	3	3	3	9	3	2	3	3	.....	.....	.....	7	1.83	46.5
Versailles	N. 48 48	E. 2 07	0.16 p.m.	445	136	29.53	750.1	30.02	762.6	67.1	19.5	53.2	5	6	3	12	.....	1	.....	3	.....	.....	.....	6	1.55	39.4
Sub Series.																										
Paris, Montsouris.	N. 48 50	E. 2 20	0.18 p.m.	256	78	29.74	755.4	30.03	762.8	67.6	19.8	54.9	6	4	6	6	6	1	.....	1	.....	.....	.....	7	1.37	34.7

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for June, 1881.																				Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.															
						Actual.		Reduced.					Directions.									Total Movement.						
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.	0–10	Inch.	Mill.
German Series.	° ′	° ′																										
Bamberg	N. 49 54	E. 10 53	0.51 p.m.	774	236	29.20	741.7	29.97	761.3	68.7	20.4	50.4	4	7	9	2	1	3	1	.....	3	.....	.....	4	1.59	40.3
Berlin	N. 52 30	E. 13 23	1.02 p.m.	164	50	29.75	755.0	29.91	759.8	68.2	20.1	53.1	5	7	5	5	1	1	4	2	.....	.....	.....	7	2.18	55.4
Breslau	N. 51 07	E. 17 02	1.17 p.m.	482	147	29.41	747.1	29.94	760.4	66.7	19.3	55.0	3	8	11	1	1	3	1	2	.....	.....	.....	6	1.60	40.7
Carlsruhe	N. 49 01	E. 8 25	0.42 p.m.	404	123	29.55	750.5	29.97	761.1	70.5	21.4	61.5	2	5	3	11	2	2	.....	5	.....	.....	.....	7	1.53	38.9
Cassel	N. 51 19	E. 9 28	0.46 p.m.	669	204	29.23	742.5	29.95	760.7	68.2	20.1	49.5	3	11	7	5	3	1	.....	.....	.....	.....	.....	6	1.32	33.5
Frankfort on M.	N. 50 08	E. 8 41	0.43 p.m.	338	103	29.64	752.9	29.99	761.8	71.2	21.8	44.9	6	7	4	8	3	.....	.....	2	.....	.....	.....	6	1.19	30.2
Friedrichshafen	N. 47 39	E. 9 29	0.45 p.m.	1355	413	28.58	725.8	29.97	761.2	67.1	19.5	65.2	.....	.....	2	13	11	2	.....	2	.....	.....	.....	6	3.53	89.7
Hamburg	N. 53 33	E. 9 58	0.48 p.m.	66	20	29.87	758.7	29.94	760.5	64.9	18.3	61.7	5	3	9	8	3	2	.....	.....	.....	.....	.....	7	0.63	16.0
Kiel	N. 54 20	E. 10 04	0.49 p.m.	13	4	29.90	759.4	29.91	759.8	62.4	16.9	61.9	3	2	14	4	.....	.....	2	5	.....	.....	.....	6	1.06	26.9
Leipsic	N. 51 20	E. 12 24	0.58 p.m.	390	119	29.54	750.3	29.95	760.8	66.6	19.2	58.5	1	12	3	4	3	3	1	3	.....	.....	.....	8	4.94	125.5
Magdeburg	N. 52 09	E. 11 37	0.54 p.m.	269	82	29.74	755.5	29.93	760.2	66.2	19.0	59.7	1	7	7	3	5	1	2	3	1	.....	.....	7	2.55	64.7
Memel	N. 55 43	E. 21 07	1.32 p.m.	39	12	29.80	757.0	29.85	758.2	63.1	17.3	65.5	1	16	3	5	1	3	1	.....	.....	.....	.....	6	.....	.....
Munich	N. 48 09	E. 11 34	0.55 p.m.	1732	528	28.18	715.8	30.04	763.0	66.4	19.1	48.8	4	6	4	3	.....	1	3	4	5	.....	.....	6	4.41	112.1
Neufahrwasser	N. 54 24	E. 18 40	1.25 p.m.	16	5	29.87	758.6	29.88	759.0	63.1	17.3	62.8	7	6	3	3	1	2	.....	8	.....	.....	.....	7	2.07	52.6
Neustadt ..... *c*	N. 49 21	E. 8 08	0.41 p.m.	479	146	29.47	748.6	30.00	761.9	71.1	21.7	50.7	4	.....	9	3	1	5	.....	2	.....	.....	.....	6	0.87	22.1
Stuttgart	N. 48 47	E. 9 11	0.45 p.m.	879	268	29.04	737.5	29.90	759.4	68.4	20.2	50.6	7	6	10	3	2	.....	1	1	.....	.....	.....	6	3.30	83.9
Weissenburg	N. 49 02	E. 10 58	0.52 p.m.	1414	431	28.50	723.8	29.96	760.9	66.9	19.4	50.0	2	6	9	2	3	1	3	1	3	.....	.....	7	4.32	109.6
Wustrow	N. 54 21	E. 12 24	0.58 p.m.	23	7	29.89	759.2	29.92	759.9	61.5	16.4	74.0	5	5	11	5	1	1	2	.....	.....	.....	.....	7	1.58	40.2
Greek Series.																												
Athens	N. 37 58	E. 23 43	1.43 p.m.	359	110	29.56	750.9	29.95	760.6	79.9	26.6	.....	.....	.....	.....	21	3	.....	.....	6	.....	.....	.....	1	.....	.....
Indian Series.																												
Kurachee	N. 24 47	E. 67 04	4.36 p.m.	49	15	29.52	749.8	29.57	751.1	88.6	31.4	77.1	.....	.....	1	20	9	.....	.....	.....	.....	.....	.....	3	0.04	1.0
Deesa	N. 24 16	E. 72 14	4.57 p.m.	465	142	29.07	738.4	29.52	749.8	97.3	36.3	37.6	.....	.....	6	14	9	1	.....	.....	.....	.....	.....	5	2.29	58.2
Bombay	N. 18 54	E. 72 49	5.00 p.m.	37	11	29.68	753.9	29.72	754.9	85.0	29.4	77.8	1	.....	13	14	2	.....	.....	.....	.....	.....	.....	7	17.86	453.6
Poona	N. 18 28	E. 74 10	5.05 p.m.	1849	564	27.87	707.9	29.70	754.4	82.5	28.1	54.0	.....	.....	13	16	1	.....	.....	.....	.....	.....	.....	5	0.43	10.9
Belgaum	N. 15 52	E. 74 42	5.07 p.m.	2550	777	27.23	691.6	29.75	755.6	76.2	24.6	71.5	.....	.....	6	23	1	.....	.....	.....	.....	.....	.....	7	0.86	21.8
Lahore	N. 31 34	E. 74 20	5.05 p.m.	732	223	28.69	728.7	29.39	746.5	100.4	38.0	29.2	3	2	15	4	.....	.....	3	3	.....	.....	.....	2	0.44	11.2
Roorkee	N. 29 52	E. 77 56	5.20 p.m.	887	270	28.56	725.4	29.43	747.5	93.9	34.4	53.4	2	3	3	2	.....	3	9	4	4	.....	.....	5	2.95	74.9
Agra	N. 27 10	E. 78 05	5.20 p.m.	555	169	28.90	734.0	29.44	747.8	98.3	36.8	43.5	2	5	5	6	.....	.....	7	3	2	.....	.....	4	0	0
Nagpur	N. 21 09	E. 79 11	5.24 p.m.	1025	312	28.52	724.4	29.54	750.3	86.9	30.5	61.9	4	9	6	7	2	.....	.....	1	1	.....	.....	8	19.70	500.4
Jubulpore	N. 23 09	E. 79 59	5.28 p.m.	1351	412	28.24	717.3	29.53	750.0	87.3	30.7	60.6	3	6	9	1	4	1	2	2	2	.....	.....	8	6.81	173.0
Lucknow	N. 26 50	E. 81 00	5.32 p.m.	369	112	29.12	739.6	29.48	748.8	91.2	32.9	56.2	11	3	2	2	.....	1	2	8	1	.....	.....	5	3.13	79.5
Allahabad ..... *a*	N. 25 26	E. 81 52	5.35 p.m.	307	94	29.16	740.7	29.46	748.3	92.5	33.6	58.4	.....	3	2	4	.....	2	5	7	6	.....	.....	6	5.85	148.6
Patna	N. 25 37	E. 85 08	5.49 p.m.	183	56	29.32	744.7	29.50	749.3	86.9	30.5	76.7	.....	6	.....	.....	.....	4	16	3	1	.....	.....	8	10.03	254.8
Hazaribagh	N. 24 00	E. 85 24	5.50 p.m.	2007	612	27.54	699.5	29.52	749.8	82.9	28.3	72.1	2	6	1	5	3	9	3	1	.....	.....	.....	8	8.07	205.0
Cuttack	N. 20 29	E. 85 54	5.52 p.m.	80	24	29.46	748.3	29.54	750.3	85.0	29.4	76.7	1	1	2	10	4	1	.....	1	10	.....	.....	9	13.70	348.0
Calcutta	N. 22 33	E. 88 19	6.01 p.m.	21	7	29.50	749.3	29.52	749.8	83.2	28.4	86.2	.....	.....	2	2	13	5	6	2	.....	.....	.....	9	15.12	384.0
Dhubri	N. 26 07	E. 89 50	6.08 p.m.	118	36	29.44	747.8	29.56	750.8	80.5	26.9	85.1	.....	.....	1	2	2	1	3	3	18	.....	.....	7	13.48	342.4
Chittagong	N. 22 21	E. 91 50	6.15 p.m.	87	26	29.53	750.0	29.62	752.3	81.9	27.7	86.7	.....	.....	.....	4	9	8	5	1	3	.....	.....	8	0.67	17.0
Sibsagar	N. 26 59	E. 94 40	6.27 p.m.	333	112	29.25	742.9	29.58	751.3	84.2	29.0	82.4	.....	.....	.....	7	6	3	.....	14	.....	.....	.....	9	16.18	411.0
Zanzibar ..... *a*	S. 6 10	E. 39 11	2.45 p.m.	22	7	.....	.....	30.05	763.3	82.2	27.9	61.9	.....	.....	.....	1	21	7	.....	.....	.....	.....	.....	5	0.26	6.6
Italian Series.																												
Udine	N. 46 04	E. 13 14	1.01 p.m.	381	116	29.55	750.5	29.95	760.6	73.0	22.8	53.6	1	1	9	10	3	1	1	2	2	.....	.....	7	7.24	183.8
Milan	N. 45 28	E. 9 11	0.45 p.m.	482	147	29.42	747.2	29.92	759.9	75.6	24.2	42.8	.....	3	3	11	2	5	6	.....	.....	.....	.....	6	1.31	33.3
Padua	N. 45 24	E. 11 53	0.56 p.m.	102	31	29.86	758.4	29.92	760.0	73.8	23.2	52.8	3	3	4	4	4	7	4	1	.....	.....	.....	6	1.81	46.0
Moncalieri	N. 45 00	E. 7 42	0.39 p.m.	853	260	29.04	737.7	29.93	760.1	73.8	23.2	47.1	1	3	1	2	.....	8	12	3	.....	.....	.....	5	1.11	28.3
Genoa	N. 44 25	E. 8 55	0.44 p.m.	157	48	29.81	757.1	29.99	761.8	71.1	21.7	53.8	3	1	1	15	2	6	1	1	.....	.....	.....	4	1.80	45.6
Mondovi	N. 44 22	E. 7 48	0.39 p.m.	1824	556	28.07	713.0	29.93	760.1	70.5	21.4	49.2	5	5	8	.....	1	2	5	4	.....	.....	.....	3	1.85	46.9
Pesaro	N. 43 55	E. 12 53	1.00 p.m.	46	14	29.90	759.4	29.93	760.2	70.9	21.6	64.0	9	6	1	3	1	.....	3	7	.....	.....	.....	4	2.32	58.9
Florence	N. 43 46	E. 11 14	0.53 p.m.	240	73	29.69	754.1	29.93	760.3	76.3	24.6	41.9	3	5	11	5	2	2	.....	2	.....	.....	.....	4	1.23	31.3
Leghorn	N. 43 32	E. 10 18	0.49 p.m.	79	24	29.89	759.1	29.97	761.2	73.4	23.0	56.0	.....	4	11	11	1	1	.....	2	.....	.....	.....	5	3.30	83.8
Rome	N. 41 54	E. 12 29	0.58 p.m.	164	50	29.79	756.7	29.96	761.0	78.3	25.7	44.4	1	.....	2	24	3	.....	.....	.....	.....	.....	.....	5	2.49	63.3
Lecce	N. 40 21	E. 18 12	1.21 p.m.	236	72	29.72	754.8	29.96	760.9	78.3	25.7	43.8	4	7	5	2	.....	8	.....	3	1	.....	.....	3	0.46	11.7
Cosenza	N. 39 13	E. 16 15	1.13 p.m.	840	256	29.10	739.1	29.97	761.1	77.2	25.1	69.6	.....	3	2	6	4	10	5	.....	.....	.....	.....	5	3.54	89.9
Cagliari	N. 39 13	E. 9 10	0.45 p.m.	180	55	29.76*b*	756.0*b*	29.96*b*	760.9*b*	80.1	26.7	53.7*a*	*a*	9	.....	.....	5	14	1	.....	.....	.....	.....	4	1.08	27.4
Palermo	N. 38 07	E. 13 22	1.02 p.m.	236	72	29.76	755.9	30.00	762.1	73.4	23.0	53.4	2	2	1	2	.....	.....	6	16	1	.....	.....	5	3.54	89.9
Syracuse	N. 37 03	E. 15 18	1.09 p.m.	43	13	29.93	760.2	29.97	761.3	75.7	24.3	60.3	.....	.....	1	4	4	4	14	3	.....	.....	.....	6	2.02	51.4
Sub-Series.																									0.69	17.5
Naples	N. 40 52	E. 14 18	1.05 p.m.	489	149	29.30	744.3	29.82	757.3	73.6	23.1	64.0	.....	2	7	9	5	6	1	.....	.....	.....	.....	5	1.68	42.7
Stelvio	N. 46 37	E. 10 32	0.50 p.m.	8343	2543	22.23	564.7	.....	.....	44.6	7.0	53.0	.....	.....	2	11	3	6	2	6	.....	.....	.....	7	1.77	44.9
Valdobbia	N. 45 47	E. 12 00	0.56 p.m.	8360	2548	22.26	565.4	.....	.....	45.0	7.2	73.7	12	.....	2	.....	.....	1	10	5	.....	.....	.....	8	0.02	0.4
Japanese Series.																												
Hiroshima	N. 34 20	E.132 27	8.58 p.m.	14	4	29.82	757.5	29.84	757.9	70.0	21.1	90.4	3	1	10	8	1	1	.....	1	5	.....	.....	8	15.89	403.7
Kioto	N. 35 01	E.135 46	9.11 p.m.	162	49	29.70	754.4	29.87	758.8	70.3	21.3	82.9	5	9	.....	4	7	3	1	1	.....	.....	.....	7	14.45	367.1
Nagasaki	N. 32 44	E.129 51	8.47 p.m.	189	58	29.67	753.5	29.86	758.4	70.9	21.6	89.7	1	.....	.....	16	7	1	2	2	1	.....	.....	8	21.69	551.0
Tokei	N. 35 40	E.139 45	9.27 p.m.	63	19	29.82	757.5	29.89	759.2	68.5	20.3	87.8	2	1	.....	3	12	2	4	5	1	.....	.....	7	8.11	206.0
Wakayama	N. 34 14	E.135 09	9.09 p.m.	48	15	29.82	757.4	29.87	758.7	72.0	22.2	83.7	3	2	1	4	11	1	1	1	6	.....	.....	6	13.38	339.9
Mauritius Ser's.																												
Mauritius	S. 20 06	E. 57 33	3.58 p.m.	181	55	29.97	761.2	30.16	766.1	73.7*a*	23.2*a*	66.6*a*	.....	1	1	1	.....	8	17	2	.....	.....	.....	5	2.53	64.3
Mexican Series.																												
Leon	N. 21 07	W.101 35	5.22 a.m.	5902	1799	24.41	619.7	30.04	763.0	65.5	18.6	77	10	4	2	5	2	1	4	2	.....	.....	.....	5	1.88	47.8
Mazatlan	N. 23 11	W.106 17	5.03 a.m.	249	76	29.64	752.9	29.90	759.4	77.9	25.4	86	1	4	.....	5	1	9	4	4	2	.....	.....	3	2.12	53.8
Mexico	N. 19 26	W. 99 00	5.32 a.m.	7490	2283	23.11	587.0	30.05	763.2	56.9	13.9	79	1	4	.....	.....	.....	.....	1	.....	24	3.1	5	6	3.57	90.6
Pabellon	N. 22 04	W. 102 04	5.20 a.m.	6312	1924	23.95	608.2	29.88	758.8	64.0	17.8	75	2	4	2	3	2	1	1	3	12	.....	.....	4	1.85	47.1
Puebla	N. 19 02	W. 98 03	5.36 a.m.	7113	2168	23.43	595.1	30.15	765.9	56.3	13.5	45	2	.....	1	.....	.....	.....	.....	.....	27	.....	.....	5	4.82	122.4
San Luis Potosi	N. 22 10	W.100 51	5.25 a.m.	6211	1893	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tlacotalpam	N. 18 37	W. 95 32	5.46 a.m.	13	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Zacatecas	N. 22 44	W.102 26	5.18 a.m.	8100	2469	22.57	573.2	30.14	765.5	57.4	14.1	.....	.....	.....	1	4	.....	1	4	4	16	.....	.....	3	1.54	39.1

