Hargrave's work has been taken up at Washington under Professor Moore's instructions and perfected by Potter and Marvin. At the same time the Germans have been busy developing a combination balloon and kite, powerful enough to carry up an officer for the purpose of military reconnaissances. Each successive decade of this century has witnessed a series of personal experiments in Europe and America, until now, just as the European meteorological bureaus have taken up the sounding balloon as a means of exploration to great vertical altitudes, the United States Weather Bureau has prepared kites to cover a great horizontal extent of territory with automatic meteorological instruments. The American system of kite work contemplates regular daily records with kites at about 5,000 feet altitude, while the European system is designed for special occasional work at 50,000 feet altitude. Undoubtedly each will supplement the other.

FURTHER COMMENT IS UNNECESSARY.

The Weather Bureau notes articles in two Boston papers, The Happy Thought, March 20, and The Transcript, April 28, which purport to be reports of papers read by the Director and staff of the Blue Hill Observatory before the Boston Scientific Society. The animus of these papers is to eulogize unduly the original work of that observatory at the expense of the United States Weather Bureau. The Blue Hill Observatory is entitled to much credit for its contributions to science, and its Director deserves all praise for his zeal in the advancement of meteorology, but we regret to say that several statements in the above articles are very misleading and incorrect, as shown by well known facts in the history of the National Service. If the Director of the Blue Hill Observatory thinks it necessary to thus magnify his own work, we respectfully suggest that it be done in such a way as to be above the criticism of his friends.

METEOROLOGICAL TABLES.

By A. J. HENRY, Chief of Division of Records and Meteorological Data.

Table I gives, for about 130 Weather Bureau stations making two observations daily and for about 20 others making only the 8 p. m. observation, the data ordinarily needed for climatological studies, viz, the monthly mean pressure, the monthly means and extremes of temperature, the average conditions as to moisture, cloudiness, movement of the wind, and the departures from normals in the case of pressure, temperature, and precipitation; the altitudes of the instruments, the total depth of snowfall, and the mean wet-bulb temperatures are now given.

Table II gives, for about 2,400 stations occupied by voluntary observers, the extreme maximum and minimum temperatures, the mean temperature deduced from the average of all the daily maxima and minima, or other readings, as indicated by the numeral following the name of the station; the total monthly precipitation, and the total depth in inches of any snow that may have fallen. When the spaces in the snow column are left blank it indicates that no snow has fallen, but when it is possible that there may have been snow of which no record has been made, that fact is indicated by leaders, thus (. . . .).

Table III gives, for about 30 Canadian stations, the mean pressure, mean temperature, total precipitation, prevailing wind, total depth of snowfall, and the respective departures from normal values. Reports from Newfoundland and Bermuda are included in this table for convenience of tabulation.

Table IV gives detailed observations at Honolulu, Republic of Hawaii, by Curtis J. Lyons, meteorologist to the Government Survey.

Table V gives, for 26 stations, the mean hourly temperatures deduced from thermographs of the pattern described and figured in the Report of the Chief of the Weather Bureau, 1891–'92, p. 29.

Table VI gives, for 26 stations, the mean hourly pressures as automatically registered by Richard barographs, except for Washington, D. C., where Foreman's barograph is in use. Both instruments are described in the Report of the Chief of the Weather Bureau, 1891–'92, pp. 26 and 30.

Table VII gives, for about 130 stations, the arithmetical means of the hourly movements of the wind ending with the respective hours, as registered automatically by the Robinson anemometer, in conjunction with an electrical recording mechanism, described and illustrated in the Report of the Chief of the Weather Bureau, 1891–'92, p. 19.

Table VIII gives, for all stations that make observations at 8 a. m. and 8 p. m., the four component directions and the resultant directions based on these two observations only and without considering the velocity of the wind. The total movement for the whole month, as read from the dial of the Robinson anemometer, is given for each station in Table I. By adding the four components for the stations comprised in any geographical division one may obtain the average resultant direction for that division.

Table IX gives the total number of stations in each State from which meteorological reports of any kind have been received, and the number of such stations reporting thunderstorms (T) and auroras (A) on each day of the current month.

Table X gives, for 56 stations, the percentages of hourly sunshine as derived from the automatic records made by two essentially different types of instruments, designated, respectively, the thermometric recorder and the photographic recorder. The kind of instrument used at each station is indicated in the table by the letter T or P in the column following the name of the station.

Table XI gives a record of rains whose intensity at some period of the storm's continuance equaled or exceeded the following rates:

Duration, minutes..	5	10	15	20	25	30	35	40	45	50	60	80	100	120
Rates pr. hr. (ins.)..	3.00	1.80	1.40	1.20	1.08	1.00	0.94	0.90	0.86	0.84	0.75	0.60	0.54	0.50

In the northern part of the United States, especially in the colder months of the year, rains of the intensities shown in the above table seldom occur. In all cases where no storm of sufficient intensity to entitle it to a place in the full table has occurred, the greatest rainfall of any single storm has been given, also the greatest hourly fall during that storm.

Table XII gives the record of excessive precipitation at all stations from which reports are received.

NOTES EXPLANATORY OF THE CHARTS.

Chart I.—Tracks of centers of high pressure. The roman letters show number and order of centers of high areas. The figures within the circles show the days of the month; the letters *a* and *p* indicate, respectively, the 8 a. m. and 8 p. m., seventy-fifth meridian time, observations. The queries (?) on the tracks show that the centers could not be satisfactorily located. Within each circle is given the highest barometric reading reported near the center. A blank indicates that no reports were available. A wavy line indicates the axis of a ridge of high pressure.

Chart II.—Tracks of centers of low pressure. The roman letters show number and order of centers of low areas. The

figures within the circles show the days of the month; the letters *a* and *p* indicate, respectively, the 8 a. m. and 8 p. m., seventy-fifth meridian time, observations. The queries (?) on the tracks show that the centers could not be satisfactorily located. Within each circle is given the lowest barometric reading reported near the center. A blank indicates that no reports were available. A wavy line indicates the axis of a trough or long oval area of low pressure.

Chart III.—Total precipitation. The scale of shades showing the depth of rainfall is given on the chart itself. For isolated stations the rainfall is given in inches and tenths, when appreciable; otherwise, a "trace" is indicated by a capital T, and no rain at all, by 0.0.

Chart IV.—Sea-level isobars, surface isotherms, and resultant winds. The wind directions on this Chart are the computed resultants of observations at 8 a. m. and 8 p, m., daily; the resultant duration is shown by figures attached to each arrow. The temperatures are the means of daily maxima and minima and are not reduced to sea level. The pressures are the means of 8 a. m. and 8 p. m. observations, daily, and correspond to Professor Hazen's system of reduction; the barometer is not reduced to standard gravity, but the necessary reduction for 30 inches of the mercurial barometer is shown by the marginal figures for each degree of latitude.

Chart V.—Total snowfall, with the isotherms of minimum 32° F., and minimum 40° F.

Chart VI.—Hydrographs for seven principal rivers of the United States.

TABLE I.—*Climatological data for Weather Bureau Stations, April*, 1897.

Stations.	Elevation of instruments.			Pressure, in inches.			Temperature of the air, in degrees Fahrenheit.												Precipitation, in inches.			Wind.									
	Barometer above sea level, feet.	Thermometers above ground.	Anemometer above ground.	Mean actual, 8 a. m. and 8 p. m. + c.	Mean reduced.	Departure from normal.	Mean max. and min. + 2.	Departure from normal.	Maximum.	Date.	Mean maximum.	Minimum.	Date.	Mean minimum.	Greatest daily range.	Mean wet thermometer.	Mean temperature of the dew-point.	Mean relative humidity, per cent.	Total.	Departure from normal.	Days with .01, or more.	Total movement, miles.	Prevailing direction.	Maximum velocity. Miles per hour.	Maximum velocity. Direction.	Maximum velocity. Date.	Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.	Total snowfall.
New England.																															
Eastport	76	69	74	29.94	30.03	+ .04	44.6	+ 1.6											4.02	+ 0.7											
Portland, Me.	103	81	89	29.91	30.01	+ .09	38.6	0.0	59	29	45	15	20	32	22	36	32	80	3.35	+ 0.3	17	7,886	sw.	41	s.	19	10	5	15	6.3	11.0
Northfield	872	15	59	29.10	30.06	+ .10	41.3	+ 2.6	82	25	52	12	20	30	45	37	32	72	2.60	— 0.4	11	5,853	s.	32	s.	19	10	10	10	5.1	2.4
Boston	125	115	181	29.92	30.06	+ .13	49.0	+ 3.9	81	25	58	21	20	40	32	43	36	67	2.73	+ 0.5	14	6,635	s.	46	sw.	19	5	12	13	6.5	5.7
Nantucket	14	43	54	30.08	30.09	+ .13	44.2	+ 2.0	61	30	49	26	20	39	20	42	40	84	3.17	— 0.3	12	8,486	sw.	36	sw.	19	11	9	10	5.0	T.
Woods Hole	.....	51	57	.....	.....	.....	44.4	+ 0.1	65	30	50	25	20	39	23	....	....	....	4.47	+ 0.9	10	8,059	sw.	31	n.	20	13	6	11	5.5	T.
Vineyard Haven	.....	20	....	.....	.....	.....	48.0	+ 1.4	70	25	56	28	20	40	23	....	....	....	5.73	+ 1.7	9	10,782	s.	46	sw.	19	16	9	5	3.5	T.
Block Island	27	39	48	30.07	30.10	+ .15	44.2	+ 0.4	62	30	50	26	20	39	20	41	38	81	5.95	+ 3.0	9	.....	sw.	....	.....	....	14	8	8	....	T.
Narragansett Pier	.....	10	....	.....	.....	.....	45.2	+ 1.0	68	30	54	19	20	37	32	....	....	....	5.70	+ 2.3	7	10,526	sw.	40	sw.	19	9	17	4	4.6	
New Haven	107	118	140	29.97	30.09	+ .12	47.8	+ 2.0	73	30	57	24	20	38	36	42	36	68	4.10	+ 0.5	9	.....	sw.	....	.....	....	19	4	7	....	
Mid. Atlan. States.							52.2	+ 0.3											2.44	— 1.1	7	7,185	s.	38	nw.	26	10	6	14	5.2	T.
Albany	97	84	113	29.98	30.09	+ .13	48.0	+ 1.3	83	25	58	21	20	38	34	41	35	67	2.63	— 0.3											
Binghamton	875	79	90	.....	.....	.....	45.9	.....	82	25	57	18	20	35	37	....	....	....	3.12	+ 0.6	13	6,460	s.	36	se	13	7	8	15	6.2	T.
New York	314	298	326	29.76	30.10	+ .12	48.6	— 0.1	74	29	57	24	20	41	35	42	36	69	1.98	.....	9	5,483	nw.	36	s.	13	8	12	10	5.8	0.4
Harrisburg	377	94	102	29.71	30.13	+ .13	50.8	+ 0.7	84	25	61	26	20	41	34	43	34	56	2.96	— 0.9	9	9,696	nw.	58	nw.	27	15	9	6	4.2	T.
Philadelphia	117	168	184	29.99	30.12	+ .13	52.6	+ 2.0	85	25	63	27	20	43	35	45	38	63	2.53	— 0.9	9	5,561	nw.	34	sw.	19	7	13	10	5.8	T.
Atlantic City	52	68	76	30.07	30.12	+ .15	48.4	+ 1.3	69	26	55	28	20	42	28	45	41	78	3.03	0.0	8	7,817	nw.	37	nw.	26	14	7	9	4.9	
Baltimore	123	68	82	29.98	30.11	+ .11	53.0	— 0.1	84	25	63	29	20	43	38	45	36	57	3.42	+ 0.1	8	8,502	sw.	37	nw.	27	13	15	2	4.3	
Washington	112	59	76	30.01	30.13	+ .14	52.9	+ 0.1	88	25	64	29	20	42	37	46	38	61	3.19	— 0.2	10	3,974	w.	29	nw.	26	12	11	7	4.5	
Cape Henry	.....	5	34	.....	.....	.....	54.9	+ 1.1	79	25	63	34	21	47	33	....	....	....	3.02	— 0.3	11	5,599	s.	35	nw.	9	16	8	6	4.0	
Lynchburg	685	83	88	29.41	30.15	+ .15	55.6	— 0.2	88	25	68	30	21	43	38	47	40	62	1.47	— 3.0	8	.....	se.	....	.....	....	5	10	15	....	
Norfolk	57	88	93	30.09	30.15	+ .15	57.5	+ 1.4	87	25	67	34	21	48	31	51	47	75	2.08	— 1.3	10	3,570	nw.	26	nw.	9	14	11	5	4.4	
S. Atlantic States.							62.0	+ 0.3											1.51	— 2.6	9	6,332	se.	30	sw.	9	16	9	5	4.0	
Charlotte	773	67	76	29.28	30.10	+ .09	59.6	— 0.2	86	29	70	35	21	49	31	50	42	60	3.14	— 0.3											
Hatteras	11	17	36	30.15	30.16	+ .16	57.0	— 0.3	75	30	63	39	21	52	20	53	50	80	3.94	+ 0.4	10	5,334	s.	36	sw.	9	16	7	7	4.1	
Kittyhawk	9	12	30	30.12	30.13	+ .14	55.4	+ 0.6	82	25	63	35	2	47	27	52	48	80	2.76	— 2.0	8	8,752	ne.	44	n.	20	12	10	8	4.8	
Raleigh	375	93	101	29.74	30.15	+ .14	60.0	+ 2.5	86	25	71	33	2	49	32	51	44	63	1.35	— 3.1	4	10,829	ne.	48	sw.	9	14	10	6	3.9	
Wilmington	78	82	88	30.06	30.15	+ .14	61.4	+ 0.1	84	25	70	35	21	52	28	55	52	77	4.66	+ 2.1	11	4,874	sw.	26	sw.	9	14	10	6	4.8	
Charleston	48	60	72	30.11	30.16	+ .13	65.6	+ 1.4	82	6	72	49	2	60	17	59	56	78	2.17	— 0.8	11	6,419	s.	44	sw.	9	15	11	4	3.8	
Columbia	.....	5	....	.....	.....	.....	62.7	— 0.3	87	29	74	39	21	51	34	....	....	....	1.89	— 1.7	11	8,733	s.	44	ne.	1	16	10	4	3.9	
Augusta	180	89	108	29.92	30.11	+ .11	63.4	— 0.9	88	28	74	42	11	52	34	55	50	68	2.32	— 0.4	9	.....	nw.	....	.....	....	14	8	8	....	
Savannah	98	63	86	30.02	30.13	+ .08	66.2	+ 0.1	85	6	75	45	11	58	24	59	56	77	3.75	+ 0.4	11	4,651	se.	38	sw.	29	18	6	6	3.8	
Jacksonville	43	69	84	30.06	30.11	+ .07	69.0	+ 0.2	88	28	78	44	11	60	25	63	61	83	3.35	— 0.1	11	6,895	s.	36	ne.	1	15	5	10	4.7	
Florida Peninsula.							72.4	— 1.2											5.18	+ 2.3	12	6,100	se.	46	s.	9	9	13	8	5.0	
Jupiter	28	13	30	30.06	30.09	+ .05	71.5	— 2.3	83	16	77	59	11	66	20	66	63	76	5.86	+ 4.0											
Key West	22	42	50	30.06	30.08	+ .04	75.5	— 0.5	84	9	80	66	17	71	15	69	66	75	8.47	+ 6.0	15	8,890	ne.	39	sw.	6	4	10	16	6.9	
Tampa	36	60	68	30.06	30.10	+ .05	70.3	— 0.8	86	27	79	47	11	61	28	64	60	73	4.45	+ 3.2	6	8,810	ne.	36	n.	7	7	15	8	5.7	
East Gulf States.							65.3	— 1.6											4.65	+ 2.8	7	5,631	ne.	36	se.	6	10	13	7	5.0	
Atlanta	1,131	92	126	28.93	30.12	+ .08	59.8	— 1.8	84	28	69	38	10	50	27	51	45	81	5.65	+ 1.3											
Pensacola	56	78	90	30.03	30.09	+ .05	66.4	— 1.4	85	20	73	46	10	60	26	61	58	77	5.06	+ 1.4	9	7,734	nw.	48	w.	8	14	6	10	4.6	
Mobile	57	88	96	30.03	30.09	+ .06	65.6	— 2.0	82	27	74	45	18	58	28	60	56	77	3.08	— 0.4	11	7,884	s.	38	s.	8	5	17	8	5.8	
Montgomery	221	100	107	29.85	30.09	+ .05	64.0	— 1.9	88	27	74	42	11	54	35	57	53	71	5.73	+ 1.0	11	6,138	se.	28	nw.	8	14	9	7	4.8	
Vicksburg	254	65	73	29.78	30.05	+ .04	65.2	— 1.4	84	*	74	45	10	56	27	57	51	63	6.30	+ 1.5	11	5,010	se.	29	e.	1	17	6	7	4.2	
New Orleans	54	112	120	30.02	30.08	+ .07	68.0	— 1.5	84	4	75	50	10	61	28	61	58	75	1.96	— 3.9	8	5,494	se.	30	nw.	9	20	8	2	2.5	
Port Eads	.....	27	....	.....	.....	.....	68.0	— 1.4	79	29	73	53	10	63	18	....	....	....	5.75	+ 0.6	9	6,925	se.	36	w.	8	3	13	14	6.8	
West Gulf States.							66.4	— 0.6											11.70	+ 8.7	6	.....	e.	....	.....	....	12	6	12	....	
Shreveport	249	77	84	29.78	30.04	+ .06	66.0	— 1.6	84	26	76	44	10	56	30	57	52	67	2.33	— 1.5											
Fort Smith	481	63	72	29.51	30.02	+ .07	61.7	— 0.6	84	27	73	39	*	51	34	54	48	66	1.71	— 3.5	8	5,740	se.	30	e.	6	11	7	12	5.4	
Little Rock	302	71	79	29.74	30.06	+ .07	61.8	— 1.0	83	27	71	42	10	53	30	53	47	66	3.17	— 1.9	8	5,830	e.	36	sw.	28	14	8	8	4.5	
Corpus Christi	20	42	50	30.01	30.03	+ .05	70.4	+ 0.3	83	30	75	52	9	66	27	66	63	80	5.88	+ 1.1	13	5,917	nw.	30	nw.	8	9	10	11	5.3	
Galveston	42	85	96	30.03	30.07	+ .08	69.4	— 0.4	81	3	74	50	9	65	28	64	62	80	0.83	— 0.8	7	10,129	se.	36	n.	14	9	13	8	5.0	
Palestine	510	54	61	29.51	30.05	+ .06	66.1	— 0.4	86	4	77	41	9	55	36	57	51	65	1.24	— 1.6	5	8,332	se.	46	n.	14	15	11	4	3.6	
San Antonio	704	95	104	29.29	30.03	+ .06	69.2	— 0.3	92	7	80	45	9	58	36	59	52	62	2.01	— 2.6	9	5,586	s.	26	w.	28	8	14	8	5.7	
Ohio Val. & Tenn.							54.9	— 0.6											1.84	— 1.1	5	7,425	se.	46	n.	8	8	12	10	5.3	
Chattanooga	762	106	112	29.81	30.12	+ .10	59.5	— 1.3	85	28	70	36	11	49	34	51	44	63	4.58	+ 0.5											
Knoxville	990	80	88	29.07	30.11	+ .09	58.6	0.0	85	28	70	34	11	48	38	51	45	67	4.18	— 0.4	12	5,810	s.	37	sw.	8	9	13	8	5.3	
Memphis	399	140	154	29.64	30.07	+ .08	61.4	— 0.9	84	27	69	42	9	53	30	53	47	64	6.26	+ 1.3	13	4,235	w.	31	sw.	29	12	7	11	4.9	
Nashville	545	128	134	29.50	30.08	+ .10	58.4	— 1.2	84	28	68	36	20	49	33	51	44	65	5.46	— 0.1	15	7,853	nw.	40	nw.	25	9	11	10	5.5	
Lexington	989	75	122	29.01	30.08	+ .05	53.2	— 0.1	82	28	62	26	20	44	35	46	39	64	5.79	+ 1.0	13	6,282	s.	36	se.	1	13	9	8	4.6	
Louisville	525	114	136	29.51	30.09	+ .09	55.4	— 1.5	88	28	65	28	20	46	40	47	41	68	5.80	+ 2.0	16	9,412	sw.	44	sw.	13	7	9	14	6.3	
Indianapolis	822	154	164	29.19	30.08	+ .09	50.8	— 1.8	81	28	59	23	20	42	34	45	40	72	3.83	— 0.6	13	7,358	s.	32	s.	13	9	7	14	6.0	
Cincinnati	628	152	157	29.42	30.10	+ .10	52.4	— 1.3	81	28	61	26	20	44	35	46	39	64	4.83	+ 1.1	13	9,049	nw.	42	sw.	13	7	12	11	6.1	5.0
Columbus	824	87	100	29.20	30.09	+ .10	50.6	— 0.1	82	24	59	23	20	42	37	45	40	72	3.08	— 0.1	13	6,749	nw.	36	w.	16	10	8	12	5.6	0.1
Pittsburg	842	116	126	29.20	30.11	+ .11	51.0	+ 0.1	81	24	60	26	20	42	34	46	42	76	4.27	+ 1.1	13	6,194	sw.	35	ne.	1	4	7	19	7.0	T.
Parkersburg	638	77	84	29.43	30.12	+ .12	52.9	+ 0.9	83	24	63	28	20	42	41	46	39	65	3.34	+ 0.5	15	5,053	w.	34	se.	30	4	14	12	6.2	0.1
Lower Lake Region.							45.5	+ 1.3											3.56	+ 0.2	12	4,632	se.	36	nw.	25	4	14	12	6.4	
Buffalo	768	178	206	29.24	30.08	+ .10	44.2	+ 2.9	74	29	53	21	19	36	32	38	32	67	2.04	— 0.3											
Oswego	335	76	87	29.69	30.07	+ .08	44.0	+ 2.0	79	25	52	19	20	36	36	39	34	69	2.56	+ 0.1	18	11,002	sw.	54	w.	19	4	12	14	6.7	2.7
Rochester	523	81	90	29.50	30.08	+ .09	45.7	+ 2.5	80	22	55	20	20	37	35	40	34	67	2.46	+ 0.4	11	8,490	w.	44	s.	13	13	4	14	5.4	1.0
Erie	714	92	102	29.31	30.09	+ .11	45.0	+ 1.1	76	22	53	23	19	37	36	40	35	73	1.63	— 0.8	15	6,396	sw.	35	w.	19	10	9	11	5.6	5.2
Cleveland	762	190	201	29.25	30.08	+ .08	46.7	+ 1.8	79	24	55	26	20	39	34	42	38	77	1.55	— 1.0	13	8,782	w.	42	s.	13	10	6	14	6.0	1.0
Sandusky	629	62	74	29.39	30.08	+ .08	47.0	+ 1.1	81	24	54	25	20	40	33	41	36	70	1.34	— 0.9	13	11,099	s.	49	nw.	19	4	9	17	7.4	0.4
Toledo	674	122	127	29.34	30.07	+ .09	46.4	— 0.3	79	24	55	21	20	38	33	42	37	75	2.11	— 0.4	12	7,461	e.	46	nw.	19	3	7	20	7.6	T.
Detroit	730	160	166	29.27	30.08	+ .09	45.2	— 0.8	78	24	53	20	20	37	33	41	36	75	2.54	+ 0.3	11	8,506	sw.	36	nw.	19	6	7	17	6.8	2.0
Upper Lake Region.							41.4	+ 1.0											2.09	— 0.2	12	7,751	se.	37	w.	19	7	6	17	6.7	T.
Alpena	609	61	65	29.39	30.08	+ .08	39.0	+ 2.0	73	22	47	10	19	32	36	36	33	81	2.93	+ 0.6											
Grand Haven	628	55	64	29.34	30.04	+ .06	43.0	— 0.7	76	28	52	18	20	34	32	39	34	77	4.59	+ 2.4	13	7,397	se.	42	sw.	18	6	13	11	6.5	1.7
Marquette	734	67	95	29.22	30.03	+ .03	37.8	+ 1.4	73	22	46	9	19	30	53	34	30	75	3.12	+ 0.6	16	8,896	nw.	37	s.	18	6	11	13	6.5	0.9
Port Huron	639	70	108	29.38	30.09	+ .10	43.3	+ 2.3	74	22	51	19	20	35	29	39	35	77	2.06	0.0	14	8,296	n.	43	s.	18	6	11	13	6.5	7.5
Sault Ste. Marie	624	58	65	29.36	30.05	+ .02	36.9	+ 0.4	66	22	46	5	19	27	39	32	27	71	2.01	— 0.1	16	8,667	s.	44	nw.	26	6	11	13	6.1	0.4
Chicago	594	241	274	29.17	30.06	+ .08	46.0	+ 0.2	78	28	53	24	20	39	31	41	37	77	3.32	+ 1.7	12	7,001	se.	48	nw.	19	8	13	9	5.8	2.7
Milwaukee	671	106	149	29.32	30.06	+ .07	43.7	+ 0.5	76	22	51	23	19	37	35	40	37	80	2.28	— 0.8	18	14,654	ne.	67	s.	18	11	9	10	5.4	0.9
Greenbay	617	49	57	29.38	30.06	+ .07	43.0	+ 1.1	75	23	51	17	19	35	28	38	33	73	4.21	+ 1.4	14	8,360	e.	45	sw.	18	4	8	18	7.3	4.5
Duluth	702	95	106	29.26	30.04	+ .04	40.0	+ 2.3	78	27	48	14	19	32	40	35	29	65	4.09	+ 1.9	11	7,339	n.	40	sw.	19	10	12	8	5.6	0.8
North Dakota.							43.4	+ 1.3											0.72	— 1.7	9	8,458	ne.	44	sw.	22	15	11	4	4.0	T.
Moorhead	935	54	60	29.00	30.04	+ .06	44.8	+ 4.4	90	27	54	16	19	34	40	38	35	76	1.16	— 0.8											
Bismarck	1,674	16	29	28.25	30.06	+ .09	42.2	0.0	81	26	52	19	19	32	43	36	30	65	0.92	— 1.3	6	8,891	nw.	44	nw.	18	8	16	11	6.5	
Williston	1,875	15	31	28.00	30.02	+ .05	43.8	+ 0.9	90	26	54	20	2	34	51	38	31	68	1.40	— 0.9	9	7,657	nw.	47	nw.	18	10	8	12	5.9	3.0
Upper Miss. Valley.							50.0	— 0.7											1.17	— 0.2	10	7,712	n.	48	n.	18	10	16	4	5.0	2.5
Minneapolis	.....	99	...	.....	.....	.....	46.4	+ 0.7	78	27	56	21	19	36	32	....	....	....	3.30	+ 0.3											
St. Paul	837	114	124	29.10	30.02	+ .05	45.8	— 0.1	78	27	55	23	19	37	34	39	31	60	1.48	— 1.3	9	.....	ne.	....	.....	....	8	10	12	....	0.5
La Crosse	.....	70	78	.....	.....	.....	46.4	— 0.7	75	22	56	22	19	37	36	....	....	....	1.56	— 0.9	11	6,820	nw.	40	nw.	18	9	12	9	5.4	4.6
Davenport	599	71	79	29.36	30.02	+ .04	49.0	— 0.4	78	22	57	28	20	41	40	43	37	69	1.86	— 0.4	9	7,064	n.	36	nw.	19	11	10	9	5.6	T.
Des Moines	867	84	88	29.10	30.04	+ .06	49.4	— 1.0	79	27	58	29	19	40	41	44	38	71	3.69	+ 0.9	13	7,240	e.	38	sw.	18	6	6	18	7.0	0.2
Dubuque	698	49	56	29.26	30.03	+ .06	47.6	— 0.8	77	22	56	25	19	40	42	42	36	67	7.37	+ 4.6	13	7,906	n.	44	sw.	22	10	9	11	5.6	T.
Keokuk	614	64	78	29.36	30.03	+ .07	51.3	— 0.8	80	22	59	32	*	44	38	46	42	75	3.39	+ 0.6	12	6,704	nw.	36	nw.	19	13	5	12	5.1	T.
Cairo	359	87	93	29.66	30.05	+ .08	57.8	— 0.8	80	26	65	36	9	50	26	52	46	68	3.54	+ 0.3	12	7,505	sw.	36	sw.	22	7	11	12	6.2	
																			6.49	+ 2.6	15	7,959	s.	36	nw.	25	7	11	12	5.9	

TABLE I.—*Climatological data for Weather Bureau Stations, April, 1897*—Continued.