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for June, 1881.																				Average Cloudiness.	Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.															
						Actual.		Reduced.					Directions.									Total Movement.						
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.		Inch.	Mill.
	o /	o /																							0–10		
Netherland Series.																												
Flushing	N. 51 24	E. 3 35	0.22 p.m.	0	0	30.05	763.3	30.05	763.3	64.4	18.0	.....	3	5	13	3	3	1	2	.....	.....	.....	.....	.....	.....	2.97	75.5
Groningen	N. 53 12	E. 6 34	0.34 p.m.	0	0	29.91	759.6	29.96	761.0	62.8	17.1	.....	5	9	5	3	4	.....	1	3	.....	.....	.....	.....	.....	2.48	63.0
Helder	N. 52 58	E. 4 45	0.27 p.m.	0	0	29.96	761.0	29.96	761.0	58.8	14.9	.....	4	6	3	9	4	.....	2	2	.....	.....	.....	.....	.....	1.48	37.7
Hellevoetsluis	N. 51 49	E. 4 08	0.25 p.m.	0	0	29.98	761.6	29.98	761.6	64.6	18.1	73.5	4	3	7	10	3	.....	3	.....	.....	.....	.....	.....	.....	3.62	92.0
Utrecht	N. 52 05	E. 5 07	0.29 p.m.	43	13	29.94	760.5	29.99	761.7	65.8	18.8	62.8	3	2	11	6	4	1	1	2	.....	.....	.....	.....	6	2.87	72.9
Norwegian Series.																												
Bergen	N. 60 24	E. 5 20	0.29 p.m.	49	15	29.76	756.0	29.83	757.6	56.3	13.5	70.9	1	7	6	3	7	1	.....	.....	5	.....	.....	.....	5	4.86	123.4
Christiania	N. 59 55	E. 10 45	0.51 p.m.	134	41	29.64	752.8	29.78	756.4	64.9	18.3	49.8	2	.....	1	12	8	2	1	4	.....	.....	.....	.....	6	1.51	38.3
Gjæsvær	N. 71 07	E. 25 22	1.49 p.m.	23	7	29.82	757.4	29.84	758.0	42.1	5.6	.....	2	1	7	4	.....	2	5	1	8	.....	.....	.....	7	.....	.....
Lodingen	N. 68 24	E. 16 01	1.12 p.m.	43	13	29.78	756.3	29.82	757.5	49.6	9.8	60.2	8	.....	1	6	2	.....	1	5	7	.....	.....	.....	5	4.89	124.2
Portuguese Series.																												
Angra	N. 38 39	W. 27 14	10.19 a.m.	144	44	30.13	765.4	30.15	765.9	66.9	19.4	85.4	5	2	7	.....	7	8	.....	1	.....	.....	.....	.....	4	0.84	21.2
Campo Major	N. 39 02	W. 6 59	11.40 a.m.	945	288	29.06	738.0	30.04	763.0	79.0	26.1	32.4	3	5	5	7	2	1	2	4	1	.....	.....	.....	5	0.95	24.2
Funchal	N. 32 38	W. 16 55	11.00 a.m.	82	25	30.10	764.4	30.18	766.6	71.4	21.9	66.2	.....	.....	1	21	3	.....	1	1	3	.....	.....	.....	6	1.51	38.4
Lisbon	N. 38 42	W. 9 08	11.31 a.m.	335	102	29.74	755.4	30.09	764.3	72.0	22.2	51.7	10	5	.....	6	6	.....	1	2	.....	.....	.....	.....	4	0.41	10.3
Ponta Delgada	N. 37 45	W. 25 41	10.25 a.m.	66	20	30.24	768.0	30.31	769.8	69.6	20.9	72.3	4	3	3	5	1	1	.....	8	5	.....	.....	.....	5	1.19	30.2
Russian Series.																												
Akmolinski	N. 51 03	E. 71 22	4.54 p.m.	?	?	28.64	727.5	29.67	753.6	72.1	22.3	35.2	4	3	7	11	2	1	.....	2	.....	.....	.....	.....	5	.....	.....
Archangel	N. 64 33	E. 40 32	2.50 p.m.	16	5	29.80	757.0	29.82	757.5	55.9	13.3	60.0	3	7	7	2	3	2	2	3	1	.....	.....	.....	7	.....	.....
Astrakhan	N. 46 21	E. 48 02	3.20 p.m.	‖ 72	‖ 22	29.95	760.7	29.87	758.6	77.2	25.1	44.3	3	2	4	8	2	3	4	2	2	.....	.....	.....	6	.....	.....
Barnaul ‡	N. 53 20	E. 83 47	5.45 p.m.	482	147	29.25	742.9	29.72	754.9	69.6	20.9	42.3	3	9	2	7	2	1	.....	4	2	.....	.....	.....	7	.....	.....
Dorpat	N. 58 23	E. 26 43	1.55 p.m.	223	68	29.54	750.4	29.78	756.4	68.5	20.3	50.1	6	3	7	3	3	1	2	5	.....	.....	.....	.....	6	.....	.....
Ekaterinburg	N. 56 49	E. 60 35	4.11 p.m.	876	267	28.74	730.1	29.68	753.8	64.0	17.8	57.1	5	6	3	6	.....	5	3	1	1	.....	.....	.....	5	.....	.....
Kasan	N. 55 47	E. 49 08	3.25 p.m.	249	76	29.46	748.2	29.71	754.7	70.2	21.2	48.8	3	7	4	6	6	1	.....	2	1	.....	.....	.....	7	.....	.....
Kertch	N. 45 21	E. 36 29	2.34 p.m.	20	6	29.90	759.5	29.92	760.0	71.6	22.0	71.8	2	1	.....	5	10	4	.....	2	6	.....	.....	.....	4	.....	.....
Kieff	N. 50 26	E. 30 31	2.10 p.m.	600	183	29.16	740.7	29.77	756.2	68.4	20.2	40.7	9	5	7	1	2	4	1	1	.....	.....	.....	.....	7	.....	.....
Krotkowo																												
Lugan	N. 48 35	E. 39 20	2.46 p.m.	187	57	29.59	751.6	29.79	756.6	73.4	23.0	43.6	.....	3	13	4	5	2	2	1	.....	.....	.....	.....	6	.....	.....
Moscow	N. 55 46	E. 37 40	2.39 p.m.	512	156	29.21	742.0	29.74	755.4	66.0	18.9	59.7	2	11	1	1	9	2	2	.....	2	.....	.....	.....	6	.....	.....
Nertchinsk	N. 61 19	E. 119 37	8.07 p.m.	1942	592	27.48	698.1	29.73	755.1	51.8	11.0	76.2	2	5	1	.....	.....	.....	.....	.....	22	.....	.....	.....	7	5.95	151.2
Nikolaiev	N. 46 58	E. 31 58	2.16 p.m.	62	19	29.83	757.7	29.90	759.5	74.8	23.8	56.8	5	2	3	6	7	.....	2	2	3	.....	.....	.....	5	.....	.....
Nikolaievsk a	N. 53 08	E. 140 45	9.31 p.m.	59	18	29.70	754.4	29.79	756.6	50.7	10.4	83.3	1	1	.....	.....	.....	7	2	1	17	.....	.....	.....	7	3.05	77.4
Pekin	N. 39 57	E. 116 29	7.54 p.m.	125	38	29.49	749.0	29.63	752.6	75.9	24.4	62.0	.....	4	.....	4	2	4	.....	2	14	.....	.....	.....	5	.....	.....
St. Petersburg	N. 59 56	E. 30 16	2.09 p.m.	16	5	29.76	755.9	29.78	756.3	64.0	17.8	54.8	1	8	4	1	3	3	1	9	.....	.....	.....	.....	5	.....	.....
Tashkend	N. 41 19	E. 69 16	4.45 p.m.	1621	494	28.24	717.2	29.71	754.6	83.5	28.6	49.4	.....	3	.....	.....	1	.....	.....	25	.....	.....	.....	.....	3	.....	.....
Tiflis	N. 41 43	E. 44 47	3.07 p.m.	1342	409	28.51	724.1	29.85	758.3	79.5	26.4	35.9	.....	11	3	.....	5	6	.....	1	4	.....	.....	.....	5	.....	.....
Warsaw	N. 52 13	E. 21 02	1.32 p.m.	394	120	29.44	747.8	29.84	758.0	66.7	19.3	59.4	3	7	9	.....	3	3	2	1	2	.....	.....	.....	7	.....	.....
Wilna	N. 54 41	E. 25 18	1.49 p.m.	387	118	29.40	746.7	29.80	756.9	68.9	20.5	53.5	3	6	6	4	4	4	1	2	.....	.....	.....	.....	6	.....	.....
Yeniseisk	N. 58 27	E. 92 09	6.16 p.m.	128	39	29.54	750.3	29.82	757.5	60.6	15.9	56.6	6	1	3	4	7	1	5	.....	3	.....	.....	.....	6	.....	.....
Scottish Series.																												
Leith	N. 55 58	W. 3 10	11.55 a.m.	83	25	.....	.....	29.86	758.4	58.6	14.8	65.3	3	.....	10	4	1	2	8	2	.....	.....	.....	.....	7	1.99	50.5
Monach Lt. House	N. 57 31	W. 7 42	11.37 a.m.	150	46	.....	.....	29.83	757.7	55.5	13.1	94.2	4	2	1	7	4	6	3	3	.....	.....	.....	.....	• 9	3.60	91.4
North Unst	N. 60 51	W. 0 53	0.04 a.m.	230	70	.....	.....	29.79	756 7	.....	.....	.....	8	1	3	5	6	1	4	2	.....	.....	.....	.....	4	.....	.....
Spanish Series.																												
Barcelona	N. 41 23	E. 2 11	0.16 p.m.	98	30	29.91	759.8	30.02	762.5	72.7	22.6	60.3	.....	.....	2	2	10	10	6	.....	.....	.....	.....	.....	3	0.04	0.9
Bilbao	N. 43 15	W. 2 59	11.56 a.m.	52	16	30.04	763.0	30.10	764.4	72.9	22.7	64.1	4	15	.....	.....	3	1	6	1	.....	.....	.....	.....	2	3.43	87.1
Burgos	N. 42 20	W. 3 46	11.53 a.m.	2821	860	27.15	689.6	.....	.....	66.4	19.1	53.9	6	.....	.....	10	1	.....	.....	13	.....	.....	.....	.....	4	0.97	24.7
Madrid	N. 40 25	W. 3 42	11.53 a.m.	2152	656	27.83	706.9	29.97	761.1	77.0	25.0	37.9	3	3	2	10	2	5	2	3	.....	.....	.....	.....	4	1.01	25.7
Murcia ‡	N. 37 59	W. 1 10	0.03 p.m.	141	43	29.87	758.6	30.01	762.3	80.2	26.8	50.1	.....	3	1	2	2	8	5	9	.....	.....	.....	.....	6	2.01	51.1
Santiago	N. 42 53	W. 8 28	11.34 a.m.	863	263	29.16	740.6	30.03	762.7	68.2	20.1	63.0	9	2	1	4	4	.....	.....	10	.....	.....	.....	.....	5	2.23	56.6
Sub-Series.																												
Havana	N. 23 08	W. 82 28	7.39 a.m.	62	19	29.93	760.3	30.00	762.0	80.6	27.0	79.5	.....	4	14	6	3	.....	.....	.....	3	.....	.....	.....	5	2.38	60.5
Manilla	N. 14 35	E. 121 00	8.12 p.m.	56	17	29.80	757.0	29.85	758.3	83.5	28.6	79.1	2	1	1	.....	5	8	9	4	.....	.....	.....	.....	6	17.09	434.0
San Fernando	N. 36 28	W. 6 13	11.43 a.m.	95	29	29.97	761.2	30.06	763.6	74.7	23.7	55.7	.....	3	6	8	2	1	8	2	.....	.....	.....	.....	5	0.02	0.4
San Juan de Porto Rico	N. 18 30	W. 66 10	7.44 a.m.	82	25	29.95	760.8	30.04	763.1	80.6	27.0	91.8	.....	.....	.....	2	6	15	6	1	.....	.....	.....	.....	6	7.15	181.7
Tuguegarao	N. 17 37	E. 121 30	8.15 p.m.	125	38	29.75	755.6	29.89	759.3	82.6	28.1	78.2	2	5	6	5	4	3	3	2	.....	.....	.....	.....	6	2.21	56.1
Swedish Series.																												
Haparanda	N. 65 47	E. 24 03	1.44 p.m.	29	9	29.82	757.4	29.86	758.4	55.0	12.8	54.2	3	2	.....	8	8	1	.....	7	1	.....	.....	.....	4	0.63	16.0
Umea	N. 63 50	E. 20 17	1.29 p.m.	39	12	29.79	756.7	29.84	758.0	57.7	14.3	48.3	.....	4	.....	9	5	.....	4	8	.....	.....	.....	.....	6	0.92	23.3
Hernosand	N. 62 32	E. 17 57	1.20 p.m.	46	14	29.79	756.7	29.84	758.0	55.8	13.2	56.1	4	2	.....	2	9	1	3	9	.....	.....	.....	.....	5	0.71	18.0
Stockholm	N. 59 20	E. 18 04	1.20 p.m.	144	44	29.65	753.0	29.82	757.5	61.7	16.5	58.8	6	2	8	2	3	3	2	4	.....	.....	.....	.....	6	1.31	33.2
Wisby	N. 57 39	E. 18 19	1.20 p.m.	52	16	29.74	755.3	29.80	756.8	57.9	14.4	71.4	6	4	7	6	1	2	.....	4	.....	.....	.....	.....	5	1.74	44.1
Sub-Series.																												
Upsala	N. 59 51	E. 17 37	1.19 p.m.	79	24	29.61	752.2	29.70	754.4	62.2	16.8	54.8	9	3	2	4	6	5	.....	1		.....	.....	.....	7	1.03	26.2
Swiss Series.																												
Geneva	N. 46 12	E. 6 08	0.33 p.m.	1338	408	28.60	726.3	29.98	761.5	68.5	20.3	50.1	19	1	1	3	3	1	.....	2	.....	.....	.....	.....	6	1.51	38.3
Zurich ‡	N. 47 22	E. 8 40	0.43 p.m.	1542	470	28.39	721.1	29.98	761.5	68.5	20.3	59.0	1	2	12	1	.....	1	3	2	8	.....	.....	.....	5	4.80	121.8
Turkish Series.																												
Constantinople	N. 41 00	E. 28 59	2.04 p.m.	230	70	.....	.....	29.93	760.3	75.4	24.1	50.4	3	2	1	6	2	1	.....	15	.....	.....	.....	.....	2	1.24	31.6
Valona	N. 40 27	E. 19 27	1.25 p.m.	105	32	.....	.....	30.07	763.8	75.4	24.1	.....	.....	2	.....	11	1	.....	.....	.....	16	.....	.....	.....	2	4.45	113.0
Sub-Series.																												
Beirut	N. 33 54	E. 35 28	2.30 p.m.	111	34	.....	.....	29.91	759.6	81.1	27.3	60.5	7	3	7	12	.....	.....	1	1	.....	.....	.....	.....	1	0.11	2.8

‖ Below sea level.

Result of Simultaneous Observations for June, 1881.

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea – Feet.	Altitude of Barometer above sea – Met'rs	Mean Barometer – Actual – Inch.	Mean Barometer – Actual – Mill.	Mean Barometer – Reduced – Inch.	Mean Barometer – Reduced – Mill.	Mean Temperature – Fah.	Mean Temperature – Cent.	Mean Rel. Humidity.	Wind – Directions – N	NW	W	SW	S	SE	E	NE	C	Wind – Total Movement – Miles	Kil.	Average Cloudiness. 0–10	Total Precipitation – Inch.	Mill.
U. S. Series.	° ′	° ′																								
Albany	N. 42 40	W. 73 45	7.13 a.m.	75	23	29.85	758.2	29.93	760.2	62.5	16.9	67.0	7	3	7	......	7	1	......	5	......	3979	6404	5	3.76	95.5
Alpena	N. 45 05	W. 83 28	6.34 a.m.	609	185	29.32	744.7	29.97	761.2	52.5	11.4	77.9	......	13	3	......	1	3	7	1	2	6053	9741	4	3.23	82.0
Atlanta	N. 33 45	W. 84 23	6.31 a.m.	1131	345	28.85	732.8	30.00	762.0	73.3	22.9	72.7	......	10	7	3	1	2	3	3	1	5331	8579	5	2.40	62.5
Atlantic City	N. 39 22	W. 74 25	7.11 a.m.	13	4	29.92	760.0	29.93	760.2	62.9	17.2	82.5	11	......	2	4	5	2	2	4	......	6737	10842	5	3.82	97.0
Attou, Aleutian	N. 52 38	E. 172 30	11.38 p.m.	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Augusta	N. 33 28	W. 81 54	6.41 a.m.	183	56	29.81	757.2	29.99	761.7	74.7	23.7	74.4	2	2	5	4	8	3	2	1	3	2947	4743	3	2.11	53.6
Baltimore	N. 39 18	W. 76 38	7.02 a.m.	45	14	29.90	759.4	29.95	760.7	67.7	19.8	75.0	4	5	8	2	2	2	3	3	1	3873	6233	7	7.81	198.4
Barnegat	N. 39 48	W. 74 09	7.12 a.m.	20	6	29.89	759.2	29.91	759.7	63.0	17.2	82.7	6	6	2	5	2	1	3	5	......	8260	13292	7	6.18	157.0
Bismarck	N. 46 48	W. 100 38	5.26 a.m.	1693	516	28.08	713.2	29.82	757.4	58.7	14.8	81.2	2	3	6	2	......	6	5	4	2	6917	11132	6	4.11	104.4
Boise City	N. 43 46	W. 116 06	4.24 a.m.	2750	838	27.11	688.6	29.87	758.7	52.8	11.6	65.7	1	5	14	3	......	......	1	2	4	3264	5253	4	0.29	7.4
Boston	N. 42 21	W. 71 04	7.23 a.m.	142	43	29.75	755.6	29.90	759.4	58.8	14.9	73.3	5	3	9	2	2	......	3	3	3	5374	8648	5	7.79	197.9
Brackettville	N. 29 17	W. 100 51	5.27 a.m.	1170	356	28.76	730.5	29.77	756.1	74.3	23.5	80.7	......	......	......	......	......	1	26	1	2	6983	11238	4	0.01	0.3
Brownsville	N. 26 00	W. 97 30	5.38 a.m	43	13	29.84	757.9	29.88	758.9	79.8	26.6	82.8	1	......	......	......	6	8	......	......	15	4299	6918	2	Inap.	Inap.
Buffalo	N. 42 53	W. 78 55	6.52 a.m.	664	202	29.22	742.2	29.91	759.7	57.1	13.9	79.0	......	4	1	8	1	......	2	14	......	4766	7070	5	4.15	105.4
Burlington	N. 44 29	W. 73 13	7.15 a.m.	268	82	29.61	752.1	29.89	759.2	58.1	14.5	71.5	13	1	2	......	12	1	1	......	......	5130	8256	5	1.89	48.0
Cairo	N. 37 00	W. 89 12	6.11 a.m.	377	115	29.60	751.8	29.99	761.7	73.7	23.2	78.9	3	1	3	9	2	5	3	4	......	5541	8917	5	1.81	46.0
Campo	N. 32 22	W. 116 08	4.22 a.m.	2500	762	27.36	694.9	29.93	760.2	39.7	4.3	66.1	......	2	2	3	20	2	1	......	......	4160	6695	1	0.04	1.0
Camp Thomas	N. 32 04	W. 110 06	4.49 a.m.	2710	826	27.16	689.9	......	......	62.6	17.0	41.9	......	2	......	......	......	3	......	......	25	......	......	3	0	0
Cape Henry	N. 36 56	W. 76 00	7.04 a.m.	16	5	29.91	759.7	29.93	760.2	70.9	21.6	77.3	3	8	3	8	3	2	1	2	......	8496	13673	5	3.93	99.8
Cape May *a*	N. 38 56	W. 74 58	7.08 a.m.	27	8	29.84	757.9	29.92	760.0	64.6	18.1	82.0	5	3	3	3	4	4	1	6	......	8029	12921	5	5.11	129.8
Castroville	N. 29 25	W. 98 50	5.33 a.m.	780	238	29.16	740.7	29.83	757.7	77.2	25.1	73.7	......	3	2	......	11	9	1	......	4	4438	7142	8	Inap.	Inap.
Cedar Keys	N. 29 12	W. 83 02	6.36 a.m.	22	7	29.99	761.7	30.01	762.2	80.3	26.8	75.6	1	......	9	3	4	2	4	6	1	6032	10673	4	1.69	42.9
Champaign	N. 40 07	W. 88 14	6.15 a.m.	767	234	29.12	739.6	29.89	759.2	64.9	18.3	83.9	3	3	3	3	4	9	......	5	......	8082	13006	6	4.71	119.6
Charleston	N. 32 45	W. 79 55	6.49 a.m.	52	16	29.93	760.2	29.99	761.7	79.1	26.2	73.7	5	1	4	15	......	......	1	4	......	6301	10140	3	1.47	37.3
Charlotte	N. 35 13	W. 80 51	6.45 a.m.	808	246	29.12	739.6	29.98	761.5	75.1	23.9	62.6	6	1	6	6	5	1	2	3	......	3611	5811	4	1.35	34.3
Chattanooga	N. 35 04	W. 85 15	6.27 a.m.	783	239	29.20	741.7	30.00	762.0	71.1	21.7	81.9*a*	2	1	4	7	1	2	1	4	8	3512	5652	4	5.24	133.1
Cheyenne	N. 41 12	W. 104 42	5.09 a.m.	6089	1856	29.05	737.9	29.86	758.4	53.9	12.2	58.3	3	13	5	6	1	1	......	1	......	6906	11114	3	1.22	31.0
Chicago	N. 41 52	W. 87 35	6.18 a.m.	661	201	29.23	742.4	29.91	759.7	60.4	15.8	78.2	9	3	1	5	5	......	1	6	......	5708	9282	6	5.93	150.6
Chincoteague	N. 37 55	W. 75 20	7.06 a.m.	18	5	29.91	759.7	29.93	760.2	66.4	19.1	83.8	4	8	1	5	2	5	2	3	......	9415	15152	6	2.34	59.4
Cincinnati	N. 39 06	W. 84 26	6.30 a.m.	620	189	29.32	744.7	29.96	761.0	68.2	20.1	77.8	3	2	2	7	1	7	5	2	1	4006	6447	6	7.82	198.6
Cleveland	N. 41 30	W. 81 47	6.42 a.m.	690	210	29.22	742.2	29.94	760.5	61.3	16.3	75.7	5	1	3	2	2	7	5	5	......	5746	9247	5	8.07	205.0
Coleman City *j*	N. 31 55	W. 99 10	5.32 a.m.	1750	533	28.13	714.5	29.72	754.9	71.2	21.8	74.6	......	1	......	2	9	5	......	......	3	3067	5901	2	0.02	0.5
Columbus	N. 39 57	W. 83 03	6.36 a.m.	805	245	29.10	739.1	29.92	760.0	64.6	18.1	75.3	4	3	4	6	3	3	2	5	......	5121	8241	5	4.02	102.1
Concho	N. 31 22	W. 100 20	5.26 a.m.	1900	579	28.03	711.9	29.91	759.7	71.7	22.1	79.9	......	......	......	......	7	9	1	......	13	7623	12265	2	0.27	6.9
Corsicana	N. 32 05	W. 96 30	5.41 a.m.	448	136	29.51	749.5	29.97	761.2	76.8	24.9	78.1	2	......	......	1	21	......	......	......	6	4932	7937	2	0	0
Davenport	N. 41 32	W. 90 30	6.06 a.m.	615	187	29.28	743.7	29.92	760.0	64.7	18.2	77.0	1	4	3	4	1	2	6	6	3	5187	8348	7	7.94	201.7
Dayton	N. 46 23	W. 117 50	4.16 a.m.	1660	506	28.21	716.5	29.96	761.0	51.5	10.8	72.8	2	......	......	1	26	1	......	......	......	3888	6257	5	1.61	40.9
Deadwood	N. 44 22	W. 103 34	5.14 a.m.	4600	1402	25.33	643.4	29.88	758.9	54.9	12.7	65.4	......	3	2	17	2	1	1	2	2	1555	2502	4	3.04	77.2
Decatur *c*	N. 33 10	W. 97 30	5.38 a.m.	1150	350	28.74	730.0	29.85	758.2	77.2	25.1	70.3	3	......	......	......	6	16	......	......	......	8067	12982	1	0.01	0.3
Del. Breakwater	N. 38 48	W. 75 05	7.08 a.m.	20	6	29.91	759.7	29.93	760.2	64.7	18.2	85.2	4	6	4	2	4	2	1	7	......	9344	15037	6	3.44	87.4
Denison	N. 33 50	W. 96 40	5.41 a.m.	767	234	29.14	740.1	29.92	760.0	77.2	25.1	78.6	1	2	2	......	19	5	1	......	......	6173	9934	2	0	0
Denver	N. 39 45	W. 105 04	5.08 a.m.	5294	1614	24.64	625.8	29.82	757.4	58.9	14.9	54.5	2	1	......	1	22	3	1	......	......	5391	8676	1	0.09	2.3
Des Moines	N. 41 35	W. 93 40	5.53 a.m.	849	259	29.02	737.1	29.90	759.4	65.2	18.4	86.0	2	2	3	3	7	5	3	4	1	4886	7853	6	15.80	401.3
Detroit	N. 41 21	W. 83 07	6.36 a.m.	661	201	29.24	742.7	29.91	759.7	60.1	15.6	77.6	10	6	3	2	1	3	2	3	......	6797	10938	5	5.90	149.9
Dodge City	N. 37 39	W. 100 08	5.27 a.m.	2512	766	27.30	693.4	29.79	756.7	67.1	19.5	72.8	1	1	1	3	7	10	3	3	1	9238	14867	3	1.77	45.0
Dubuque	N. 42 30	W. 90 44	6.05 a.m.	665	203	29.22	742.2	29.90	759.4	62.4	16.9	77.5	1	3	4	2	3	6	4	4	3	4031	6487	6	7.56	192.0
Duluth	N. 46 48	W. 92 08	6.00 a.m.	644	184	29.23	742.4	29.91	759.7	53.6	12.1	83.2	4	3	3	......	......	......	......	18	2	5251	8450	5	2.52	64.0
Eagle Pass	N. 28 40	W. 100 15	5.26 a.m.	780	238	29.15	740.4	29.96	761.0	76.5	24.7	78.2	......	1	1	......	......	26	......	......	2	5739	9236	1	0	0
Eagle Rock	N. 43 30	W. 112 04	4.40 a.m.	4650	1417	25.21	640.3	29.92	760.0	49.4	9.7	60.8	12	1	2	11	2	......	......	1	1	8729	14048	2	1.09	27.7
Eastport	N. 44 55	W. 66 54	7.40 a.m.	61	18	29.80	756.9	29.87	758.7	51.6	10.9	75.8	4	6	3	1	10	2	......	2	2	5089	8190	5	4.47	113.5
El Paso	N. 31 46	W. 106 32	5.02 a.m.	3760	1146	26.17	664.7	29.82	757.4	67.5	19.7	43.9	1	10	3	2	......	3	6	4	1	3451	5554	2	0.02	0.5
Erie	N. 42 07	W. 80 10	6.47 a.m.	681	208	29.21	741.9	29.90	759.4	60.0	15.6	80.3	......	2	3	4	4	4	2	11	......	6209	9992	6	6.37	161.8