Stations.	Elevation of instruments: Barometer above sea level, feet.	Elevation of instruments: Thermometers above ground.	Elevation of instruments: Anemometers above ground.	Pressure, in inches: Mean actual, 8 a. m. and 8 p. m. + 2.	Pressure, in inches: Mean reduced.	Pressure, in inches: Departure from normal.	Temperature of the air, in degrees Fahrenheit: Mean max. and min. + 2.	Temperature: Departure from normal.	Temperature: Maximum.	Temperature: Date.	Temperature: Mean maximum.	Temperature: Minimum.	Temperature: Date.	Temperature: Mean minimum.	Temperature: Greatest daily range.	Mean wet thermometer.	Mean temperature of the dew-point.	Mean relative humidity, per cent.	Precipitation, in inches: Total.	Precipitation: Departure from normal.	Precipitation: Days with .01, or more.	Wind: Total movement, miles.	Wind: Prevailing direction.	Wind: Maximum velocity: Miles per hour.	Wind: Maximum velocity: Direction.	Wind: Maximum velocity: Date.	Clear days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.	Total snowfall.
Up. Miss. Val.—Con																															
Springfield, Ill.	644	82	92	29.35	30.05	+ .06	50.6	− 2.5	77	28	58	28	20	43	37	45	39	70	3.85	+ 0.1	15	8,899	nw.	36	se.	12	4	9	17	7.2	0.1
Hannibal	534	75	107	.....	.....	.....	52.9	.....	80	21	61	33	20	45	33	....	....	....	3.96	+ 1.3	13	9,061	sw.	44	sw.	18	7	12	11	5.7	
St. Louis	567	111	210	29.45	30.07	+ .10	56.0	− 0.7	80	28	64	35	8	48	32	50	46	78	4.66	+ 0.9	14	9,050	s.	43	e.	3	7	7	16	6.2	T.
Missouri Valley.							50.8	− 0.9											4.11	+ 1.1											
Columbia	.....	4	84	.....	.....	.....	55.4	− 0.6	84	27	66	29	17	44	38	....	....	....	4.83	+ 0.3	12	8,491	se.	44	e.	28	6	9	15	6.8	
Kansas City	963	78	95	29.00	30.04	+ .08	54.7	0.0	84	18	64	35	19	46	35	47	40	64	2.57	− 0.4	7	7,865	s.	36	s.	21	8	11	11	6.0	
Springfield, Mo.	1,324	100	108	28.62	30.03	+ .06	54.9	− 2.2	81	27	64	34	9	46	30	47	41	66	3.73	− 0.2	13	9,355	se.	36	se.	21	8	18	4	4.7	
Topeka	.....	81	....	.....	.....	.....	55.0	− 0.3	86	18	66	35	9	44	42	....	....	....	2.44	+ 0.2	13	.....	nw.	....	.....	...	10	11	9	....	
Lincoln	1,199	74	84	28.71	30.00	.....	50.0	− 1.4	80	21	60	30	19	40	36	46	43	80	6.15	+ 4.0	13	10,582	nw.	50	n.	28	9	11	10	5.2	
Omaha	1,108	92	97	28.82	30.00	+ .02	50.5	− 0.9	79	27	59	29	19	42	35	46	42	77	5.67	+ 2.5	14	7,489	nw.	35	nw.	22	9	9	12	5.9	
Sioux City	1,139	96	169	.....	.....	.....	47.6	− 1.9	79	27	58	24	19	37	42	....	....	....	4.03	+ 1.0	15	11,465	n.	54	nw.	18	11	6	13	5.9	
Pierre	1,460	50	61	28.44	30.01	+ .02	46.9	− 0.7	87	27	57	24	19	36	42	40	32	64	3.51	+ 1.6	9	8,156	nw.	46	w.	21	9	9	12	5.8	2.8
Huron	1,310	63	72	28.61	30.04	+ .06	45.4	− 0.4	86	27	56	20	19	35	38	40	36	75	4.03	+ 1.1	15	9,181	n.	48	nw.	18	9	10	11	5.7	T.
Yankton	1,234	51	57	28.69	30.02	+ .05	47.4	− 0.2	80	27	57	24	19	38	40	41	34	67	4.16	+ 1.1	14	8,476	nw.	44	s.	27	13	6	11	5.2	
Northern Slope.							45.1	0.0											1.23	− 0.4											
Havre	2,494	15	33	27.34	29.97	.00	46.6	+ 2.2	83	26	59	26	28	34	39	39	31	62	0.78	− 0.2	6	8,465	w.	48	sw.	26	14	12	4	4.6	1.5
Miles City	2,372	41	49	27.49	30.00	+ .02	47.6	+ 1.0	88	26	58	28	3	38	39	40	32	62	1.69	+ 0.6	8	6,195	w.	36	nw.	21	9	13	8	5.2	....
Helena	4,108	88	93	25.87	30.10	+ .10	45.2	+ 0.3	77	26	54	26	6	36	34	38	28	56	1.15	0.0	11	6,249	sw.	36	ne.	14	12	9	9	4.6	6.2
Rapid City	3,251	53	61	26.62	30.02	+ .01	45.4	0.0	81	26	56	26	3	35	40	37	27	56	0.69	− 1.6	7	6,765	nw.	33	se.	19	7	10	13	6.2	3.9
Cheyenne	6,105	58	60	24.01	30.11	+ .10	40.0	− 3.1	71	26	51	13	3	29	37	32	22	57	0.60	− 0.8	10	8,558	nw.	36	s.	19	12	14	4	4.8	5.2
Lander	5,372	26	36	24.64	30.08	+ .08	42.9	+ 1.0	76	26	56	13	4	30	44	34	23	54	1.14	− 1.2	9	3,485	s.	40	s.	20	9	13	8	5.2	10.5
North Platte	2,826	43	52	27.09	30.06	+ .09	47.8	− 1.6	82	26	59	26	8	37	41	41	36	70	2.59	+ 0.4	10	8,373	nw.	40	nw.	28	8	15	7	5.4	7.2
Middle Slope.							53.2	− 0.5											3.03	+ 1.0											
Denver	5,290	83	151	24.74	30.08	+ .10	47.4	− 0.7	77	26	60	15	1	35	37	38	26	52	1.31	− 0.7	11	6,394	s.	46	sw.	20	9	13	8	4.9	2.2
Pueblo	4,713	74	81	25.26	30.03	+ .09	49.5	− 1.3	81	18	64	17	1	34	45	38	22	44	0.24	− 1.2	4	6,369	nw.	49	n.	28	9	17	4	4.6	T.
Concordia	1,506	42	47	28.50	30.00	+ .02	53.0	− 0.1	85	18	64	30	14	42	41	45	39	66	4.20	+ 2.1	10	7,014	n.	42	s.	21	12	7	11	5.3	
Dodge City	2,504	44	52	27.88	30.00	+ .08	53.8	− 0.3	87	18	66	31	4	41	42	45	38	65	3.21	+ 1.6	7	9,649	nw.	50	n.	28	11	14	5	4.3	
Wichita	1,351	78	85	28.58	30.01	+ .06	56.1	+ 0.3	87	18	67	34	9	45	37	47	40	63	3.66	+ 1.4	10	8,571	n.	40	n.	28	14	6	10	4.7	
Oklahoma	1,218	54	53	28.72	30.02	+ .07	59.6	− 0.8	80	18	71	37	9	48	36	51	45	69	5.87	+ 3.0	9	8,808	n.	44	s.	21	16	11	3	3.7	
Southern Slope.							59.2	− 1.2											0.91	− 0.9											
Abilene	1,749	47	54	28.21	30.04	+ .08	63.1	− 1.0	93	7	75	36	9	51	39	52	44	59	0.74	− 2.0	5	8,667	se.	36	sw.	11	15	7	8	4.1	
Amarillo	3,691	53	61	26.25	30.01	+ .07	55.3	− 1.3	83	7	69	29	9	42	43	44	32	55	1.08	+ 0.2	11	12,557	s.	60	se.	23	12	12	6	4.3	T.
Southern Plateau.							63.1	+ 0.6											0.25	0.0											
El Paso	3,767	10	110	26.15	29.94	+ .01	64.6	+ 0.3	88	18	80	35	1	49	43	45	16	22	0.14	0.0	2	9,068	nw.	60	sw.	2	20	8	2	2.4	
Santa Fe	6,998	47	50	23.25	30.00	+ .05	47.2	− 0.9	72	18	59	24	3	36	33	36	15	36	0.87	+ 0.2	7	5,769	se.	40	nw.	7	16	13	1	3.8	0.2
Phœnix	1,076	47	57	28.75	29.87	.....	68.2	+ 1.0	96	18	85	38	1	52	41	50	31	31	T.	− 0.3	0	3,282	e.	22	sw.	26	26	4	0	1.1	
Yuma	139	16	50	29.74	29.88	− .03	72.4	+ 1.9	100	17	89	42	1	56	43	53	34	32	T.	− 0.1	0	5,159	w.	33	n.	7	24	4	2	1.6	
Middle Plateau.							48.7	− 0.5											0.76	− 0.6											
Carson City	4,720	82	92	25.82	30.09	.....	48.9	0.0	78	17	63	25	8	35	45	38	21	40	0.03	− 0.8	3	5,606	sw.	59	w.	6	18	10	2	2.6	0.2
Winnemucca	4,340	59	70	25.73	30.10	+ .12	48.2	+ 0.4	81	17	62	24	8	34	45	38	22	41	0.25	− 0.7	6	7,448	ne.	60	nw.	6	14	5	11	4.5	T.
Salt Lake City	4,344	83	90	25.69	30.12	+ .12	49.0	− 1.8	80	18	60	26	1	38	31	42	35	63	2.00	− 0.2	11	5,215	nw.	40	n.	10	11	8	11	5.0	2.4
Northern Plateau.							49.0	+ 1.5											1.03	− 0.4											
Baker City	3,470	49	47	26.52	30.12	+ .10	47.0	+ 3.0	80	17	59	27	7	35	38	38	27	53	0.64	− 0.6	7	4,730	s.	26	nw.	21	8	14	8	5.2	1.2
Idaho Falls	4,742	10	56	25.29	30.13	+ .13	43.0	+ 1.0	73	26	54	22	13	32	40	38	34	75	1.35	− 0.2	10	6,880	s.	38	s.	10	20	6	4	2.8	4.7
Spokane	1,943	99	107	28.02	30.08	+ .09	50.4	+ 1.3	80	17	62	32	7	39	37	42	32	57	0.60	− 0.8	10	4,376	sw.	36	sw.	10	10	7	13	5.7	
Walla Walla	1,018	65	73	29.02	30.10	+ .10	55.8	+ 0.6	86	18	67	32	11	45	36	47	37	53	1.75	+ 0.2	8	4,760	s.	30	sw.	20	15	9	6	4.2	
N. Pac. Coast Reg.							50.6	+ 1.2											2.32	− 1.3											
Fort Canby	179	10	34	29.95	30.15	+ .11	49.8	+ 1.2	80	15	55	40	2	44	25	46	44	84	2.88	− 2.6	13	8,512	n.	52	s.	21	8	12	10	5.7	
Port Angeles	29	47	61	.....	.....	.....	46.8	+ 1.2	66	25	54	30	27	39	27	...	....	....	0.48	− 1.5	7	4,842	w.	36	w.	10	9	10	11	5.3	
Pysht	.....	5	....	.....	.....	.....	49.2	.....	71	25	59	32	*	39	32	...	....	....	2.75	− 2.3	14	.....	w.	....	.....	...	16	1	13	....	
Seattle	119	100	108	30.08	30.16	.....	52.5	.....	85	16	62	38	27	44	38	46	41	69	1.53	.....	9	3,737	se.	24	sw.	20	12	12	6	4.3	
Tatoosh Island	86	12	21	30.08	30.18	+ .16	47.1	+ 0.1	68	15	51	38	27	43	21	45	42	82	7.61	+ 0.2	14	9,516	e.	55	e.	16	8	8	14	6.4	
Astoria	.....	39	60	.....	.....	.....	51.6	+ 1.9	78	15	59	37	23	44	23	....	....	....	3.14	− 3.1	10	.....	w.	....	.....	...	16	6	8	....	
Portland, Oreg	153	203	213	29.98	30.14	+ .09	55.0	+ 1.8	89	17	66	36	7	44	35	47	39	62	1.76	− 1.5	7	6,158	nw.	34	s.	21	12	13	5	4.0	
Roseburg	521	56	67	29.58	30.14	+ .07	53.2	+ 0.7	90	15	65	33	11	41	43	46	39	67	1.11	− 1.5	7	2,732	nw.	20	nw.	6	14	7	9	4.3	
Mid. Pac. C'st Reg.							57.2	+ 1.3											0.95	− 1.5											
Eureka	64	60	69	30.11	30.17	+ .07	51.0	+ 1.0	72	25	58	36	7	44	27	48	46	87	2.55	− 1.6	8	4,794	nw.	36	nw.	22	9	13	8	4.9	
Redbluff	334	54	58	29.71	30.06	+ .06	63.2	+ 2.7	93	25	76	35	1	51	37	51	38	48	1.22	− 0.9	4	4,921	nw.	34	n.	7	21	7	2	2.3	
Sacramento	71	106	117	.....	.....	.....	62.6	+ 3.1	87	14	74	42	20	51	33	....	....	....	0.25	− 2.0	2	7,228	sw.	39	nw.	22	24	5	1	2.0	
San Francisco	158	161	167	29.94	30.10	+ .06	57.4	+ 1.4	84	24	65	45	2	50	29	51	47	75	0.27	− 1.7	3	8,121	w.	35	w.	30	21	5	4	3.0	
Point Reyes Light	.....	12	....	.....	.....	.....	52.2	+ 1.0	78	9	58	43	1	46	30	....	....	....	0.47	− 1.2	3	.....	nw.	....	.....	...	18	3	9	....	
S. Pac. Coast Reg.							61.5	+ 1.2											0.12	− 1.0											
Fresno	332	67	70	29.67	30.02	.00	63.5	+ 1.5	94	16	78	39	2	49	38	52	42	55	0.30	− 1.0	1	4,018	nw.	26	nw.	22	27	3	0	1.2	
Los Angeles	330	74	76	29.66	30.01	.00	61.2	+ 1.2	90	10	73	40	1	49	35	58	48	73	0.02	− 1.3	1	3,284	w.	24	w.	26	16	12	2	3.1	
San Diego	69	59	70	29.94	30.02	− .01	59.8	+ 0.8	88	9	67	46	3	53	36	53	48	72	0.02	− 0.7	1	3,617	nw.	19	w.	30	23	3	4	2.5	
San Luis Obispo	201	10	46	29.87	30.09	.....	59.6	.....	94	10	74	38	24	45	50	50	44	66	0.18	.....	1	3,833	nw.	21	n.	8	22	4	4	2.8	

NOTE.—The data at stations having no departures are not used in computing the district averages. Letters of the alphabet denote number of days missing from the record. * Two or more directions, dates, or years. † Received too late to be considered in departures, etc.

TABLE II.—*Meteorological record of voluntary and other cooperating observers, April, 1897.*

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
	°	°	°	Ins.	Ins.
Alabama.					
Alco†	87	39	64.6	5.98	
Ashville†	89	35	61.0	5.00	
Bermuda†	90	38	66.2	5.50	
Birmingham	88	36	64.0	5.09	
Brewton†	87	37	64.2	4.35	
Bridgeport†	.....	.....	.....	4.49	
Citronelle†	84	45	66.6	2.96	
Clanton†	83	38	61.4	1.39	
Cordova†	.....	.....	.....	4.60	
Daphne†	84	42	65.8	6.57	
Decatur†	86	34	60.2	4.55	
Demopolis	88	40	64.5	3.15	
Elba†	88	40	65.4	3.55	
Eufaula *a*†	88	39	63.4	4.28	
Eufaula *c*†	.....	.....	.....	4.78	
Evergreen†	88	40	63.2	3.28	
Florence *a*†	.....	.....	.....	4.44	
Florence *b*†	84	34	61.0	5.00	
Fort Deposit †	88	41	63.7	4.18	
Gadsden	86	36	60.0	3.84	
Goodwater†	91	34	62.3	3.90	
Greensboro†	86	38	62.2	4.24	
Hamilton	90	31	59.2	4.01	
Healing Springs†	90	37	63.4	3.33	
Highland Home†	84	42	64.2	4.07	
Jasper†	85	31	58.8	4.43	
Livingston	85	39	63.9	3.71	
Lock No. 4	85	36	59.7	3.64	
Madison Station†	86	32	59.4	4.85	
Maple Grove	87	29	57.6	4.34	
Marion†	88	42	63.6	4.60	
Mount Willing†	88	40	65.4	5.92	
Newbern†	85	40	63.2	4.27	
Newburg	86	31	60.2	4.90	
Newton†	86	34	62.8	3.55	
Oneonto	.....	.....	.....	3.55	
Opelika†	87	38	63.2	5.37	
Oxanna†	83	34	58.4	2.77	
Pineapple	90	37	63.9	3.01	
Pushmataha†	87	40	63.5	3.06	
Rockmills†	81	32	59.4	6.50	
Scottsboro†	87	32	58.0	4.09	
Selma†	88	41	64.0	4.08	
Sturdevant†	.....	.....	.....	1.96	
Talladega *[1]	84	40	60.8	3.01	
Tallassee†	.....	.....	.....	5.08	
Thomasville	87	42	64.6	1.98	
Tuscaloosa†	86	40	63.4	4.07	
Tuscumbia	84	36	60.9	4.42	
Union†	88	36	62.2	4.82	
Union Springs†	88	39	63.4	3.97	
Uniontown†	87	42	64.3	3.21	
Valleyhead	83	31	59.2	3.54	
Warrior†	.....	.....	.....	2.43	
Wetumpka	89	37	63.4	5.46	
Wilsonville†	.....	.....	.....	4.25	
Alaska.					
Killisnoo	48	29	39.8	4.35	
Arizona.					
Arizona Canal Co. Dam	98	36	69.0	T.	
Benson *[8]	87	43	68.7	0.00	
Bisbee†	82	37	63.0	0.00	
Buckeye†	100	33	68.7	0.00	
Calabasas	89	30	63.0	0.00	
Casa Grande *[8]	95	47	71.7	0.00	
Cedar Springs	.....	.....	.....	0.00	
Congress	88	42	67.1	0.29	
Dragoon	.....	.....	.....	0.00	
Dragoon Summit *[5]	80	35	65.4	0.00	
Dudleyville	97	37	64.0	0.35	
Farleys Camp†	95	40	67.4	0.00	
Flagstaff†	70	20	45.4	.....	2.0
Fort Apache	82	23	52.3	0.24	
Fort Grant†	87	31	61.2	0.00	
Fort Huachuca†	85	34	60.5	0.00	
Fort Mohave	110	37	72.2	0.10	
Gilabend *a* *[8]	102	47	74.6	0.00	
Gisela†	90	27	59.6	T.	
Glendale	94	32	64.6	0.00	
Holbrook†	86	20	52.8	0.16	
Lochiel *[1]	84[f]	35[e]	60.2[e]	0.00	
Maricopa *[8]	102	54	77.7	0.00	
Mesa†	97	38	66.6	T.	
Mount Huachuca	87	30	61.2	T.	
Music Mountain	92	34	62.0	0.25	
Natural Bridge	.....	.....	.....	0.12	
Oracle†	88	34	62.2	0.01	
Oro	.....	.....	.....	0.36	
Oro Blanco	90	32	63.4	0.00	
Pantano *[8]	89	38	68.1	0.00	
Parker	106	37	71.3	0.07	
Payson	.....	.....	.....	0.14	
Peoria†	92[e]	36	65.8[e]	0.00	
Phœnix	96	33	66.6	0.00	
Pinal Ranch	.....	.....	.....	T.	
Reymert†	100	41	71.2	0.01	
Arizona—Cont'd.					
St. Helena Ranch	.....	.....	.....	0.00	
San Carlos†	96	30	63.2	0.00	
San Simon *[8]	89	30	67.4	0.00	
Showlow	.....	.....	.....	0.12	T.
Signal†	95	35	66.2	0.20	
Sulphur Spring Valley†	.....	.....	.....	0.00	
Texas Hill *[8]	104	48	75.6	0.00	
Tombstone	89	33	63.8	T.	
Tuba	84	26	53.6	0.09	
Tucson *c*†	94	30	65.2	T.	
Walnut Grove	.....	.....	.....	1.00	
Walnut Ranch *†[1]	78	28	58.7	0.00	
Whipple Barracks†	87	17	52.4	0.37	
Willcox *[8]	87	45	66.1	0.00	
Williams	78	23	48.0	0.75	6.0
Arkansas.					
Amity	82	36	61.6	2.76	
Arkansas City†	.....	.....	.....	4.88	
Batesville	86	38	61.4	2.99	
Beebranch†	84[c]	35[c]	60.4[c]	3.81	
Blanchard Springs†	84	37	63.3	4.28	
Brinkley	85	38	61.6	5.91	
Camden *a*†	.....	.....	.....	4.35	
Camden *b*†	84	34	62.6	4.38	
Canton *[1]	84	36	57.9	.....	
Conway	88	34	63.9	3.35	
Corning†	85[e]	35[e]	58.6[e]	4.14	
Dallas	85[f]	38[d]	62.2[e]	3.39	
Dardanelle	.....	.....	.....	4.36	
Elon†	85	34	62.8	2.27	
Fayetteville†	85	33	58.4	4.60	
Forrest	85	37	61.1	5.49	
Fulton†	.....	.....	.....	1.89	
Helena *a*†	.....	.....	.....	5.57	
Helena *b*	89	39	61.3	5.63	
Hot Springs *a*	86	38	63.0	5.03	
Hot Springs *b*	.....	.....	.....	4.00	
Hot Springs (near)	.....	.....	.....	5.62	
Jonesboro	87	37	61.7	3.78	
Keesees Ferry†	86	31	59.6	5.31	
Lacrosse†	86	34	57.2	2.96	
Lonoke *[1]	87	41	62.7	4.50	
Luna Landing *[8]	79	45	63.5	2.22	
Lutherville *[1]	86	36	62.3	.....	
Malvern†	86	36	61.1	4.37	
Marianna *[1]	87	46	63.6	.....	
Marvell	87	40	63.7	4.80	
Moore	.....	.....	.....	3.77	
Mossville	80	37	57.5	5.47	
Mount Nebo†	81	39	59.4	6.12	
New Gascony *[1]	80	44	62.7	5.22	
Newport *a*†	.....	.....	.....	4.68	
Newport *b*†	86	39	59.9	4.77	
Newport *c*†	86	37	61.1	4.76	
Oregon *[1]	80	32	54.2	.....	
Osceola†	80	41	60.6	4.45	
Ozark†	85	40	63.4	3.56	
Picayune†	83	39	63.4	2.50	
Pinebluff†	87	43	65.2	4.16	
Pocahontas†	80	36	58.2	3.18	
Prescott	86	40	64.2	3.18	
Rison†	85	38	63.2	2.50	
Russellville	85	37	61.0	3.72	
Silver Springs†	83	27	56.4	5.82	
Stuttgart†	90	40	62.6	4.68	
Texarkana†	88	40	64.0	4.71	
Warren†	85	39	63.0	5.53	
Washington *†[1]	82	39	62.5	3.02	
Wiggs *[1]	84	38	64.2	3.80	
Witts Springs†	82	33	58.0	2.76	T.
California.					
Adin	84	26	48.6	1.27	2.5
Agnew	84	36	58.6	0.20	
Arlington Heights	93	36	63.2	0.01	
Athlone *[8]	93	39	61.3	0.07	
Azusa	.....	.....	.....	0.15	
Ballast Point L. H	.....	.....	.....	0.00	
Barstow†	94	45	75.0	0.00	
Bear Valley†	.....	.....	.....	3.35	16.0
Berkeley	84	41	57.7	0.44	
Bishop†	83	26	54.4	0.00	
Bishop Creek *[8]	90	38	63.1	T.	
Boca *[8]	78	17	40.9	0.10	1.0
Bodie†	60	11	35.0	T.	
Bowmans Dam *†[1]	71	23	42.8	2.85	15.0
Caliente *[8]	85	45	63.5	0.35	
Calloway Canal†	94[d]	36[e]	62.2[e]	0.00	
Campbell	84	34	56.7	0.21	
Cape Mendocino L. H	.....	.....	.....	1.50	
Castle Pinckney *[1]	82	50	59.8	0.03	
Cedarville†	78	23	48.7	0.56	1.0
Centerville *[1]	92	50	62.4	0.45	
Chico *[8]	92	41	65.2	1.36	
Chino *†[6]	95	40	62.5	0.00	
Cisco *[8]	50	19	36.1	.....	7.0
Claremont†	86	33	58.0	T.	
California—Cont'd.					
Corning *[8]	92	35	60.7	1.63	
Coronado	97	50	65.0	0.02	
Craftonville	91	33	60.1	0.07	
Crescent City†	82	33	50.9	2.95	
Crescent City L. H	.....	.....	.....	3.48	
Daunt	.....	.....	.....	0.40	
Davisville *b*	94	41	67.1	0.46	
Delano *[8]	92	43	62.4	0.18	
Delta *[8]	90	31	58.2	1.30	
Descanso *[5]	84	25	52.3	0.16	
Drytown	90	33	59.6	0.53	
Dunnigan *[8]	88	44	68.3	0.42	
Durham *[1]	81	34	58.2	0.68	
East Brother L. H	.....	.....	.....	0.05	
Edmanton *[1]	76	22	46.6	1.59	10.0
Elsinore	98	36	65.8	0.00	
Escondido	93	29	59.4	.....	
Fallbrook *[1]	92	42	59.8	0.06	
Famosa†	84	39	57.8	0.08	
Folsom City *b* *[1]	91	45	63.5	0.74	
Fordyce Dam †	.....	.....	.....	2.78	18.0
Fort Bragg†	.....	.....	.....	1.28	
Fort Ross	79	40	53.4	0.78	
Fort Tejon	.....	.....	.....	0.95	
Georgetown†	81	29	56.4	2.40	T.
Glendora	.....	.....	.....	0.00	
Goshen *[8]	93	38	62.1	0.00	
Grand Island *[5]	90	38	64.7	T.	
Grass Valley	.....	.....	.....	2.56	
Greenville†	85	21	49.6	0.94	3.0
Guinda	.....	.....	.....	0.00	
Healdsburg *[1]	86	40	58.0	0.11	
Hollister	87	34	57.4	0.51	
Hueneme	.....	.....	.....	0.05	
Humboldt L. H	.....	.....	.....	2.23	
Hydesville	88	28	53.4	2.39	
Indio *[8]	102	43	72.7	0.00	
Iowa Hill *[1]	84	35	56.6	2.15	0.5
Jackson	84	32	55.9	1.46	
Jolon	.....	.....	.....	0.00	
Keeler *[8]	92	41	66.9	0.00	
Keene *[8]	86	36	57.7	0.14	
Kennedy Gold Mine	88	34	58.8	1.51	
Kernville	.....	.....	.....	0.10	
King City *[8]	88	42	59.5	0.11	
Kingsburg *[8]	90	38	64.6	0.30	
Kono Tayee	83	38	58.7	0.90	
Lagrange *[5]	94	40	64.4	T.	
Laporte *†[1]	67	27	43.7	3.12	18.0
Las Fuentes Ranch	.....	.....	.....	0.00	
Lemoore *a* *[8]	90	40	66.2	0.08	
Lick Observatory	78	28	51.0	0.82	0.5
Lime Kiln	100	32	65.4	.....	
Lime Point L. H	.....	.....	.....	0.18	
Lodi	86	38	60.6	0.40	
Los Alamos†	.....	.....	.....	0.00	
Los Gatos *b*	88	38	58.2	0.40	
Lytton Springs	87	40	60.2	0.26	
McMullin *[1]	96	42	60.1	.....	
Malakoff Mine *[1]	84	31	56.2	3.70	3.0
Mammoth Tank *[8]	107	52	79.1	0.00	
Manzana	84	30	55.2	0.04	
Mare Island L. H	.....	.....	.....	0.47	
Marysville	91	39	63.0	1.53	
Merced *[8]	90	43	64.3	0.41	
Middletown *†[1]	87	31	57.6	0.00	
Mills College	.....	.....	.....	0.47	
Milton (near) *[1]	90	38	61.4	0.47	
Modesto *[5]	90	44	65.2	0.00	
Mohave *[8]	90	42	62.1	0.00	
Mokelumne Hill *[3]	.....	37	58.0	0.48	
Monterey *[8]	78	42	56.5	0.40	
Morena Dam *[4]	82	32	48.7	1.13	
Mount Breckenridge	.....	.....	.....	0.00	
Mount Frazier	.....	.....	.....	0.15	
Mount Glenwood *[1]	89	44	63.7	0.02	
Mutah Flat†	.....	.....	.....	0.00	
Napa	87	33	57.8	0.33	
Needles	97	50	74.2	0.00	
Nevada City†	81	30	53.8	2.08	
Newcastle *a*†	83	35	58.6	0.48	
Newhall *[8]	94	40	62.8	0.00	
Nordhoff †	92	30	59.9	0.00	
North Ontario	88	38	61.4	T.	
North San Juan *[1]	86	34	57.7	2.20	
Oakland *a*	85	40	58.8	0.52	
Ogilby *[8]	105	60	83.0	0.00	
Oleta *[1]	83	38	56.2	1.50	
Orangevale†	91	39	62.8	0.75	
Orland *[8]	97	39	65.8	1.79	
Oroville *b*	92	48	68.5	0.35	
Otay Dam *[1]	91	48	63.5	0.00	
Palermo†	92	38	62.7	0.76	
Paso Robles *b*	83	40	58.8	T.	
Peachland *[1]	85	38	57.4	0.12	
Picacho	100	47	75.3	T.	

TABLE II.—*Meteorological record of voluntary and other cooperating observers*—Continued.

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
California—Cont'd.	°	°	°	*Ins.*	*Ins.*
Piedras Blancas L. H.	.....	.....	.....	0.50	
Pigeon Point L. H.	.....	.....	.....	0.10	
Pilot Creek	.....	.....	.....	2.60	10.0
Point Ano Nuevo L. H.	.....	.....	.....	0.30	
Point Arena L. H.	.....	.....	.....	1.11	
Point Bonita L. H.	.....	.....	.....	0.30	
Point Conception L. H.	.....	.....	.....	0.00	
Point Fermin L. H	.....	.....	.....	0.00	
Point George L. H.	.....	.....	.....	0.61	
Point Hueneme L. H.	.....	.....	.....	0.00	
Point Lobos	80	42	53.8	0.12	
Point Loma L. H.	.....	.....	.....	0.00	
Point Montara L. H.	.....	.....	.....	0.00	
Point Pinos L. H	.....	.....	.....	0.80	
Point Reyes L. H.	.....	.....	.....	0.47	
Point Sur L. H.	.....	.....	.....	0.10	
Pomona (near)	92	30	62.6	T.	
Poway *[8]	88	42	55.0	0.00	
Quincy †	80	27	50.0	0.99	T.
Ravenna *[8]	98	38	62.8	0.00	
Redding *b* †	89	35	62.4	3.02	
Represa	84	38	60.6	0.71	
Riovista	88	40	61.2	0.21	
Roe Island L. H.	.....	.....	.....	0.00	
Rosewood	90	29	58.4	0.42	
Sacramento *a*	87	39	62.8	0.12	
Salinas *[8]	82	40	58.7	0.35	
Salton *[8]	112	62	79.1	0.00	
San Bernardino †	92	34	61.8	0.08	
San Jose *b*	84	34	57.2	0.91	
San Leandro *[1]	89	45	60.8	0.50	
San Louis L. H.	.....	.....	.....	0.19	
San Mateo *[8]	82	50	62.7	0.06	
San Miguel *[8]	89	41	62.8	0.13	
Santa Ana *[5]	78	48	67.4	0.00	
Santa Barbara *a*	86	41	59.6	0.02	
Santa Barbara L. H.	.....	.....	.....	0.03	
Santa Clara *a*	.....	.....	.....	0.15	
Santa Cruz *b* †	90	36	59.4	0.22	
Santa Cruz L. H.	.....	.....	.....	0.30	
Santa Maria	92	37	61.0	0.14	
Santa Monica *[8]	81	49	64.4	0.00	
Santa Paula *b* †	89	33	58.5	0.00	
Santa Rosa *[8]	86	37	58.5	1.03	
Saticoy	.....	.....	.....	T.	
Shasta	.....	.....	.....	0.78	
Sierra Madre	86	39	62.0	0.10	
Sneddens Ranch *†[1]	80	12	42.0	0.02	
S. E. Farallone L. H.	.....	.....	.....	0.00	
Stanford University	83	39	57.1	0.16	
Stockton *a*	85	39	60.7	0.37	
Summerdale †	69	27	46.4	1.13	5.0
Susanville †	82	28	52.5	0.30	T.
Sutter Creek *[5]	83	28	53.8	T.	
Tecarte Dam *[4]	92	28	51.0	0.31	
Tehama *[8]	89	42	65.3	1.11	
Templeton *[8]	92	42	60.5	0.09	
Trinidad L. H.	.....	.....	.....	2.26	
Truckee *[8]	70	20	40.3	0.30	3.0
Tulare *b*	.....	.....	.....	0.40	
Tulare *c*	100	34	67.3	0.35	
Turlock *b* †	92	35	60.2	0.06	
Ukiah †	88	33	57.4	0.91	
Upper Lake	88	33	58.9	0.42	
Upper Mattole *[1]	92	35	55.2	1.83	
Vacaville *a* *[1]	90	44	62.8	0.24	
Ventura †	93	33	56.0	0.05	
Volcano Springs *[8]	112	57	81.1	0.00	
Walnutcreek	87	38	61.4	0.19	
West Palmdale	.....	.....	.....	0.04	
Westpoint †	.....	.....	.....	1.11	
Wheatland †	86	38	60.6	0.92	
Williams *[8]	90	40	64.8	0.25	
Wilmington *[5]	87	49	65.5	0.00	
Wire Bridge *[5]	89	38	62.6	1.60	
Yerba Buena L. H.	.....	.....	.....	0.00	
Yreka †	85	25	52.2	0.39	
Yuba City *[5]	89	44	72.4	1.00	
Engineers Quarters ‡	.....	.....	.....	0.03	
Morses House ‡	.....	.....	.....	0.15	
Deep Creek ‡	.....	.....	.....	0.00	
Holcomb Creek ‡	.....	.....	.....	0.00	
Squirrel Inn ‡	.....	.....	.....	0.13	
Colorado.					
Alma †	56	1	29.2	1.14	13.0
Antlers †	73	12	46.6	0.97	4.0
Arkins	.....	.....	.....	1.82	3.5
Boxelder	.....	.....	.....	1.22	8.0
Breckenridge †	67	— 8	30.0	4.00	40.0
Canyon †	79	21	50.6	0.75	T.
Castlerock †	63	0	41.4	1.37	8.0
Cheyenne Wells	82	26	55.0	1.05	T.
Collbran	.....	.....	.....	1.04	0.5
Colorado Springs †	73	18	44.2	0.54	0.6
Cripple Creek †	60	1	32.1	1.21	12.0
Delta	86	19	51.7	0.05	0.0

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
Colorado—Cont'd.	°	°	°	*Ins.*	*Ins.*
Downing †	80	15	48.2	0.96	1.0
Dumont †	70	18	40.1	1.43	7.0
Durango	73	21	46.7	0.45	1.0
Fleming	.....	.....	.....	2.20	12.0
Fort Collins †	77	20	45.8	1.39	3.8
Fort Morgan [2]	.....	23	45.0	0.06	0.0
Fox	.....	.....	.....	0.94	4.0
Garnett	82	12	41.6	0.10	T.
Gleneyrie †	70	19	43.4	0.44	.....
Gold Hill *[1]	71	14	42.0	2.93	16.8
Grand Junction †	80	24	52.3	1.12	1.5
Greeley †	82	19	47.5	0.81	
Gulch †	74	15	39.6	2.20	18.0
Gunnison †	73	5	39.8	.....	.....
Holly	.....	.....	.....	1.17	T.
Holyoke *a*	.....	.....	.....	2.36	8.0
Hugo (near)	78	12	43.4	0.49	4.8
Husted †	76	10	44.8	1.60	3.2
Lake Moraine †	56	— 1	29.5	1.75	17.5
Lamar †	87	23	52.5	0.45	.....
Laporte	.....	.....	.....	1.62	9.0
Las Animas †	83	23	50.9	0.85	0.0
Lay †	72	— 1	39.6	1.83	9.5
Leadville (near) *†[1]	63	7	32.0	1.50	15.1
Leroy †	84	21	45.8	1.77	9.0
Longmont †	84	23	49.8	.....	.....
Longs Peak	60	1	32.5	1.45	17.5
Loveland	.....	.....	.....	0.94	.....
Meeker †	76	9	42.4	2.19	5.6
Millbrook †	77	11	42.8	1.27	6.0
Minneapolis †	85	17	51.7	1.27	.....
Montrose †	80	18	47.5	0.97	3.0
Moraine †	65	4	36.6	1.29	12.5
Pagoda †	70	—11	38.6	3.50	30.5
Paonia †	.....	.....	.....	0.20	0.0
Parachute †	79	10	48.6	3.98	.....
Pinkhamton *[1]	81	2	40.1	1.95	19.5
Rangely †	81	23	48.0	0.05	0.0
Redcliff	.....	.....	.....	0.77	7.7
Rico †	64	3	35.9	1.66	13.0
Rockyford †	85	20	50.2	0.44	0.0
Ruby	.....	.....	.....	10.50	105.0
Saguache †	71	18	44.4	T.	T.
St. Cloud	.....	.....	.....	2.12	17.0
San Luis †	80	10	43.0	0.51	1.2
Santa Clara *[1]	65	12	40.8	3.85	19.0
Seibert †	.....	.....	.....	2.57	13.0
Smoky Hill Mine †	70	6	38.0	2.81	23.0
Stamford *[1]	60	4	31.8	2.60	26.0
Sulphur Springs †	73	— 3	40.4	2.40	19.0
Surface Creek †	77	15	46.5	1.23	1.5
Thon †	78	9	43.3	1.65	2.0
T. S. Ranch †	77	16	47.4	1.15	4.0
Twin Lakes	.....	.....	.....	1.09	10.0
Vilas	.....	.....	.....	2.19	.....
Walden	68	2	33.8	0.90	7.0
Wallet †	.....	.....	.....	1.70	3.0
Wray †	86	20	49.2	1.64	5.0
Yuma	.....	.....	.....	0.80	4.0
Connecticut.					
Bridgeport	73	25	48.4	2.53	
Canton †	80	17	47.2	2.55	T.
Colchester	80	23	48.3	2.77	T.
Hartford *b*	.....	.....	.....	2.49	T.
Middletown	78	22	49.1	2.65	T.
New London †	73	24	46.0	3.69	T.
Norwalk	76	21	47.8	2.41	
Southington *[1]	77	24	47.6	2.03	
Storrs	78	19	45.9	2.37	T.
Voluntown †	77	23	47.4	3.66	T.
Waterbury	77	22	49.0	1.97	T.
West Cornwall †	76	16	45.0	3.16	.....
Windsor	77	22	47.8	2.28	T.
Delaware.					
Milford	89	30	54.4	2.69	
Millsboro	86	27	52.5	3.20	
Newark	85	26	50.5	2.87	
Seaford †	86	29	53.6	3.98	
District of Columbia.					
Distributing Reservoir *[5]	85	30	54.8	2.60	
Receiving Reservoir *[5]	84	31	54.0	2.77	
West Washington	88	27	53.0	3.08	
Florida.					
Amelia †	81	47	67.0	4.16	
Archer †	92	40	70.2	5.24	
Bartow	89	47	71.2	4.07	
Boca Raton †	85	55	73.3	6.95	
Brooksville †	89	45	71.0	1.90	
Clermont †	94	48	72.0	2.01	
De Funiak Springs	88	38	64.9	4.50	
Earnestville †	94	43	71.3	3.68	
Emerson †	94	36	68.8	4.37	
Eustis †	89	40	70.7[e]	1.52	
Federal Point †	87	45	67.4	5.13	
Fort Meade † [1]	88*	44	69.0	3.57	
Frostproof †	91	52	72.0	2.17	