Escanaba	N. 45 46	W. 87 14	6.20 a.m.	612	186	29.29	744.0	29.93	760.2	55.4	13.0	78.5	13	2	1	......	3	4	2	2	3	6190	9962	5	6.21	157.7
Florence	N. 33 03	W. 111 17	4.43 a.m.	1480	451	28.34	719.8	29.95	760.7	66.8	19.3	30.6	1	......	7	......	1	......	1	9	11	1880	3025	0	0	0
Fort Apache	N. 33 47	W. 109 58	4.49 a.m.	5050	1539	25.03	635.8	29.81	757.2	51.4	10.8	33.8	......	......	1	......	......	......	19	10	......	6291	10124	2	Inap.	Inap.
Fort Assinnaboine	N. 48 37	W. 109 43	4.49 a.m.	2710	826	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
Fort Bennett	N. 44 42	W. 100 38	5.26 a.m.	1510	457	28.28	718.3	29.75	755.6	61.3	16.3	78.6	4	4	6	......	1	8	3	2	2	6260	10074	5	3.07	78.0
Fort Benton	N. 47 51	W. 110 40	4.45 a.m.	2700	823	27.08	687.8	29.82	757.4	55.8	13.2	63.9	......	2	3	5	......	1	2	7	10	6008	9669	3	3.46	87.9
Fort Buford	N. 48 03	W. 103 58	5.12 a.m.	1900	579	27.90	708.6	29.82	757.4	56.7	13.7	83.9	1	1	1	3	2	......	8	4	10	6692	10770	5	3.44	87.4
Fort Custer	N. 45 48	W. 107 38	4.58 a.m.	3040	927	26.73	678.9	29.82	757.4	56.5	13.6	73.5	2	5	4	3	2	6	3	3	2	5541	8917	3	1.57	39.9
Fort Davis	N. 30 30	W. 103 45	5.13 a.m.	4940	1506	25.19	639.8	30.15	765.8	67.2	19.6	54.7	......	1	11	4	8	1	1	1	3	4701	7565	1	0.07	1.8
Fort Elliott	N. 35 31	W. 100 27	5.28 a.m.	2650	808	27.17	690.1	30.24	768.1	66.3	19.1	62.3	1	1	1	2	13	5	1	4	2	9097	14640	3	0.10	2.5
Fort Gibson	N. 35 43	W. 95 16	5.48 a.m.	540	165	29.36	745.7	29.89	759.2	75.2	24.0	79.5	......	......	......	......	5	15	3	1	6	4973	8003	3	3.80	96.5
Fort Grant	N. 32 25	W. 109 56	4.49 a.m.	4860	1481	25.24*j*	641.1*j*	30.04*j*	763.0*j*	67.1	19.5	25.4	13	2	......	......	......	1	6	7	1	5872	9450	3	Inap.	Inap.
Fort Griffin *b*	N. 32 53	W. 99 21	5.33 a.m.	1260	384	28.64	727.4	29.85	758.2	75.5	24.2	65.1	......	......	......	......	......	4	12	2	10	6200	9978	2	0.09	2.3
Fort Keogh	N. 46 17	W. 105 55	5.05 a.m.	2372	723	27.38	695.4	29.79	756.7	56.3	13.5	79.3	1	4	1	9	......	4	......	7	4	7236	11640	4	4.44	112.8
Fort Macon	N. 34 42	W. 76 40	7.01 a.m.	11	3	29.94	760.5	29.95	760.7	74.2	23.4	84.1	4	2	6	11	1	......	3	2	1	8977	14447	5	7.71	195.8
Fort McKavett	N. 30 48	W. 99 58	5.28 a.m.	2240	683	27.70	703.6	29.54	750.3	70.6	21.4	72.8	......	......	3	6	13	7	1	......	......	7232	11638	6	0.07	1.8
Fort Missoula	N. 46 50	W. 114 01	4.32 a.m.	3140	957	25.65	676.9	30.03	762.7	54.2	12.3	74.1	3	4	1	5	7	4	3	......	3	3909	6291	5	2.75	69.8
Fort St. Michael	N. 63 48	W. 162 00	1.20 a.m.	30	9	29.82	757.4	29.85	758.2	41.0	5.0	91.7	7	2	1	6	5	4	3	1	1	6201	9979	8	0.65	16.5
Fort Shaw	N. 47 29	W. 111 46	4.41 a.m.	3550	1082	26.30	668.0	29.75	755.6	50.7	10.4	75.7	3	2	13	4	1	1	3	3	......	6345	10211	6	3.75	95.5
Fort Sill	N. 34 40	W. 98 30	5.34 a.m.	1200	366	28.68	728.5	29.73	755.1	74.1	23.4	74.4	2	2	......	......	23	1	......	1	1	10418	16764	3	0.21	5.3
Fort Stevenson *d*	N. 47 36	W. 101 23	5.22 a.m.	1750	534	28.04	712.2	29.82	757.4	58.6	14.8	88.5	1	1	9	......	......	3	7	3	2	5999	9554	5	5.83	148.1
Fort Verde	N. 34 24	W. 111 53	4.38 a.m.	?	?	......	......	......	......	58.9	14.9	35.2	1	1	11	9	7	1	......	......	......	......	......	2	Inap.	Inap.
Fredericksburg *a*	N. 30 20	W. 98 40	5.33 a.m.	1700	518	28.24	717.3	29.74	755.4	71.9	22.2	80.1	......	1	1	13	3	1	......	......	10	5078	8172	4	0	0
Galveston	N. 29 18	W. 94 50	5.49 a.m.	40	12	29.94	760.5	29.98	761.5	81.8	27.7	77.4	1	4	3	4	16	......	......	......	2	6583	10594	2	0.03	0.8
Grand Haven	N. 43 05	W. 86 18	6.23 a.m.	620	189	29.28	743.7	29.93	760.2	60.2	15.7	76.5	3	......	2	1	2	5	5	11	1	5013	9033	6	3.44	87.4
Hatteras	N. 35 14	W. 75 30	7.06 a.m.	19	6	29.94	760.5	29.96	761.0	73.3	22.9	86.5	3	1	1	10	6	1	1	6	1	11403	18351	5	4.99	126.7
Helena	N. 46 33	W. 112 02	4.40 a.m.	4100	1250	25.74	653.8	29.94	760.5	55.0	12.8	63.3	5	2	......	2	10	1	......	......	10	4732	7615	3	3.51	89.2
Henrietta *c*	N. 33 42	W. 98 00	5.36 a.m.	980	300	28.90	734.0	29.77	756.1	78.4	25.8	71.1	......	1	......	2	5	15	......	......	2	7093	11415	2	0.88	22.4
Indianapolis	N. 39 47	W. 86 06	6.24 a.m.	753	229	29.14	740.1	29.91	759.7	68.5	20.3	74.6	2	2	4	6	4	3	3	5	1	3291	5296	6	3.92	99.6
Indianola	N. 28 32	W. 96 38	5.42 a.m.	26	8	29.93	760.2	29.95	761.0	79.9	26.6	82.5	......	......	1	......	15	8	......	2	4	7395	11901	2	Inap.	Inap.
Jacksboro	N. 33 10	W. 98 00	5.35 a.m.	1120	341	28.77	730.7	29.84	757.9	76.0	24.4	73.2	......	1	......	8	10	8	1	1	1	7102	11429	2	0.04	1.0
Jacksonville	N. 30 24	W. 81 40	6.41 a.m.	43	13	29.97	761.2	29.99	761.7	80.9	27.2	74.1	1	......	2	17	4	1	1	4	......	6081	9786	3	2.82	71.6
Keokuk	N. 40 23	W. 91 25	6.02 a.m.	618	188	29.20	743.2	29.89	759.2	67.6	19.8	79.3	1	2	1	7	4	5	4	6	......	6104	9823	7	8.70	221.0
Key West	N. 24 32	W. 81 48	6.41 a.m.	27	8	29.99	761.7	30.02	762.5	82.4	28.0	75.7	......	1	......	3	2	7	16	......	1	5286	8507	5	7.47	189.7
Kitty Hawk	N. 36 00	W. 75 23	7.05 a.m.	22	7	29.94	760.5	29.96	761.0	71.7	22.1	82.0	5	2	9	5	1	......	5	3	......	9717	15638	5	5.06	128.5
Knoxville	N. 35 56	W. 83 58	6.32 a.m.	980	299	29.01	736.8	30.01	762.2	67.9	19.9	86.9	2	2	1	12	1	......	2	6	4	3913	6297	6	5.13	130.3
La Crosse	N. 43 48	W. 91 23	6.03 a.m.	702	214	29.13	739.9	29.84	757.9	63.8	17.7	75.8	4	4	2	5	4	5	2	3	1	5000	8047	6	2.75	69.8
La Mesilla	N. 32 17	W. 106 48	5.01 a.m.	3900	1189	26.04	661.4	30.20	767.1	63.3	17.4	44.9	......	2	......	......	2	1	......	......	25	1511	2432	2	0.43	10.9
Laredo	N. 27 32	W. 99 26	5.30 a.m.	460	136	29.46	748.3	29.78	756.4	78.0	25.6	84.7	......	......	......	......	......	27	......	......	3	4461	7179	1	0	0
Leavenworth	N. 39 19	W. 94 58	5.48 a.m.	842	256	29.02	737.1	29.89	759.2	70.7	21.5	76.8	2	3	......	3	9	8	3	1	1	6225	10019	5	5.27	133.9
Lewiston	N. 46 25	W. 116 59	4.20 a.m.	780	238	29.10	739.1	29.93	760.2	55.6	13.1	71.9	......	1	1	6	......	3	9	6	4	2256	3631	6	2.30	58.4
Little Rock	N. 34 40	W. 92 12	5.59 a.m.	298	91	29.63	752.6	29.94	760.5	74.3	23.5	86.7	1	2	3	6	3	2	1	4	8	3423	5509	2	6.02	152.9
Los Angeles	N. 34 03	W. 118 16	4.15 a.m.	371	113	29.56	750.8	29.93	760.2	56.7	13.7	87.0	4	......	......	5	4	4	5	4	4	4218	6788	5	0	0
Louisville	N. 38 18	W. 85 52	6.25 a.m.	530	162	29.38	746.2	29.93	760.2	69.9	21.1	78.9	5	1	3	7	4	1	3	4	2	5085	8183	6	3.78	96.0
Lynchburg	N. 37 30	W. 79 02	6.52 a.m.	652	199	29.28	743.7	29.95	760.7	71.8	22.1	67.3	......	3	......	1	......	......	1	1	24	1198	1928	5	1.07	42.4
Madison	N. 43 03	W. 89 30	6.10 a.m.	949	289	28.92	734.6	29.90	759.4	60.0	15.6	83.7	4	5	1	3	4	3	9	1	......	6227	10021	7	4.15	105.4
Marquette	N. 46 33	W. 87 36	6.19 a.m.	673	205	29.23	742.4	29.94	760.5	54.5	12.5	75.7	4	9	4	1	5	3	......	2	2	4991	8032	5	3.47	88.1
Mason *a*	N. 30 42	W. 99 02	5.32 a.m.	1620	494	28.32	719.3	30.01	762.2	73.9	23.3	74.2	......	2	1	1	19	2	......	......	4	6294	10129	2	0	0
Memphis	N. 35 07	W. 90 07	6.08 a.m.	321	98	29.66	753.4	29.99	761.7	75.7	24.3	78.7	1	2	1	2	2	6	3	4	9	2829	4553	4	2.83	71.9
Milwaukee	N. 43 03	W. 87 54	6.17 a.m.	697	212	29.20	741.7	29.93	760.2	56.2	13.4	81.9	14	2	1	5	3	1	1	1	2	6839	11167	6	3.77	95.8
Mobile	N. 30 42	W. 87 59	6.16 a.m.	69	21	29.93	760.2	30.00	762.0	77.7	25.4	82.9	13	8	3	1	2	......	1	2	......	4769	7675	3	4.85	123.2
Montgomery	N. 32 22	W. 86 23	6.23 a.m.	219	66	29.78	756.4	30.00	762.0	75.5	24.2	79.5	6	2	6	3	2	5	2	4	......	3346	5385	4	3.04	77.2
Moorhead	N. 46 52	W. 96 40	5.41 a.m.	923	281	28.88	733.5	29.84	757.9	59.7	15.4	82.8	5	2	4	1	3	6	2	4	3	7482	12041	6	5.59	142.0
Morgantown	N. 39 36	W. 79 52	6.48 a.m.	963	293	28.96	735.6	29.91	759.7	65.7	18.7	83.0	3	......	1	7	2	......	1	5	11	3207	5161	7	4.77	121.2
Mt. Washington	N. 44 16	W. 71 16	7.22 a.m.	6272	1902	23.70	602.0	29.73	755.1	37.4	3.0	78.5	2	16	2	1	......	3	2	2	2	18323	29487	4	7.03	178.6