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
Florida—Cont'd.	°	°	°	*Ins.*	*Ins.*
Gainesville	90	42	69.2	4.89	
Grasmere †	90	47	71.2	1.58	
Haywood	90	37	66.7	6.99	
Huntington	91	46	70.6	4.82	
Kissimmee	.....	48	.....	2.75	
Lake Butler †	90	52	71.2	7.04	
Lake City †	93	42	71.9	5.00	
Lemon City †	89	58[f]	74.2[f]	10.55	
Macclenny †	92	42	68.4	4.51	
Manatee †	90	49	69.8	4.13	
Merritts Island †	86	52	72.4	3.18	
Milton *[1]	82	42	65.0	8.25	
Mullet Key †	82	54	71.7	2.39	
Myers †	90	53	72.5	7.26	
Oakhill *[1]	84	51	72.0	.....	
Ocala *†[1]	88	44	69.8	3.96	
Orange City	91	49	71.8	1.47	
Orange Park	89	40	69.8	3.74	
Orlando †	87	46	68.4	2.83	
Oxford *†[1]	92	55	71.9	2.34	
Plant City †	91	46	71.4	4.14	
Quincy	86[d]	53[d]	70.9[d]	7.66	
St. Francis †	90	39	68.3	2.09	
St. Francis Barracks	82	45	67.0	6.65	
Tallahassee †	84	40	65.4	9.29	
Tarpon Springs †	88	45	69.8	2.22	
Georgia.					
Adairsville † [e]	83	33	58.0	4.27	
Albany †	91	41	65.0	3.69	
Allentown †	93	37	64.2	4.16	
Americus †	94	35	65.4	3.00	
Belleville [4]	95	45	68.0	4.80	
Blakely †	88	38	65.8	3.57	
Brag †	91	37	65.8	2.20	
Canton †	.....	.....	.....	4.59	
Cartersville	85	33	58.6	3.83	
Cedartown	86	33	60.2	3.34	
Clayton †	85	32	56.2	11.65	
Columbus	90	35	63.6	5.09	
Covington	86	31	57.6	4.29	
Dahlonega †	86	31	57.6	7.10	
Diamond	88	27	55.3	5.44	
Dublin	.....	.....	.....	3.02	
Elberton †	88	37	61.3	5.02	
Fleming †	90	38	64.0	3.78	
Gillsville †	86	39	60.3	6.62	
Greenbush	85	31	58.1	.....	
Hawkinsville	87	28	62.6	3.60	
Hephzibah *†[6]	84	44	64.9	3.50	
Jesup	91	43	67.1	4.71	
Lagrange †	86	36	63.1	6.09	
Leverett	91	36	61.6	3.46	
Louisville †	88	37	63.0	3.39	
Lumpkin	89	38	65.5	4.77	
Macon † *b*	.....	.....	.....	3.30	
Marietta	83	34	58.2	4.35	
Marshallville †	87	40	64.6	5.57	
Milledgeville †	88	40	64.0	2.53	
Monticello *†[1]	82	40	63.4	4.55	
Morgan †	89	34	62.2	4.09	
Newnan †	89	38	60.9	4.83	
Piscola	89	41	67.7	6.50	
Point Peter	86	36	58.6	6.51	
Poulan †	89	34	64.0	2.68	
Quitman †	89	37	66.2	5.16	
Ramsey	86	33	59.7	6.13	
Resaca †	.....	.....	.....	5.25	
Reynolds	.....	.....	.....	4.25	
Rome †	85	33	59.3	3.16	
Sparta	89	36	62.2	3.75	
Talbotton †	85	36	60.6	3.38	
Tallapoosa	84	34	58.4	3.28	
Thomasville †	90	39	66.1	4.98	
Toccoa †	87	38	60.1	7.19	
Washington †	.....	.....	.....	3.28	
Whitesburg	.....	.....	.....	3.96	
Idaho.					
Blackfoot †	78	24	45.6	1.40	1.1
Boise Barracks †	86	29	49.9	1.10	T.
Burnside †	70	15	38.3	0.02	0.2
Cœur d'Alene	79	28	47.0	.....	.....
Corral *†[1]	71	16	37.6	0.88	.....
Downey	72	18	42.6	1.20	4.5
Fort Sherman †	87	27	47.5	1.65	T.
Gimlet †	77	10	41.4	0.96	5.0
Idaho City	80[c]	9[c]	40.6[c]	1.41	7.4
Kootenai †	84	24	50.6	0.58	
Lake †	50	6	30.0	0.00	
Lewiston *a* †	90	32	55.0	1.38	
Lost River †	.....	.....	.....	0.13	1.0
Martin †	66	9	37.8	0.40	4.0
Marysville	64	12	41.4	1.51	8.1
Minidoka †	80	16	47.8	0.30	3.0
Murray †	75	23	44.8	2.40	3.0
Nampa	87	27	50.4	0.96	
Oakley	83	13	47.6	0.92	.....

TABLE II.—*Meteorological record of voluntary and other cooperating observers*—Continued.

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
Idaho—Cont'd.	°	°	°	*Ins.*	*Ins.*
Ola †	88	23	47.0	1.35	
Paris	72	8	37.8	0.79	.....
Payette †	90	28	53.0	0.74	
Pollock †	87	29	53.4	0.41	
Rexburg	.....	.....	.....	0.10	
Roseberry †	58	15	34.6	0.50	0.2
St. Maries [c]	80	30	48.8	1.16	
Soldier †	70	11	37.1	0.75	5.0
Swan Valley †	63	12	36.9	1.68	12.2
Warren †	80	12	40.9	1.47	.....
Illinois.					
Albion †	85	28	54.4	7.47	
Alexander †	79	28	52.4	4.85	
Ashton *†[1]	78	27	47.2	3.19	2.0
Atlanta *[5]	78	27	51.4	4.33	0.1
Atwood *a* *†[2]	76	20	47.6	8.08	T.
Atwood *b*	.....	.....	.....	5.12	
Aurora *a*	84	18	48.8	3.04	.....
Aurora *b*	78	19	47.2	2.88	0.6
Beardstown †	.....	.....	.....	5.26	
Bloomington †	82	23	49.2	3.92	1.0
Bushnell †	84	28	50.5	3.90	
Cambridge	78	26	48.2	3.70	0.5
Carlinville †	79	30	53.4	5.85	
Carlyle	.....	.....	.....	4.45	
Carrollton	77	29	50.6	4.33	
Charleston	79	25	50.8	6.41	T.
Chemung *[1]	76	20	45.0	4.66	
Chester	.....	.....	.....	6.28	
Cisne †	82	29	54.1	5.51	
Clearcreek †	82	21	48.0	2.36	2.0
Coatsburg †	80	29	52.6	4.09	
Cobden †	81	34	55.7	8.31	
Cordova	.....	.....	.....	3.63	
Decatur †	80	25	51.4	3.87	T.
Dixon †	80	22	48.1	3.43	6.0
Duquoin *[1]	86	38	55.0	5.69	
Dwight †	82	18	48.4	2.74	0.5
East Peoria †	81	24	50.4	3.19	
Effingham †	81	27	53.2	5.68	T.
Fort Sheridan †	76	23	45.1	2.20	.....
Friendgrove *†[4]	.....	30	52.8	8.00	
Galva †	81	24	48.6	2.61	T.
Glenwood *†[1]	80[d]	26[e]	46.6[d]	1.93	
Golconda †	82	33	56.5	7.65	
Grafton †	.....	.....	.....	6.51	
Greenville †	82	30	53.6	3.90	
Griggsville †	80	30	52.4	4.25	
Halliday *[5]	80[d]	34[d]	57.4[d]	5.15	
Havana †	78	32	52.0	3.74	T.
Herrin *[1]	78	38	56.6	6.34	
Hillsboro †	79	29	53.2	4.07	T.
Iron †	82	31	56.0	6.88	
Joliet †	81	21	50.3	2.87	0.4
Jordans Grove †	80	35	55.2	3.55	T.
Kankakee *a* †	77	23	48.0	1.99	
Kishwaukee	77	22	46.2	2.91	2.0
Knoxville *a* *[5]	79	26	48.3	4.18	T.
Lagrange †	80	20	47.2	3.50	0.5
Laharpe *[1]	74	30	50.4	5.85	
Lanark *†[1]	76	24	46.6	2.67	1.0
Lexington	80	22	50.4	2.70	
Loami †	.....	.....	.....	4.27	
Louisville †	79	28	53.6	6.00	T.
McLeansboro †	81	30	54.3	7.27	
Martinsville †	80	25	52.2	5.72	0.5
Martinton †	83	20	49.0	2.26	
Mascoutah *[5]	80	34	55.2	8.64	
Mattoon *[1]	78	27	51.9	6.38	
Minonk †	78	21	49.2	2.93	2.0
Monmouth †	80	27	49.6	3.25	.....
Morgan Park	74	20	45.3	.....	.....
Morrisonville †	78	28	51.4	5.27	
Mount Carmel †	.....	.....	.....	6.20	T.
Mount Pulaski	76	26	51.0	2.98	0.5
Mount Vernon	81	20	53.0	4.47	
New Burnside †	83	34	57.1	5.82	
Olney *a* *[1]	82	26	55.2	6.49	T.
Oregon †	76	20	47.0	2.40	.....
Oswego *[1]	76	20	46.0	2.36	T.
Ottawa †	81	20	48.8	1.88	2.2
Palestine †	84	26	53.0	5.60	1.0
Paris	.....	22	.....	4.63	.....
Peoria *a* †	.....	.....	.....	3.50	.....
Peoria *b* †	81	28	50.4	2.87	0.5
Philo †	80	20	49.4	3.48	
Plumhill †	80	32	54.4	5.13	
Rantoul †	82	22	49.2	3.54	T.
Reynolds	79	27	48.7	3.84	T.
Riley †	76	21	45.6	2.59	0.4
Robinson *†[3]	82	30	51.6	6.41	
Rockford †	81	26	47.2	3.91	1.1
Rose Hill *†[1]	84	33	54.7	6.30	
Roundgrove †	82	22	49.2	2.88	.....
St. Charles *†[1]	80	28	46.3	3.47	T.
St. John *†[1]	81	34	54.6	4.55	

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
Illinois—Cont'd.	°	°	°	*Ins.*	*Ins.*
Scales Mound	74	22	46.4	3.57	4.0
Streator †	80	23	48.8	1.88	2.3
Sycamore †	77	22	45.4	3.78	T.
Tiskilwa *†[3]	.....	24	45.8	2.77	1.0
Tuscola †	81	23	50.6	4.76	0.1
Warsaw †	.....	.....	.....	1.20	
Walnut †	.....	24	.....	3.71	3.2
Wheaton *[3]	.....	27	45.2	4.36	3.8
Winnebago †	76	23	46.6	3.62	2.0
Zion †	75	20	46.1	3.16	3.0
Indiana.					
Anderson †	80	21	50.2	4.70	3.0
Angola *[1]	80	15	46.6	2.90	2.4
Bloomington †	82	23	52.0	6.02	T.
Bluffton †	83	21	47.6	4.25	8.0
Bright †	80	23	51.7	4.54	0.5
Butlerville †	83	23	53.0	4.63	1.0
Cambridge City †	81	21	49.0	5.45	2.0
Columbia City *[1]	76	20	47.0	3.20	2.5
Columbus †	83	22	51.7	5.25	0.2
Connersville †	80	21	49.3	4.99	1.0
Delphi †	83	18	48.9	2.89	T.
Edwardsville *†[1]	82	27	55.0	4.12	
Evansville †	86	29	54.4	5.89	
Farmland †	79	21	48.4	4.47	8.0
Fort Wayne	80	20	48.0	3.87	2.0
Greencastle †	79	23	50.4	3.64	3.7
Greensburg	80	29	54.8	5.97	
Hammond †	73	26	46.5	0.99	2.0
Huntingburg	78	29	51.2	8.00	
Huntington	80	19	47.6	3.45	5.5
Jasper †	84	27	55.6	5.35	T.
Jeffersonville	85	28	55.5	4.11	
Knightstown †	82	22	50.4	6.02	3.0
Knox	87	18	49.9	1.90	
Kokomo †	84	21	50.5	3.76	1.0
Lafayette †	81	20	49.0	2.86	T.
Laporte	78	.....	.....	2.35	.....
Logansport *b* †	81	21	47.4	2.84	
Madison †	84	26	54.2	4.12	T.
Marengo †	87	27	55.6	5.08	T.
Marion †	81	19	49.1	3.90	2.0
Mauzy †	80	21	50.0	5.15	2.5
Mount Vernon †	.....	.....	.....	6.74	
Northfield †	79	20	48.8	4.57	4.0
Princeton *[1]	84	28	54.0	5.98	0.2
Richmond	81	22	50.7	4.83	0.5
Rockville †	82	22	50.9	3.97	
Rushville †	.....	.....	.....	5.57	1.5
Salem	90	22	53.8	3.65	
Scottsburg	85	27	56.3	4.42	T.
Seymour †	82	24	51.5	3.44	
Shelbyville	82	25	51.4	5.47	T.
South Bend †	80	15	47.2	2.52	1.5
Syracuse †	.....	.....	.....	2.28	0.2
Terre Haute †	80	24	52.6	4.33	
Tipton †	84	20	51.3	3.95	2.0
Topeka †	79	23	47.6	2.13	T.
Valparaiso †	80	18	47.6	2.50	
Vevay	88	28	54.0	5.80	
Vincennes †	86	28	55.6	6.93	
Warsaw †	80	19	49.2	3.52	T.
Washington †	84	21	54.8	5.73	0.1
Worthington †	82	25	53.8	5.85	T.
Indian Territory.					
Afton	86	37	58.8	2.84	
Eufaula	.....	.....	.....	7.01	
Healdton †	87	37	63.0	2.55	
Kemp †	83	39	63.4	3.26	
Lehigh †	82	37	60.8	4.83	
Purcell	94	.....	.....	3.06	
South McAlester	85	35	62.3	7.75	
Tahlequah	84	31	60.2	6.60	
Tulsa †	.....	.....	.....	5.60	
Iowa.					
Adair	.....	.....	.....	7.28	
Afton	80	26	49.0	8.01	
Algona *[1]	78	24	46.8	3.50	2.0
Alta *a* †	78	20	45.6	4.28	
Amana †	77	27	48.0	7.17	
Ames *b*	81	26	48.2	5.70	
Ames (near)	80	26	47.8	5.82	
Atlantic †	79	25	48.1	6.80	
Atlantic (near)	78	25	49.8	5.52	
Audubon	77	23	46.2	5.27	
Belknap	80	28	50.3	3.89	
Belleplaine	75	26	46.0	7.69	
Bonaparte †	82	28	50.2	2.41	
Britt	76	21	44.6	3.63	T.
Carroll	78	22	46.6	6.81	
Cedarfalls	78	25	47.8	5.59	
Cedar Rapids †	80	26	47.4	5.97	
Centerville	80	28	50.6	8.37	
Chariton	77	28	50.2	8.48	
Charles City †	76	23	46.1	3.82	T.
Clarinda †	82	29	50.8	6.00	

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
Iowa—Cont'd.	°	°	°	*Ins.*	*Ins.*
Clinton	82	24	49.7	2.36	3.0
College Springs	84	26	51.2	5.29	
Corning †	79	25	48.9	7.88	
Council Bluffs	80	28	50.3	5.40	
Cresco †	74	22	44.8	2.23	T.
Decorah †	78	21	46.2	3.76	
Delaware *[3]	73	24	45.2	4.89	
Denison †	78	22	47.6	5.88	
Dows	77	23	46.4	4.69	
Eldora	81	23	45.8	5.87	
Elkader †	79	20	46.1	4.05	
Fairfield †	76	28	48.3	4.11	
Fayette †	78	20	45.8	3.00	
Fonda	.....	27	.....	6.09	
Forest City	76	22	44.8	4.16	
Fort Madison *†[1]	80	35	52.9	4.13	
Fredericksburg	.....	.....	.....	3.01	
Galva †	78[c]	24[d]	48.2[c]	3.79	
Gardengrove	80	24	48.2	6.95	
Gladbrook	.....	.....	.....	7.32	
Glenwood †	80	21	46.5	5.65	
Grand Meadow *[1]	73	22	44.4	3.48	
Greene	78	24	46.5	3.62	T.
Greenfield †	81	24	49.0	5.12	
Grinnell †	76	27	48.0	7.04	
Grundy Center	79	24	45.9	5.81	1.0
Hampton	77	23	45.0	4.96	0.4
Hawkeye	.....	.....	.....	3.15	
Hopeville †	78	27	49.2	8.92	
Humboldt †	80	23	47.0	4.05	
Independence †	.....	21	.....	6.13	
Indianola †	80	26	51.2	6.10	
Iowa City *a* †	81	27	48.9	4.60	
Iowa City *b*	78	20	49.0	.....	
Iowa Falls †	77	24	46.2	4.31	T.
Keosauqua	84	29	51.5	3.66	
Knoxville	81	27	50.0	7.05	
Lansing	77	21	48.8	2.24	
Larchwood	.....	.....	.....	3.29	T.
Larrabee †	82	19	44.9	2.84	T.
Leclaire	.....	.....	.....	3.60	
Lemars	81	23	47.0	4.36	
Lenox *[1]	77	31	49.6	7.21	
Logan †	82	28	49.3	6.18	
Malvern *[1]	88	23	49.6	5.61	
Maple Valley	.....	.....	.....	3.65	
Maquoketa	78	26	49.0	3.24	2.0
Marshall †	79	26	47.7	5.98	
Millman	.....	.....	.....	7.90	
Monticello *†[1]	75	25	46.9	5.86	
Moorar	79	26	49.6	.....	
Mountayr †	86	26	50.4	7.93	
Mount Pleasant *[1]	74	32	50.8	3.59	
Mount Vernon *a* *[1]	74	25	47.7	6.52	
Mount Vernon *b*	79	24	47.0	6.62	0.5
Neola	80	25	47.6	6.70	
New Hampton	74	23	46.4	2.26	
Newton †	78	26	48.8	6.09	
North McGregor	.....	.....	.....	2.84	
Northwood	75	20	44.4	2.22	
Odebolt	.....	.....	.....	6.36	
Ogden	79	26	48.1	5.24	
Osage *†[3]	.....	27	43.4	3.21	0.5
Osceola	78	28	49.6	9.74	
Oskaloosa †	84	27	49.9	5.32	
Ottumwa [1]	81	31*	50.3	5.53	
Ovid †	80	27	50.1	7.20	
Plover	79	20	47.8	3.86	
Primghar	79	20	46.3	4.78	T.
Red Oak	81	26	50.6	5.62	
Reinbeck	.....	.....	.....	4.58	
Rockwell City	81	23	47.0	3.44	
Sac City †	77	20	45.5	5.00	
St. Charles	81	26	49.1	6.45	
Seymour †	80	28	50.1	5.75	
Sibley	80	20	44.7	3.68	0.5
Sidney	76	29	50.6	5.82	
Sigourney	82	27	50.0	4.46	
Spencer	79	20	45.4	4.20	T.
Spirit Lake †	79	20	44.8	3.46	T.
Stuart	78	26	48.2	7.03	
Toledo	77	25	47.0	4.88	
Villisca †	80	27	49.6	7.79	
Vinton *[1]	76	28	47.4	6.73	
Washington	81	26	48.0	.....	
Waterloo	78	25	46.2	5.16	
Waukee	78	23	49.3	9.54	
Waverly	77	24	46.6	5.04	T.
Webster City	76	25	47.7	3.81	
Westbend *†[1]	77	24	44.5	4.21	T.
Wilton Junction †	79	26	48.4	4.33	
Winterset †	80	25	50.4	9.86	
Kansas.					
Abilene †	89	29	54.8	3.14	
Achilles *[3]	88[d]	30	44.8[d]	4.54	T.
Altoona *†[3]	81	34	54.9	3.58	

TABLE II.—*Meteorological record of voluntary and other cooperating observers*—Continued.

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
Kansas—Cont'd.	°	°	°	*Ins.*	*Ins.*
Anthony	.....	.....	.....	3.40	
Assaria*[5]	84	28	50.4	2.75	
Atchison †	84	33	52.6	7.17	
Augusta	86	30	55.8	2.80	
Baker	84	31	53.6	5.64	
Beloit †	86	30	54.4	3.52	
Burlington †	88	31	58.0	1.95	
Campbell	85	29	52.4	3.49	
Colby †	83	25	48.8	4.06	1.0
Columbus †	83	31	56.4	2.84	
Coolidge †	85	23	51.4	2.09	
Cunningham †	81	29	54.9	4.36	
Downs	.....	.....	.....	5.04	
Dresden*[1]	83	28	47.6	7.06	2.5
Effingham [6]	81	32	53.5	.....	
Elgin*[1]	83	35	55.7	4.70	
Ellinwood †	89	30	53.7	3.50	T.
Emporia*†[1]	83	36	55.3	3.10	
Englewood †	91	26	56.4	3.79	
Eureka †	.....	.....	.....	2.95	
Eureka Ranch †	86	29	51.2	5.96	
Fall River	83	33	57.6	3.04	
Fort Riley †	87	32	55.5	2.08	
Fort Scott †	84	32	55.4	3.59	
Frankfort	86	31	55.4	4.35	
Garden City †	87	24	53.3	2.09	
Garfield	.....	.....	.....	4.67	
Gibson*[5]	86	27	49.6	4.90	T.
Goodland	81	23	47.7	1.89	
Gove*†[1]	83	31	51.7	4.68	
Grainfield*[6]	82	28	50.4	3.80	
Grenola *[1]	86	32	56.0	5.77	
Halstead	82	30	51.8	3.80	
Horton	84	32	52.9	4.87	
Hutchinson †	90	34	57.0	3.19	
Independence †	87	33	57.9	3.79	
Lakin †	92	.....	.....	1.70	
Lawrence	84	32	54.2	1.96	
Lebo †	86	32	54.9	2.15	
Macksville	88	30	53.0	3.62	
McPherson	89	32	54.6	4.13	
Manhattan *b*	89	31	54.8	4.19	
Manhattan *c*	88	28	54.9	3.66	
Marion †	88	30	55.4	2.35	
Meade †	96	30	58.2	4.63	
Medicine Lodge †	91	28	56.6	3.73	
Minneapolis †	88	27	53.8	2.38	
Morantown †	82	32	55.4	3.04	
Morland	85	28	49.9	6.00	T.
Morton †	87	25	54.6	3.49	
Mounthope*[1]	84	37	54.9	3.18	
Ness City	.....	27	.....	4.97	
Newton	85	31	55.4	3.26	
Norton	84	27	50.0	4.71	T.
Norwich †	88	31	56.4	3.36	
Oberlin †	.....	.....	.....	6.70	
Olathe †	86	31	54.8	2.53	
Osage City †	85	31	54.8	2.49	
Oswego	85	33	58.0	3.33	
Ottawa	86	29	55.2	2.28	
Paola †	85	28	54.4	1.35	
Phillipsburg	86	30	52.6	4.56	
Pleasant Dale	88	30	52.4	5.42	T.
Pratt	87	30	53.6	3.30	
Rome*†[1]	84	33	55.8	4.30	
Russell	88	28	54.0	5.68	
Salina †	89	26	54.1	3.72	
Sedan †	83	32	56.4	5.15	
Seneca	82	31	52.2	4.36	
Sharon Springs*[1]	87	29	49.2	3.00	
Toronto	87	30	56.0	3.35	
Ulysses †	86[1]	25[1]	51.8[1]	1.40	
Wallace*[1]	84	26	51.1	2.09	T.
Wamego*[1]	87	32	53.6	3.20	
Wellington*[1]	82	36	56.6	4.81	
Winona*[5]	89	28	52.0	3.75	
Yates Center	85	31	55.5	4.06	
Kentucky.					
Alpha †	90	29	57.6	7.26	
Ashland	85	29	54.0	.....	
Bardstown †	87[d]	27[d]	55.2[d]	6.16	
Blandville †	80	34	56.9	7.77	
Bowling Green *a**[1]	84	28	55.3	8.57	
Bowling Green *b* †	85	32	57.6	7.45	
Burnside †	.....	.....	.....	5.51	
Caddo †	81	26	53.4	3.73	T.
Canton*†[1]	82	35	58.8	9.97	
Carlisle	82	26	52.9	4.31	
Carrollton †	87	31	56.8	2.96	T.
Catlettsburg*†[1]	82	33	51.4	4.65	
Earlington	86	34	58.6	6.21	
Edmonton †	82	31	56.0	6.57	
Ensor	83	29	56.7	5.27	
Eubank †	84	25	54.0	7.10	
Falmouth †	.....	.....	.....	4.26	
Fords Ferry †	86	30	56.0	5.38	

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
Kentucky—Cont'd.	°	°	°	*Ins.*	*Ins.*
Frankfort †	83	29	54.2	5.58	
Franklin †	80	35	56.8	6.76	
Georgetown	80	27	54.0	.....	
Greensburg †	87	27	55.6	7.16	
Henderson †	89	31	57.6	6.29	
Hopkinsville †	84	32	55.3	8.84	
Leitchfield †	86	26	54.1	5.72	
Lyndon	82	26	54.4	3.90	
Marrowbone †	85	28	56.4	7.82	
Maysville	85	28	53.8	4.17	
Middlesboro †	87	27	54.8	6.75	
Mount Sterling †	81	28	53.2	5.60	
Owensboro †	84	30	55.4	6.72	
Owenton †	84	25	53.3	7.07	T.
Paducah *a* †	.....	.....	.....	9.23	
Paducah *b* †	85	36	59.3	9.89	
Pleasure Ridge Park †	86	27	55.0	4.40	
Princeton	85	32	57.2	6.45	
Richmond †	88	27	54.5	6.77	
Russellville †	87	30	58.0	7.81	
St. John †	84	27	54.8	5.11	
Sandyhook	.....	.....	.....	4.78	
Shelbyville †	89	27	54.6	4.59	
Southfork[2]	.....	.....	55.7	5.16	
Vanceburg †	82	27	50.2	4.30	
Williamsburg †	85	29	59.0	6.48	
Louisiana.					
Abbeville	84	47	67.8	12.40	
Alexandria †	84	42	66.2	3.31	
Amite †	88	40	68.3	6.07	
Bastrop †	84	37	64.6	1.52	
Baton Rouge †	85	44	67.6	7.27	
Calhoun	83	38	64.2	2.00	
Cameron †	.....	.....	.....	2.53	
Cheneyville †	90	40	65.5	2.58	
Clinton †	84	41	65.2	2.77	
Covington	86	42	68.5	7.74	
Davis	83	34	61.0	1.93	
Donaldsonville †	90	45	69.2	11.08	
Elm Hall	85	42	64.6	7.15	
Emille †	83	46	66.4	4.83	
Farmerville	84	39	64.2	1.98	
Franklin †	86	46	68.6	7.26	
Grand Coteau	85	47	68.6	2.46	
Hammond	85	42	65.5	6.45	
Houma	86	44	68.4	10.64	
Jeanerette	88	44	68.6	7.40	
Lafayette †	88	42	68.0	4.49	
Lake Charles †	87	45	68.0	2.83	
Lake Providence	85	41	64.8	2.00	
Lawrence	87	48	68.8	6.66	
Liberty Hill	86	36	65.0	3.44	
Mansfield †	86	37	64.8	2.81	
Melville	82	50	67.0	1.57	
Minden	88	40	64.4	1.89	
Monroe †	81	44	65.0	2.29	
Montgomery	88	37	66.4	2.46	
New Iberia	84[d]	48[d]	68.6[d]	8.74	
Oakridge †	87	38	64.6	2.67	
Oberlin	89	40	66.0	3.60	
Opelousas †	86[d]	43[d]	68.0[d]	3.17	
Oxford †	89	36	64.3	2.92	
Paincourtville †	87	44	68.5	10.28	
Plain Dealing †	81	40	64.6	4.31	
Rayne	90	41	68.2	3.76	
Robeline	86	35	63.8	2.26	
Ruston	83	42	65.1	2.84	
Schriever	89	43	68.4	8.18	
Shellbeach	84	49	69.8	4.76	
Southern University †	81	45	65.4	5.35	
Sugar Ex. Station †	82	49	67.6	5.89	
Sugartown †	84	45	68.6	1.26	
Thibodeaux	.....	.....	.....	9.60	
Venice †	82	50	67.4	4.85	
Wallace	84	48	68.0	6.41	
Whitehall	88	41	68.1	4.69	
White Sulphur Springs	84	42	67.4	2.85	
Maine.					
Bar Harbor	70	16	42.5	2.75	4.0
Belfast *[6]	62	21	43.1	2.90	6.0
Cornish *[1]	82	16	44.7	3.07	3.2
Fairfield	77	11	43.4	2.40	
Fort Fairfield	75	12	42.0	1.76	
Gardiner	75	16	45.4	2.86	1.5
Kineo †	68	8	39.0	3.27	2.0
Lewiston	76	18	44.8	2.93	
North Bridgton	77	14	43.6	2.93	3.0
Orono	74	14	42.3	3.03	
Maryland.					
Annapolis	81	29	54.9	2.80	
Bachmans Valley	85	23	49.2	3.37	
Boettcherville[2]	.....	.....	46.1	2.30	
Charlotte Hall †	90	32	54.6	2.33	
Cherryfields †[2]	.....	.....	52.9	2.73	T
Chestertown †	81	30	51.8	3.58	
Collegepark	86[f]	26[f]	51.8[f]	3.35	

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
Maryland—Cont'd.	°	°	°	*Ins.*	*Ins.*
Cumberland *b*	86	31	54.9	3.00	T.
Darlington †	84	27	51.0	3.16	
Deerpark	.....	17	.....	2.77	.....
Denton	87	28	53.5	2.90	
Easton †	85	30	52.3	2.36	
Ellicott City	81	30	52.8	2.46	
Fallston*[1]	79	28	50.2	3.22	T.
Flintstone	86	20	49.2	2.75	
Frederick	89	27	52.2	2.32	
Grantsville	79	18	45.7	2.99	0.2
Greatfalls*[5]	83	30	53.5	2.18	
Greenspring Furnace	87	25	51.2	2.19	
Hagerstown †	88	26	53.5	2.37	
Jewell †	87	27	53.1	2.16	
Johns Hopkins Hospital	84	27	52.2	3.35	
Laurel	87	26	51.3	3.29	
McDonogh *	85	26	53.3	.....	
Mardela Springs †	86	29	52.6	4.15	
Mount St. Marys Coll. †	86	24	50.9	2.90	
New Market	89	25	52.8	3.15	
Pocomoke City	89	32	56.8	3.29	
Port Deposit	83	28	52.5	2.66	
Princess Anne	86	25	52.7	3.24	
Sharpsburg	88	26	51.6	2.21	
Smithsburg	83	24	49.5	2.77	
Solomons †	81	31	53.9	2.00	
Sunnyside	78	15	45.4	5.06	0.4
Taneytown †	94	25	52.4	3.10	
Van Bibber	80	28	52.1	3.81	
Western Port	87	24	50.7	3.07	
Westminster	88	23	53.7	3.13	
Woodstock	86	26	50.8	2.63	
Massachusetts.					
Amherst	81	20	47.4	2.57	T.
Bluehill (summit)	78	18	46.4	3.20	1.0
Cambridge *a*	83	20	49.6	2.70	
Chestnut Hill	83	19	49.5	3.23	T.
Concord †	84	20	47.2	2.26	T.
Fallriver*[1]	73	22	45.4	3.95	T.
Fitchburg *b*	85	18	47.5	1.81	T.
Framingham	84	20	51.0	2.85	
Groton	82	17	46.4	2.04	
Hyannis*†[1] [c]	72	26	49.1	5.57	
Lawrence	84	17	48.0	2.06	
Leeds	82	19	46.9	2.32	T.
Leicester Hill	80	17	45.8	1.93	T.
Lowell *a*	82	19	47.6	2.25	T.
Middleboro	75	20	46.1	3.80	T.
Monson	84	20	48.2	1.61	T.
New Bedford *a*	67	22	45.4	4.30	
Pittsfield	80	18	44.6	3.67	
Springfield Armory	80	14	45.2	2.24	
Taunton *b*	74	23	46.8	4.07	T.
Wakefield	82	20	48.6	2.88	T.
Westboro †	85	18	48.9	2.43	
Worcester *b*	80	21	48.1	2.65	T.
Michigan.					
Adrian	78	17	46.7	3.06	2.5
Allegan	80	10	45.2	2.70	T.
Alma	74	14	43.0	3.17	T.
Ann Arbor	78	16	44.8	3.07	T.
Arbela	73	16	44.4	2.62	.....
Baldwin	71	10	41.7	4.49	T.
Ball Mountain	75	13	42.4	1.51	1.3
Baraga	75	9	37.2	1.88	1.3
Battlecreek	79	16	45.2	2.18	0.3
Bay City *b*	73	20	46.3	3.61	T.
Benton Harbor	78	18	45.8	2.07	T.
Benzonia	70	15	43.0	3.15	T.
Berlin	75	15	42.6	1.92	1.8
Berrien Springs	80	17	45.7	2.26	4.0
Big Rapids	73	13	42.0	4.56	T.
Birmingham	76	18	45.2	2.67	0.5
Boon	69	6	38.6	5.39	0.5
Calumet	73	5	37.6	2.29	1.5
Camden	78	17	44.9	2.67	4.0
Carsonville	75	18	44.1	1.04	.....
Charlevoix	74	14	41.7	1.50	T.
Cheboygan	74	10	39.6	3.06	T.
Clinton	79	15	45.2	2.25	1.7
Cold Water	77	15	44.9	2.65	0.0
East Tawas	68	15	40.2	4.06	T.
Eloise	77	18	45.0	2.00	T.
Escanaba †	64	12	37.4	2.35	2.0
Ewen	75	9	38.1	1.47	2.5
Fairview	78	11	43.0	1.38	1.2
Fitchburg	76	12	43.3	1.77	T.
Flint	76	16	42.2	2.06	.....
Gladwin	71	15	41.0	5.90	T.
Grand Rapids *b*	78	13	44.0	3.07	T.
Grape	78	18	46.0	3.09	2.5
Grayling	72	5	40.8	4.57	1.0
Hanover	75	13	44.9	2.93	1.5
Harrison	76	8	40.7	4.12	0.5
Harrisville	75	13	39.4	5.22	4.3
Hart	69	18	44.0	4.16	0.2

TABLE II.—*Meteorological record of voluntary and other cooperating observers*—Continued.

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
	°	°	°	*Ins.*	*Ins.*
***Michigan*—Cont'd.**					
Hastings	73	16	44.4	2.95	0.5
Hayes	74	17	42.0	3.08	.....
Highland Station	75	16	44.3	2.07	1.0
Hillsdale	78	10	44.6	2.09	T.
Holland *[10]	59	18	44.6	.....	.....
Howell	74	15	44.5	2.25	T.
Humboldt	71	5	35.1	0.93	1.0
Ionia	75	16	44.8	2.66	.....
Iron River	72	6	37.2	2.60	1.5
Ivan	70	10	39.8	5.72	1.0
Jackson	77	17	44.9	1.32	.....
Jeddo	74	19	42.6	1.90	0.2
Kalamazoo	78	16	45.4	3.17	T.
Lake City	71	10	40.0	5.78	T.
Lansing	75	15	43.6	2.40	0.8
Lapeer	74	15	44.0	2.30	0.5
Lathrop	74	5	36.2	1.68	2.0
Ludington	67	19	43.0	1.08	T.
Luzerne	75	7	38.0	5.56	3.0
Mackinaw City	72	10	37.6	2.98	.....
Madison	78	16	45.9	2.90	2.3
Mancelona	75	8	40.4	5.74	1.0
Manistee	69	16	41.3	4.00	.....
Manistique	60	11	35.4	3.18	1.2
Mayville	74	16	43.2	2.20	T.
Middle Island *[10]	67	15	39.2	.....	.....
Midland	.....	.....	.....	2.63	.....
Mottville	79	11	46.2	3.05	T.
Mount Clemens	76	17	44.4	.....	T.
Mount Pleasant *b*	72	19	43.0	2.95	T.
Muskegon	73	18	42.8	2.81	T.
Newberry	65*	0	33.5*	2.25	1.0
North Manitou Island *[10]	64	15	39.0	.....	.....
North Marshall	77	13	43.4	2.56	T.
Northport	72	15	40.6	2.85	T.
Old Mission	70	15	40.8	4.14	1.0
Olivet	75	17	44.8	2.42	0.3
Ovid	75	16	43.9	2.35	1.0
Owosso	76	10	44.2	3.05	.....
Parkville	.....	.....	.....	2.87	1.0
Petoskey	72	13	40.0	4.03	.....
Plymouth	77	11	44.2	2.10	T.
Point Aux Barques *[10]	76	21	40.8	.....	.....
Port Austin	75	12	40.6	2.85	.....
Powers	74	10	39.2	1.90	0.0
Reed City	72	10	40.6	4.67	.....
Rockland	76	5	39.6	1.40	1.2
Rogers City	75	7	37.5	5.81	0.5
Romeo	73	21	45.5	0.88	0.0
Saginaw	75	17	44.0	2.65	.....
St. Ignace	.....	.....	.....	3.28	.....
St. Johns	75	15	44.6	2.20	1.0
Sandbeach *b*	74	12	40.2	3.54	0.1
Saranac	78	13	45.4	2.65	3.0
Sidnaw	70	8	37.6	0.94	.....
Somerset	76	15	43.9	2.41	1.2
South Haven	79	18	43.5	1.99	.....
Stanton	75	12	42.4	2.86	T.
Thomaston	74	6	37.8	1.44	3.0
Thornville	74	17	45.9	1.33	3.4
Thunder Bay Island *[10]	58	13	37.7	.....	.....
Traverse City	74	20	44.6	5.00	0.0
Valley Center	75	15	42.4	2.64	2.5
Vandalia	79	16	46.6	2.57	2.1
Wasepi	79	15	44.8	2.10	0.0
Waverly	78	14	44.3	2.56	0.3
West Harrisville	71	15	39.2	4.45	0.2
Wetmore	73	3	36.2	2.09	7.0
White Cloud	72	13	42.2	3.74	0.1
Ypsilanti	77	16	45.4	2.47	1.0
Minnesota.					
Ada†	88	13	44.6	0.70	T.
Alexandria†	82	9	42.4	1.57	T.
Beardsley†	90	17	45.2	1.76	.....
Belleplaine *[1]	70	28	42.4	1.95	T.
Bermidji	.....	.....	.....	0.90	2.7
Bingham Lake	76	20	45.7	.....	.....
Bird Island	78	18	44.9	1.66	2.0
Blooming Prairie†	75	21	44.0	1.45	T.
Bonniwell	80	19	45.8	1.30	
Caledonia†	73	20	46.2	2.32	T.
Camden	83	18	45.2	3.63	5.0
Campbell	89	15	43.4	0.92	
Collegeville	80	17	44.9	2.02	1.0
Crookston†	75	14	45.6	0.39	T.
Dawson *[1]	86	20	41.4	1.55	2.0
Detroit City	86	11	42.3	1.75	T.
Faribault	75	22	44.4	1.66	.....
Farmington†	80	18	42.8	2.15	4.0
Fergus Falls†	86	15	43.5	1.33	0.5
Glencoe†	78	0	42.7	1.44	
Glenwood†	82	15	42.6	2.49	
Grand Meadow†	75	20	44.3	1.64	2.0
Grand Portage	47	9	31.6	2.16	
Granite Falls	83	18	45.0	2.32	
Koochiching	81	5	38.8	0.28	T.
***Minnesota*—Cont'd.**					
Lake City	80	18	45.9	0.86	T.
Lakeside†	79	20	45.0	2.50	2.0
Lake Winnibigoshish [1]	79*	11	38.5	1.03	3.8
Lambert†	80	11	40.2	T.	T.
Lawrence	80	16	43.7	.....	.....
Leech Lake [1]	82*	11	41.0	1.46	
Lesueur *[1]	80	20	48.4	1.97	
Long Prairie†	86	14	43.0	1.57	0.8
Luverne†	80	19	45.6	2.35	1.0
Mapleplain	80	19	45.2	1.38	1.6
Maplewood *[1]	77	25	45.1	.....	.....
Mazeppa [1]	80*	18	42.2	0.90	T.
Milaca [1]	92	12	44.4	.....	.....
Milan†	88	17	45.2	2.29	2.0
Minneapolis *a*†	78	20	45.2	1.61	0.9
Minneapolis *b* [1]	76*	20	44.0	1.52	1.5
Minnesota City *†[1]	80	24	47.4	2.35	
Montevideo†	87	18	44.4	1.91	0.5
Morris	84	18	44.0	2.53	0.5
Mount Iron	78	8	39.2	0.20	2.0
New London	80	12	40.2	0.93	0.5
New Richland *[1d]	76	24	46.0	.....	.....
New Ulm†	80	20	45.8	2.95	0.5
Park Rapids†	85	10	41.0	2.00	4.0
Pine River [1]	72*	10	42.2	1.39	0.2
Pleasant Mounds†	80	23	46.0	3.54	T.
Pokegama Falls [1]	63*	8	42.3	1.63	
Redwing	.....	.....	.....	1.14	
Reeds	.....	.....	.....	1.64	
Rolling Green	75	21	43.4	4.85	
Roseau	75	9	39.4	0.24	1.3
St. Charles†	75	19	44.9	2.20	2.0
St. Cloud	75	15	41.4	1.56	
St. Olaf	86	15	43.2	1.35	
Sandy Lake Dam [1]	75*	12	41.1	0.53	
Sauk Center	81	10	42.7	1.96	T.
Shakopee [6]	78*	24	47.5	1.19	0.5
Tower†	77	−3	35.5	0.70	4.0
Two Harbors†	71	14	40.0	1.18	0.5
Wabasha *[1]	79	23	47.9	1.47	T.
Willmar†	81	18	44.1	0.84	0.5
Worthington	78	14	42.3	2.83	T.
Zumbrota [1]	74*	15	45.5	.....	.....
Mississippi.					
Aberdeen	88	31	61.0	2.85	
Agricultural College	84	39	62.6	2.41	
Austin†	84	41	62.2	5.20	
Batesville†	83	35	60.6	2.68	
Bay St. Louis	81	47	68.2	8.75	
Biloxi†	83	47	66.7	4.69	
Briers†	82	47	65.0	2.60	
Brookhaven†	90	36	65.5	1.84	
Canton†	85	40	65.2	2.53	
Columbus *a*†	.....	.....	.....	3.59	
Columbus *b*	90	35	63.8	3.47	
Corinth†	90	30	58.6	4.12	
Crystal Springs†	89	38	65.4	1.81	
Edwards	88	39	65.7	1.92	
Enterprise	88	37	64.5	4.89	
Fayette†	94	37	67.2	1.48	
French Camps†	88	30	61.8	1.42	
Fulton†	86	32	61.6	3.37	
Greenville *a*	81	45	63.4	1.97	
Greenville *b*†	84	42	64.7	1.96	
Hattiesburg†	86	42	66.6	3.28	
Hernando	85	40	60.2	2.54	
Holly Springs	86	38	61.1	4.04	
Jackson†	87	37	63.8	1.54	
Lake	84	37	61.9	2.87	
Leakesville†	89	40	65.8	5.47	
Logtown†	84	46	68.0	4.63	
Louisville†	87	34	62.6	2.24	
Macon†	89	37	63.4	1.70	
Magnolia†	88	39	65.6	3.69	
Mayersville	84	41	65.8	1.20	
Meridian†	87	37	63.2	3.04	
Mosspoint	83	46	66.4	2.75	
Natchez†	86	40	66.6	4.50	
Okolona	91	36	62.4	2.03	
Palo Alto†	87	39	63.0	1.62	
Pontotoc	88	36	59.2	2.02	
Port Gibson†	88	37	65.4	3.28	
Stonington *[1]	86	42	65.6	.....	
Thornton†	94	46	66.8	1.65	
Topton *[5]	84	42	66.4	1.70	
University	91[8]	37[8]	62.8[8]	2.38	
Water Valley *†[1]	88	34	60.3	2.89	
Waynesboro *b*	85	45	66.0	2.85	
Woodville†	83	41	65.6	3.01	
Yazoo City†	88	39	66.8	2.20	
Missouri.					
Akron	.....	.....	.....	4.63	
Arlington†	.....	.....	.....	6.34	
Arthur *†[3]	.....	35	54.6	4.01	
Avalon	82	30	53.6	4.26	
Bagnell†	.....	.....	.....	5.95	
***Missouri*—Cont'd.**					
Birchtree	83	29	56.2	6.40	
Bolckow†	.....	.....	.....	4.29	T.
Boonville†	.....	.....	.....	8.21	
Brunswick	82	32	52.6	4.16	
Carrollton†	83	34	54.8	3.08	
Conception	79	37	52.0	4.51	
Cowgill *[5]	78	32	52.7	5.14	
Darksville†	83	32	52.6	3.00	
Downing	.....	.....	.....	2.95	
East Lynne *[3]	.....	34	51.8	1.80	
Edgehill *[5]	80	34	55.5	7.00	
Eightmile *[1]	81	34	53.4	1.85	T.
Elmira	85	25	53.4	5.09	
Emma *[3]	.....	30	53.7	1.20	
Fairport	.....	.....	.....	4.03	
Farmersville	.....	.....	.....	4.37	
Fayette	83	34	55.0	3.69	
Fulton	.....	.....	.....	5.56	
Gallatin *[1]	79	30	52.2	4.51	
Glasgow	82	30	53.8	2.28	
Gordonville *[3]	.....	37	54.6	6.23	
Gorin	.....	.....	.....	4.54	T.
Halfway	85	28	54.9	4.80	
Harrisonville†	85	30	53.6	1.67	
Hastain	85	30	55.8	3.96	
Hermann†	.....	.....	.....	4.78	T.
Houston	83	30	56.8	5.99	
Houstonia	.....	.....	.....	2.17	
Irena	.....	.....	.....	5.78	
Ironton†	86	28	55.7	7.64	
Jefferson City†	83	32	56.2	2.95	
Kidder	81	29	52.2	4.37	
Lamar†	85	31	56.4	3.87	
Lamonte	.....	.....	.....	2.39	
Lebanon	83	32	55.8	4.76	
Lexington†	85	31	54.9	3.13	
Liberty	85	33	54.5	3.64	
McCune *†[1]	82	33	52.7	4.78	
Mansfield	.....	.....	.....	5.00	
Marblehill	83	30	55.0	6.58	
Marshall†	88	31	53.2	2.38	
Maryville	81	28	50.0	6.63	
Mexico†	84	32	54.1	3.84	
Mine La Motte†	81	32	56.0	6.40	
Mineralspring	85	32	56.4	5.96	
Montreal *[1]	84	35	54.7	4.06	
Mount Vernon	86	30	57.3	3.65	
Neosho	81	.....	.....	3.58	
Nevada *[1]	82	32	55.8	3.48	
New Haven *[1]	78	38	56.4	4.01	
New Madrid	73	36	56.4	8.08	
New Palestine *†[1]	79	37	56.2	4.19	
Oakfield	82	34	55.8	6.70	
Oakmound	.....	.....	.....	4.71	
Oakridge *[4]	.....	37	55.4	5.76	
Olden†	81	30	55.3	6.27	
Oregon *a*	82	31	54.2	4.25	T.
Oregon *b* *[1]	82	30	51.8	4.19	.....
Osceola†	.....	.....	.....	5.30	
Oto	.....	.....	.....	4.20	
Palmyra *[5]	80	32	52.3	3.49	
Phillipsburg *†[1]	82	32	53.5	4.74	
Pickering *[3]	.....	32	50.4	3.99	
Platte River *[3]	82	30	50.6	6.65	
Poplar Bluff	84	32	58.6	5.63	
Potosi	79	21	49.2	5.67	T.
Princeton	80	29	51.6	3.16	
Rhineland	80	32	56.0	4.30	
Richmond	80	32	52.7	3.09	
Rolla	.....	.....	.....	5.01	T.
St. Charles	81	32	54.2	4.81	
St. James *[3]	.....	37	52.8	.....	
St. Joseph†	.....	.....	.....	5.02	
St. Louis	79	34	54.4	6.17	
Sarcoxie *[3]	.....	32	53.6	3.04	
Sedalia	85*	37*	53.5*	3.18	
Seymour *[1]	80	30	53.7	7.15	
Shelbina	.....	.....	.....	4.30	T.
Sikeston	81	37	59.2	7.43	
Stellada†	87	29	55.2	2.89	
Sublett	80	27	51.2	4.77	
Trenton	80	31	52.8	3.44	
Unionville	85	30	53.2	3.50	
Vichy	82	28	55.8	4.87	
Virgil City	.....	.....	.....	2.87	
Wheatland	.....	.....	.....	4.16	
Willow Springs	83	28	55.2	6.97	
Zeitonia *[1]	83	33	57.1	5.40	
Montana.					
Augusta†	82	14	46.6	1.11	8.7
Bigtimber†	76	23	47.1	0.44	.....
Boulder	76*	16*	42.6*	.....	.....
Bozeman†	83	21	44.4	1.58	3.0
Bozeman Exper. Stat'n	73	19	43.0	1.44	.....
Butte†	72	20	41.6	1.63	15.5
Castle	70	19	40.0	0.54	5.4

TABLE II.—*Meteorological record of voluntary and other cooperating observers*—Continued.

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
Montana—Cont'd.	°	°	°	*Ins.*	*Ins.*
Chinook †	88	28	50.0	0.20	
Choteau †	79[d]	25[e]	45.8[d]	0.93	T.
Cokedale	75	19	43.2	0.86	4.6
Columbia Falls	76	23	46.0	0.99	0.5
Deer Lodge	74	20	42.2	0.24	1.0
Ekalaka	83	21	42.3	0.57	0.4
Fort Benton	86	25	50.1	1.15	T.
Fort Custer †	86	19	45.6	1.16	10.0
Fort Keogh †	89	24	47.2	0.41	2.0
Fort Logan †	75	19	42.1	0.82	
Fort Missoula	80	22	46.8	1.46	
Glasgow	88	21	46.8	0.69	
Glendive †	94	28	49.1	0.40	1.0
Greatfalls †	88	28	51.2	1.09	0.9
Hogan †	75	15	43.0	1.50	15.0
Kalispell	77	28	46.9	0.77	.....
Kipp †	77	18	43.5	1.60	12.4
Lewiston	80	20	43.6	1.10	7.0
Libby †	86	21	49.5	0.83	3.0
Livingston †	81	21	45.6	0.52	T.
Manhattan †	77	19	43.6	0.20	1.0
Martinsdale †	75	19	42.8	0.72	6.5
Marysville †	74	17	42.2	0.83	5.6
Monarch	81	7	43.1	2.38	12.8
Poplar †	88	24	45.4	0.71	
Radersburg	.....	.....	.....	1.75	
St. Ignatius Mission †	76	18	43.2	0.88	
St. Pauls †	80	20	43.7	1.30	
Sun River	83	23	47.4	1.40	6.0
Troy	85	24	49.4	0.68	
Utica †	76	18	42.4	.....	.....
Virginia City †	71	20	41.5	1.29	10.0
Wibaux †	84	20	45.2	0.30	T.
Yale †	79	17	41.8	1.21	7.5
Nebraska.					
Agee *[1]	85	26	46.0	4.08	
Albion	89	26	51.2	4.63	
Alliance *[1]	78	19	43.9	2.13	15.0
Ansley †	82	22	47.2	5.00	
Arapaho *[1]	80	30	49.7	5.69	
Arborville *[1]	80	27	48.3	4.80	
Arcadia	90	28	49.2	7.04	
Ashland *a* †	78	28	50.3	7.29	
Ashland *b* *[1]	82	30	49.9	6.82	
Ashton	80	27	48.8	5.01	
Auburn *† [1]	84	28	52.6	4.54	
Aurora *[1]	82	32	50.6	3.79	0.8
Bassett	84[e]	20[e]	46.9[e]	1.92	
Beatrice †	81	29	50.2	6.54	
Beaver City †	87	29	51.2	5.30	T.
Benkelman	.....	.....	.....	1.12	
Bluehill *[1]	80	33	50.7	5.92	
Brokenbow *[1]	78	30	49.2	5.40	3.5
Burchard	.....	.....	.....	7.15	
Burwell	.....	.....	.....	3.24	T.
Callaway †	80	25	47.2	5.30	5.5
Central City *[5]	79	36	55.2	6.10	
Chester *[1]	82	34	48.6	4.99	
Columbus †	78	27	49.0	5.10	
Cornlea	.....	.....	.....	4.64	
Creighton †	84	23	46.6	5.88	
Crete	79	29	50.8	4.38	
Culbertson	.....	.....	.....	4.73	0.8
Curtis *a*	89	28	50.3	5.10	3.0
David City *† [1]	76	33	48.2	6.60	
Divide	.....	.....	.....	4.23	
Dunning *[1]	77	31	46.4	3.11	
Eden	.....	.....	.....	4.72	
Edgar *[1]	78	33	49.1	5.02	
Elba	.....	.....	.....	4.33	
Ericson *† [1]	80	33	47.8	4.25	
Ewing †	.....	.....	.....	4.34	
Fairbury †	84	28	51.6	3.35	
Fairmont †	80	28	49.0	4.72	
Filley	.....	.....	.....	3.74	
Fort Robinson	82	23	44.0	0.40	T.
Fremont †	79	26	48.8	5.61	
Geneva †	83	29	51.9	4.69	T.
Genoa	78	28	48.6	5.47	
Gering †	84	16	46.6	1.40	7.5
Gothenburg	84	24	49.6	4.85	T.
Grand Island *a* * [1]	84	36	51.4	5.72	
Grand Island *b*	79	28	49.0	7.01	
Greeley *[1]	80	34	48.4	6.15	
Haigler *[1]	82	30	47.8	2.58	3.0
Hartington †	83	23	46.7	4.48	
Harvard *[1]	81	31	49.4	4.19	
Hastings *[1]	81	34	49.6	4.89	
Hayes Center	.....	.....	.....	3.36	
Hay Springs	83	24	44.7	1.65	9.1
Hebron †	83	27	51.1	3.12	
Hickman	.....	.....	.....	4.13	
Holdrege *a*	.....	.....	.....	4.02	
Holdrege *b* *[1]	84	33	51.8	5.80	
Imperial *a* †	88	20	48.2	2.55	10.0
Indianola (near) *[1]	84	30	48.5	5.23	
Nebraska—Cont'd.	°	°	°	*Ins.*	*Ins.*
Kearney *[5]	82	30	50.0	6.52	
Kennedy	84	21	46.0	1.80	2.5
Kimball †	79	8	44.2	1.10	11.0
Kirkwood *[1]	82	27	46.6	2.69	3.0
Lexington †	83	17	46.2	4.24	.....
Lincoln *b* †	80	31	51.3	6.51	
Lincoln *d*	80	32	49.3	5.28	
Lodgepole †	89	13	46.3	2.10	
Loup *a* *[1]	77	32	50.3	4.69	
Loup *b* *[1]	88	30	47.9	4.80	
Lynch *† [1]	87	26	47.8	5.90	3.2
Lyons	80	24	45.3	4.43	
McCook *[1]	87	32	48.8	3.27	0.1
McCool	.....	.....	.....	5.35	
Madison *[1]	82	25	45.2	3.85	
Madrid *[5]	85	18	47.8	2.19	14.0
Marquette	.....	.....	.....	4.48	T.
Minden *a* *[1]	84	30	48.4	4.48	1.5
Minden *b*	.....	.....	.....	5.45	.....
Nebraska City *a*	80	28[k]	50.4[f]	3.50	
Nebraska City *b* *[1]	83	32	51.2	3.69	
Nemaha *[1]	83	32	49.6	4.38	
Nesbit	84	22	45.5	2.84	9.5
Norfolk *† [5]	75	22	44.0	3.86	T.
Norman	80	27	49.4	5.03	
North Loup †	79	27	47.4	6.05	
Oakdale †	80	24	47.0	3.36	0.5
Odell *[5]	80	32	52.6	4.33	
O'Neill †	81	23	45.6	4.85	
Ord	.....	.....	.....	4.63	
Osceola	.....	.....	.....	6.74	
Ough †	.....	.....	.....	2.85	
Palmer *b*	.....	.....	.....	4.44	
Plattsmouth *a* †	.....	.....	.....	5.47	
Ravenna *a*	79	27	49.0	5.21	0.5
Ravenna *b* *[1]	78	32	45.8	5.19	.....
Redcloud *a*	.....	.....	.....	4.97	
Redcloud *b* *[1]	82	30	52.2	4.50	
Republican *[1]	86	34	51.3	4.04	
Rulo *[1]	84	37	54.5	5.12	
St. Libory	80	26	48.8	4.34	
St. Paul	80	30	50.8	4.59	
Salem *[1]	66	32	53.6	.....	
Santee Agency †	85	24	47.8	4.32	T.
Sargent	.....	.....	.....	3.77	
Schuyler	.....	.....	.....	6.25	
Seneca *[1]	87	27	46.4	3.93	
Seward *[1]	76	33	49.9	7.31	
Springfield *[1]	80	29	49.1	6.78	
Springview	83	25	45.8	1.31	10.0
Stanton *[1]	80	27	47.8	4.92	
State Farm	80	29	51.1	5.08	
Strang *[1]	84	34	52.4	5.27	
Stratton	.....	.....	.....	2.50	
Stromsburg	.....	.....	.....	3.56	
Superior *[5]	80	32	52.0	5.64	
Sutton	78	30	49.0	6.21	
Syracuse	.....	.....	.....	3.42	
Tecumseh *b* †	83	28	53.4	5.32	
Tekamah	80	26	50.1	5.09	
Thedford *[1]	80	28	45.0	3.70	4.0
Turlington †	80	27	49.6	4.10	
Valentine †	82	24	45.3	2.19	
Wakefield	78	24	47.2	4.26	
Wallace *[1]	92	17	43.7	2.23	15.0
Wayne	.....	.....	.....	5.15	
Weeping Water *[1]	80	26	47.6	3.97	
Westpoint †	78	29	49.6	6.04	
Whitman	.....	.....	.....	1.68	1.0
Wilber *[1]	80	38	53.3	8.72	
Willard	.....	.....	.....	2.73	
Wilsonville *[1]	80	26	45.6	6.61	T.
Wisner	.....	.....	.....	4.93	
Woodlawn	.....	.....	.....	5.90	
York *[1]	76	32	49.4	5.45	
Nevada.					
Austin	70	19	44.8	0.94	4.0
Battle Mountain *[1]	80	30	47.4	0.36	3.0
Beowawe *[1]	84	30	49.0	0.09	1.0
Candelaria [f]	78	14	49.2	T	
Carlin *[1]	83	18	42.0	0.25	T.
Carson City	80	24	48.7	0.04	0.2
Cloverdale *[1]	73	21	53.6	T.	
Clover Valley	.....	.....	.....	1.06	4.0
Cranes Ranch	.....	.....	.....	1.44	5.5
Darrough Ranch	.....	.....	.....	0.05	
Downeyville	91	28	57.0	0.47	T.
Duckwater	80	17	46.8	0.61	T.
Elko *[5]	80	28	43.7	0.52	3.0
Elko (near)	.....	.....	.....	0.60	
Ely	74	11	41.9	0.75	1.5
Empire Ranch	79	20	46.6	0.16	1.0
Fenelon *[1]	76	21	44.0	0.85	8.5
Golconda *[1]	84	28	49.4	0.30	2.0
Gold Creek	68	9	37.2	0.14	1.5
Halleck *[1]	82	28	42.6	0.36	1.2
Nevada—Cont'd.	°	°	°	*Ins.*	*Ins.*
Hamilton	82	8	40.8	0.35	3.5
Hawthorne *a* *[8]	78	32	55.3	T.	
Hawthorne *b*	81	29	52.8	0.10	T.
Hot Springs *[1]	82	35	50.3	T.	
Humboldt *[1]	83	29	52.3	0.19	1.0
Keysers Springs	.....	.....	.....	0.40	
Lewers Ranch	78	22	41.9	0.25	0.5
Lovelock *[1]	86	22	54.4	0.09	1.0
McGill	77	19	44.9	0.45	1.0
Midas	74	24	46.4	0.75	4.0
Mill City *[1]	87	32	49.8	0.00	
Monitor Mill	76	11	41.0	0.67	6.7
Osceola	80	20	46.1	0.39	1.0
Palisade *[1]	73	26	46.5	0.37	4.0
Palmetto	75	17	46.0	0.05	
Reno *[8]	80	28	50.0	0.00	
Reno State University	79	26	48.4	0.03	T.
Ruby Valley	.....	.....	.....	1.06	1.1
San Antonio	83	19	51.4	T.	T.
Silver Peak	85	25	55.9	T.	T.
Sodaville	84	15	51.6	0.20	
Tecoma *[1]	85	28	44.3	0.50	
Toano *[1]	82	26	45.7	1.15	4.0
Tuscarora	73	10	38.0	0.94	4.2
Tybo	83	17	47.7	T.	T.
Verdi *[1]	75	30	50.6	T.	T.
Wadsworth *[1]	86	26	47.4	0.00	
Wells	77	23	44.1	1.09	
New Hampshire.					
Bethlehem	80	8	42.2	2.65	15.0
Concord	85	17	47.3	2.38	T.
Durham	85	17	46.6	2.50	
Grafton †	85	12	43.6	2.27	2.0
Hanover	79	15	43.0	2.60	4.5
Keene	84	16	45.1	2.74	T.
Lancaster	80	12	41.6	2.30	
Nashua	87	18	47.9	1.88	
Newton	85	18	46.8	1.95	T.
North Conway	83	14	44.7	2.43	5.0
Peterboro	84	15	45.6	2.08	T.
Plymouth	84	14	44.4	1.60	1.5
Sanbornton †	83	13	43.6	2.55	2.0
Stratford	88	10	42.8	2.90	T.
Warner	.....	.....	.....	2.35	T.
West Milan	84	5	41.6	2.95	T.
New Jersey.					
Allaire	81	26	52.3	.....	
Asbury Park	70	26	50.5	4.36	
Barnegat	78	28	51.0	6.82	
Bayonne	79	26	51.2	3.37	T.
Beachhaven	66	29	48.8	3.10	
Belvidere	87	23	50.4	4.15	
Beverly †	89	25	52.4	3.35	
Billingsport *[1]	85	29	50.9	3.48	
Blairstown	83	25	51.0	3.75	
Boonton	85	21	50.0	3.49	T.
Bridgeton	86	29	53.5	5.06	
Camden	86	27	52.2	3.44	
Cape May	70	30	50.0	3.55	
Cape May C. H. †	71	29	49.8	3.36	
Charlotteburg	83	21	47.7	3.54	
Chester	79	20	47.6	3.79	2.0
Clayton	85	26	51.2	4.06	
College Farm †	85	26	51.2	3.47	T.
Deckertown	85	23	50.0	3.08	
Dover	82	22	48.6	3.03	T.
Egg Harbor City	80	23	50.0	4.86	
Egg Island	64	28	50.8	2.17	
Elizabeth †	85	24	51.4	3.54	T.
Englewood	80	23	49.2	2.54	
Franklin Furnace	84	21	49.2	3.69	
Freehold	82	23	50.2	4.18	
Friesburg	.....	.....	.....	4.03	
Gillette	84	22	48.3	3.24	2.0
Hammonton	.....	.....	.....	5.79	
Hanover	81	24	49.4	3.54	
Hightstown	88	25	52.1	3.93	
Imlaystown	86	25	51.7	3.59	T.
Junction	.....	.....	.....	2.85	0.5
Lambertville	84	25	51.3	3.81	
Moorestown	85	26	51.7	4.00	
Newark *a*	79	25	50.1	3.41	.....
Newark *b* †	82	25	50.9	3.66	T.
New Brunswick *a*	88	25	52.8	3.48	.....
New Brunswick *b*	84	25	49.7	3.49	T.
Newton	85	21	48.8	3.79	
Ocean City	65	28	49.4	3.77	
Oceanic	76	29	53.4	4.50	T.
Paterson	82	26	52.6	3.27	
Plainfield	84	24	49.3	3.91	T.
Rancocas	.....	.....	.....	3.81	
Readington *[5]	80	30	53.7	.....	
Rivervale	80	21	48.1	2.34	
Sergeantsville	81	24	49.2	3.43	
Somerville	86	19	50.8	3.92	
South Orange	84	25	49.7	2.47	T.