STATIONS.	Latitude.	Longitude.	Local Time.	Altitude of Barometer above sea.		Result of Simultaneous Observations for June, 1881.																				Total Precipitation.	
						Mean Barometer.				Mean Temperature.		Mean Rel. Humidity.	Wind.											Average Cloudiness.		
						Actual.		Reduced.					Directions.									Total Movement.				
				Feet.	Met'rs	Inch.	Mill.	Inch.	Mill.	Fah.	Cent.		N	NW	W	SW	S	SE	E	NE	C	Miles	Kil.		Inch.	Mill.
U.S. Series—*Continued.*	° ′	° ′																									
Nashville	N. 36 11	W. 86 53	6.21 a.m.	507	154	29.45	748.0	29.97	761.2	72.7	22.6	76.4	3	3	4	7	1	2	2	4	4	2860	4603	5	3.70	94.0
New Haven	N. 41 17	W. 72 57	7.16 a.m.	107	32	29.80	756.9	29.91	759.7	60.1	15.6	74.6	8	5	1	3	1	.....	1	7	4	4838	7784	5	5.14	130.6
New London	N. 41 22	W. 72 09	7.19 a.m.	47	14	29.87	758.7	29.92	760.0	60.4	15.8	81.6	7	3	5	.....	2	2	5	5	1	4177	6722	4	3.75	95.2
New Orleans	N. 29 58	W. 90 07	6.08 a.m.	52	16	29.93	760.2	29.98	761.5	80.5	26.9	77.5	3	2	6	5	8	3	1	.....	2	3952	6360	2	2.84	72.1
Newport	N. 41 29	W. 71 19	7.23 a.m.	44	13	29.85	758.2	29.90	759.4	60.3	15.7	80.5	6	2	6	7	1	.....	2	6	.....	5363	8470	6	5.94	150.9
New River	N. 34 30	W. 77 23	6.58 a.m.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Shoreham	N. 41 10	W. 71 37	7.22 a.m.	27	8	29.89	759.2	29.92	760.0	58.7	14.8	85.6	4	7	3	4	1	1	1	7	2	8657	13932	4	12.93	328.4
New York	N. 40 43	W. 74 00	7.12 a.m.	164	50	29.76	755.9	29.93	760.2	61.2	16.2	80.0	10	2	4	4	1	2	3	4	.....	5898	9493	5	6.23	158.2
Norfolk	N. 36 51	W. 76 19	7.03 a.m.	30	9	29.91	759.7	29.95	760.7	72.6	22.6	74.2	7	6	2	8	1	4	.....	2	.....	4868	7834	5	3.74	95.0
North Platte	N. 41 08	W. 100 53	5.24 a.m.	2841	866	26.99	685.5	29.81	757.2	62.4	16.9	82.4	2	6	2	1	3	8	3	3	2	9450	15208	5	6.12	155.4
Olympia	N. 47 02	W. 122 56	3.56 a.m.	36	11	29.93	760.2	29.97	761.2	49.4	9.7	88.9	8	.....	4	1	14	.....	.....	2	1	3073	4945	7	1.93	49.0
Omaha	N. 41 16	W. 96 00	5.45 a.m.	1113	339	28.74	730.0	29.88	758.9	69.4	20.8	79.0	5	1	1	3	7	8	1	2	2	6703	10787	6	5.56	141.2
Oswego	N. 43 29	W. 76 35	7.01 a.m.	304	93	29.60	751.8	29.92	760.0	56.3	13.5	79.4	3	2	8	1	4	3	2	6	1	4932	7937	5	2.98	75.7
Pensacola	N. 30 25	W. 87 12	6.19 a.m.	30	9	29.97	761.2	30.00	762.0	78.8	26.0	83.6	6	3	4	10	3	1	.....	1	2	5485	8947	3	4.27	108.5
Philadelphia	N. 39 57	W. 75 10	7.07 a.m.	52	16	29.88	758.9	29.94	760.5	63.6	17.6	80.1	4	3	5	3	2	1	7	5	.....	7017	11293	6	3.87	98.3
Phœnix	N. 33 18	W. 112 00	4.40 a.m.	1120	341	28.72	729.5	30.48	774.2	65.9	18.8	49.1	1	.....	3	.....	.....	2	21	2	1	1780	2865	1	0	0
Pikes Peak	N. 38 48	W. 104 59	5.07 a.m.	14134	4308	17.97	456.4	30.18	766.6	35.5	1.9	44.4	1	3	23	.....	.....	.....	.....	1	2	11178	17989	1	0.87	22.1
Pioche	N. 37 57	W. 114 26	4.30 a.m.	6110	1862	24.00	609.6	29.85	758.2	55.6	13.1	28.1	.....	4	1	2	20	1	.....	2	1	6697	10788	2	0.03	0.8
Pittsburg	N. 40 32	W. 80 02	6.48 a.m.	776	236	29.14	740.1	29.93	760.2	63.4	17.4	81.5	1	6	5	3	3	1	1	7	3	4042	6505	5	6.95	176.5
Port Eads	N. 29 00	W. 89 15	6.11 a.m.	7	2	29.99	761.7	30.00	762.0	80.2	26.8	87.5	4	1	7	5	5	5	1	1	1	6151	9899	2	0.94	23.9
Port Huron	N. 42 58	W. 82 29	6.38 a.m.	633	193	29.27	743.4	29.93	760.2	56.2	13.4	81.7	9	.....	5	1	3	1	1	9	1	6317	10246	6	3.82	97.0
Portland, Maine	N. 43 40	W. 70 16	7.27 a.m.	45	14	29.84	757.9	29.88	758.9	57.9	14.4	92.4	2	7	5	3	4	2	2	5	.....	5344	8600	6	3.99	101.3
Portland, Oregon	N. 45 30	W. 122 28	3.57 a.m.	67	20	29.93	760.2	30.00	762.0	53.6	12.0	84.1	1	7	1	1	6	6	1	1	6	3635	5850	8	2.34	59.4
Portsmouth	N. 35 02	W. 76 04	7.04 a.m.	40	12	.....	.....	.....	.....	73.9	23.3	82.7	1	2	3	10	1	.....	3	10	.....	11800	18990	6	4.95	125.7
Prescott	N. 34 29	W. 112 13	4.38 a.m.	5340	1628	24.75	628.6	29.82	757.4	50.5	10.3	34.7	.....	.....	.....	16	13	.....	.....	.....	1	5877	9458	1	Inap.	Inap.
Punta Rassa	N. 26 36	W. 82 10	6.40 a.m.	13	4	29.99	761.7	30.00	762.0	80.6	27.0	77.0	1	.....	3	3	3	4	11	5	.....	6759	10877	4	2.53	64.3
Red Bluff	N. 40 10	W. 122 16	3.59 a.m.	350	106	29.54	750.3	29.87	758.7	61.4	16.3	63.4	7	8	.....	2	9	2	.....	.....	2	4355	7008	2	0.51	13.0
Rio Grande City	N. 26 22	W. 98 45	5.33 a.m.	230	70	29.73	755.1	29.94	760.5	77.0	25.0	80.9	.....	.....	.....	.....	.....	21	5	.....	4	7631	12281	2	0	0
Rochester	N. 43 08	W. 77 51	6.58 a.m.	589	179	29.31	744.5	29.93	760.2	57.3	14.1	79.0	2	4	14	.....	.....	4	4	2	.....	5123	8244	5	3.20	81.3
Roseburg	N. 43 10	W. 123 16	3.55 a.m.	511	156	29.46	748.3	30.02	762.5	51.3	10.7	85.7	2	2	1	1	2	1	4	3	14	2687	4324	6	2.92	74.2
Sacramento	N. 38 35	W. 121 31	4.02 a.m.	70	21	29.84	757.9	29.91	759.7	56.8	13.8	80.6	.....	.....	.....	1	12	16	.....	.....	1	5684	9147	2	0.50	12.7
Saint Louis	N. 38 37	W. 90 15	6.07 a.m.	568	173	29.36	745.7	29.94	760.5	68.8	20.4	83.3	3	2	1	4	11	2	4	2	1	7257	11679	8	2.74	69.6
Saint Paul	N. 44 53	W. 93 05	5.56 a.m.	811	247	29.03	737.3	29.87	758.7	61.6	16.4	80.7	4	3	2	3	1	4	9	1	3	5911	9513	6	2.87	72.9
Saint Vincent	N. 48 58	W. 97 03	5.40 a.m.	804	245	29.02	737.1	29.86	758.4	56.1	13.4	86.2	1	7	2	2	3	9	2	3	1	6050	9736	5	3.47	88.1
Salt Lake City	N. 41 10	W. 112 00	4.40 a.m.	4348	1325	25.56	649.2	29.76	755.9	61.1	16.2	37.0	1	.....	.....	.....	.....	8	1	2	18	3759	6049	2	0.28	7.1
San Antonio	N. 29 28	W. 98 22	5.34 a.m.	676	206	29.28	743.7	29.97	761.2	75.9	24.4	84.3	1	.....	.....	.....	.....	.....	.....	14	15	3306	5320	5	Inap.	Inap.
San Diego	N. 32 32	W. 117 08	4.20 a.m.	67	20	29.82	757.4	29.90	759.4	60.1	15.6	78.8	3	1	2	3	1	3	1	3	13	4460	7178	8	0.05	1.3
Sandusky	N. 41 27	W. 82 43	6.37 a.m.	639	195	29.26	743.2	29.92	760.0	64.1	17.8	79.0	5	2	1	5	7	5	.....	6	.....	9425	15168	6	10.09	256.3
Sandy Hook	N. 40 28	W. 74 01	7.12 a.m.	34	10	29.90	759.4	29.93	760.2	62.3	10.8	83.5	2	8	4	3	.....	5	3	5	.....	7881	12683	6	6.80	172.7
San Francisco	N. 37 48	W. 122 26	3.58 a.m.	60	18	29.89	759.2	29.96	761.0	53.7	12.1	87.3	.....	1	12	11	2	1	.....	1	2	10183	16388	5	0.69	17.5
Santa Fé	N. 35 41	W. 106 10	5.04 a.m.	7049	2148	23.33	592.6	29.84	757.9	57.7	14.3	34.3	1	1	.....	.....	1	7	11	4	5	4396	7075	1	0.08	2.0
Savannah	N. 32 05	W. 81 08	6.44 a.m.	87	26	29.91	759.7	30.00	762.0	78.9	26.1	71.4	6	1	7	13	.....	1	1	2	.....	5237	8428	3	0.91	23.1
Shreveport	N. 32 30	W. 93 45	5.54 a.m.	227	69	29.75	755.6	29.98	761.5	77.5	25.3	83.1	.....	2	.....	3	13	2	1	1	8	3479	5599	3	0.38	9.7
Silver City	N. 32 48	W. 108 15	4.55 a.m.	5890	1795	24.35	618.5	29.81	757.2	63.5	17.5	38.5	7	14	.....	1	2	.....	.....	.....	6	1910	3074	2	9.62	244.3
Sitka	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Smithville	N. 33 55	W. 78 01	6.56 a.m.	34	10	29.94	760.5	29.97	761.2	76.3	24.6	81.5	1	3	.....	13	5	2	1	4	1	4461	7179	.....	1.54	39.1
Spokane Falls, W. T.	N. 47 39	W. 117 24	4.18 a.m.	1910?	582?	27.91	708.9	29.87	758.7	49.5	9.7	79.7	2	.....	4	5	10	2	4	1	2	8030	12939	5	0.52	13.2
Springfield, Ill	N. 39 48	W. 89 48	6.10 a.m.	644	196	29.27	743.4	29.93	760.2	66.7	19.3	81.6	5	2	1	5	5	3	5	4	.....	4527	7285	7	1.23	31.2
Springfield, Mass	N. 42 06	W. 72 36	7.18 a.m.	120	37	29.78	756.4	29.91	759.7	61.6	16.4	73.5	15	3	3	1	6	.....	.....	2	.....	5821	9368	7	4.96	126.0
Stockton	N. 30 50	W. 102 50	5.16 a.m.	3010	917	26.90	683.2	29.89	759.2	68.9	20.5	76.7	.....	.....	.....	2	13	11	.....	.....	4	3542	5700	6	9.07	230.4
Thatcher's Island	N. 42 36	W. 70 34	7.26 a.m.	48	15	29.85	758.2	29.90	759.4	56.9	13.8	88.8	6	7	2	6	1	.....	6	2	.....	9441	15193	1	1.05	26.7
Toledo	N. 41 40	W. 83 32	6.34 a.m.	651	198	29.24	742.7	29.92	760.0	63.0	17.2	79.9	10	4	5	3	4	.....	1	3	.....	8386	13496	5	7.51	190.8
Tucson	N. 32 14	W. 110 56	4.44 a.m.	2369	722	27.45	697.2	29.74	755.4	68.3	20.2	29.5	.....	.....	.....	2	3	19	5	1	.....	6283	10111	5	7.36	186.9
Umatilla	N. 45 55	W. 119 21	4.11 a.m.	340	103	29.61	752.1	30.01	762.2	54.8	12.7	71.1	2	2	2	13	1	.....	8	2	.....	2821	4540	2	0	0
Uvalde	N. 29 13	W. 99 40	5.29 a.m.	930	283	28.98	736.1	29.77	756.1	74.2	23.4	84.7	.....	.....	.....	.....	4	17	4	1	3	7848	12628	5	0.96	24.4
Vicksburg	N. 32 23	W. 90 54	6.04 a.m.	244	74	29.76	755.9	30.02	762.5	77.0	25.0	78.1	2	2	.....	4	9	5	3	2	3	2772	4461	4	0	0
Visalia	N. 36 20	W. 119 16	4.11 a.m.	348	106	29.51	749.5	29.86	758.4	59.8	15.4	66.3	3	24	1	1	.....	1	.....	.....	.....	3761	6053	3	1.94	49.3
Washington, D. C.	N. 38 53	W. 77 01	7.00 a.m.	106	32	29.83	757.7	29.94	760.5	66.5	19.2	81.3	7	7	1	....	4	2	1	3	5	3061	4926	1	0	0
Wickenburg	N. 33 58	W. 112 42	4.37 a.m.	?	?	.....	.....	.....	.....	61.4	16.3	33.2	1	1	.....	.....	.....	.....	.....	.....	28	2939	4730	7	5.71	145.0
Wilmington	N. 34 11	W. 78 10	6.56 a.m.	52	16	29.90	759.4	29.96	761.0	74.9	23.8	80.9	2	4	9	4	1	.....	3	4	3	4792	7712	1	Inap.	Inap.
Winnemucca	N. 41 00	W. 119 21	4.17 a.m.	4327	1319	25.52	648.2	29.76	755.9	50.4	10.2	51.1	.....	.....	.....	.....	20	2	1	.....	7	6681	10752	5	3.48	88.4
Wood's Holl	N. 41 33	W. 70 40	7.26 a.m.	35	11	29.86	758.4	29.89	759.2	59.7	15.4	85.1	2	6	.....	8	2	4	2	5	1	7411	11927	2	0.62	15.7
Yankton	N. 42 45	W. 97 30	5.38 a.m.	1228	374	28.61	726.7	29.87	758.7	66.3	19.1	78.5	1	4	3	1	2	6	3	6	4	6701	10784	6	6.25	158.7
Yuma	N. 32 44	W. 114 36	4.30 a.m.	141	43	29.63	752.6	29.77	756.1	70.3	21.3	58.5	3	3	3	4	1	1	5	4	6	3518	5662	4	3.51	89.2
Sub-Series.																								1	Inap.	Inap.
Bo ota	N. 4 36	W. 74 14	7.41 a.m.	8704	2653	22.10	561.3	.....	.....	52.0	11.1	79.3	1	.....	.....	.....	.....	.....	.....	.....	29	.....	.....	6	2.71	68.8
Buff Bay Town, Jam.	N. 18 15	W. 76 39	7.01 a.m.	?	?	29.77	756.1	30.08	764.0	77.2	25.1	81.6	.....	.....	2	.....	1	.....	.....	.....	25	.....	.....	3	.....	.....
Havana	N. 23 09	W. 82 22	6.39 a.m.	50	15	29.98	761.5	30.03	762.7	82.0	27.8	80.3	.....	.....	.....	.....	1	4	.....	.....	25	.....	.....	5	2.18	55.4
Kingston	N. 18 58	W. 76 48	7.01 a.m.	10	3	.....	.....	29.98	761.5	80.8	27.1	74.8	5	.....	.....	.....	.....	3	2	.....	20	.....	.....	6	0.85	21.6
Navassa	N. 18 25	W. 75 03	7.43 a.m.	77	23	29.89	759.2	29.97	761.2	81.5	27.5	78.9	.....	.....	.....	.....	.....	1	19	10	.....	.....	.....	7	3.02	76.7
Paramaribo	N. 5 50	W. 55 13	8.27 a.m.	6	2	30.05	763.3	30.05	763.3	79.2	26.2	85.7	.....	.....	.....	.....	.....	12	18	.....	.....	.....	.....	9	10.95	278.1
Puerto Berrio	N. 6 32	W. 74 28	7.10 a.m.	542	165	29.41	747.0	29.96	761.0	79.2	26.2	84.6	3	.....	.....	.....	.....	.....	.....	.....	27	.....	.....	9	11.75	298.4
Rivas	N. 11 26	W. 85 47	6.25 a.m.	150	46	.....	.....	.....	.....	76.1	24.5	.....	1	6	4	2	1	2	2	12	.....	.....	.....	7	13.17	334.0
Santiago deCuba	N. 19 55	W. 75 50	7.04 a.m.	21	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
St. Thomas	N. 18 20	W. 64 55	7.48 a.m.	110	33	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
York Factory	N. 57 02	W. 92 56	5.58 a.m.	45	14	29.89	759.2	29.94	760.5	50.0	10.0	91.8	2	3	4	2	4	3	5	7	.....	.....	.....	4	1.45	36.8