TABLE II.—*Meteorological record of voluntary and other cooperating observers*—Continued.

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
	°	°	°	*Ins.*	*Ins.*
New Jersey—Cont'd.					
Staffordville	.....	.....	.....	6.98	
Toms River	80	20	49.7	5.30	
Trenton	82	29	53.4	3.51	
Vineland	85	25	51.9	5.18	
Woodbine	80	21	50.0	3.68	
New Mexico.					
Albert	84	29	56.1	0.32	
Albuquerque †	80	27	55.7	0.63	
Alma	87	21	55.6	0.15	
Angus V. V. Ranch	75	20	49.0	0.55	0.5
Azteo †	80	18	46.6	0.23	
Bernalillo †	88	29	56.2	0.55	
Bluewater †	76	14	46.5	0.50	T.
Buckmans	65	5	38.4	1.35	3.5
Chama †	78	9	42.9	0.79	8.0
Clayton	79	29	50.2	1.05	
Deming *[8]	90	33	58.3	0.00	
East Lasvegas †	73	22	49.0	0.37	0.2
Eddy	91	31	61.9	0.43	
Engle †	83	31	57.4	1.56	
Espanola †	81	23	50.2	0.16	T.
Fort Bayard	80	25	53.4	0.10	
Fort Union	75	15	45.0	0.70	3.0
Fort Wingate	77	19	48.4	0.11	
Galisteo †	76	21	51.5	0.00	
Gallinas Spring †	83[e]	26[e]	55.2[e]	0.02	
Gila	89	28	59.3	T.	
Gold Hill †	48	1	25.0	2.20	16.5
Hillsboro †	85	34	60.0	0.20	
Labelle †	63	7	36.3	0.86	8.5
Las Cruces †	88	21	58.1	0.23	
Lordsburg *[8]	83	39	62.7	0.00	
Los Lunas †	89	20	54.3	0.50	
Lower Penasco [1]	79	27	54.2	0.50	T.
Monero † [e]	78	11	42.4	0.84	
Ocate †	72	11	45.7	0.61	2.5
Olio	81	23	50.9	T.	
Puerto de Luna †	87	29	58.7	0.35	
Raton †	75	18	46.0	0.20	2.0
Rincon †	87	30	60.6	0.18	
Roswell †	88	28	59.4	1.35	
San Marcial †	95	33	61.2	0.37	
Shattucks Ranch	86	27	58.9	0.81	T.
Socorro †	85	30	56.7	1.00	
Springer † [e]	79	14	48.4	0.10	T.
Valley Ranch	75	18	46.0	T.	
White Oaks †	76	28[e]	51.7[e]	0.45	T.
Winsors Ranch	66	13	39.8	1.37	1.5
New York.					
Addison	81	20	46.2	2.41	T.
Akron	.....	.....	.....	1.79	.....
Alfred	76	14	43.0	2.69	4.1
Angelica †	79	16	43.4	3.15	3.0
Appleton	77	22	44.5	2.58	1.0
Arcade	76	15	43.0	3.06	6.5
Atlanta	.....	.....	.....	1.92	.....
Avon	80	19	45.4	1.21	
Baldwinsville	81	21	46.6	2.18	T.
Bedford	77	20	48.2	3.22	.....
Big Sandy *[10]	71	18	42.6	.....	.....
Binghamton †	81	18	45.9	2.33	0.2
Bolivar	78	16	43.6	2.48	2.0
Boyds Corners	.....	.....	.....	2.78	
Brentwood	77	17	47.2	4.90	
Brooklyn	73	26	50.8	2.75	T.
Canajoharie	84	18	45.8	1.56	T.
Canton	76	13	43.3	3.16	3.0
Carmel	81	20	49.0	3.05	
Catskill	83	22	47.8	3.20	
Charlotte *[10]	70	20	40.7	.....	.....
Cherry Creek	.....	.....	.....	3.11	.....
Cooperstown †	81	15	43.2	3.65	T.
Cortland	74	18	43.2	0.68	
De Kalb Junction	.....	.....	.....	2.81	.....
Dryden	82	18	44.2	2.82	
Eagle Mills	.....	.....	.....	4.97	.....
Elizabethtown	86	12	42.2	4.75	14.5
Elmira †	84	23	48.3	2.30	
Fleming	83	20	45.7	2.21	
Fort Niagara †	78	22	45.2	2.49	
Franklinville	76	14	44.0	2.76	5.2
Friendship	81	18	45.3	2.77	0.5
Fulton	.....	.....	.....	2.42	.....
Garrattsville	89	9	44.0	3.15	T.
Glens Falls	86	17	44.9	3.61	2.0
Gloversville	84	15	44.0	3.38	T.
Haskinsville	.....	.....	.....	2.25	.....
Honeymead Brook	84	19	46.4	3.33	T.
Humphrey †	77	15	43.6	1.39	7.5
Ithaca	82	20	46.2	2.47	0.5
Jamestown	75	20	45.7	3.77	6.0
Kings Station	.....	.....	.....	3.68	.....
Lake George	84	17	45.0	3.85	3.0
Little Falls	82	15	44.1	4.47	T.
Lockport	78	22	46.4	1.98	5.0
Lowville	78	14	43.6	2.97	4.0
New York—Cont'd.					
Lyons	81	21	46.0	2.14	2.0
Madison Barracks †	74[d]	16	47.5	1.16	.....
Manhatton Beach	66	30	46.0	3.26	
Middletown [f]	84	30	49.8	.....	
Mohonk Lake	79	14	45.0	2.12	
Mount Morris	.....	.....	.....	2.10	T.
Newark Valley	.....	.....	.....	3.08	.....
New Lisbon	80	13	42.3	2.63	T.
Niagara Falls	.....	.....	.....	3.09	.....
North Hammond †	74	14	44.0	2.57	3.8
North Lake	75	10	37.2	3.80	4.5
Number Four †	76	9	40.4	3.93	10.3
Ogdensburg	72	13	44.2	3.98	1.5
Oneonta	83	16	46.4	3.26	
Oxford	83	16	44.4	3.76	
Palermo †	81	19	44.1	1.49	T.
Perry City	82	16	43.2	2.56	0.5
Phœnix	.....	.....	.....	2.39	.....
Pine City	.....	.....	.....	2.95	.....
Pittsford	80	20	45.3	2.23	
Plattsburg Barracks †	84	14	42.2	2.67	
Port Jervis	87	21	49.5	3.11	
Poughkeepsie	83	20	48.0	1.30	T.
Primrose	77	23	49.2	2.88	
Ridgeway	78	21	45.2	2.62	4.0
Rome	82	18	45.6	3.36	
Romulus	82	19	47.0	2.53	2.8
Rose	.....	.....	.....	2.52	.....
St. Johnsville	80	17	44.1	2.30	
Saranac Lake	79	9	41.5	3.79	7.2
Scottsville	.....	.....	.....	1.98	.....
Setauket †	74	26	48.7	3.29	
Sherwood	.....	.....	.....	2.47	.....
Skaneateles	.....	.....	.....	3.16	.....
South Canisteo	82	15	44.5	3.13	4.0
Southeast Reservoir	.....	.....	.....	3.05	
South Kortright †	81	12	42.8	2.91	
Straits Corners	81	12	44.2	2.68	1.5
Wappingers Falls	83	23	49.6	3.05	T.
Warwick	.....	.....	.....	3.24	.....
Waverly †	82	18	46.9	3.10	0.2
Wedgwood	80	16	44.9	2.72	4.0
Westfield	79	22	45.1	2.99	4.0
Westpoint †	78	24	49.3	3.17	
Willetspoint	77	26	49.0	3.21	
North Carolina.					
Abshers	87	26	55.4	4.20	
Asheville †	83	29	54.2	3.81	
Beaufort †	78	38	61.2	3.53	
Biltmore †	83	28	54.4	4.78	
Bryson City †	.....	.....	.....	4.79	
Chapelhill †	88	31	58.4	3.31	
Edenton	83	31	57.8	0.98	
Experimental Farm	84	30	59.0	2.99	
Fairbluff †	.....	.....	.....	1.89	
Falkland	.....	.....	.....	2.77	
Fayetteville †	87	29	59.4	2.77	
Flatrock	80	27	52.8	8.22	
Greensboro †	91	31	59.4	3.38	
Henderson †	90	28	58.0	3.25	
Highlands	74	25	49.4	7.70	
Horse Cove †	74	24	49.2	8.80	
Jacksonville	89	30	62.0	1.47	
Lenoir *†[1]	82	33	54.7	5.17	
Linville †	75	22	46.9	5.12	
Littleton †	88	25	56.3	3.23	
Louisburg †	88	27	58.9	4.30	
Lynn *†[2]	86	.....	56.3	10.57	
Marion	87	30	57.3	6.74	
Moncure †	86	30	59.9	2.89	
Monroe †	84	29	59.0	4.81	
Morganton *†[1]	78	30	52.6	4.99	
Mountairy †	84	26	54.6	3.45	
Mount Pleasant	85	30	59.3	4.05	
Murphy †	.....	.....	.....	5.43	
Newbern †	83	40	62.2	1.91	
Oakridge †	84	29	56.4	3.96	
Pantego *[3]	82	31	57.2	1.96	
Pittsboro †	85	27	56.0	3.70	
Rockingham †	89	35	61.3	2.67	
Roxboro †	87	25	57.0	1.92	
Salem †	87	28	57.6	4.19	
Salisbury †	88	33	59.6	2.40	
Saxon †	88	28	56.8	3.26	
Selma	89	30	59.2	4.45	
Settle	89	30	57.6	4.24	
Skyuka	78	38	53.4	.....	
Sloan †	87	33	60.7	2.39	
Soapstone Mount †	87	26	58.2	3.61	
Southern Pines *a* †	90	29	62.0	4.07	
Southern Pines *b*	89	31	61.8	3.42	
Southport †	77	36	61.7	1.82	
Springhope *†[1]	85	29	57.3	2.90	
Tarboro	90	26	59.0	2.81	
Waynesville †	81	26	53.2	5.08	
Weldon †	87	27	57.8	3.10	
North Carolina—Cont'd.					
Willeyton	89	26	58.8	1.48	
North Dakota.					
Amenia	85	16	41.4	1.49	
Ashley †	81	12	40.8	2.06	2.5
Bordulac	72	15	41.5	T.	
Buxton	74	14	40.2	0.90	
Churchs Ferry	78	15	39.9	1.20	T.
Coalharbor †	82	21	40.4	1.90	8.0
Devils Lake †	72	14	38.6	1.10	T.
Dickinson †	82	20	41.8	1.93	3.6
Dunseith	.....	.....	.....	0.66	2.9
Falconer	83	15	42.4	0.32	2.5
Fargo †	83*	7	37.5[e]	0.89	
Forman †	89	10	44.4	1.39	T.
Fort Berthold †	71	16	40.0	0.70	2.0
Fort Yates †	83	18	43.1	3.25	5.5
Gallatin †	77	12	40.9	0.77	0.3
Glenullin	84	.....	.....	1.17	2.0
Grafton † [f]	65	12	36.4	0.40	T.
Grand Rapids †	84	15	41.1	0.83	0.6
Hamilton	70	13	38.6	0.73	0.4
Jamestown †	78[1]	15[1]	44.9[1]	0.62	
Langdon †	67	12	36.0	.....	.....
Larimore †	72	14	38.6	0.81	
Lisbon †	90	17	42.4	0.90	
McKinney	81	12	39.2	1.65	
Mayville	78	11	44.2	0.49	T.
Medora †	91	22	45.0	0.72	0.5
Milton †	68	9	37.3	.....	.....
Minnewaukon	74	14	40.8	0.83	
Minot †	85	14	41.5	1.18	0.3
Minto †	75	14	40.0	1.10	T.
Napoleon †	77	16	40.2	1.43	1.0
Oakdale †	82	18	42.4	1.60	7.0
Portal †	84	15	40.4	1.34	
Power †	93	15	42.9	T.	
St. John †	67	10	36.4	0.54	
Sheyenne	75	14	39.6	0.77	T.
Steele †	77	15	40.6	1.62	3.3
Towner †	79	16	40.6	.....	.....
University †	70	13	41.4	0.56	T.
Valley City †	78	16	39.0	0.76	.....
Wahpeton †	92	17	46.8	1.84	
White Earth	90	20	41.3	1.20	0.5
Wildrice † [2]	.....	.....	41.6	0.71	T.
Woodbridge †	69	8	38.0	0.04	
Ohio.					
Akron	79	23	48.0	1.66	0.2
Annapolis	83	21	49.0	4.28	T.
Ashland	81	22	47.2	2.75	3.0
Ashtabula	78	25	44.9	2.27	2.0
Atwater	.....	.....	.....	3.22	T.
Auburn	.....	.....	.....	2.23	.....
Bangorville	79	18	47.4	3.23	1.5
Bellefontaine	.....	.....	.....	1.92	0.5
Bement	.....	.....	.....	3.12	3.0
Benton Ridge	84	16	48.8	4.06	10.9
Bethany	85	25	53.3	3.78	
Bigprairie	81	21	48.4	3.05	.....
Binola	84	28	50.6	2.36	4.0
Bissells	79	21	43.7	2.52	8.7
Bowling Green	81	17	47.0	2.64	5.0
Bucyrus	84[e]	20[e]	49.6[e]	1.30	2.0
Cambridge	81	21	49.0	3.49	
Camp Dennison	82	27	53.0	3.64	T.
Canal Dover	82	22	48.3	4.05	
Canfield	.....	.....	.....	3.35	1.0
Canton †	81	23	49.0	3.59	
Cardington	80	19	46.5	3.09	1.5
Carrollton	83	20	48.9	3.38	
Cedarville	.....	.....	.....	4.30	.....
Celina	85	20	50.6	2.29	
Cherryfork	86	22	51.8	3.72	
Circleville	82	25	52.3	3.85	
Clarksville	81	23	51.0	3.98	T.
Cleveland *a*	76	26	46.9	2.32	4.7
Cleveland *b*	80	26	46.8	1.28	1.5
Clifton	82	20	49.6	4.14	1.5
Coalton	84	24	51.6	3.67	
Colebrook	78	21	46.6	2.41	
Dayton *a*	83	21	51.0	4.26	
Dayton *b* †	.....	.....	.....	3.27	
Defiance	80	16	47.4	2.68	3.1
Demos	81	24	49.3	2.74	.....
Dupont	79	18	47.5	2.16	3.0
Elyria	81	25	46.7	1.83	8.3
Fairport Harbor *[10]	80	29	46.9	.....	.....
Fayetteville	80	24	51.4	3.87	
Findlay	83	19	48.9	3.66	
Frankfort	83	23	51.0	3.84	
Garrettsville †	80	20	46.6	2.49	3.5
Granville	82	22	49.4	3.39	
Gratiot	80	23	49.6	2.94	T.
Greenfield	82	27	52.6	3.30	T.
Greenhill	82	20	47.6	2.53	0.2
Greenville	78	21	47.6	5.12	6.0

TABLE II.—*Meteorological record of voluntary and other cooperating observers*—Continued.

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
Ohio—Cont'd.	°	°	°	*Ins.*	*Ins.*
Hackney	84	25	51.2	3.55	
Hanging Rock	86	28	52.2	4.60	
Hedges	79	17	47.5	4.11	10.2
Hillhouse	78	16	44.8	1.92	9.0
Hillsboro†	87	23	52.4	3.40	
Hiram	78	21	46.5	2.47	4.0
Hudson	78	22	45.7	2.14	.....
Jacksonboro	84	22	50.4	3.55	1.0
Kenton†	84	19	49.8	3.16	3.5
Killbuck	82	20	49.2	3.23	T.
Lancaster	82	24	50.4	3.05	
Leipsic	80	17	46.8	3.20	4.0
Levering	84	13	46.2	2.64	6.0
Logan	85	22	50.4	3.45	
Lordstown	78	23	47.4	2.74	0.5
McArthur	82	23	51.0	3.11	
McConnelsville†	83	24	52.2	3.51	
Mansfield†	.....	.....	.....	2.71	3.0
Marietta *a*†	.....	.....	.....	3.54	
Marietta *b*	83	21	51.4	3.77	
Marion	83	18	49.0	2.45	0.2
Medina	82	21	47.6	2.16	3.0
Milfordton	81	19	47.6	3.10	
Milligan	85	21	51.1	3.38	
Millport	78	21	46.8	3.18	.....
Montpelier	79	17	46.6	3.51	3.0
Napoleon	80	13	46.5	3.04	7.5
Neapolis	.....	.....	.....	2.74	3.5
New Alexandria	80	22	49.3	3.67	
New Berlin	82	20	47.5	2.45	T.
New Bremen	80	18	48.9	4.01	
New Comerstown	82	23	49.5	3.70	T.
New Holland	82	23	50.0	4.63	T.
New Moscow	.....	.....	.....	3.33	
New Paris	78	21	49.2	4.13	
New Waterford	.....	.....	.....	3.40	0.5
North Lewisburg	83	19	49.4	3.20	1.0
North Royalton	81	22	47.6	2.29	3.0
Norwalk	82	18	45.1	2.37	3.0
Oberlin	83	21	46.6	2.00	T.
Ohio State University	80	22	49.6	3.80	
Orangeville	81	20	46.6	2.08	T.
Ottawa	81	20	49.6	3.70	3.0
Pataskala†	82	20	49.6	3.58	0.3
Philo	83	21	50.4	3.19	
Plattsburg	82	21	49.1	3.25	T.
Pomeroy	84	27	52.5	3.32	
Portsmouth *a*†	.....	.....	.....	4.55	
Portsmouth *b*	92	28	55.4	4.75	
Richwood	.....	.....	.....	3.30	1.0
Ridgeville Corners	80	11	47.3	3.76	8.0
Ripley	81	26	52.6	5.54	
Rittman	80	18	45.2	1.44	
Rockyridge	83	19	47.0	2.72	T.
Rosewood	79	19	48.1	3.51	
Shenandoah	82	19	46.9	1.87	9.0
Sidney *b*	81	22	48.4	3.68	1.5
Sinking Spring†	80	25	52.3	4.11	
Springboro	.....	.....	.....	4.38	T.
Spring Valley	86	22	50.2	3.95	
Strongsville	.....	.....	.....	3.88	3.5
Sylvania	82	17	46.8	2.54	5.0
Thurman	88	25	54.0	3.02	
Tiffin†	80	21	48.0	2.96	2.0
Upper Sandusky	81	21	49.8	3.63	2.0
Urbana	78	21	48.7	2.75	
Vanceburg	85	20	52.6	2.67	
Van Wert	81	17	47.1	3.49	6.5
Vermilion	81	22	47.0	1.82	7.0
Vickery	83	23	48.2	2.42	2.6
Walnut	.....	.....	.....	3.07	T.
Warren	82	22	47.2	2.48	0.8
Wauseon	81	16	47.2	5.69	6.8
Waverly	86	25	53.0	4.79	T.
Waynesville	78	20	48.9	4.38	T.
Wellington	83	22	49.0	2.72	0.5
Westerville	80	23	50.2	4.12	T.
Willoughby	.....	.....	.....	1.71	
Wooster *a*	.....	.....	.....	2.64	T.
Wooster *b*†	79	21	47.4	2.75	1.0
Youngstown	88	23	47.2	2.68	T.
Oklahoma.					
Alva	88	33	57.2	3.40	
Anadarko†	87	32	61.7	3.32	
Arapaho†	87	31	58.6	4.22	
Beaver	.....	.....	.....	6.23	
Burnett†	83	34	59.9	4.41	
Clifton†	85	32	60.8	9.22	
Edmond	81	35	59.0	13.35	
Fort Reno†	82	32	59.2	7.36	
Fort Sill	84	34	60.4	0.80	
Hennessey	86	31	60.4	5.39	
Kingfisher[f]	84	31	60.6	6.04	
Mangum†	82	32	60.0	2.72	
Norman†	97	31	60.5	4.87	
Ponca	88	.....	.....	8.38	
Oklahoma—Cont'd.					
Pondcreek†	89	28	61.0	5.80	
Prudence†	87	30	58.5	6.49	
Sac and Fox Agency†	83	32	59.0	7.90	
Stillwater†	83	32	58.3	6.36	
Waukomis	87	31	57.9	4.15	
Winnview†	84	33	58.1	4.49	
Woodward	88	30	57.7	1.08	
Oregon.					
Albany *a*	82	36	54.1	2.06	
Arlington	85	34	55.9	0.26	
Ashland *b*	89	29	53.0	0.99	
Aurora *[8]	92	40	58.5	2.48	
Aurora (near)	88	29	52.9	2.03	
Bandon	79	33	49.7	0.86	
Bay City†	79	30	51.8	3.87	
Brownsville *[8]	82	45	58.6	1.58	
Burns†	79	14	44.2	1.10	
Burns (near)	84	21	47.4	0.15	1.5
Canyon City	97	28	53.3	2.71	
Cascade Locks	86	38	54.6	4.04	
Comstock *[8]	86	36	51.3	1.60	
Corvallis *a*	84	33	53.4	1.73	
Dayville†	92	26	51.5	0.94	
Eugene *a*†	80	34	52.6	1.27	
Falls City	.....	.....	.....	3.28	
Fife†	85	20	44.4	3.90	2.0
Forest Grove	93	32	53.9	2.04	
Fort Klamath	75	10	46.5	0.75	2.8
Gardiner	84	37	51.8	2.70	
Glenora	90	29	50.6	4.56	
Government Camp	74	18	41.0	5.50	36.5
Grants Pass *a*†	92	29	54.5	0.67	
Happy Valley	84	20	44.8	2.33	6.0
Hood River (near)	85	34	53.1	1.84	
Irvington	.....	.....	.....	1.82	
Jacksonville	85	29	53.1	1.02	
Joseph	75	21	43.8	0.58	5.2
Junction City *[8]	84	38	53.0	1.20	
Lafayette *[8]	90	35	54.0	1.84	
Lakeview†	77	19	46.2	1.03	0.5
Langlois	86	37	55.0	3.23	
McMinnville†	88	30	53.0	2.00	
Merlin *[8]	92	30	52.5	0.72	
Monmouth *[8]	84	39	57.2	1.98	
Mount Angel†	94	32	54.8	2.41	
Nehalem	.....	.....	.....	4.73	
Newberg	89	31	53.6	2.21	
Newport	79	35	50.6	2.09	
Pendleton	90	31	55.0	0.95	
Prineville	91	20	50.0	0.51	T.
Riddles *[8]	88	35	53.7	0.49	
Salem *b*†	84	34	53.4	3.47	
Sheridan *[8]	85	41	56.7	2.11	
Silver Lake	85	13	44.5	0.25	1.5
Silverton *[8]	84	40	54.4	2.76	
Siskiyou *[8]	78	33	52.8	0.00	
Sparta	75	20	44.9	0.97	9.0
Springfield *[8]	80	38	52.9	1.85	
Stafford	89	29	52.8	3.42	
The Dalles†	88	34	55.8	0.23	
Tillamook Rock L. H.	.....	.....	.....	2.52	
Vale	86	26	50.2	0.66	
Vernonia	100	27	55.3	2.13	
West Fork *[8]	94	32	51.5	1.44	
Weston	82	32	53.0	1.87	
Williams	87	28	52.6	0.87	
Pennsylvania.					
Altoona	83	23	51.6	2.91	
Aqueduct	90	26	52.3	2.53	T.
Beaver Dam	.....	.....	.....	3.88	T.
Bethlehem	.....	.....	.....	3.41	
Blooming Grove	80	12	45.6	4.10	T.
Brookville†	.....	.....	.....	1.85	
Browers Lock	.....	.....	.....	3.38	
Cameron	.....	.....	.....	2.70	
Canonsburg	83	27	51.2	1.99	T.
Carlisle	88	24	50.6	2.92	
Cassandra	77	20	46.4	3.56	T.
Cedarrun	.....	.....	.....	2.44	
Centerhall†	83	20	48.6	3.84	1.0
Chambersburg†	86	15	48.8	2.79	
Coatesville	87	24	51.2	3.39	
Confluence†	83	21	48.8	3.33	
Coopersburg	83	24	50.8	3.59	T.
Davis Island Dam†	.....	.....	.....	3.30	T.
Derry Station	84	21	49.2	3.81	T.
Doylestown	.....	.....	.....	3.80	
Drifton	81[e]	17[e]	48.1[e]	3.55	3.0
Driftwood	.....	.....	.....	3.58	
Dubois	.....	.....	.....	3.45	
Duncannon	.....	.....	.....	2.59	
Dunmore	85	15	47.0	3.27	
Dushore	91	16	45.9	2.70	0.3
Dyberry†	83	18	45.2	3.72	
East Bloomsburg	.....	.....	.....	2.54	.....
East Mauch Chunk	87	21	50.0	3.29	1.0
Pennsylvania—Cont'd.					
Easton	82	22	50.1	1.20	T.
Edinboro *[1]	72	18	43.5	.....	2.5
Ellwood Junction†	.....	.....	.....	3.82	
Emporium	80	22	47.2	3.49	T.
Farrandsville	.....	.....	.....	3.35	T.
Forks of Neshaminy *[1]	80	30	52.0	2.93	T.
Franklin	81	22	47.9	3.22	
Frederick	.....	.....	.....	3.06	
Freeport†	.....	.....	.....	4.29	
Gettysburg	92	30	52.3	.....	
Girardville	.....	.....	.....	3.77	2.5
Grampian	80	20	46.0	4.14	2.0
Greensboro†	86	20	49.8	3.98	T.
Greenville	78	22	47.2	2.93	
Hallstead†	82	19	47.0	2.40	
Hamburg	88	25	52.0	3.76	
Hollidaysburg	85[e]	21[e]	50.6[e]	2.77	
Honesdale	.....	.....	.....	3.95	
Huntingdon *a*†	86	23	50.2	3.86	
Huntingdon *b*	.....	.....	.....	3.55	
Indiana[1]	79	30	51.2	.....	
Irwin	.....	.....	.....	4.05	
Johnstown†	83	23	49.4	3.98	T.
Karthaus	.....	.....	.....	1.70	
Keating	.....	.....	.....	3.28	T.
Kennett Square	86	24	51.0	3.19	
Lancaster	85	24	49.8	.....	
Lansdale	.....	.....	.....	3.36	
Lawrenceville	81	19	47.6	2.90	
Lebanon	86	24	49.9	3.51	T.
Leroy†	84	15	44.8	2.70	0.7
Lewisburg	85	24	49.9	3.21	0.2
Lock Haven *a*†	90	24	51.8	3.42	
Lock Haven *b*	.....	.....	.....	2.90	0.5
Lock No. 4†	.....	.....	.....	3.33	
Lycippus	80	22	50.0	3.93	
Mifflin	.....	.....	.....	2.81	
Oil City†	.....	.....	.....	3.54	
Ottsville	.....	.....	.....	3.28	
Parker†	.....	.....	.....	3.42	
Philadelphia *b*	84	27	52.9	3.53	
Point Pleasant	.....	.....	.....	2.91	
Pottstown	89	26	52.9	3.80	
Quakertown	84	21	48.8	3.32	T.
Reading[3]	.....	.....	50.3	3.89	
Renovo *a*	.....	.....	.....	2.86	T.
Renovo *b*	85	23	49.4	2.64	
Ridgway†	.....	.....	.....	3.57	T.
Saegerstown	79	14	45.6	2.22	
St. Marys	76[1]	19	45.2[1]	2.93	
Salem Corners	81	17	46.7	3.78	T.
Scranton	85	20	48.4	3.41	
Seisholtzville	.....	.....	.....	3.53	
Selinsgrove	87	24	50.4	3.25	1.0
Shawmont	.....	.....	.....	2.84	
Shinglehouse	80	15	47.6	2.87	2.0
Sinnamahoning	.....	.....	.....	2.49	
Skippack	84[e]	20[e]	49.6[e]	3.67	
Smethport	78	17	44.8	3.43	
Smiths Corners	.....	.....	.....	3.30	
Somerset	78	18	47.0	3.99	T.
South Bethlehem	85	24	50.2	.....	
South Eaton	84	21	48.1	3.11	
State College	83	24	48.0	3.78	3.0
Swarthmore	82	28	52.8	.....	
Swiftwater	82	20	46.6	2.67	
Towanda	83	21	48.0	2.30	T.
Uniontown	81	25	50.1	4.63	
Warren†	81	20	46.7	3.21	T.
Wellsboro†	82	20	45.6	2.55	T.
West Chester	83	25	51.0	3.06	
West Newton†	.....	.....	.....	3.60	
White Haven†	83	19	46.2	3.99	T.
Wilkesbarre†	87	22	51.1	3.34	T.
Williamsport	85	19	49.6	2.25	T.
York†	85	25	50.4	3.42	
Rhode Island.					
Bristol	66	23	46.0	4.03	T.
Kingston	71	22	45.6	4.81	T.
Providence *a*	78	24	50.0	3.30	T.
South Carolina.					
Allendale†	92	43	64.2	2.66	
Anderson†	.....	.....	.....	4.20	
Batesburg†	85	37	61.2	2.08	
Blackville†	90	41	58.1	2.94	
Camden†	.....	.....	.....	3.13	
Central†	88	36	59.0	.....	
Cheraw *a*†	94	34	61.6	2.17	
Cheraw *b*†	.....	.....	.....	2.54	
Conway†	.....	.....	.....	1.59	
Darlington (near)	.....	.....	.....	4.36	
Edisto†	.....	.....	.....	3.22	
Effingham†	.....	.....	.....	1.60	
Florence†	86	32	61.0	2.27	
Georgetown†	81	42	62.4	5.85	
Gillisonville†	95	36	65.6	1.41	

TABLE II.—*Meteorological record of voluntary and other cooperating observers*—Continued.

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
	°	°	°	*Ins.*	*Ins.*
South Carolina—Cont'd.					
Greenville †	82	36	58.2	4.82	
Greenwood	86	39	61.1	4.28	
Holland	87	32	58.8	4.62	
Kingstree *a* †	87	35	63.2	1.79	
Kingstree *b* †	.....	.....	.....	1.79	
Little Mountain	89	37	62.8	2.76	
Longshore †	87	38	61.3	2.98	
Mount Carmel †	.....	.....	.....	5.50	
Pinopolis *[1]	83	46	62.8	3.74	
Port Royal †	81	48	66.0	2.42	
St. George †	86	42	63.4	2.03	
St. Matthews †	87	41	62.8	1.81	
St. Stephens †	.....	.....	.....	2.14	
Santuck †	85	32	60.0	4.11	
Shaws Fork *[1]	85	40	65.8	2.45	
Smiths Mills †	.....	.....	.....	1.67	
Society Hill †	84	36	61.3	6.31	
Statesburg †	87	39	63.6	4.86	
Trenton	85	42	64.5	3.32	
Trial †	86	40	62.6	2.97	
Walhalla	85	31	57.9	8.40	
Winnsboro	85	35	60.3	2.82	
Yemassee †	90	42	64.8	2.15	
Yorkville	86	37	61.4	4.07	
South Dakota.					
Aberdeen †	91	19	43.5	3.39	
Alexandria †	85	18	45.6	3.59	T.
Armour †	84	22	47.0	4.65	
Ashcroft †	86	19	44.6	1.26	2.0
Brookings	83	16	44.1	2.45	
Canton	80	22	46.4	3.63	
Castlewood †	86	16	43.8	3.20	T.
Centerville	.....	.....	.....	2.10	
Chamberlain †	87	23	47.2	3.53	
Clark	.....	.....	.....	3.60	
Cross †	77	15	40.2	1.01	6.0
Doland	88	15	44.6	3.37	T.
Edgemont	.....	.....	.....	0.80	.....
Farmingdale	.....	.....	.....	0.60	T
Faulkton	89	22	42.8	4.23	5.2
Flandreau †	88	17	45.2	2.94	3.5
Forestburg †	86	23	46.2	3.92	
Forest City	75	22	38.4	2.40	4.0
Fort Meade †	82	10	44.8	1.80	7.0
Gary	86	17	44.0	.....	3.0
Goudyville	90	17	43.6	2.16	6.5
Greenwood †	82	23	47.5	6.13	
Highmore	89	20	44.0	3.44	13.0
Hotch City †	88	20	46.2	2.89	2.0
Hot Springs	75	21	45.5	0.70	0.4
Howard †	84	21	44.5	3.53	T.
Kimball †	85	20	46.2	4.20	2.0
Leslie †	87	25	47.2	1.40	
Mellette †	91	16	45.2	2.51	1.1
Menno †	86	22	47.3	3.02	0.5
Millbank	87	18	44.4	2.15	
Mitchell †	85	22	46.0	4.79	
Oelrichs †	89	14	45.6	2.20	
Parker †	85	21	46.2	2.91	
Parkston	84	21	46.9	3.71	
Plankinton †	85	21	45.9	3.95	
Rosebud	88	18	42.2	2.87	
Shiloh	90	25	45.6	1.80	
Sioux Falls †	85	20	45.5	2.74	
Spearfish †	80	26	45.8	1.80	13.0
Tyndall †	86	22	47.2	4.84	
Vermillion	90	23	47.6	.....	
Watertown	82	15	43.2	2.87	
Webster †	88	16	42.8	1.59	0.6
Wentworth †	83	19	44.8	2.78	2.0
Wessington Springs	85	18	45.0	4.18	1.5
Tennessee.					
Andersonville	84	31	58.1	7.47	
Arlington †	86	36	61.4	5.05	
Ashwood *† [1]	83	40	59.7	6.20	
Benton (near) †	84	30	58.0	4.39	
Bolivar †	84	32	59.2	6.65	
Bristol †	81	29	53.8	3.39	
Brownsville †	88	36	61.2	4.91	
Byrdstown	88	29	58.6	6.89	
Cagle	82	32	56.1	5.67	T.
Carthage †	.....	.....	.....	8.45	
Charlotte	85	30	58.1	7.55	
Clarksville	83	34	57.6	8.09	
Clinton †	.....	.....	.....	7.57	
Decatur †	85	31	57.8	8.55	
Dyersburg	82	34	59.1	6.43	
Elizabethton †	87	30	55.9	2.84	
Elk Valley	85	30	58.0	6.93	
Erasmus	84	25	54.0	7.96	
Fairmount *[1]	76[e]	34	55.2[e]	7.49	
Florence †	82	32	58.1	7.89	
Franklin	83	32	57.8	7.85	
Greeneville †	84	30	55.9	3.07	
Harriman	85	32	57.6	9.25	
Hickory Withe	82	36	61.2	4.82	
Tennessee—Cont'd.					
Hohenwald †	86	26	57.2	6.22	
Jackson †	82	35	60.2	6.62	
Johnsonville †	82	33	59.5	5.69	
Jonesboro *† [1]	78	38	55.0	4.18	
Liberty †	84	30	58.0	6.32	
Loudon †	.....	.....	.....	7.75	
Lynnville *† [1]	83	34	57.3	6.66	
McKenzie †	81	35	59.8	9.41	
McMinnville †	84	32	58.2	5.90	
Milan †	82	33	60.4	7.79	
Molino †	84	34	59.6	5.32	
New Market	.....	.....	.....	3.66	
Newport †	81	31	56.9	4.10	
Nunnelly *[1]	83	37	59.2	5.75	
Oak Hill *[1]	84	31	56.4	7.55	
Palmetto †	84	34	58.6	7.12	
Pope	85	31	59.4	3.65	
Riddleton †	84	32	57.8	7.56	
Rockwood †	.....	.....	.....	6.98	
Rogersville †	80	31	55.8	3.83	
Rugby	81	26	54.2	6.94	
St. Joseph †	88	29	59.7	6.61	
Savannah	86	33	60.8	4.58	
Sewanee †	76	32	56.0	5.96	
Springdale *[1]	88	30	57.6	5.66	
Springfield *[1]	81	36	58.1	7.08	
Tellico Plains †	83	30	58.6	5.64	
Trenton	81	34	58.8	6.10	
Tullahoma †	78	30	55.7	6.25	
Union City †	83	34	59.1	6.07	
Waynesboro	82	29	58.5	4.72	
Texas.					
Albany *[1]	76	35	59.5	1.35	
Arthur City †	.....	.....	.....	2.38	
Austin *b* *[5]	85	40	65.2	.....	
Ballinger †	93	34	65.6	0.65	
Beeville †	95	46	71.3	0.53	
Blanco †	97	36	63.2	2.01	
Boerne *† [1]	86	42	65.9	3.26	
Bowie	84	36	62.2	2.36	
Brady	91	33[e]	63.3	1.31	
Brazoria †	85	47	68.3	2.25	
Bremond *[1]	85	47	67.3	3.04	
Brenham †	88	44	68.9	1.98	
Brighton †	87	44	69.6	0.82	
Brownwood	91	32	65.4	2.15	
Burnet *[1]	84	42	66.5	2.60	
Camp Eagle Pass †	101	52	74.8	1.01	
Childress *[1]	87	32	59.0	1.66	
Coleman *[3]	.....	37	61.0	1.05	
College Station	89	43	66.8	1.57	
Columbia †	89	45	67.9	2.33	
Corsicana *b* †	87	50	70.5	1.90	
Cuero †	89	45	68.0	2.85	
Dallas †	86	39	63.3	2.58	
Danevang †	88	44	68.2	2.81	
Dean	86	28	55.6	.....	
Dublin †	86	39	62.8	3.23	
Duval *[1]	90	46	70.2	3.19	
Estelle †	86	34	63.4	2.02	
Forestburg †	82	38	64.2	2.02	
Fort Clark	97	38	68.2	1.94	
Fort McIntosh	95	45	72.2	0.15	
Fort Ringgold †	96	45	73.6	1.88	
Fort Worth †	85[d]	39[d]	65.8[d]	3.32	
Fredericksburg *† [1]	87[f]	37	65.2[f]	3.00	
Gainesville †	82	38	62.8	2.90	
Georgetown *[1]	85[e]	38[e]	62.8[e]	2.42	
Golindo	.....	.....	.....	2.50	
Graham †	90	33	62.3	2.08	
Grapevine †	84	38	64.2	3.37	
Hale Center †	86	34	60.6	1.65	
Hallettsville †	89	45	69.2	4.57	
Hewitt	.....	.....	.....	2.75	
Houston †	89	47	68.6	0.83	
Huntsville †	86	43	67.1	1.73	
Junction City	89	32[e]	65.8[e]	0.94	
Kent	.....	.....	.....	0.06	
Kerrville †	89	30	63.7	1.38	
Lampasas †	88	36	65.2	1.88	
Llano *† [5]	90	42	66.8	1.42	
Longview †	86	41	65.8	4.61	
Lulling †	88	45	69.2	5.70	
Marathon	90	31	61.7	1.00	
Marshall	85	50	68.2	3.51	
Midland	96	28	63.2	0.00	
Mount Blanco †	87	29	59.4	0.05	T.
New Braunfels †	88	45	67.4	3.10	
Orange †	81	44	66.0	0.50	
Panter †	.....	.....	.....	2.24	
Paris †	84	32	62.8	2.68	
Point Isabel *[1]	88	60	73.4	1.75	
Rheinland †	83	35	62.0	1.38	
Roby †	88	31	60.1	1.75	
Rocksprings	.....	.....	.....	1.70	
San Antonio	93	44	71.7	2.07	
Texas—Cont'd.					
Sanderson †	94	30	64.4	1.30	
San Marcos *b* †	87	34	65.8	2.47	
Sierra Blanca †	89	27	63.0	T.	
Stafford †	89	42	67.2	1.67	
Sulphur Springs †	88	38	66.4	4.12	
Temple *a*	88	40	66.0	2.27	
Tivoli	91	46	66.0	0.06	
Tulia	83	25	55.0	1.08	
Tyler	85	40	65.2	3.57	
Valentine †	92	26	61.1	0.00	
Waco †	85	43	67.6	1.87	
Weatherford †	87	40	63.4	3.43	
Wichita Falls †	.....	.....	.....	1.63	
Utah.					
Alpine City †	.....	.....	.....	1.03	.....
Blue Creek *[8]	99	23	48.5	.....	.....
Brigham City †	.....	.....	.....	2.09	.....
Cisco †	83	28	53.8	1.46	1.0
Corinne	78	21	47.4	0.34	
Croyden	79	.....	.....	1.50	.....
Farmington	.....	.....	.....	1.86	3.0
Fillmore †	89	16	50.6	1.26	
Fort Duchesne †	78	22	46.2	0.01	0.1
Frisco	79	23	48.4	T.	T.
Giles †	87	18	51.3	1.57	
Heber	80	18	43.0	0.90	2.0
Kelton *[8]	80	30	49.9	.....	
Koosharem	72	6	40.2	0.75	1.0
Levan †	82	18	47.2	1.05	
Loa †	77	13	40.5	1.05	5.0
Logan †	74	19[e]	44.0	1.74	
Mammoth †	75	21	44.9	0.14	1.5
Manti †	88	14	48.4	0.10	1.0
Minersville	81	21	48.8	0.16	1.0
Moab †	88	27	56.0	0.72	T.
Mount Pleasant †	87	22	49.0	0.10	1.0
Ogden *a* *[8]	77	34	52.0	1.70	.....
Ogden *b*	79	24	50.1	1.47	6.8
Pahreah	87	26	53.7	3.25	
Park City †	66	14	39.0	1.50	15.0
Parowan †	81	18	48.2	0.95	2.5
Pinto	.....	.....	.....	0.78	
Promontory *[8]	78	30	49.9	0.70	1.5
Richfield †	82	20	46.4	0.12	
St. George †	93	21	56.1	0.08	
Scipio †	81	19	46.8	1.26	6.0
Snowville	76	25	45.6	0.90	
Soldier Summit †	75	9	38.0	0.67	6.8
Terrace *[8]	74	23	46.5	0.50	.....
Thistle †	78	25	45.4	.....	.....
Tooele †	78	27	49.0	0.91	
Tropic	74	18	45.2	.....	.....
Vernal	75	22	48.0	0.58	
Woodruff	65	14	35.4	0.20	2.0
Vermont.					
Bennington	85	16	45.5	3.22	
Brattleboro	80	18	47.5	2.31	
Burlington †	76	16	45.7	4.01	T.
Chelsea †	78	7	40.2	2.91	10.0
Cornwall	82	12	44.8	3.50	T.
Enosburg Falls	80	13	43.2	3.91	0.5
Hartland †	82	15	43.4	3.25	6.0
Jacksonville	79	12	40.6	3.33	0.5
St. Johnsbury	81	12	43.0	2.84	T.
Strafford *† [1]	67	14	42.2	3.05	13.0
Vernon *[6]	79	20	47.4	2.68	
Wells	80	12	42.8	3.19	1.0
Woodstock	85	13	44.4	3.63	5.0
Virginia.					
Alexandria	86	28	53.7	2.68	
Ashland †	90	28	56.9	2.82	
Barboursville	88	29	53.4	2.06	
Bedford City	88	25	55.0	1.50	
Bigstone Gap †	85	24	52.9	4.61	
Birdsnest *† [1]	79	36	55.7	1.65	
Blacksburg	80	24	50.9	1.69	
Buckingham †	89	25	54.6	2.95	
Burkes Garden	78	24	49.8	1.97	
Callaville †	87	26	56.1	2.05	
Christiansburg †	.....	.....	.....	1.76	
Clarksville †	.....	.....	.....	2.85	
Clifton Forge	88	27	52.4	1.13	
Danville †	.....	.....	.....	2.23	
Dale Enterprise †	84	22	50.8	1.70	
Doswell	81	24	58.7	1.90	
Farmville	95	28	55.8	1.01	
Fredericksburg †	87	29	55.3	2.31	
Gordonsville	77	32	53.8	.....	
Goshen	.....	.....	.....	2.00	
Grahams Forge	82	28	52.2	1.47	
Guinea	90	31	55.0	4.90	
Hampton	84	35	56.4	3.11	
Hot Springs	76	23	49.7	1.21	
Leesburg	94	25	51.6	2.23	
Lexington †	85	27	53.3	1.58	
Maidens	.....	.....	.....	2.08	

TABLE II.—*Meteorological record of voluntary and other cooperating observers*—Continued.

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
Virginia—Cont'd.	°	°	°	*Ins.*	*Ins.*
Manassas†	90	28	54.0	2.09	
Marion†	83[e]	28[e]	54.2[e]	1.57	
Monterey	78	18	46.6	1.65	
Petersburg†	90	28	58.6	2.52	
Quantico	88	22	50.0	.....	
Radford†	.....	.....	.....	1.54	
Richmond (near)†	95	30	58.3	2.62	
Rockymount†	86	30	57.6	2.34	
Salem†	86	32	57.0	1.56	
Saltville	84	27	53.4	2.14	
Smithville†	85	31	56.3	1.70	
Spottsville†	90	26	56.1	2.06	
Stanardsville†	89	26	52.5	1.86	
Stanleyton	92	27	53.8	1.98	
Staunton†	88	26	53.4	1.56	
Stephens City†	88	25	52.7	2.30	
Sunbeam†	79	28	52.7	3.86	
Swords Creek	85	28	54.2	1.28	
Warrenton	86	31	55.2	2.06	
Warsaw†	88	27	54.7	1.71	
Westbrook Farm	90	30	55.0	.....	
Woodstock†	88	24	56.5	2.30	
Wytheville	82	29	51.6	1.72	
Washington.					
Aberdeen	81	34	50.7	3.40	
Anacortes	.....	.....	.....	1.24	
Ashford†	.....	.....	.....	3.24	
Blaine†	78	25	46.7	2.74	
Bridgeport	87	30	55.8	0.25	
Cascade Tunnel	63	18	39.3	1.05	14.0
Centerville†	81	28	52.0	0.38	
Chehalis†	94	29	54.0	1.54	
Colfax†	83	30	49.3	1.64	
Coupeville†	72	35	49.4	0.88	
Dayton	83	32	52.4	1.60	
Eastsound	71	36	50.0	1.37	
Ellensburg†	84	23	52.0	0.08	
Ellensburg (near)	84	30	52.6	0.10	
Elma	81	31	53.5	1.98	
Fort Simcoe†	90	30	56.6	0.09	
Fort Spokane	84	30	50.8	0.59	
Grandmound†	87	26	51.4	2.42	
Hunters†	74	23	48.4	1.16	
Kennewick†	86	30	54.4	0.11	
La Center	89	34	53.0	2.48	
Lakeside	78	33	52.8	0.54	
Lapush†	75	34	48.7	5.59	
Loomis†[4]	82	34	54.6	0.69	
Madrone*†[1]	79	32	51.4	1.25	
Mayfield†	88	31	51.7	.....	
Moxee Valley†	87	24	54.6	0.08	
New Whatcom†	77	32	51.5	1.33	
Northbend	84	31	53.4	5.40	
Olga	72	34	49.4	1.65	
Olympia†	83	30	51.8	1.28	
Pinehill†	85	30	52.4	0.50	
Pomeroy†	88	36	54.6	0.91	2.0
Pullman†	81	30	48.1	1.22	
Rosalia†	77	28	47.9	1.24	0.3
Sedro†	84	32	52.8	1.99	
Silvercreek*[1]	82	31	50.4	2.29	
Snohomish†	85	33	52.4	1.95	
Southbend	86	29	53.1	3.61	
Stillaguamish	80	29	49.6	2.08	
Sunnyside†	87	24	55.3	T.	
Tacoma†	84	34	50.7	1.64	
Union City†	87[b]	32[b]	52.8[b]	2.25	
Vashon†	81	34	50.6	1.59	
Waterville†	78	27	47.5	0.50	
Wenatchee Lake	82	24	45.4	.....	
West Ferndale	80	30	48.6	2.04	
West Virginia.					
Beverly†	86	22	51.5	2.79	T.
Bloomery†	84	21	47.1	1.64	
Bluefield†	88	27	53.4	1.58	
Buckhannon *a*†	.....	.....	.....	3.37	
Buckhannon *b*	83	28	50.0	.....	
Burlington†	85	21	50.6	2.03	
Charleston†	.....	.....	.....	2.84	
Clay	88	27	55.6	.....	
Dayton†	.....	.....	.....	3.22	
Elkhorn†	83	30	54.6	1.85	
Fairmont†	.....	.....	.....	3.42	
Glenville†	82	25	50.9	3.36	
Grafton†	85	23	50.4	3.10	T.
Green Sulphur	84	29	52.0	1.76	
Harpers Ferry†	.....	.....	.....	2.14	
Hewett†	90	28	56.9	2.84	
Hinton *a*†	.....	.....	.....	2.08	.....
Hinton *b*†	86	28	53.6	.....	T.
Huntington	82	29	54.4	3.70	
Kingwood	80	21	49.7	3.89	T.
Marlinton*†[1]	79	21	47.6	2.85	T.
Martinsburg†	89	26	50.6	2.20	
Morgantown *a*†	.....	.....	.....	3.36	
Morgantown *b*†	85	24	51.5	3.80	
West Virginia—Cont'd.	°	°	°	*Ins.*	*Ins.*
New Martinsville†	84	26	53.0	3.79	
Nuttallburg†	84	22	51.0	2.00	T.
Oldfields†	86	23	52.2	1.91	
Pennsboro	84	26	51.9	3.40	T.
Philippi†	87	28	51.0	7.10	
Point Pleasant†	88	28	53.8	3.77	
Powellton[5]	85	30	55.4	.....	
Romney	82	28	52.4	1.70	
Rowlesburg†	.....	.....	.....	4.07	
Tannery*[1]	78	25	48.2	.....	
Weston *a*†	.....	.....	.....	3.28	
Wheeling *a*†	.....	.....	.....	3.95	T.
Wheeling *b*†	84	26	53.5	4.31	.....
White Sulphur Springs†	82	19	50.5	1.77	
Wisconsin.					
Amherst	74	17	44.0	2.24	T.
Antigo	78	11	40.6	1.71	7.0
Barron	76	12	42.9	1.86	9.0
Bayfield	73	17	40.0	1.05	.....
Beloit	74	23	46.3	4.72	
Chilton	74	17	43.9	2.98	1.0
Citypoint	75	.....	44.6	1.90	1.0
Crandon†	78	10	40.6	0.81	3.8
Delavan	75	22	45.7	4.87	T.
Dodgeville†	74	18	45.2	3.70	
Easton†	75	15	44.4	2.86	
Eau Claire[1]	75*	18	46.0	1.16	
Fond du Lac	76	20	44.7	2.61	2.0
Grand River Lock	.....	.....	.....	2.81	
Grantsburg†	76	17	44.2	0.75	
Hartford	.....	.....	.....	4.17	4.0
Hartland	75	20	44.0	4.89	
Harvey	73	21	45.2	3.71	0.1
Hayward†	77	15	42.3	0.31	0.5
Hillsboro	76	18	44.2	2.18	T.
Hudson	78[e]	21[e]	47.6[e]	1.59	
Koepenick*†[1]	66	20	41.1	0.80	4.0
Lancaster†	75	21	45.4	4.19	0.2
Lincoln†[2]	.....	.....	43.3	3.41	3.0
Madison†	73	32	45.0	2.51	T.
Manitowoc†	74	18	41.4	3.46	2.0
Meadow Valley†	76	18	45.2	1.75	
Medford†	76	11	41.2	1.34	0.2
Menasha	.....	.....	.....	0.50	0.8
Neillsville†	72	16	43.5	2.61	.....
New Holstein	71	18	43.0	4.30	4.0
New London	78	17	47.0	2.36	T.
Oconto	76	16	42.4	2.80	1.0
Osceola†	87	15	44.6	1.34	T.
Oshkosh†	74	18	44.3	2.52	0.8
Pepin	74	18	43.0	1.40	1.0
Pine River†	78	17	44.6	2.04	0.1
Portage†	77	18	44.8	2.49	T.
Port Washington	77	18	42.2	3.92	3.0
Prairie du Chien	79	25	50.4	2.44	.....
Racine	77	23	44.6	3.96	2.8
Sharon†	80	17	43.4	4.49	1.0
Shawano	76	15	42.4	2.42	1.0
Spooner†	82	10	42.8	0.10	
Stevens Point†	75	16	44.2	2.12	.....
Sturgeon Bay Canal*[10]	62	16	38.0	.....	.....
Valley Junction†	76	17	44.7	1.75	T.
Viroqua	72	19	45.0	2.73	T.
Watertown†	78	20	45.1	4.34	1.0
Waukesha†	76	21	44.6	4.10	3.3
Waupaca†	77	16	44.4	2.27	
Wausau†	74	15	42.8	1.91	0.2
Wausaukee	78	12	40.0	3.40	
Westbend	74	20	43.1	4.54	3.0
Westfield†	74	19	44.6	2.39	
Whitehall	75	16	44.3	2.06	0.5
White Mound†	78	18	46.2	3.14	0.5
Wyoming.					
Big Horn Ranch	72	2	37.3	0.51	0.8
Carbon	86	9	40.9	0.74	7.0
Fort Laramie†	84	19	44.6	1.06	8.0
Fort Washakie†	76	8	41.9	1.00	10.0
Fort Yellowstone†	66	11	37.9	1.21	7.8
Green River	77	17	43.8	0.50	1.0
Laramie	67	5	35.0	0.55	4.8
Lusk†	79	15	40.8	1.01	6.0
Sheridan	82	8	43.0	1.25	7.5
Sundance	75	15	39.9	1.67	9.0
Wheatland	80	10	45.7	0.62	0.5
Mexico.					
Ciudad P. Diaz	95	48	73.4	1.26	
Leon de Aldamas	90	49	69.8	0.02	
Mexico	86	46	66.0	1.23	
New Brunswick.					
St. John	60	18	38.4	3.72	7.3
West Indies.					
Grand Turk Island	.....	.....	.....	3.41	

Late reports for March, 1897.

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
Alaska.					
Coal Harbor	50	— 11	26.2	2.88	13.0
California.					
Lick Observatory	53	19	32.8	6.45	30.5
Napa *b*	69	28	47.2	5.88	
Point Lobos	57	38	47.9	4.91	
San Jacinto	77	27	49.7	2.24	
San Miguel Island	71	37	50.8	1.63	
Engineers Quarters‡	.....	.....	.....	10.17	17.5
Morses House‡	.....	.....	.....	15.61	21.5
Deep Creek‡	.....	.....	.....	7.59	11.0
Holcomb Creek‡	.....	.....	.....	3.42	2.0
Squirrel Inn‡	.....	.....	.....	12.17	15.0
Colorado.					
Boxelder	.....	.....	.....	2.75	37.0
Connecticut.					
Wallingford	.....	.....	.....	3.84	.....
Kansas.					
Macksville	.....	.....	44.9	0.76	.....
McPherson	80	10	44.4	1.90	4.5
Russell	80	6	41.9	1.39	2.5
Montana.					
Glasgow	48	— 45	7.7	2.50	25.0
Lewistown	62	— 26	24.4	1.15	8.0
Nebraska.					
Benkelman	.....	.....	.....	1.18	.....
Nemaha	.....	.....	.....	1.62	.....
New Hampshire.					
Peterboro	55	— 21	30.3	3.33	8.0
New York.					
Garrattsville	72	0	31.9	2.38	4.2
Ohio.					
Wellington	.....	.....	.....	3.82	6.0
Oregon.					
Tillamook Rock L. H.	.....	.....	.....	7.83	.....
Texas.					
San Antonio	92	35	68.2	1.81	
Utah.					
Snowville	54	5	29.1	0.84	7.0
Virginia.					
Quantico	82	21	46.2	.....	
Mexico.					
Topolobampo*[1]	87	59	69.5	0.14	

EXPLANATION OF SIGNS.

* Extremes of temperature from observed readings of dry thermometer.

† Weather Bureau instruments.

‡ Record furnished by the Arrowhead Reservoir Company, in the San Bernardino Mountains, San Bernardino County, Cal., at elevations varying from 5,150 to 5,350 feet.

No note is made of breaks in the continuity of temperature records when the same do not exceed two days. All known breaks, of whatever duration, in the precipitation record receive appropriate notice.

CORRECTIONS.

Maine, Lewiston, March, 1897, make precipitation read 4.49 instead of 4.19.

Louisiana, Oakridge, February, 1897, make precipitation read 3.81 instead of 3.78.

California, Indio, December, 1896, make mean temperature read 55.0 instead of 45.0.

Nevada, Carson City, December, 1896, make mean temperature read 38.0 instead of 58.0.

New Hampshire, Keene, December, 1896, make minimum temperature read —9 instead of —0.

New Jersey, Asbury Park, December, 1896, make mean temperature read 29.1 instead of 20.1; New Brunswick *a*, December, 1896, make mean temperature read 31.7 instead of 51.7; Rivervale, December, 1896, make precipitation read 2.70 instead of 3.70.

New Mexico, Fort Union, December, 1896, make precipitation read 0.08 instead of 0.88.

New York, Canton, December, 1896, make mean temperature read 19.8 instead of 11.8.

Arizona, Farleys Camp, November, 1896, make precipitation read 2.60 instead of 0.60.

Pennsylvania, Bethlehem, November, 1896, make precipitation read 4.32 instead of 2.34.

New York, Ogdensburg, November, 1896, make precipitation read 3.01 instead of 2.58.

Arizona, San Carlos, October, 1896, make mean temtemperature read 64.9 instead of 44.9.

Oregon, Toledo, June, 1896, transfer all data to May, 1896, REVIEW.

NOTE.—The following changes have been made in names of stations:

Arizona, Eagle Pass, changed to Cedar Springs.

Nebraska, Bratton, changed to Eden.

TABLE III.—*Data from Canadian stations for the month of April*, 1897.

Stations.	Pressure.			Temperature.		Precipitation.		Prevailing direction of wind.	Total depth of snow.
	Mean not reduced.	Mean reduced.	Departure from normal.	Mean.	Departure from normal.	Total.	Departure from normal.		
	Inches.	*Inches.*	*Inches.*	°	°	*Inches*	*Inches.*		
St. Johns, N. F	29.79	29.94	+ .06	36.2	0.0	3.58	.....	s.	T.
Sydney, C. B. I	29.95	30.01	+ .14	37.8	+ 3.3	3.58	— 0.22	sw.	9.0
Grindstone, G. St. L.	.....	.....	.....	.....	.....	.....	.....	.....	.....
Halifax, N. S	29.93	30.06	+ .16	40.3	+ 2.8	6.21	+ 2.90	w.	7.7
Grand Manan, N. B.	29.97	30.02	+ .04	38.8	.....	4.04	+ 0.64	w.	2.7
Yarmouth, N. S.	29.96	30.04	+ .13	40.2	+ 1.2	7.12	+ 4.18	sw.	6.6
St. Andrews, N. B.	.....	.....	.....	39.0	+ 0.7	2.65	+ 0.09	nw.	7.0
Charlottet'n, P. E. I.	29.96	30.00	+ .04	37.5	+ 2.6	3.32	+ 0.40	sw.	5.4
Chatham, N. B	29.98	30.00	+ .08	36.3	+ 2.8	2.98	— 0.12	w.	3.4
Father Point, Que.	29.96	29.99	+ .08	32.8	+ 0.3	3.28	+ 1.26	e.	0.5
Quebec, Que	29.68	30.02	+ .07	35.9	+ 1.4	3.68	+ 1.29	ne.	0.7
Montreal, Que	29.81	30.02	+ .06	41.1	+ 2.6	3.27	+ 0.83	sw.	1.9
Rockliffe, Ont	29.51	30.03	+ .07	37.4	+ 3.4	4.09	+ 2.85	nw.	4.1
Kingston, Ont	29.74	30.06	+ .09	40.8	+ 2.3	2.22	+ 0.27	sw.	0.8
Toronto, Ont	29.68	30.07	+ .08	42.0	+ 2.0	2.53	+ 0.65	s.	4.1
White River, Ont	28.71	30.10	+ .04	30.1	— 1.0	0.98	+ 0.06	ne.	2.5
Port Stanley, Ont	29.42	30.07	+ .06	41.4	.....	3.02	+ 0.89	s.	4.2
Saugeen, Ont	29.34	30.07	+ .07	37.9	+ 2.7	2.56	+ 0.73	sw.	1.7
Parry Sound, Ont.	29.34	30.05	+ .07	38.2	+ 3.7	3.88	+ 2.16	s.	0.3
Port Arthur, Ont	29.32	30.04	+ .02	35.0	+ 2.5	0.64	— 0.73	ne.	0.0
Winnipeg, Man	29.16	30.00	— .03	37.8	+ 4.3	1.01	— 0.34	n.	0.5
Minnedosa, Man	28.19	30.03	+ .05	36.7	+ 3.2	0.87	— 0.25	e.	0.4
Qu'Appelle, Assin.	27.72	30.01	+ .05	38.4	+ 2.9	0.39	— 0.67	nw.	2.7
Medicine Hat, Assin	27.67	29.98	+ .06	45.8	+ 1.8	0.39	— 0.12	w.	0.2
Swift Curr't, Assin.	27.39	29.99	— .01	41.3	+ 2.8	0.08	— 1.10	nw.	T.
Calgary, Alberta	26.49	30.05	+ .13	41.6	+ 3.6	0.31	— 0.31	w.	0.7
Prince Albert, Sask.	28.36	29.89	.....	40.8	.....	0.70	.....	s.	5.8
Edmonton, Alberta.	27.63	29.99	+ .08	41.6	+ 1.4	0.46	— 0.11	nw.	0.0
Battleford, Sask	28.24	29.98	.....	41.1	.....	0.30	.....	w.	0.6
Kamloops, B. C.	28.82	30.05	.....	51.1	.....	0.65	.....	w.	0.0
Hamilton, Bermuda	30.00	30.16	+ .11	65.0	.....	5.22	.....	s.	
Banff, Alberta	25.33	30.01	... .	38.3	.....	1.07	.....	sw.	0.6
Esquimalt, B. C.	30.12	30.15	... .	46.6	.....	1.04	....	sw.	0.0
Ottawa, Ont	29.70	30.07	.....	40.8	... .	1.82	.....	nw.	....
Sable Island, N. S.	30.03	30.06	.....	39.6	.....	5.63	.....	sw.	0.2

TABLE IV.—*Meteorological observations at Honolulu, Republic of Hawaii, by Curtis J. Lyons, Meteorologist to the Government Survey.*

Pressure is corrected for temperature and reduced to sea level, but the gravity correction, —0.06, is still to be applied.

The average direction and force of the wind and the average cloudiness for the whole day are given unless they have varied more than usual, in which case the extremes are given. The scale of wind force is 0 to 10. Two directions of wind, connected by a dash, indicate change from one to the other; also same for force.

The rainfall for twenty-four hours is given as measured at 6 a. m. on the respective dates.

March, 1897.	Pressure at sea level.			Temperature.					Relative humidity.			Wind.		Cloudiness.	Rain measured at 6 a. m.
	9 a. m.	3 p. m.	9 p. m.	6 a. m.	2 p. m.	9 p. m.	Maximum.	Minimum.	6 a. m.	2 p. m.	9 p. m.	Direction.	Force.		
	Ins.	*Ins.*	*Ins.*	°	°	°	°	°	%	%	%				*Ins.*
1 ...	30.10	29.99	30.10	64	78	68	80	63	79	56	80	se-n.	1	3	0.00
2 ...	30.08	29.99	30.09	67	79	69	81	65	80	64	79	se-s.	2	4	0.00
3 ...	30.06	30.00	30.09	68	78	71	80	67	81	65	86	sw-s.	2	3	0.03
4 ...	30.09	30.00	30.09	69	76	69	79	68	70	78	81	nw-sse.	0-3	8	0.06
5 ...	30.09	30.01	30.12	68	79	72	80	66	81	60	75	sw-nne.	3	6	0.04
6 ...	30.06	30.00	30.10	71	78	70	79	70	72	60	81	e.	3	7	0.00
7 ...	30.09	30.02	30.09	69	77	71	81	66	83	71	86	s-e.	2	3-9	0.00
8 ...	30.07	30.03	30.14	70	78	69	79	69	77	67	88	ne-se.	3	5	0.25
9 ...	30.14	30.05	30.14	70	79	71	78	69	70	52	68	ene.	4	3	0.08
10 ...	30.13	30.07	30.16	70	80	71	80	70	70	54	68	ene.	4	3	T.
11 ...	30.18	30.08	30.16	69	79	70	78	69	81	43	68	ene-nne.	4	3	0.01
12 ...	30.12	30.04	30.13	68	77	68	79	67	76	55	68	ne.	4	6-10	0.11
13 ...	30.13	30.04	30.12	68	77	70	77	67	81	59	68	ene.	3	5	0.37
14 ...	30.10	30.00	30.09	66	77	68	77	66	95	59	85	e-nne.	1-4	7	0.27
15 ...	30.09	30.02	30.12	71	78	71	78	69	72	63	70	ne.	4	8	0.22
16 ...	30.12	30.05	30.13	70	78	71	79	70	64	54	70	ene.	4	4	0.03
17 ...	30.13	30.07	30.14	70	78	70	79	70	74	61	77	ene.	4	4	T.
18 ...	30.14	30.08	30.14	70	78	71	78	67	72	53	68	ne-nne.	4	3	0.05
19 ...	30.15	30.07	30.16	66	79	68	80	65	75	53	85	ne.	3	3	0.00
20 ...	30.18	30.09	30.20	67	79	71	79	65	85	55	72	e.	3	3-8	0.00
21 ...	30.22	30.14	30.22	69	78	70	80	69	76	53	76	ne.	3	3	0.05
22 ...	30.22	30.12	30.23	70	78	69	79	70	68	56	68	ene-n.	3	4	0.01
23 ...	30.25	30.17	30.27	69	79	71	80	67	72	55	68	nne-n.	3	3	0.01
24 ...	30.30	30.22	30.29	69	78	71	78	68	72	51	72	ene.	4	9-4	0.15
25 ...	30.32	30.23	30.28	69	78	70	78	66	74	50	76	ene.	2-5	5	0.09
26 ...	30.31	30.22	30.27	70	78	71	78	70	74	52	68	ene.	4-5	4	0.02
27 ...	30.28	30.20	30.25	71	80	72	79	70	70	48	68	ene.	4	4	0.00
28 ...	30.26	30.16	30.21	71	78	72	79	70	72	64	69	ene.	4-2	4-9	0.01
29 ...	30.22	30.10	30.18	71	78	70	79	70	72	62	72	ne.	4-1	9-2	T.
30 ...	30.20	30.11	30.20	68	79	71	79	67	76	66	69	ne-ene.	3	5	0.01
31 ...	30.18	30.10	30.18	69	79	71	79	67	78	55	72	ene-ne.	4	3	0.03
	30.16	30.08	30.16	68.9	78.2	70.2	79.0	67.8	75.5	57.9	74.2	ene.	3-2	4.7	1.87

Mean temperature: 6+2+9+3 is 72.4; extreme temperatures, 81° and 63°.