The following table of Ocean Square mean data, from observations taken at 7 A. M. Washington or 0.08 P. M. Greenwich mean time, is computed from the isobars, isotherms and wind directions of the daily international charts, which latter are based upon the data obtained from the logs of vessels for the month of JUNE, 1881.

OCEAN SQUARE BOUNDED BY—	BAROMETER.		TEMPERATURE.		PREVAIL'G WIND.	FORCE 0–10	OCEAN SQUARE BOUNDED BY—	BAROMETER.		TEMPERATURE.		PREVAIL'G WIND.	FORCE 0–10
	INCH.	MILL.	FAH.	CENT.				INCH.	MILL.	FAH.	CENT.		
° ° ° °.							° ° ° °						
N. 30 & 35 W. 10 & 15	30.14	765.5	70.5	21.4	NE	3.3	N. 55 & 60 W. 35 & 40	29.82	757.4	47.2	8.4	NW	3.9
35 40 10 15	30.14	765.5	68.0	20.0	SW	3.9	50 55 35 40	29.90	759.4	52.1	11.2	SW	4.1
35 40 15 20	30.21	767.3	66.0	18.9	NE	4.0	20 25 40 45	30.19	766.8	75.9	24.4	NE	3.7
30 35 15 20	30.18	766.6	69.7	20.9	SW	2.5	25 30 40 45	30.21	767.3	74.0	23.3	NE	3.7
40 45 10 15	30.10	764.5	65.0	18.3	NE	3.6	25 30 45 50	30.17	766.3	74.0	23.3	NE	3.5
45 50 10 15	30.04	763.0	60.0	15.6	SW	4.0	20 25 45 50	30.15	765.8	77.6	25.3	NE	3.5
45 50 15 20	30.03	762.7	60.0	15.6	SW	4.0	30 35 40 45	30.20	767.1	71.8	22.1	NE	3.8
40 45 15 20	30.15	765.8	63.0	17.2	SW	4.0	35 40 40 45	30.14	765.5	68.7	20.4	SW	3.5
50 55 10 15	29.94	760.5	58.0	14.4	SW	4.3	35 40 45 50	30.11	764.8	67.8	19.9	SW	3.7
55 60 10 15	29.85	758.2	53.8	12.1	SW	4.0	30 35 45 50	30.16	766.1	72.2	22.3	SW	3.3
55 60 15 20	29.85	758.2	52.9	11.6	SW	4.2	40 45 40 45	30.08	764.0	63.0	17.2	SW	3.9
50 55 15 20	29.92	760.0	56.4	13.6	SW	4.3	45 50 40 45	29.97	761.2	54.9	12.7	SW	3.9
10 15 20 25	30.03	762.7	80.0	26.7	NE	3.4	45 50 45 50	29.97	761.2	52.2	11.2	SW	3.2
15 20 20 25	30.07	763.8	78.3	25.7	NE	3.1	40 45 45 50	30.06	763.5	62.7	17.1	SW	3.9
15 20 25 30	30.11	764.8	77.4	25.2	NE	3.2	50 55 40 45	29.90	759.4	50.5	10.3	SW	3.1
10 15 25 30	30.05	763.3	80.1	26.7	NE	3.3	55 60 40 45	29.83	757.7	46.8	8.2	SW	3.4
20 25 20 25	30.16	766.1	73.7	23.2	NE	3.6	55 60 45 50	29.83	757.7	45.0	7.2	SW	3.3
25 30 20 25	30.21	767.3	71.8	22.1	NE	4.0	50 55 45 50	29.90	759.4	49.3	9.6	SW	2.9
25 30 25 30	30.22	767.6	72.7	22.6	NE	3.8	15 20 50 55	30.07	763.8	80.9	27.2	NE	2.4
20 25 25 30	30.19	766.8	73.9	23.3	NE	3.8	15 20 55 60	30.05	763.3	81.3	27.4	NE	3.0
30 35 20 25	30.24	768.1	69.7	20.9	NE	3.6	20 25 50 55	30.11	764.8	78.6	25.9	NE	3.2
35 40 20 25	30.27	768.8	68.3	20.2	NE	3.3	25 30 50 55	30.13	765.3	76.0	24.4	NE	3.3
35 40 25 30	30.24	768.1	68.3	20.2	SW	3.0	25 30 55 60	30.09	764.3	78.7	25.9	E	3.8
30 35 25 30	30.26	768.6	70.8	21.6	NE	3.2	20 25 55 60	30.08	764.0	80.3	26.8	E	3.2
40 45 20 25	30.14	765.5	62.7	17.1	NE	3.7	30 35 50 55	30.11	764.8	73.4	23.0	SW	3.4
45 50 20 25	30.02	762.5	58.3	14.6	SW	4.2	35 40 50 55	30.05	763.3	69.2	20.7	SW	3.8
45 50 25 30	30.03	762.7	58.3	14.6	SW	4.1	35 40 55 60	30.02	762.5	70.4	21.3	SW	4.1
40 45 25 30	30.13	765.3	63.4	17.4	SW; NW	3.7	30 35 55 60	30.06	763.5	74.0	23.3	SW	3.3
50 55 20 25	29.92	760.0	56.1	13.4	SW	4.7	40 45 50 55	30.07	763.8	62.3	16.8	SW	3.5
55 60 20 25	29.87	758.7	51.2	10.7	SW	4.1	40 45 55 60	29.96	761.0	61.9	16.6	SW	4.0
55 60 25 30	29.86	758.4	50.7	10.4	SW	4.2	20 25 60 65	30.07	763.8	80.2	26.8	SE	3.0
50 55 25 30	29.93	760.2	55.6	13.1	SW	4.4	25 30 60 65	30.08	764.0	79.5	26.4	SW	3.1
20 25 30 35	30.19	766.8	74.3	23.5	NE	4.0	25 30 65 70	30.06	763.5	79.8	26.6	SW; SE	4.4
25 30 30 35	30.23	767.8	73.4	23.0	NE	3.7	20 25 65 70	30.06	763.5	80.9	27.2	SE	3.0
25 30 35 40	30.23	767.8	74.2	23.4	NE	3.7	30 35 60 65	30.05	763.3	79.0	26.1	SW	3.2
20 25 35 40	30.21	767.3	72.5	22.5	NE	4.0	35 40 60 65	29.98	761.5	69.2	20.7	SW	3.6
30 35 30 35	30.25	768.3	70.6	21.4	NE	3.2	35 40 65 70	29.94	760.5	66.1	18.9	SW	3.6
35 40 30 35	30.23	767.8	68.1	20.1	SW; NE	2.9	30 35 65 70	30.03	762.7	79.1	26.2	SW	3.4
35 40 35 40	30.17	766.3	68.4	20.2	NE; SE	3.4	40 45 60 65	29.92	760.0	58.9	14.9	SW	3.4
30 35 35 40	30.23	767.8	72.0	22.2	NE	3.3	40 45 65 70	29.90	759.4	54.4	12.4	W	3.1
40 45 30 35	30.13	765.3	62.3	16.8	SW	4.1	25 30 70 75	30.05	763.3	80.9	27.2	SE	3.0
45 50 30 35	30.03	762.7	58.5	14.7	SW	4.2	25 30 75 80	30.03	762.7	83.2	28.4	SE	2.4
45 50 35 40	30.03	762.7	57.8	14.3	SW	4.0	30 35 70 75	30.01	762.2	76.4	24.7	SW	3.3
40 45 35 40	30.10	764.5	62.0	16.7	SW	4.1	35 40 70 75	29.94	760.5	66.8	19.3	SW	3.5
50 55 30 35	29.95	760.7	53.3	11.8	SW	4.2	30 35 75 80	29.99	761.7	76.3	24.6	SW	3.1
55 60 30 35	29.88	758.9	50.0	10.0	NE	4.2							