A few rumblings of thunder on the 14th. On the same date there was a severe thunderstorm on Kauai.

Wind on 25th and 26th, a half gale throughout the group.

Temperature, and barometer pressure above normal. Rains scanty, except at some windward stations. Four miles from Honolulu there was 7.33 inches of rain, at an elevation of about 1,000 feet above sea level. At Waikiki, 2 miles from town, only 0.32 inch at sea level.

Solar halo at midday March 5. Lunar rainbow (faint) March 17. Rainbows noted on fifteen days; one on the 21st on a background of apparently clear, blue sky.

TABLE V.—*Mean temperature for each hour of seventy-fifth meridian time, April,* 1897.

Stations.	1 a. m.	2 a. m.	3 a. m.	4 a. m.	5 a. m.	6 a. m.	7 a. m.	8 a. m.	9 a. m.	10 a. m.	11 a. m.	Noon.	1 p. m.	2 p. m.	3 p. m.	4 p. m.	5 p. m.	6 p. m.	7 p. m.	8 p. m.	9 p. m.	10 p. m.	11 p. m.	Midnight.	Mean.
Bismarck, N. Dak.....	38.5	37.4	36.4	35.8	35.2	34.7	34.3	35.1	36.2	38.9	41.3	43.9	45.9	47.7	48.6	49.4	49.5	49.7	49.3	48.0	45.6	43.1	41.2	39.8	41.9
Boston, Mass.	43.9	43.7	43.3	42.8	42.5	42.4	43.5	46.0	48.4	50.5	52.8	53.5	53.5	54.1	54.3	54.2	53.3	52.7	51.0	49.2	48.2	47.1	46.1	45.4	48.4
Buffalo N Y.....	41.1	40.9	41.2	40.0	39.4	39.1	40.5	41.4	42.6	43.8	45.4	46.0	46.8	47.0	47.8	47.3	46.4	45.5	44.4	44.6	43.4	42.9	42.9	42.6	43.5
Chicago, Ill.....	43.3	43.0	42.7	42.4	42.0	41.6	41.4	42.4	43.4	43.9	44.6	45.4	45.7	46.0	47.1	47.7	48.1	47.7	47.4	46.6	46.1	45.8	44.8	43.7	44.7
Cincinnati, Ohio.....	50.1	49.3	48.7	48.1	47.8	47.1	47.2	48.2	49.2	51.2	53.0	54.8	56.1	57.4	57.9	58.4	58.6	58.3	57.1	56.1	54.7	53.4	52.1	50.9	52.7
Cleveland, Ohio	44.6	44.3	43.9	43.5	43.1	42.6	42.6	43.4	45.5	46.8	48.0	47.3	48.0	47.6	48.1	48.6	49.2	49.3	48.7	47.9	46.9	46.1	45.5	45.1	46.1
Detroit, Mich.....	42.3	41.6	41.1	40.3	39.9	39.6	39.7	41.3	42.9	45.0	46.4	47.8	48.5	49.4	50.2	50.4	50.3	49.3	48.0	46.9	45.1	44.3	43.8	43.0	44.9
Dodge City, Kans.....	47.7	47.3	45.9	45.3	44.5	43.6	42.9	43.3	46.3	49.6	53.6	56.9	59.5	61.3	62.8	64.0	64.3	64.3	62.7	60.2	56.0	53.4	51.3	49.5	53.2
Eastport, Me.....	35.7	35.1	34.8	34.6	34.2	34.5	35.5	37.0	38.4	39.5	40.9	41.6	42.4	42.7	42.5	42.4	41.7	40.9	39.3	38.6	37.8	37.5	36.8	36.3	38.3
Galveston, Tex.....	68.1	67.9	67.5	67.2	66.9	66.7	66.0	66.4	66.8	67.9	69.2	70.5	71.7	72.5	72.8	72.3	71.7	71.4	70.8	70.0	69.3	68.9	68.6	68.2	69.2
Havre, Mont.....	42.9	41.3	39.7	38.6	37.7	37.3	36.6	36.5	38.5	41.8	45.5	48.1	50.5	52.5	54.4	55.7	56.5	56.7	56.6	55.6	53.2	49.5	46.8	45.4	46.6
Kansas City, Mo.....	51.7	50.7	50.2	49.3	48.7	48.1	47.7	47.5	48.9	51.0	53.9	55.7	57.4	58.7	60.4	61.4	61.6	61.3	60.6	58.7	57.1	55.7	54.0	52.8	54.3
Key West, Fla.....	73.3	73.3	73.1	72.9	72.9	73.0	74.0	74.5	76.0	76.6	77.6	78.2	78.1	78.4	78.0	78.1	77.5	76.1	74.9	74.7	74.4	74.1	73.8	73.4	75.3
Memphis, Tenn.....	58.9	58.1	57.4	56.8	56.2	55.8	54.9	56.4	57.4	58.8	60.6	62.8	64.4	65.8	66.9	67.1	67.6	67.2	66.1	64.7	63.3	61.7	60.4	59.4	61.2
New Orleans, La.....	64.9	64.4	63.9	63.4	63.2	62.9	62.8	63.7	65.9	67.7	69.5	70.9	71.6	71.7	72.6	72.8	72.9	72.5	71.6	69.3	68.0	67.0	66.2	65.4	67.7
New York, N. Y.....	45.1	44.3	43.9	42.9	42.4	42.4	43.0	44.1	46.4	48.3	50.8	52.7	53.5	53.8	54.0	54.0	53.2	52.2	50.2	49.7	48.7	48.3	47.4	46.7	48.3
Philadelphia, Pa.....	47.2	46.6	46.2	45.5	44.9	44.8	45.8	48.2	50.3	52.6	55.2	56.8	58.8	60.2	61.1	61.4	61.0	59.0	56.1	54.0	51.7	50.4	49.4	48.6	52.3
Pittsburg, Pa.....	47.4	46.4	45.7	44.8	44.1	44.0	45.0	46.7	49.2	51.0	53.1	54.6	56.1	57.3	57.2	57.3	56.8	56.0	54.5	53.5	52.3	51.3	50.4	49.2	51.0
Portland, Oreg.....	53.7	52.2	51.0	50.1	48.9	48.0	46.7	46.3	45.1	45.7	47.4	49.5	52.4	55.0	56.9	59.0	61.5	62.5	62.6	62.7	61.9	60.0	57.5	55.8	53.8
St. Louis, Mo.....	53.4	52.9	52.3	51.5	50.5	49.9	49.6	50.1	51.1	52.4	54.2	56.5	57.7	58.4	59.5	60.4	60.4	60.3	59.3	57.2	56.4	55.5	54.6	53.8	54.9
St. Paul, Minn.....	43.4	42.5	41.7	40.8	40.0	39.4	38.7	39.7	41.0	43.2	45.7	47.5	49.0	50.4	51.7	52.6	52.7	52.4	51.6	50.3	48.6	47.2	45.6	44.3	45.8
Salt Lake City, Utah..	46.6	45.8	45.3	44.5	43.7	42.9	41.8	41.6	41.4	44.2	47.3	50.7	53.2	54.3	55.8	56.6	57.0	57.0	57.0	56.0	54.8	53.2	50.0	48.9	49.5
San Diego, Cal.....	56.6	56.0	55.4	55.1	54.9	54.7	54.2	53.8	53.4	56.2	58.8	61.6	63.3	64.1	65.0	65.3	65.4	65.1	64.4	63.4	61.9	59.6	59.0	57.8	59.4
San Francisco, Cal....	54.3	53.6	52.7	52.0	51.7	51.6	51.1	51.2	51.3	52.2	54.3	56.4	58.9	60.1	61.4	63.0	63.6	62.9	61.6	60.2	57.9	56.7	55.5	54.9	56.2
Savannah, Ga.....	61.7	61.3	60.6	60.1	59.3	58.9	59.5	62.0	64.7	67.2	69.5	71.3	72.4	72.3	72.7	72.1	71.0	69.5	67.2	65.0	64.0	63.6	63.1	62.5	65.5
Washington, D. C....	46.9	46.0	44.8	44.2	43.3	43.1	45.3	48.2	50.9	53.4	56.2	58.6	60.5	62.1	62.7	62.4	61.5	60.3	57.7	56.1	54.0	52.0	50.3	49.0	52.9

TABLE VI.—*Mean pressure for each hour of seventy-fifth meridian time, April,* 1897.

Stations.	1 a. m.	2 a. m.	3 a. m.	4 a. m.	5 a. m.	6 a. m.	7 a. m.	8 a. m.	9 a. m.	10 a. m.	11 a. m.	Noon.	1 p. m.	2 p. m.	3 p. m.	4 p. m.	5 p. m.	6 p. m.	7 p. m.	8 p. m.	9 p. m.	10 p. m.	11 p. m.	Midnight.	Mean.
Bismarck, N. Dak...	28.264	.265	.262	.258	.257	.259	.262	.267	.272	.270	.269	.264	.261	.251	.243	.237	.232	.231	.232	.234	.244	.255	.260	.261	.255
Boston, Mass.....	29.921	.916	.912	.914	.920	.932	.940	.945	.945	.938	.924	.911	.901	.892	.884	.881	.882	.885	.885	.902	.914	.917	.917	.917	.913
Buffalo, N. Y.....	29.247	.240	.236	.236	.235	.240	.249	.250	.251	.251	.247	.237	.231	.223	.213	.209	.212	.244	.216	.221	.234	.235	.232	.230	.233
Chicago, Ill.....	29.165	.155	.154	.154	.153	.164	.178	.187	.188	.183	.188	.181	.171	.164	.154	.145	.144	.144	.141	.145	.156	.162	.159	.155	.162
Cincinnati, Ohio ...	29.421	.417	.409	.408	.408	.414	.428	.439	.448	.447	.447	.437	.423	.416	.405	.396	.394	.394	.397	.401	.410	.417	.415	.411	.417
Cleveland, Ohio	29.256	.249	.244	.244	.247	.252	.264	.269	.273	.271	.264	.254	.246	.242	.229	.226	.222	.222	.228	.231	.243	.242	.239	.237	.246
Detroit, Mich.....	29.283	.277	.268	.268	.267	.275	.286	.292	.290	.290	.292	.284	.276	.269	.259	.252	.252	.254	.252	.257	.265	.267	.268	.265	.271
Dodge City, Kans..	27.392	.394	.398	.397	.400	.400	.407	.414	.422	.424	.425	.425	.409	.398	.381	.367	.353	.346	.349	.354	.364	.384	.401	.400	.392
Eastport, Me.....	29.925	.921	.920	.919	.924	.933	.942	.946	.952	.950	.945	.937	.929	.921	.913	.912	.918	.922	.931	.935	.939	.939	.932	.930	.931
Galveston, Tex.....	30.085	.080	.025	.014	.016	.024	.035	.053	.059	.066	.073	.077	.067	.051	.043	.026	.012	.006	.005	.008	.019	.034	.040	.041	.036
Havre, Mont.....	27.356	.357	.354	.352	.354	.355	.360	.366	.373	.376	.374	.372	.366	.359	.346	.336	.327	.320	.314	.312	.318	.328	.334	.338	.348
Kansas City, Mo....	29.006	.001	.999	.000	.997	.006	.021	.027	.033	.039	.040	.039	.024	.009	.995	.987	.980	.981	.983	.981	.999	.011	.015	.015	.008
Key West, Fla.....	30.064	.048	.038	.037	.042	.045	.060	.066	.076	.079	.078	.070	.062	.049	.032	.023	.017	.025	.037	.051	.066	.075	.074	.068	.053
Memphis, Tenn.....	29.641	.639	.634	.632	.637	.642	.657	.672	.682	.685	.688	.683	.671	.656	.640	.622	.614	.612	.612	.616	.626	.636	.641	.643	.645
New Orleans, La....	30.021	.013	.006	.003	.008	.020	.033	.049	.057	.067	.069	.063	.049	.036	.016	.001	.989	.989	.993	.996	.009	.021	.025	.025	.023
New York, N. Y....	29.761	.755	.751	.750	.756	.767	.781	.786	.786	.782	.766	.750	.742	.729	.717	.712	.713	.713	.725	.737	.752	.758	.759	.758	.750
Philadelphia, Pa....	29.996	.990	.985	.984	.991	.000	.012	.018	.020	.018	.010	.997	.982	.970	.958	.945	.943	.943	.954	.970	.982	.983	.986	.984	.984
Pittsburg, Pa.....	29.205	.199	.195	.196	.200	.206	.216	.216	.216	.214	.212	.198	.186	.171	.162	.157	.161	.164	.173	.185	.193	.194	.188	.184	.191
Portland, Oreg.....	29.991	.999	.002	.003	.002	.002	.004	.005	.010	.022	.031	.033	.036	.029	.017	.002	.992	.978	.970	.962	.961	.963	.972	.984	.999
St. Louis, Mo.....	29.445	.443	.439	.441	.446	.453	.467	.479	.480	.478	.477	.470	.459	.448	.431	.422	.415	.416	.418	.425	.435	.443	.447	.447	.447
St. Paul, Minn.....	29.112	.114	.109	.110	.108	.110	.119	.127	.132	.132	.133	.131	.122	.112	.103	.093	.084	.082	.080	.082	.091	.100	.104	.109	.108
Salt Lake City, Utah	25.693	.695	.698	.695	.697	.696	.700	.709	.718	.720	.723	.726	.724	.716	.703	.693	.681	.670	.674	.671	.667	.672	.682	.688	.696
San Diego, Cal.....	29.968	.968	.965	.957	.949	.943	.942	.942	.953	.966	.972	.979	.979	.978	.962	.956	.943	.933	.926	.927	.929	.938	.951	.962	.954
San Francisco, Cal..	29.964	.965	.965	.960	.952	.949	.949	.951	.964	.974	.980	.986	.991	.986	.974	.965	.950	.939	.931	.927	.926	.932	.951	.959	.958
Savannah, Ga.....	30.016	.009	.005	.004	.011	.021	.037	.046	.052	.057	.058	.047	.033	.016	.998	.984	.979	.981	.987	.998	.002	.006	.006	.005	.015
Washington, D. C...	30.015	.011	.009	.011	.018	.030	.036	.042	.044	.042	.031	.015	.996	.981	.959	.952	.950	.952	.962	.976	.993	.997	.001	.002	.001

TABLE VII.—*Average wind movement for each hour of seventy-fifth meridian time, April, 1897.*

Stations.	1 a. m.	2 a. m.	3 a. m.	4 a. m.	5 a. m.	6 a. m.	7 a. m.	8 a. m.	9 a. m.	10 a. m.	11 a. m.	Noon.	1 p. m.	2 p. m.	3 p. m.	4 p. m.	5 p. m.	6 p. m.	7 p. m.	8 p. m.	9 p. m.	10 p. m.	11 p. m.	Midnight.	Mean.
Abilene, Tex.	10.5	10.1	9.7	9.7	9.3	9.8	8.9	9.3	10.9	13.1	14.4	14.6	15.0	14.6	14.6	14.6	15.1	15.1	14.7	12.8	10.8	10.3	10.5	10.5	12.0
Albany, N. Y.	7.1	7.2	7.3	6.9	6.6	6.5	6.7	8.4	10.3	11.1	11.2	11.0	11.6	11.7	12.0	12.1	11.4	10.2	8.4	8.3	7.8	7.6	6.8	7.1	9.0
Alpena, Mich.	8.0	7.8	7.9	8.1	8.3	8.6	9.2	9.3	10.1	11.1	12.3	12.6	13.0	13.1	13.0	13.1	12.7	12.2	10.6	9.4	8.7	8.5	7.7	7.7	10.1
Amarillo, Tex.	17.0	16.5	15.8	15.4	15.0	15.5	14.5	14.1	15.2	18.4	19.0	19.4	18.8	18.5	18.2	19.3	19.5	20.4	19.3	18.6	18.0	17.9	17.0	17.4	17.4
Atlanta, Ga.	9.7	9.9	9.6	9.9	10.4	10.6	10.0	9.5	10.4	11.2	11.7	11.6	11.9	11.9	12.2	12.6	12.7	12.7	10.7	9.5	9.3	10.4	9.8	9.6	10.7
Atlantic City, N. J.	11.3	11.0	10.8	10.7	10.8	10.9	11.4	12.6	13.0	12.6	13.3	13.6	14.1	13.2	13.5	13.3	12.5	12.0	11.0	10.2	10.5	10.8	10.5	9.7	11.8
Augusta, Ga.	5.1	4.7	4.7	4.6	4.0	4.1	4.6	5.5	6.7	7.1	7.3	7.7	8.9	8.8	9.3	9.7	9.6	8.8	7.4	6.0	5.2	5.1	5.0	5.1	6.5
Baker City, Oreg.	5.4	6.4	6.9	7.5	6.9	6.9	6.7	7.0	6.8	6.9	5.5	4.5	4.9	5.8	6.4	7.3	8.1	8.2	8.2	8.3	7.9	6.2	4.5	4.4	6.6
Baltimore, Md.	4.2	3.7	3.7	3.3	3.4	2.9	4.1	5.0	5.8	6.3	6.6	6.9	7.8	7.5	8.1	7.4	7.5	7.1	5.9	5.4	5.4	5.3	4.9	4.4	5.5
Bismarck, N. Dak.	8.4	8.3	7.6	7.0	6.7	6.6	7.2	7.5	8.7	10.1	10.9	11.9	13.1	14.2	15.6	15.6	15.9	15.0	14.5	12.8	10.5	9.5	8.9	8.7	10.6
Block Island, R. I.	11.6	11.9	12.4	12.5	13.7	13.7	14.8	15.0	15.3	15.7	15.5	15.2	16.1	17.0	17.6	17.8	17.6	16.5	15.3	14.8	13.3	12.9	12.6	12.1	14.6
Boston, Mass.	11.1	10.7	10.2	10.1	9.6	10.0	10.9	11.1	11.8	12.0	12.7	13.3	13.5	14.1	14.5	14.4	13.9	12.5	11.3	10.7	11.4	11.6	11.3	10.3	11.8
Buffalo, N. Y.	14.1	14.4	14.1	14.3	14.4	14.0	13.9	14.3	16.1	16.4	16.5	17.1	17.8	17.3	16.0	15.5	15.2	15.4	15.5	15.3	15.3	15.4	14.0	14.5	15.3
Cairo, Ill.	10.6	11.1	11.3	11.2	10.3	10.0	9.7	10.4	11.3	11.8	11.4	10.9	11.4	11.5	12.2	12.9	12.4	11.6	10.7	10.4	10.5	11.0	10.7	10.2	11.1
Cape Henry, Va.	13.7	14.1	15.5	15.4	15.0	14.8	14.5	14.9	14.6	14.1	14.3	13.8	13.2	13.5	13.6	13.6	14.2	12.9	12.4	12.0	12.3	12.1	12.7	13.8	13.8
Charleston, S. C*.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Charlotte, N. C.	7.1	7.2	6.6	6.5	5.9	5.3	5.5	6.8	8.1	8.9	8.8	8.2	7.9	9.2	8.7	9.3	9.0	8.5	7.4	6.5	5.9	7.0	6.9	6.6	7.4
Chattanooga, Tenn.	6.0	5.6	6.1	6.1	5.3	5.4	4.9	5.8	7.3	8.5	9.4	10.2	11.6	11.9	12.8	11.7	11.9	11.1	10.1	7.9	7.2	6.1	5.3	5.5	8.1
Cheyenne, Wyo.	10.4	10.1	10.3	10.6	10.0	9.7	9.9	8.3	9.5	12.0	12.2	13.0	14.8	14.6	14.9	15.0	14.8	15.3	14.6	14.1	11.4	9.6	10.0	10.0	11.9
Chicago, Ill.	18.7	19.1	19.2	18.9	19.4	19.3	20.0	19.8	20.4	21.8	22.2	22.1	23.0	22.0	22.8	21.9	21.8	21.5	20.5	20.1	19.3	18.4	18.2	18.1	20.4
Cincinnati, Ohio	7.4	7.2	6.9	7.0	6.8	7.0	6.9	7.8	8.8	10.2	11.7	12.2	12.2	12.4	12.7	12.2	12.1	11.3	10.5	9.1	8.8	8.0	8.4	7.4	9.4
Cleveland, Ohio	14.6	15.2	14.7	14.6	14.3	15.1	15.4	16.6	16.8	17.0	17.7	16.7	16.7	17.5	17.8	17.6	16.0	14.4	12.6	13.2	13.9	13.7	14.1	13.9	15.4
Columbia, Mo.	10.3	10.4	10.1	10.0	10.4	10.9	10.7	11.0	12.2	12.5	12.9	13.4	13.6	14.7	14.5	14.5	14.6	13.6	12.2	11.3	10.0	9.5	9.5	10.4	11.8
Columbus, Ohio	6.4	7.0	7.0	7.4	7.1	7.4	7.1	8.4	9.2	9.7	9.9	10.4	10.9	11.4	11.5	10.6	11.0	9.9	8.6	7.7	7.2	7.3	6.9	6.4	8.6
Concordia, Kans.	9.4	8.4	7.7	7.2	7.5	7.3	7.3	7.4	8.4	10.7	11.8	12.1	12.0	12.0	11.3	11.7	12.0	12.2	11.9	10.9	8.2	8.5	8.8	9.1	9.7
Corpus Christi, Tex.	13.7	12.4	12.6	11.7	11.4	11.3	12.0	10.9	11.8	12.6	13.5	14.2	15.2	16.1	16.3	16.6	17.9	17.6	17.0	15.8	14.7	14.2	14.6	13.7	14.1
Davenport, Iowa	9.4	9.5	8.8	9.3	9.0	8.6	9.3	9.3	10.0	11.2	11.5	11.9	12.0	12.3	12.4	12.3	11.1	10.6	10.1	8.7	8.7	8.3	8.4	8.5	10.1
Denver, Colo.	7.5	7.7	7.6	7.4	7.6	7.1	6.4	6.2	6.9	7.2	6.9	6.9	8.6	9.9	10.8	11.6	12.4	12.8	12.8	12.4	11.4	9.8	8.7	6.6	8.9
Des Moines, Iowa	9.5	9.1	9.7	9.3	9.6	10.0	9.6	9.8	10.1	11.5	12.5	13.0	13.4	13.2	12.9	13.4	13.5	13.2	12.6	11.2	9.9	9.2	9.2	8.2	11.0
Detroit, Mich.	9.5	9.3	8.8	9.6	9.5	9.3	9.6	9.6	10.6	11.6	12.5	12.5	13.2	12.7	12.4	12.7	12.7	11.8	10.5	10.1	10.1	10.1	9.8	9.7	10.8
Dodge City, Kans.	11.6	11.6	11.6	11.3	10.0	10.1	10.9	11.6	14.0	15.8	16.5	16.6	15.8	15.5	15.1	14.8	14.3	13.8	13.3	12.4	11.0	11.6	11.2	11.1	13.0
Dubuque, Iowa	8.0	8.1	7.9	7.7	7.8	7.8	7.3	8.5	9.4	10.6	11.1	11.1	11.5	11.4	11.7	11.4	11.0	10.9	9.8	8.3	7.7	7.9	8.3	8.2	9.3
Duluth, Minn.	8.5	9.3	9.9	10.7	10.5	9.9	10.5	11.3	13.2	13.8	13.9	14.7	14.7	15.0	13.9	14.4	13.5	13.1	12.3	10.8	9.8	9.6	9.8	8.8	11.7
Eastport, Me.	10.5	10.0	9.8	9.9	10.0	10.4	10.5	10.1	10.4	10.9	11.4	12.0	12.7	13.1	13.2	13.0	12.0	11.3	11.0	10.5	10.6	9.3	9.9	10.5	11.0
El Paso, Tex.	11.1	11.2	11.2	10.4	10.7	10.5	10.2	9.9	9.4	9.9	12.5	13.2	13.4	14.7	15.5	16.1	16.5	16.4	16.4	16.2	14.1	11.9	10.9	10.7	12.6
Erie, Pa.	11.2	11.3	12.4	12.3	12.6	11.7	11.3	11.7	12.8	12.8	13.6	13.8	15.2	14.5	13.6	13.3	13.3	12.1	10.7	10.2	10.2	10.6	10.5	10.9	12.2
Eureka, Cal.	6.1	4.7	4.6	3.5	3.5	3.3	3.3	3.5	2.8	3.3	3.2	4.3	6.8	8.7	10.7	12.2	12.5	12.8	13.2	12.5	10.7	9.2	8.4	7.0	7.1
Fort Canby, Wash.	13.5	13.3	11.8	11.2	10.9	10.2	10.7	11.1	10.6	10.6	11.1	10.7	10.4	11.0	11.3	11.5	12.0	13.1	13.4	12.6	13.1	13.7	13.2	12.8	11.8
Fort Smith, Ark.	6.0	6.5	5.7	5.9	5.9	6.3	5.9	6.2	7.2	7.8	9.1	9.8	10.8	10.7	11.2	10.8	11.5	10.9	10.2	9.1	7.2	7.0	6.3	6.4	8.1
Fresno, Cal.	6.3	6.3	6.6	5.6	4.9	4.6	4.3	4.1	3.3	3.8	4.6	5.0	5.4	5.3	5.6	5.8	6.0	6.8	6.9	7.4	6.9	6.2	6.1	6.1	5.6
Galveston, Tex.	11.3	11.1	11.0	10.9	10.2	9.2	10.1	10.6	10.9	11.6	12.0	12.5	12.5	12.3	12.4	13.1	13.0	12.9	12.7	12.2	11.7	12.2	11.8	11.2	11.6
Grand Haven, Mich.	11.0	11.3	11.2	11.6	11.0	10.8	10.1	11.0	12.5	13.1	13.3	13.9	14.3	15.3	14.6	14.7	13.9	13.2	12.4	11.7	10.9	10.8	10.6	11.0	12.3
Greenbay, Wis.	9.0	8.5	8.6	9.2	9.6	9.4	9.3	9.1	10.4	10.8	11.3	11.9	12.6	12.3	11.8	11.3	11.5	11.1	10.6	9.5	9.7	9.1	9.3	8.6	10.2
Hannibal, Mo.	11.3	11.7	12.2	12.3	11.3	11.6	11.8	12.3	13.0	14.3	14.2	13.8	14.7	14.4	14.6	14.6	14.5	13.4	12.0	11.0	11.1	10.0	10.9	11.3	12.6
Harrisburg, Pa.	6.6	6.3	6.4	6.4	5.9	5.3	5.7	6.2	7.1	7.7	8.3	8.0	9.3	10.7	10.7	10.3	10.2	9.1	7.9	8.0	8.7	7.8	6.8	6.5	7.8
Hatteras, N. C.	9.7	10.5	11.5	12.3	12.8	13.9	13.7	14.1	14.4	14.5	14.3	14.7	13.8	14.0	13.6	13.2	12.1	11.1	10.2	9.9	9.5	9.4	9.3	9.1	12.2
Havre, Mont.	9.2	9.0	8.2	9.0	9.1	9.0	9.7	9.1	9.9	11.3	13.1	14.5	15.7	16.2	16.5	16.3	15.3	15.5	14.1	13.3	11.5	8.9	9.2	8.5	11.8
Helena, Mont*.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Huron, S. Dak.	12.3	11.3	10.7	10.4	10.8	11.0	10.6	10.3	10.8	13.1	13.5	13.6	14.7	15.8	15.5	15.3	15.7	15.1	14.5	13.4	11.9	10.9	11.4	11.7	12.7
Idaho Falls, Idaho	7.2	7.6	7.5	7.4	7.0	7.4	7.1	7.1	7.7	8.8	9.0	9.2	11.3	11.4	12.4	13.2	13.5	13.4	13.5	12.7	11.2	8.7	7.6	7.3	9.6
Indianapolis, Ind.	11.2	10.5	10.2	9.9	10.2	10.1	10.3	11.3	12.5	14.0	15.1	15.0	15.8	15.6	15.1	15.3	15.1	14.5	13.2	11.7	10.9	11.8	11.2	11.1	12.6
Jacksonville, Fla.	6.8	6.6	6.9	6.8	6.4	6.5	6.2	6.7	7.8	9.4	10.4	11.3	12.3	11.4	11.3	11.5	11.5	11.1	9.5	7.4	6.5	6.5	6.2	6.3	8.5
Jupiter, Fla.	11.3	11.2	11.8	11.1	10.7	9.7	9.9	10.1	11.7	13.1	13.2	13.9	13.8	13.5	14.2	13.9	14.1	13.5	12.7	13.1	13.7	12.8	11.8	11.7	12.3
Kansas City, Mo.	10.2	10.2	9.9	9.4	9.5	9.0	8.5	9.0	9.1	10.0	11.2	12.1	13.0	13.1	13.4	13.8	13.9	12.8	12.2	10.8	10.1	10.2	10.7	10.1	10.9
Keokuk, Iowa	10.2	9.6	9.8	9.3	8.7	8.9	8.9	9.6	10.6	11.3	11.1	11.8	12.2	12.5	12.5	12.1	11.4	11.2	10.3	9.8	9.0	9.2	9.6	10.5	10.4
Key West, Fla.	11.9	12.1	11.6	11.8	12.3	12.4	11.9	12.8	13.1	13.7	14.1	13.6	13.7	13.5	12.1	11.8	11.4	10.9	11.1	11.2	10.9	11.2	12.4	12.1	12.2
Kittyhawk, N. C.	12.6	14.2	15.2	15.7	16.2	16.7	16.3	17.7	17.4	17.1	15.8	14.2	16.0	15.9	14.9	14.8	14.5	13.9	14.1	13.6	13.7	13.7	12.8	13.2	15.0
Knoxville, Tenn.	4.1	3.6	4.2	4.3	3.9	4.1	4.8	5.4	6.4	6.9	7.5	8.1	8.2	8.6	8.2	8.4	7.9	7.9	7.2	5.2	4.7	4.0	4.0	3.5	5.9
La Crosse, Wis.	8.8	8.9	8.8	8.6	8.2	9.3	9.0	9.2	9.7	9.8	10.0	11.0	11.4	12.0	12.1	11.9	11.3	11.2	10.3	9.8	8.9	8.6	8.5	8.5	9.8
Lander, Wyo.	4.3	3.8	3.4	3.1	3.6	3.0	2.6	2.8	2.7	3.1	4.8	5.0	5.5	5.7	6.2	7.0	6.3	6.4	6.5	7.2	6.9	4.9	4.9	4.9	4.8
Lexington, Ky.	12.5	12.4	12.9	12.4	12.1	12.6	12.5	12.8	13.2	14.0	15.1	15.3	15.4	15.0	14.3	14.8	14.1	13.5	12.3	11.5	11.5	10.6	11.3	11.6	13.1
Little Rock, Ark.	6.3	6.8	6.3	6.2	6.6	6.5	6.4	6.6	7.8	8.8	9.9	9.4	10.2	10.7	11.0	10.9	10.7	9.6	9.2	8.2	7.6	7.4	7.1	7.3	8.2
Los Angeles, Cal.	2.6	3.0	3.0	2.7	2.7	2.7	2.2	2.8	2.9	2.9	3.5	4.0	4.3	5.1	6.2	7.7	8.8	8.6	8.4	7.8	6.6	4.8	3.4	3.0	4.6
Louisville, Ky.	8.4	8.5	8.2	8.2	8.5	8.3	8.6	9.3	10.3	11.4	12.0	12.0	12.7	12.8	13.0	13.3	13.0	11.9	10.4	9.7	9.0	8.8	8.3	8.7	10.2
Lynchburg, Va.	3.9	3.2	2.9	2.7	2.6	3.0	3.0	3.5	4.7	5.2	5.7	5.9	6.4	6.5	6.5	6.9	7.4	7.5	7.2	6.2	5.0	4.8	4.4	3.9	5.0
Marquette, Mich.	9.9	9.9	10.3	10.9	10.7	10.2	10.8	10.8	11.3	11.6	13.2	14.6	14.7	15.2	14.8	14.3	13.3	11.6	10.3	9.6	9.2	9.3	10.1	10.0	11.5
Memphis, Tenn.	11.9	11.5	11.4	11.5	10.5	10.8	10.5	10.0	10.5	10.9	11.4	10.9	11.4	11.8	11.2	11.7	11.7	11.0	10.4	9.5	9.3	10.5	10.5	11.2	10.9
Milwaukee, Wis.	10.4	10.0	10.6	10.2	10.4	10.4	10.6	10.9	11.5	12.5	12.7	13.5	14.5	14.5	15.0	14.7	13.9	12.4	10.9	9.8	9.5	9.5	10.2	10.0	11.6
Mobile, Ala.	6.3	5.6	5.3	5.7	5.6	5.7	5.8	6.3	7.3	8.0	8.6	10.3	10.8	11.0	12.1	12.3	12.6	12.5	11.7	10.0	8.7	7.8	7.6	7.0	8.5
Montgomery, Ala.	5.6	5.9	5.4	5.2	4.9	5.2	4.9	5.7	6.3	7.2	7.8	8.0	8.7	9.1	9.0	9.6	9.7	8.8	7.4	6.7	6.6	6.7	6.2	6.1	7.0
Moorhead, Minn.	11.5	11.7	10.8	10.4	11.1	10.7	10.9	11.5	12.9	13.5	13.4	13.5	13.5	13.9	14.6	14.0	13.5	14.3	13.3	12.9	11.7	11.0	10.6	11.1	12.3
Nantucket, Mass.	9.7	9.8	10.0	10.5	10.1	10.9	11.8	12.3	12.9	12.9	13.4	13.2	13.1	13.3	13.4	12.7	11.9	10.8	9.7	9.5	9.6	9.1	9.0	8.9	11.2
Nashville, Tenn.	7.1	7.7	8.2	7.8	7.1	6.4	6.0	7.0	8.3	9.6	10.0	10.9	11.1	11.1	11.1	10.4	10.3	10.7	10.6	8.9	7.9	7.3	7.1	6.9	8.7
New Haven, Conn.	8.1	7.0	6.4	6.6	7.0	7.3	8.2	9.2	9.8	10.2	11.6	13.2	13.9	14.2	14.3	14.1	13.4	11.9	11.0	10.8	8.5	7.9	7.2	7.6	10.0
New Orleans, La.	8.4	8.2	8.4	8.4	8.1	7.7	7.3	7.5	8.8	10.4	11.2	11.8	11.8	11.9	11.2	10.9	11.4	11.4	10.9	9.7	8.7	9.0	9.1	8.8	9.6
New York, N. Y.	12.4	11.2	10.8	11.1	11.6	11.6	12.9	13.4	12.4	12.0	12.5	13.0	14.1	15.4	16.7	17.1	17.4	16.4	16.7	15.4	14.1	12.2	11.3	11.5	13.5
Norfolk, Va.	7.9	7.7	8.2	7.8	7.7	7.3	8.3	9.1	9.4	9.2	9.4	9.2	9.0	10.0	10.5	11.0	11.0	10.4	8.8	8.0	8.0	8.1	7.8	7.4	8.8
Northfield, Vt.	7.1	6.8	6.5	6.4	5.9	6.2	5.6	7.5	9.5	10.3	11.6	12.7	12.9	13.5	13.7	12.7	12.5	11.1	9.4	8.8	8.6	7.5	7.1	7.4	9.2
North Platte, Nebr.	10.6	10.0	9.7	10.1	9.2	8.4	8.9	9.2	9.7	11.6	13.3	13.5	14.1	14.4	14.4	14.5	14.2	13.7	13.9	12.5	10.7	10.6	11.0	10.8	11.6
Oklahoma, Okla.	10.7	10.1	9.7	9.5	9.0	9.7	9.6	9.4	10.4	12.8	14.7	15.6	15.8	15.1	15.0	15.3	15.3	15.4	14.5	13.1	11.3	10.9	10.3	10.5	12.2
Omaha, Nebr.	8.5	9.4	9.0	8.8	9.5	9.6	9.3	9.3	10.2	11.6	12.1	12.2	12.6	13.1	12.6	12.5	11.8	11.3	10.3	10.3	8.2	8.8	9.4	8.9	10.4
Oswego, N. Y.	11.2	11.5	11.2	11.1	10.8	11.0	10.9	11.3	12.1	12.7	13.4	13.1	13.7	14.2	13.6	13.1	12.6	11.5	10.4	9.9	10.3	10.8	11.3	11.3	11.8
Palestine, Tex.	6.0	5.8	6.0	5.6	5.8	6.0	6.2	6.1	7.1	8.9	9.6	9.9	9.8	10.5	10.6	10.4	10.5	9.4	8.7	6.8	6.1	6.8	6.7	6.7	7.8
Parkersburg, W. Va.	5.0	5.0	4.7	4.8	4.6	4.8	4.7	5.6	6.6	7.3	7.6	7.8	9.0	9.5	8.9	8.5	9.3	9.0	7.3	5.4	4.9	5.0	4.5	4.7	6.4
Pensacola, Fla.	9.8	9.0	8.7	9.2	9.7	9.3	9.5	10.3	10.8	12.0	12.4	12.1	12.3	12.7	13.5	13.4	13.1	11.6	11.0	10.1	9.2	10.1	9.7	10.2	10.8

*Report not received in time for publication.