The following table shows the position of Ocean Squares, the total number of observations and the number of days on which observations were taken for each square during the month of JUNE, 1881.

OCEAN SQUARE BOUNDED BY—	NO. DAYS.	NO. OBS.	OCEAN SQUARE BOUNDED BY—	NO. DAYS.	NO. OBS.	OCEAN SQUARE BOUNDED BY—	NO. DAYS.	NO. OBS.
° ° ° °			° ° ° °			° ° ° °		
N. 5 & 10 W. 15 & 20	2	2	N. 25 & 30 W. 65 & 70	2	2	N. 40 & 45 W. 30 & 35	2	2
5 10 20 25	9	9	25 30 70 75	1	1	40 45 35 40	6	9
10 15 20 25	5	5	25 30 75 80	7	7	40 45 40 45	14	15
10 15 25 30	3	3	25 30 80 85	2	2	40 45 45 50	16	22
10 15 30 35	4	4	30 35 10 15	2	2	40 45 50 55	14	20
10 15 35 40	2	2	30 35 15 20	11	13	40 45 55 60	12	15
10 15 50 55	1	1	30 35 20 25	2	2	40 45 60 65	13	15
10 15 55 60	4	6	30 35 25 30	4	4	40 45 65 70	9	9
15 20 20 25	4	4	30 35 30 35	1	1	40 45 70 75	10	11
15 20 25 30	7	7	30 35 40 45	6	6	45 50 10 15	15	19
15 20 30 35	2	2	30 35 60 65	1	1	45 50 15 20	10	14
15 20 35 40	3	3	30 35 65 70	3	3	45 50 20 25	12	15
15 20 40 45	3	3	30 35 70 75	2	2	45 50 25 30	10	11
15 20 45 50	1	1	30 35 75 80	4	4	45 50 30 35	19	25
20 25 20 25	6	6	35 40 10 15	10	12	45 50 35 40	13	15
20 25 25 30	5	6	35 40 15 20	13	13	45 50 40 45	6	6
20 25 30 35	4	4	35 40 20 25	1	1	45 50 45 50	6	6
20 25 35 40	3	3	35 40 25 30	1	1	45 50 50 55	17	19
20 25 40 45	2	2	35 40 30 35	1	1	50 55 10 15	13	14
20 25 45 50	1	1	35 40 35 40	3	3	50 55 15 20	8	9
20 25 55 60	3	3	35 40 50 55	2	2	50 55 20 25	8	9
20 25 60 65	3	3	35 40 55 60	3	3	50 55 25 30	1	1
20 25 65 70	2	2	35 40 60 65	8	9	50 55 30 35	2	2
20 25 70 75	5	8	35 40 65 70	10	10	50 55 35 40	2	2
25 30 20 25	10	12	35 40 70 75	14	30	50 55 40 45	3	3
25 30 25 30	1	1	35 40 75 80	5	5	50 55 45 50	3	3
25 30 30 35	2	2	40 45 10 15	11	16	50 55 50 55	2	2
25 30 35 40	3	3	40 45 15 20	4	4	55 60 10 15	2	2
25 30 40 45	2	2	40 45 20 25	4	4	55 60 20 25	1	1
25 30 60 65	6	6	40 45 25 30	2	2	55 60 30 35	1	1

GENERAL REMARKS.

All data which appears in the DAILY BULLETIN OF SIMULTANEOUS METEOROLOGICAL OBSERVATIONS are copied from the regular exchanges of this office. The barometer readings for land stations, in the first and second columns, are reduced to freezing and their respective standards; those in the third and fourth columns to sea-level. When necessary, corrections for instrumental error, temperature and reduction to sea-level are applied at this office. In the Naval and Marine Series, corrections for temperature and reduction to sea-level are always applied, while those for instrumental error, only when such corrections can be ascertained with close approximation, as by comparison when vessels are at or near land stations. Relative humidity generally requires computation from the hygrometrical observations. When rain has fallen, but neither the amount or duration is recorded, the word "blank" is published in the rain-fall column. The weather is generally published as given. The following symbols and abbreviations are common to all series, viz.: †, aneroid; *, instrumental error not known; ‡, observations taken at 7.35 a. m., Washington mean time; c, cirrus; k, cumulus; s, stratus; n, nimbus; d, scud; f, fracto; p, pallio; hz, haze; fg, fog; sk, smoke; inap, inappreciable; d. clouds, detached clouds. The movement of the air is published as given on the originals, when indicated by velocity in miles per hour, in meters per second, or by force, all variations of the latter being reduced to the common scale of 0 to 10. Those stations reporting the movement in pounds pressure per square foot are reduced to force on the common scale, and those in kilometers per hour, to meters per second and miles per hour. The distinction between upper and lower clouds is carefully made in the United States and a portion of the Canadian series, and the various formations are indicated by the letters above given and their combinations. In the MONTHLY SUMMARY OF INTERNATIONAL SIMULTANEOUS METEOROLOGICAL OBSERVATIONS the position of stations (latitude and longitude) are obtained from Keith Johnson's Index Geographicus, except where more exact information is furnished. The elevations of stations are obtained either from the annual, semi-annual and monthly publications of the various meteorological bureaus here represented, or from the original forms, upon which are entered the daily observations. In the United States series the elevations are computed from the latest surveys, and are carefully revised each month, in order to note any change in the elevation of the barometer cistern at any station. It is believed for the most part, that throughout the European and other series, the elevations as given, represent the height of the barometer cistern above sea-level; at least this should be the case. The local time, where omitted or not given correctly in the originals, is carefully computed at this office. Generally, all conversions are made at this office. A letter placed opposite the name of a station or some portion of the data credited thereto, indicates that a certain number of observations are missing, corresponding to the relative position in the alphabet of the letter so used. The following remarks relate to the individual peculiarities in the *methods* of recording and the *times* of taking the international simultaneous meteorological observations, under the auspices of the various Meteorological Bureaus:

ALGERIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level; temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10. The rain-fall is measured at 7 a. m., local time, and the amount indicated in millimeters.

AUSTRALIAN SERIES.—At Melbourne the conversions are published as given in the originals. The movement of the air is indicated by velocity in miles per hour. The kind of clouds is not given except by inference from general weather terms.

AUSTRO-HUNGARIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. At the following stations rainfall is measured at local time: Lemburg, 7 p. m.; Vienna, 2 p. m.; Trieste, 7 a. m. The weather is given by the Vienna symbols or in general terms. At Gratz, observations are taken at 2 p. m., local time.

BELGIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The weather is occasionally given by the Vienna symbols. Except for Brussels, the distinction between upper and lower clouds is not made. At Furnes, observations are taken at 12.26 p. m., local time, and at Maeseyck at 1 p. m., local time.

BRITISH SERIES.—In general the originals do not give rain-fall or distinction between upper and lower clouds. Relative humidity, except for Bradford and Silloth Rectory, is not given on the originals, but is computed from hygrometrical observations. At Cardington, Galway, Oxford and Sandwick Manse the barometers are given as read off. At Free Town the barometer is reduced to freezing on the originals, but not to sea-level. The movement of the air is indicated by force, on a scale of 0 to 12, except pounds pressure per square foot at Greenwich. At the following stations rain-fall is measured at local time: Bradford, 9 a. m.; Nottingham, 6 p. m.; and Aberdeen, 10 a. m. The wind direction is given to 32 points and weather by the Beaufort notation.

CANADIAN SERIES.—The originals give the barometer reduced to sea-level in English inches and the temperature in Fahrenheit. Charlottetown, St. Andrews, Windsor and those stations marked with a star (*) give the clouds on a scale of 0 to 4, while the remainder report them on a scale of 0 to 10.

CAPE COLONY SERIES.—At Cape Town the barometer is given on the original as corrected for temperature only. Upper and lower clouds are given on a scale of 0 to 10 and the kind occasionally indicated by abbreviating Poëy's classification.

CHINESE SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is given in meters per second and the direction to 16 points. The kind of clouds is occasionally given, and the degree of cloudiness on the scale of 0 to 10; distinction between upper and lower clouds is sometimes made. The weather is given in general (French) terms. The rain-fall is given in millimeters and measured at the moment of simultaneous observation.

COSTA RICAN SERIES.—At San Jose the originals give the barometer as corrected for temperature only and the thermometer in Centigrade. Relative humidity is not given on the originals, but is computed from the hygrometrical observations. Upper and lower clouds are given, the amount on a scale of 0 to 10 and the kind by Howard's classification. The rain-fall is apparently measured at midnight.

DANISH SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force, on a scale of 0 to 6. The weather is occasionally given by the Vienna symbols, but it is not certain that they always refer to the moment of simultaneous observations, except at Copenhagen. No distinction is made between upper and lower clouds and the direction of movement, together with the rain-fall, is entirely omitted.

FRENCH SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 6, except in meters per second, for Mont Louis and Perpignan. In general, the rain-fall is measured at 9 a. m., local time, but at Lyons at the moment of simultaneous observation. The direction of upper and lower clouds is given, but no distinction is made as to kind. The degree of cloudiness is given on a scale of 0 to 4 at Clermont-Ferrand, Commune de Greasque and Puy de Dome, while at other stations the scale of 0 to 10 is employed, or general weather terms, from which the amount of cloudiness is inferred. The weather is given in general terms, except occasionally by the Vienna symbols at Mont Louis and Perpignan.

GERMAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10, except at Carlsruhe, where the scale of 0 to 4 is used. No distinction is made between upper and lower clouds except at Magdeburg where distinction is also made as to direction and kind, but not as to amount. The amount is given on a scale of 0 to 10, but the kind is rarely given. The weather is given in Vienna symbols or in general terms. On June 1st, the elevation of barometer cistern at Madgeburg, changes from 269 feet or 82 meters, to 177 feet or 54 meters.

GREEK SERIES.—The originals give the barometer corrected for temperature only and the thermometer in Centigrade. Hygrometrical observations are not given, and the rain-fall is omitted. The kind of clouds is occasionally given, and the amount is inferred from the general weather terms. The movement of the air is indicated by force on the scale of 0 to 10.

INDIAN SERIES.—The barometric observations refer to the Calcutta standard, which requires a correction of —0.011 inch, or 0.28 m. m. as compared with the Kew standard. The wind-velocity given is the average rate of wind since the observation of the preceding day. All conversions are published as given in the originals, where the data are recorded to an additional decimal. The weather is given by the Beaufort notation, Vienna symbols, or special symbols.

ITALIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by velocity in kilometers per hour or by force on a scale of 0 to 4 as at Mondovi, Florence and Cagliari. No distinction is made between upper and lower clouds and the amount is given on a scale of 0 to 10. The weather is given in Vienna symbols.

JAPANESE SERIES.—The rain-fall is measured at 9.30 a. m., local time, and the conversions are all published as given in the originals. Distinction is generally made between upper and lower clouds and the amount is given on the scale of 0 to 10. The weather is given in general terms.

MAURITIUS SERIES.—All conversions are published as given in the originals. The direction of the wind is given to 64 points and the rain-fall is measured at 9.30 a. m., local time.

MEXICAN SERIES.—All conversions (subject to correction at this office) are published as given in the originals. The kind of clouds is given, and also the direction and amount of both upper and lower. The degree of cloudiness is indicated on the scale of 0 to 10.

NETHERLANDS SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by pressure in kilograms per square meter, except at Hellevoetsluis, which gives force on the scale of 0 to 12. The humidity is not given on the originals, but for two stations it is computed from the hygrometrical observations. The weather is only given for Utrecht, from which the amount of cloudiness at that station is inferred.

NORWEGIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by velocity in meters per second or by force on a scale of 0 to 6. The weather is occasionally given by Vienna symbols. At Bergen, observations upon the weather and degree of cloudiness are made at 2 p. m., local time.

PORTUGUESE SERIES.—In the originals the barometer is given in millimeters and the temperature in Centigrade. The movement of the air is indicated by velocity in kilometers per hour, except at Angra, which gives force on the scale of 0 to 9. The weather is occasionally given by the Vienna symbols. The rain-fall is measured at noon of each day.

RUSSIAN SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. At Astrakhan, the barometer cistern is below sea-level. The movement of the air is indicated by velocity in meters per second. No distinction is made between upper and lower clouds; the amount is given on the scale of 0 to 10 and the kind occasionally. The weather is occasionally given by the Vienna symbols. The rain-fall is not given. At Barnaul, observations are taken at 6.18 p. m., local time.

SCOTTISH SERIES.—The originals give the barometer as read off and the movement of the air is indicated by force on a scale of 0 to 6. Distinction is made between upper and lower clouds as to degree, and the amount of cloudiness is given on a scale of 0 to 10. The direction of upper clouds is given separately. The rain-fall, temperature and humidity are not given at North Unst. The wind direction is given to 32 points.

SPANISH SERIES.—The originals give the barometer at Barcelona, Bilbao, Burgos, Murcia and Santiago as corrected for temperature only. The movement of the air, except for sub-series, is given in kilometers per hour. The kind of clouds is occasionally given and the degree of cloudiness on a scale of 0 to 10. The rain-fall at San Juan is measured at 4 p. m., local time and at San Fernando at midnight. The weather is given in general (Spanish) terms.

SWEDISH SERIES.—The originals give the barometer in millimeters reduced to sea-level and the temperature in Centigrade. The movement of the air is indicated by force, on a scale of 0 to 6, except in meters per second for Upsala. The kind of clouds is not given, but the degree of cloudiness is indicated on a scale of 0 to 10. The rain-fall is measured at 8 a. m., local time, and the weather is occasionally given by the Vienna symbols.

SWISS SERIES.—The originals give the barometer in millimeters, corrected for temperature only and the thermometer in Centigrade. The movement of the air is indicated by force on a scale of 0 to 10 and at Zurich on a scale of 0 to 4. The rain-fall at Zurich is measured at 9 a. m., local time, and the remainder of the observation is taken at 1.13 p. m., local time.

TURKISH SERIES.—The originals give the barometer in millimeters reduced to sea-level. The temperature is given in Centigrade. The movement of the air is indicated by force on a scale of 0 to 7 for Valona and on a scale of 0 to 12 for Beirut. At Constantinople the velocity is given in meters per second. The kind of clouds is not given, but the amount is indicated on a scale of 0 to 10, except at Valona, at which station it is inferred from the general weather terms.

UNITED STATES SERIES.—The originals generally give the barometer reduced to sea-level and the temperature in Fahrenheit. At Bogota the barometer is corrected for temperature only; at Navassa and Puerto Berrio is given as read off, and at Rivas is omitted. The amount of cloudiness is given on the scale of 0 to 4, except for Rivas, Paramaribo and York Factory. The movement of the air is generally indicated by velocity in miles per hour, except on a scale of 0 to 10 for Bogota, Paramaribo and Rivas, and 0 to 12 for Puerto Berrio. The wind direction is generally given to 16 points, except 8 points for Bogota and 32 points for Rivas. The rain-fall at Rivas is given in centimeters and millimeters. At Buff Bay Town, Jamaica, observations are taken at 7.36 a. m., local time.

BRITISH NAVAL SERIES.—The originals give the barometer as read off. The wind direction is given to 32 points. The movement of the air is indicated by force on a scale of 0 to 12. The distinction between upper and lower clouds is made as to direction, but not as to amount. The height of sea-disturbance is given on the scale of 0 to 9 and the weather by the Beaufort notation. The direction of movement of wind, clouds and sea is compass direction, corrected only for deviation caused by the iron in the ship, while the correction for magnetic variation is applied at this office. The humidity is not given, but is computed from the hygrometrical observations.

GERMAN NAVAL SERIES.—No vessels reporting.

PORTUGUESE NAVAL SERIES.—The originals give the barometer in millimeters, corrected for temperature only and the thermometer in Centigrade. The movement of the air is indicated by force on the scale of 0 to 10. The humidity is not given, but is computed from the hygrometrical observations. The kind of clouds is not given, but the amount is indicated on the scale of 0 to 10; the direction of movement is given without distinction between upper and lower. The height of sea disturbance is given on the scale of 0 to 9, and the weather by the Beaufort notation. The rain-fall is not measured, but the duration is generally given in hours and minutes.

SWEDISH NAVAL SERIES.—The originals give the barometer as read off. The movement of the air is indicated by force on the scale of 0 to 12, and the direction is corrected for magnetic variation at this office. The humidity is not given, but is computed from the hygrometrical observations. The rain-fall is omitted. The height of the sea-swell is given on the scale of 0 to 9, and the weather by the Beaufort notation.

UNITED STATES NAVAL SERIES.—The originals give the barometer as read off. The humidity is not given, but is computed from the hygrometrical observations. The sea-swell and the weather are given in general terms. The direction of the wind is compass direction, corrected for variation.

BRITISH MERCHANT-MARINE SERIES.—Same as the Naval, except that frequently the direction of the wind is given to the true meridian.

GERMAN MERCHANT-MARINE SERIES.—Same as U. S. Naval.

SWEDISH MERCHANT-MARINE SERIES.—Same as Swedish Naval.

UNITED STATES MERCHANT-MARINE SERIES.—Same as U. S. Naval.

ERRATA.

DAILY BULLETIN, JUNE, 1881—4th, page 9, H. M. S. Seraphis, barometer 747.5 m.m., should read 748.5 m. m.

11th, page 10, Navy Yard, Portsmouth, rainfall 1.8 m. m., should read 18 m. m. Page 12, Miscellaneous, U. S. F. C. S. Fish Hawk, clouds, 3, should read 8.

18th, page 12, Pacific Mail Steamship Companys S. S. Granada, longitude W. 82° 52′, should read W. 82° 25′.

21st, page 6, Dodge City, weather, clear, should read cloudy.

24th, page 7, Springfield, Ill., temperature 69.5 Fahrenheit or 20.8 Centigrade, should read 59.5 Fahrenheit or 15.3 Centigrade.

29th, page 6, Eagle Rock, weather, cloudy, should read clear.

Monthly Summary, April 1881, page 5, Fort Macon should read, N. 34° 42′, W. 76° 40′, 7.01 a. m., 11 feet 3 meters, 29.98 inches, &c. Fort McKavett should read N. 30° 48′, W. 99° 58′, 5.28 a. m., 2240 feet, 683 meters, 27.72 inches, &c.

May 1881, page 5, transpose names of stations, Fort Macon and Fort McKavett, so that the former will read, N. 34° 42′, &c., and the latter, N. 34° 48′, &c.

PUBLISHED BY ORDER OF THE SECRETARY OF WAR:

W. B. HAZEN,

Brig. & Bvt. Maj. Gen'l,

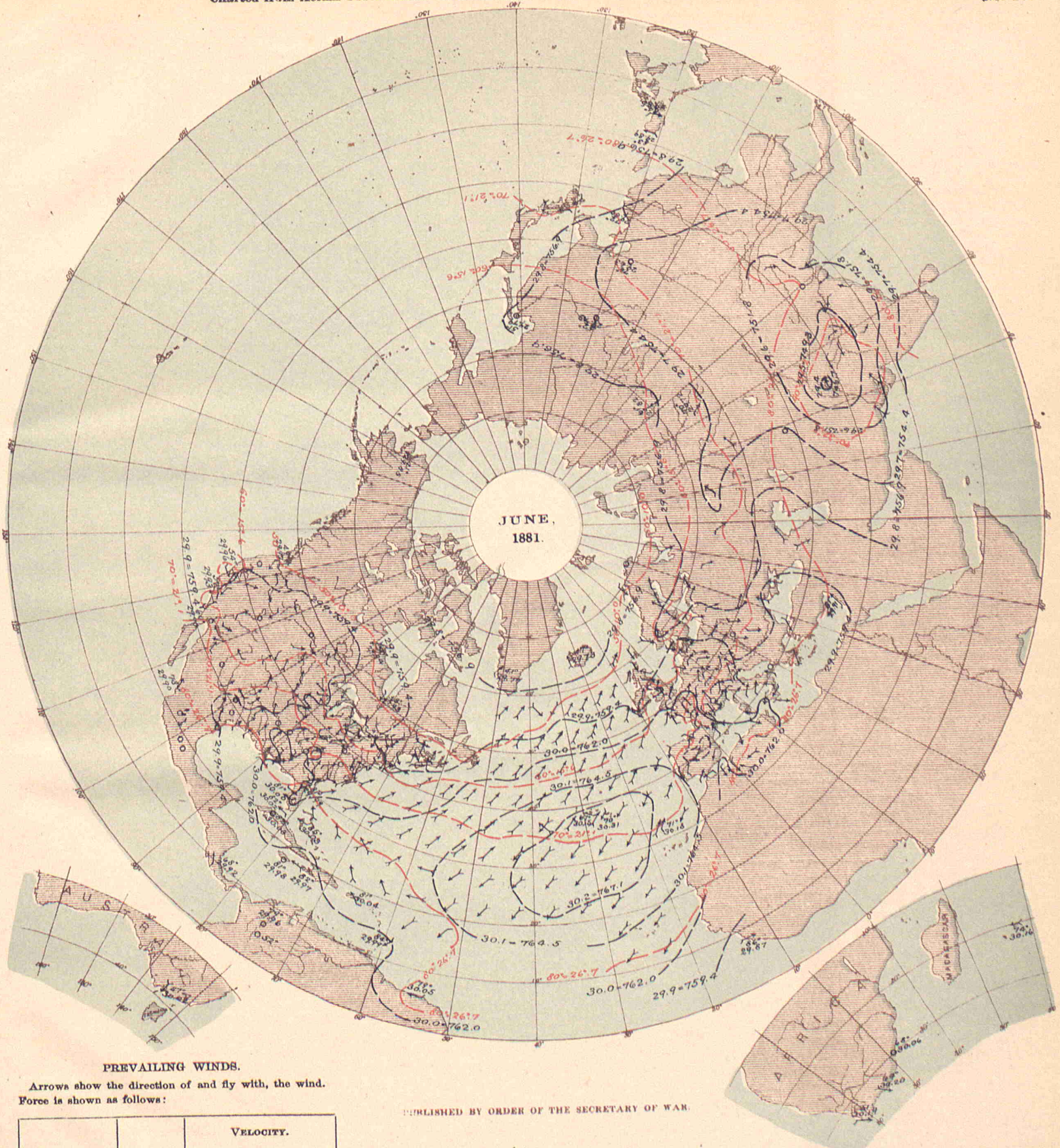
Chief Signal Officer, U. S. A.

Office of the Chief Signal Officer,

UNITED STATES ARMY.

Charted from Actual Observations taken Simultaneously, Series commencing January, 1877.

No. IV.



PREVAILING WINDS.

Arrows show the direction of and fly with, the wind.
Force is shown as follows:

Symbols.	Force.	Velocity.	
		Miles per hour.	Metres per second.
O	0	0	0
→	1, 2	0 to 9	0 to 4.0
→	3, 4	9.1 to 22.5	4.1 to 10.1
→	5, 6	22.6 to 40.5	10.1 to 18.1
→	7, 8	40.6 to 67.5	18.1 to 30.2
→	9, 10	67.6 up.	30.2 & over.

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W. B. Hazen

BRIG. & BVT. MAJ. GEN'L.
CHIEF SIGNAL OFFICER, U. S. A.

ISOBARS AND ISOTHERMS.

Isobars in *black*; detached barometer means in English inches.

Isotherms in *red*; detached temperature means in degrees Fahrenheit.

Broken lines, are doubtful.

INTERNATIONAL MONTHLY CHART.

Showing mean pressure, mean temperature, mean force and prevailing direction of winds at 7.00 A. M., Washington mean time, for the month of June, 1881. based on the daily charts of the International Bulletin.