TABLE VII.—*Average wind movement, etc.*—Continued.

Stations.	1 a. m.	2 a. m.	3 a. m.	4 a. m.	5 a. m.	6 a. m.	7 a. m.	8 a. m.	9 a. m.	10 a. m.	11 a. m.	Noon.	1 p. m.	2 p. m.	3 p. m.	4 p. m.	5 p. m.	6 p. m.	7 p. m.	8 p. m.	9 p. m.	10 p. m.	11 p. m.	Midnight.	Mean.
Philadelphia, Pa.	9.6	9.3	9.8	9.8	9.6	9.1	9.5	10.9	12.2	12.3	12.0	11.7	12.1	12.2	12.6	12.2	12.1	12.6	11.6	11.3	10.4	9.0	9.2	9.2	10.9
Phœnix, Ariz	3.3	3.5	3.5	4.3	3.7	3.6	3.8	3.7	4.0	4.0	4.9	5.0	5.1	4.5	4.9	6.0	6.6	6.5	6.6	6.3	4.8	4.2	3.5	3.2	4.6
Pierre, S. Dak.	10.1	9.5	9.2	8.6	8.5	8.6	9.2	8.8	9.6	11.3	11.1	12.4	13.9	13.7	14.5	15.2	14.0	14.5	15.0	13.9	10.9	10.5	9.6	9.4	11.3
Pittsburg, Pa.	5.4	5.5	5.3	5.2	5.4	5.2	5.6	6.2	7.1	7.7	8.5	8.7	8.7	9.3	9.5	9.2	8.5	7.8	7.6	7.2	7.0	6.2	5.8	5.6	7.0
Port Angeles, Wash.	5.9	6.0	5.9	5.8	5.7	6.5	6.0	6.2	5.5	5.4	5.4	6.2	8.0	8.0	8.0	8.7	8.4	8.2	8.4	7.7	7.1	6.2	5.9	6.4	6.7
Port Huron, Mich.	10.4	10.6	10.3	11.1	10.2	10.6	10.6	10.9	11.4	12.9	14.0	14.6	15.5	14.6	14.6	14.6	14.3	12.9	11.1	10.8	10.6	11.1	10.8	10.5	12.0
Portland, Me.	6.8	7.0	6.6	6.5	6.3	6.1	6.4	7.0	8.1	8.6	9.1	10.2	10.8	11.1	10.8	10.7	10.2	9.8	8.2	7.5	6.9	7.2	6.4	6.6	8.1
Portland, Oreg.	9.5	8.9	8.9	8.0	7.6	7.0	6.8	6.5	6.4	6.4	7.4	8.2	8.7	8.5	8.8	9.6	9.8	10.1	10.4	9.8	9.5	9.5	8.8	10.0	8.5
Pueblo, Colo.	6.5	6.8	7.5	7.2	7.2	7.0	5.8	5.8	5.4	6.0	6.7	6.3	8.0	9.2	10.3	11.6	12.6	13.4	14.5	14.2	12.5	11.3	9.0	7.8	8.8
Raleigh, N. C.	6.5	6.4	6.5	5.9	5.8	5.5	5.5	6.3	7.2	7.7	7.6	7.7	8.0	7.6	7.9	8.1	7.9	7.0	6.0	5.4	5.7	6.0	7.1	6.9	6.8
Rapid City, S. Dak.	7.6	7.4	7.2	8.0	7.5	7.7	7.8	7.7	7.7	8.4	9.7	10.1	11.4	12.1	12.6	12.9	12.9	12.7	12.9	11.5	9.2	7.1	6.5	6.8	9.4
Redbluff, Cal.	5.3	5.7	5.5	5.4	6.2	6.5	6.4	6.1	6.0	6.2	7.5	8.0	8.1	8.5	8.2	8.1	8.1	8.1	8.1	8.0	7.1	5.9	5.7	5.3	6.8
Rochester, N. Y.	7.1	7.3	7.4	7.9	8.0	8.1	8.0	9.0	9.6	10.2	10.9	11.3	11.8	11.8	12.1	10.8	10.4	8.9	7.6	6.9	7.2	7.5	6.9	6.5	8.9
Roseburg, Oreg.	2.1	1.9	1.9	1.7	1.7	1.7	1.8	1.9	2.0	2.1	2.2	2.9	3.5	4.4	4.8	5.5	6.4	7.2	7.1	6.8	7.1	6.4	4.7	3.3	3.8
Sacramento, Cal.	9.2	9.4	9.6	9.6	10.0	9.2	9.3	9.6	9.1	9.3	9.8	10.8	11.6	11.4	11.7	11.4	11.0	10.6	10.5	9.8	9.8	9.4	9.6	9.4	10.0
St. Louis, Mo.	10.9	10.6	10.7	10.8	11.3	11.2	11.6	12.8	13.2	14.6	14.8	14.2	14.2	14.1	14.8	14.0	13.2	13.2	13.6	12.9	11.8	11.6	11.1	10.4	12.6
St. Paul, Minn.	6.8	7.0	7.3	7.2	7.6	7.8	8.0	8.6	10.0	10.1	10.7	11.8	12.1	12.4	12.4	12.1	12.2	11.8	11.0	9.4	7.7	7.6	8.0	7.6	9.5
Salt Lake City, Utah.	5.4	4.7	5.7	5.5	5.4	5.6	5.8	5.4	5.4	5.2	5.8	7.0	8.6	9.4	9.8	10.2	11.1	11.0	11.1	10.8	8.6	5.7	5.6	5.1	7.2
San Antonio, Tex.	8.8	8.2	8.3	7.6	7.7	6.9	6.8	6.9	7.2	9.3	11.4	11.6	12.7	13.5	13.5	13.2	13.0	13.0	13.0	11.7	11.0	11.5	11.3	9.5	10.3
San Diego, Cal.	2.2	2.4	2.7	2.5	2.6	2.3	2.7	2.6	2.8	2.6	2.6	3.4	6.3	8.3	9.3	10.2	10.0	9.8	9.1	8.0	6.8	4.8	3.6	3.0	5.0
Sandusky, Ohio	8.7	9.1	9.7	9.5	9.2	9.5	9.3	9.9	10.4	11.0	11.5	12.2	13.0	12.4	12.3	11.9	11.5	11.1	10.3	9.8	9.4	9.0	9.0	9.0	10.4
San Francisco, Cal.	10.1	8.8	8.5	7.6	7.5	7.3	7.1	7.3	7.3	7.8	8.3	8.1	8.7	9.8	12.3	13.4	15.5	16.3	17.4	18.5	19.1	17.8	15.5	10.8	11.3
San Luis Obispo, Cal.	3.3	3.8	3.5	3.5	3.5	3.7	3.8	4.0	3.8	3.6	4.5	4.8	5.7	6.2	7.1	8.3	8.9	8.9	8.2	7.9	7.1	5.9	4.1	3.5	5.3
Santa Fe, N. Mex.	5.7	5.8	5.1	4.7	4.3	4.7	4.9	5.0	4.7	6.0	8.2	9.3	11.3	12.0	13.7	12.0	12.1	12.9	11.9	11.3	8.4	6.5	6.2	5.6	8.0
Sault Ste Marie, Mich.	7.9	7.8	8.1	7.6	7.9	7.2	7.8	8.5	9.7	10.2	10.6	11.5	12.2	12.2	12.3	13.0	12.7	12.2	11.3	9.9	9.0	8.5	8.0	7.2	9.7
Savannah, Ga.	8.1	8.1	8.1	8.3	7.8	7.9	8.0	8.4	9.1	9.8	10.0	10.3	11.4	12.0	11.9	12.3	12.2	11.8	9.8	8.8	8.9	9.2	9.0	8.6	9.6
Seattle, Wash.	3.9	4.0	3.8	4.2	3.5	3.7	4.0	3.8	3.4	4.1	4.1	4.6	5.6	5.6	6.3	7.2	7.2	7.4	7.5	7.2	6.8	6.2	5.6	4.9	5.2
Shreveport, La.	6.5	6.3	6.9	7.4	7.1	6.6	6.0	6.8	8.4	8.2	8.9	9.3	9.7	9.5	10.0	10.7	10.5	9.0	8.6	6.9	6.4	6.9	7.6	7.3	8.0
Sioux City, Iowa	14.8	15.3	13.7	13.6	13.8	14.1	13.8	14.2	15.1	16.3	17.5	18.0	19.1	19.1	19.3	19.8	19.5	19.2	17.2	15.2	14.0	13.4	13.2	13.1	15.9
Spokane, Wash.	4.0	3.8	3.6	3.9	4.4	4.5	5.1	4.9	5.1	5.4	5.9	6.8	7.6	7.6	8.3	8.6	9.1	9.2	8.3	8.1	6.9	5.3	4.7	4.7	6.1
Springfield, Ill.	11.0	11.2	10.8	11.0	10.8	10.5	11.2	11.7	12.6	14.3	14.6	15.0	14.9	14.4	14.6	14.8	14.9	14.1	12.5	10.5	10.0	10.2	10.4	10.6	12.4
Springfield, Mo.	10.4	10.6	10.1	11.6	11.0	10.9	11.6	12.0	12.9	14.0	14.7	15.3	15.7	15.7	15.8	16.4	16.2	16.0	15.2	13.0	10.9	10.7	10.4	10.7	13.0
Tampa, Fla.	5.3	4.9	5.3	5.9	6.1	5.8	6.2	7.3	8.7	9.6	9.3	9.3	10.8	10.6	11.0	10.6	10.5	9.5	8.8	7.4	7.0	6.6	6.3	5.0	7.8
Tatoosh Island, Wash.	12.7	13.3	12.5	12.8	12.8	12.1	12.0	13.0	13.7	13.8	13.8	14.0	14.3	14.1	13.5	14.5	14.4	13.2	12.1	13.4	12.1	13.1	13.5	12.4	13.2
Toledo, Ohio	10.3	10.4	10.1	10.0	10.4	10.1	10.4	10.9	12.6	13.2	14.2	14.1	14.6	14.8	14.3	14.3	14.0	12.8	11.5	10.7	9.7	9.8	10.0	10.4	11.8
Vicksburg, Miss.	7.8	7.6	7.8	7.2	7.1	7.4	7.2	7.3	8.3	8.5	8.2	7.8	8.8	8.0	7.9	8.1	7.8	7.4	6.8	6.6	7.0	7.5	7.7	7.7	7.6
Vineyard Haven, Mass	7.2	7.5	7.7	7.8	7.5	7.8	9.4	10.6	10.3	10.9	11.2	11.5	12.1	12.1	12.3	11.9	11.3	9.7	8.2	7.7	7.5	7.3	7.5	7.8	9.4
Walla Walla, Wash.	5.1	5.4	5.6	5.5	5.2	4.8	5.2	5.8	5.9	6.1	6.6	7.9	8.2	8.5	8.2	8.0	7.8	8.1	7.3	7.4	7.0	6.2	6.6	6.2	6.6
Washington, D. C.	6.4	5.8	5.7	5.5	5.4	4.7	5.5	7.0	8.0	8.5	8.4	8.8	9.9	10.1	10.4	11.2	10.8	10.0	8.2	7.3	6.8	7.4	7.7	7.1	7.8
Wichita, Kans.	10.0	9.5	9.3	9.0	8.8	9.4	9.1	9.9	10.6	12.7	13.6	14.9	16.1	16.3	15.9	16.0	15.2	14.4	14.0	11.6	10.3	10.2	9.1	9.8	11.9
Williston, N. Dak.	7.4	7.4	6.9	7.8	8.0	7.9	8.2	8.6	9.4	10.8	11.6	12.0	13.0	14.7	15.0	14.9	14.4	14.8	14.4	13.0	10.0	9.6	8.8	7.5	10.7
Wilmington, N. C.	7.3	7.1	7.5	7.3	7.1	7.6	7.6	8.0	9.2	9.5	9.8	10.2	10.8	12.0	12.3	11.5	11.2	11.0	9.5	8.1	7.7	7.6	7.0	7.0	8.9
Woods Hole, Mass.	13.5	13.1	13.4	13.1	13.1	13.1	14.1	15.5	15.3	16.1	15.7	16.0	18.2	18.2	18.0	18.3	16.8	15.7	14.0	13.8	13.6	13.3	14.3	13.3	15.0
Yankton, S. Dak.	10.6	10.7	10.6	10.9	10.5	10.8	10.6	9.7	10.9	11.9	12.9	13.5	14.0	14.0	14.3	14.3	14.1	13.2	13.6	11.9	10.1	9.6	9.5	10.3	11.8

TABLE VIII.—*Resultant winds from observations at 8 a. m. and 8 p. m., daily, during the month of April, 1897.*

Stations.	Component direction from— N.	S.	E.	W.	Resultant. Direction from—	Duration.
	Hours.	Hours.	Hours.	Hours.	°	Hours.
New England.						
Eastport, Me	20	20	13	23	w.	10
Portland, Me	19	23	11	21	s. 68 w.	11
Northfield, Vt	25	27	5	11	s. 72 w.	6
Boston, Mass	17	17	11	30	w.	19
Nantucket, Mass	16	24	9	27	s. 66 w.	20
Woods Hole, Mass.*	5	19	4	7	s. 12 w.	14
Block Island, R. I	17	19	6	36	s. 86 w.	30
New Haven, Conn	26	22	5	17	n. 72 w.	13
Middle Atlantic States.						
Albany, N. Y	26	18	1	21	n. 68 w.	22
Binghamton, N. Y †	12	6	4	12	n. 53 w.	10
New York, N. Y	21	23	11	23	s. 81 w.	12
Harrisburg, Pa	15	17	19	24	s. 68 w.	5
Philadelphia, Pa	20	23	13	20	s. 67 w.	8
Atlantic City, N. J	17	21	11	28	s. 77 w.	18
Baltimore, Md	15	13	21	21	n.	2
Washington, D. C	22	20	16	13	n. 56 e.	4
Lynchburg, Va	18	20	23	18	s. 68 e.	5
Norfolk, Va	15	25	25	11	s. 54 e.	17
South Atlantic States.						
Charlotte, N. C	11	27	25	8	s. 47 e.	23
Hatteras, N. C	22	16	23	11	n. 63 e.	13
Kittyhawk, N. C.	18	23	25	10	s. 72 e.	16
Raleigh, N. C	19	20	20	17	s. 72 e.	3
Wilmington, N. C	17	24	21	11	s. 55 e.	12
Charleston, S. C	16	25	20	10	s. 48 e.	14
Augusta, Ga	10	22	22	20	s. 9 e.	12
Savannah, Ga	18	24	20	12	s. 53 e.	10
Jacksonville, Fla	20	23	21	13	s. 69 e.	8
Florida Peninsula.						
Jupiter, Fla	14	20	25	14	s. 61 e.	12
Key West, Fla	17	11	38	3	n. 80 e.	36
Tampa, Fla	23	15	23	13	n. 51 e.	13
Eastern Gulf States.						
Atlanta, Ga	16	16	22	23	w.	1
Pensacola, Fla	19	28	13	15	s. 13 w.	9
Mobile, Ala	25	24	17	8	n. 84 e.	9
Montgomery, Ala	16	22	20	16	s. 34 e.	7
Vicksburg, Miss	17	21	23	13	s. 68 e.	11
New Orleans, La	18	19	26	14	s. 35 w.	12
Western Gulf States.						
Shreveport, La	14	29	21	13	s. 28 e.	17
Fort Smith, Ark	17	13	22	19	n. 37 e.	5
Little Rock, Ark	17	20	16	18	s. 34 w.	4
Corpus Christi, Tex	12	27	35	2	s. 66 e.	36
Galveston, Tex	14	32	24	5	s. 47 e.	26
Palestine, Tex	18	28	17	8	s. 42 e.	14
San Antonio, Tex	23	22	27	4	n. 88 e.	23
Ohio Valley and Tennessee.						
Chattanooga, Tenn	17	20	19	17	s. 34 e.	4
Knoxville, Tenn	27	5	21	20	n. 3 e.	22
Memphis, Tenn	18	22	18	16	s. 27 e.	4
Nashville, Tenn	20	21	14	19	s. 79 w.	5
Lexington, Ky	17	21	20	21	s. 14 w.	4
Louisville, Ky	21	22	16	13	s. 72 e.	3
Indianapolis, Ind	22	19	13	17	n. 53 w.	5
Cincinnati, Ohio	16	21	21	15	s. 50 e.	8
Columbus, Ohio	14	19	16	24	s. 58 w.	9
Pittsburg, Pa	11	26	13	26	s. 41 w.	20
Parkersburg, W. Va	19	22	19	16	s. 45 e.	4
Lower Lake Region.						
Buffalo, N. Y	11	26	12	27	s. 45 w.	21
Oswego, N. Y	16	22	7	24	s. 71 w.	18
Rochester, N. Y	14	22	12	30	s. 66 w.	20
Erie, Pa	13	20	11	23	s. 60 w.	14
Cleveland, Ohio	15	23	16	19	s. 21 w.	8
Sandusky, Ohio	13	20	21	20	s. 8 e.	7
Toledo, Ohio	14	18	21	22	s. 14 w.	4
Detroit, Mich	20	21	13	19	s. 80 w.	6
Upper Lake Region.						
Alpena, Mich	21	19	17	17	n.	2
Grand Haven, Mich	18	18	18	19	w.	1
Marquette, Mich	30	13	7	22	n. 42 w.	23
Port Huron, Mich	21	25	12	13	s. 14 w.	4
Sault Ste. Marie, Mich	18	17	29	15	n. 86 e.	14
Chicago, Ill	20	21	19	17	s. 63 e.	2
Milwaukee, Wis	19	19	21	15	e.	6
Upper Lake Region—Cont'd.						
Greenbay, Wis	23	19	14	15	n. 14 w.	4
Duluth, Minn	33	8	21	18	n. 7 e.	25
North Dakota.						
Moorhead, Minn	23	16	20	19	n. 9 e.	6
Bismarck, N. Dak	25	15	17	18	n. 6 w.	10
Williston, N. Dak	30	14	13	10	n. 11 e.	16
Upper Mississippi Valley.						
St. Paul, Minn	27	15	12	23	n. 43 w.	16
La Crosse, Wis. †	13	12	6	6	n.	1
Davenport, Iowa	15	15	24	18	e.	6
Des Moines, Iowa	23	18	17	18	n. 11 w.	5
Dubuque, Iowa	15	16	19	21	s. 63 w.	2
Keokuk, Iowa	20	18	15	20	n. 68 w.	5
Cairo, Ill	19	24	14	12	s. 22 e.	5
Springfield, Ill	20	20	14	19	w.	5
Hannibal, Mo. †	8	12	8	10	s. 27 w.	4
St. Louis, Mo	21	20	15	17	n. 63 w.	2
Missouri Valley.						
Columbia, Mo.*	11	10	8	9	n. 45 w.	1
Kansas City, Mo	25	20	13	15	n. 22 w.	5
Springfield, Mo	19	23	14	18	s. 45 w.	6
Lincoln, Nebr	23	17	19	14	n. 40 e.	8
Omaha, Nebr	30	12	14	15	n. 3 w.	18
Sioux City, Iowa†	13	8	5	8	n. 31 w.	6
Pierre, S. Dak	23	16	17	18	n. 8 w.	7
Huron, S. Dak	28	13	17	14	n. 11 e.	15
Yankton, S. Dak	26	12	16	20	n. 16 w.	15
Northern Slope.						
Havre, Mont	19	11	14	29	n. 63 w.	17
Miles City, Mont	15	17	14	27	s. 81 w.	13
Helena, Mont	10	15	4	41	s. 82 w.	37
Rapid City, S. Dak	27	7	12	31	n. 44 w.	28
Cheyenne, Wyo	31	11	4	23	n. 44 w.	28
Lander, Wyo	15	23	17	19	s. 14 w.	8
North Platte, Nebr	20	15	10	29	n. 75 w.	20
Middle Slope.						
Denver, Colo	24	19	15	13	n. 22 e.	5
Pueblo, Colo	24	10	20	20	n.	14
Concordia, Kans	22	17	16	14	n. 22 e.	5
Dodge City, Kans	29	17	14	16	n. 9 w.	12
Wichita, Kans	25	20	13	13	n.	5
Oklahoma, Okla	22	27	9	12	s. 31 w.	6
Southern Slope.						
Abilene, Tex	19	26	20	10	s. 55 e.	12
Amarillo, Tex	14	22	13	18	s. 32 w.	9
Southern Plateau.						
El Paso, Tex	21	6	19	29	n. 34 w.	18
Santa Fe, N. Mex	25	20	18	13	n. 45 e.	17
Phœnix, Ariz	15	8	20	24	n. 30 w.	8
Yuma, Ariz	22	11	14	21	n. 32 w.	13
Middle Plateau.						
Carson City, Nev	18	18	8	32	w.	24
Winnemucca, Nev	21	12	20	20	n.	9
Salt Lake City, Utah	18	16	18	23	n. 68 w.	5
Northern Plateau.						
Baker City, Oreg	19	28	14	12	s. 13 e.	9
Idaho Falls, Idaho	16	32	10	8	s. 7 e.	16
Spokane, Wash	9	28	15	23	s. 23 w.	21
Walla Walla, Wash	7	36	9	13	s. 8 w.	29
North Pacific Coast Region.						
Fort Canby, Wash	25	17	8	18	n. 51 w.	13
Port Angeles, Wash.*	2	1	10	19	n 84 w.	9
Seattle, Wash	20	21	10	19	s. 84 w.	9
Tatoosh Island, Wash	10	20	18	20	s. 11 w.	10
Portland, Oreg	22	21	9	26	n. 87 w.	17
Roseburg, Oreg	26	10	13	20	n. 24 w.	18
Middle Pacific Coast Region.						
Eureka, Cal	22	15	10	30	n. 71 w.	21
Redbluff, Cal	29	20	11	15	s. 24 w.	10
Sacramento, Cal	26	22	4	22	n. 77 w.	18
San Francisco, Cal	8	11	2	45	s. 86 w.	43
South Pacific Coast Region.						
Fresno, Cal	36	2	5	35	n. 42 w.	45
Los Angeles, Cal	15	7	16	31	n 62 w.	17
San Diego, Cal	25	6	12	33	n. 48 w.	26
San Luis Obispo, Cal	34	9	1	28	n. 47 w.	37

* From observations at 8 p. m. only. † From observations at 8 a. m. only.

TABLE IX.—*Thunderstorms and auroras, April, 1897.*

States.	No. of stations.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total. No.	Total. Days.	
Alabama	50	T.	10	1	2	1	3	2	1	4	2					1														1	7	2		37	14	T.
		A.																																0	0	A.
Arizona	49	T.																				1					2	3						6	3	T.
		A.																																0	0	A.
Arkansas	50	T.			10	1		2	11	5		2		4	4	1					1	1		2			6			6	2			58	15	T.
		A.																																0	0	A.
California	197	T.																			1					1	3	4	1					10	5	T.
		A.																																0	0	A.
Colorado	71	T.					2		1		1										1	2			1	9	1	4	6	2	5	1		36	18	T.
		A.																																0	0	A.
Connecticut	14	T.																																0	0	T.
		A.	3	1																														4	2	A.
Delaware	4	T.					2				1								1															4	3	T.
		A.																											1					1	1	A.
Dist. of Columbia	4	T.					1									1																		2	2	T.
		A.																																0	0	A.
Florida	38	T.	5	3	1	3	5	6	1	3	9	2					3	1		1	7	1						1		1	4	11		68	19	T.
		A.																																0	0	A.
Georgia	50	T.	3			5	6	2	1	7	1						1											2			7	15		50	11	T.
		A.																																0	0	A.
Idaho	36	T.				1						4								2	1	1						1						10	6	T.
		A.	1																															1	1	A.
Illinois	97	T.	5		7	7			2	4				8	7		1		2	17	2	1	2	17	28	25	3	1		8	8			155	20	T.
		A.																1			1				4		1							7	4	A.
Indiana	49	T.				2				1	1				5									3	15	5	2				8			42	9	T.
		A.	1																															1	1	A.
Indian Territory	7	T.			4					1					2											1			2					10	5	T.
		A.																																0	0	A.
Iowa	101	T.	1		6	1						1	1	13	3		2	1		2	1	6	20	25	20	10	1							114	17	T.
		A.	1																															1	1	A.
Kansas	73	T.	1	4	3			1	2	1	1			1			1			5		2	3	8	12	17	3		6	9				80	19	T.
		A.		1	1																		1	1										4	4	A.
Kentucky	47	T.	1		2	2				9																	3	1			8	5		31	8	T.
		A.																																0	0	A.
Louisiana	51	T.	2	4	17	3	6	15	6	12	4	2	1		2	6	1							4			5	1		4	10			105	19	T.
		A.																																0	0	A.
Maine	13	T.																																0	0	T.
		A.	4		1	2	1														1	1						1		1				12	8	A.
Maryland	31	T.					9			2	2					2			2															17	5	T.
		A.					1	1																	1				1					4	4	A.
Massachusetts	27	T.						1								1																		2	2	T.
		A.	6																		1													7	2	A.
Michigan	96	T.				6									6					7		1	1	2	27	21	1				1			73	9	T.
		A.	12	2	1	1		2	2		1														4	2								27	9	A.
Minnesota	69	T.	1		1							1								1			13	1	1				4	3				26	9	T.
		A.	3	1			2								1	1		1				1	4		3	1	2		2	1				23	13	A.
Mississippi	45	T.	3		6		4	3		9		1				3	1										1			3	3			37	11	T.
		A.																																0	0	A.
Missouri	96	T.	7		20		1		15	8	3	2		6	2		3			12	2	2	5	14	15	16	11	2	3	24	2	1		176	23	T.
		A.									1																							1	1	A.
Montana	40	T.										1																						1	1	T.
		A.																							2	1		1	1					5	4	A.
Nebraska	112	T.	2	2	6	2		1	1	1			1	2		3	1					5	15	7	10	1			2	1				63	18	T.
		A.					3																	1	1					1				6	4	A.
Nevada	39	T.																			2								4			1		7	3	T.
		A.																																0	0	A.
New Hampshire	23	T.																																0	0	T.
		A.	5		3		5														1	2								2				18	6	A.
New Jersey	54	T.					17	7	1	4	7					6	5						1					2						50	9	T.
		A.	2																											1				3	2	A.
New Mexico	42	T.															1								1		3	10	6	1	1	2		25	8	T.
		A.																																0	0	A.
New York	93	T.					19	1	1							1			1						9	2	3		1					38	9	T.
		A.	16	2	2		3					1															1	1						26	7	A.
North Carolina	60	T.	2			3	11	3		16	13	2					1	2						1				1			6	14		75	13	T.
		A.																																0	0	A.
North Dakota	39	T.																											1					1	1	T.
		A.	10			1	1	2	1		1				2	1	1	1			1	2	1	1	4	1		1	1	1		1		35	20	A.
Ohio	140	T.				1	6								14						1			11	10	5	10				4	9		71	10	T.
		A.	6	1	1				1				1	1									1		2	2		2						18	10	A.
Oklahoma	20	T.			2			1	2	1																6	2		6	1				21	8	T.
		A.																																0	0	A.
Oregon	60	T.																		1		1						1						3	3	T.
		A.																																0	0	A.
Pennsylvania	93	T.				2	27	2			3					2	1							1	1	1	4	2		1		1		48	13	T.
		A.	6				1							1																				8	3	A.
Rhode Island	6	T.									1																							1	1	T.
		A.																																0	0	A.
South Carolina	42	T.	2			5	11	1		5	6																	7			7	14		58	9	T.
		A.																																0	0	A.
South Dakota	46	T.														1						2	3			2			6	1				15	6	T.
		A.					2											1							2	2								7	4	A.
Tennessee	49	T.	4		10	5	7	1	1	19	2				3	4								1			5	1			13	7		83	15	T.
		A.																																0	0	A.
Texas	91	T.		1	6	1	2	3	1	6		1		1	7	5		1								2	4	1	4	10		1		57	18	T.
		A.																																0	0	A.
Utah	32	T.																				2				1		3	2	2		2		12	6	T.
		A.																1																1	1	A.
Vermont	13	T.																									2							2	1	T.
		A.	5		1	1																1								1				9	5	A.
Virginia	37	T.					9			9	1					2		5														5		31	6	T.
		A.																																0	0	A.
Washington	51	T.				1						1																						2	2	T.
		A.	3							1	1					1	1		1					1	3	2						1		15	10	A.
West Virginia	37	T.					4																					2				3		9	3	T.
		A.																																0	0	A.
Wisconsin	58	T.	1											1						1			2	8	9	7				4				33	8	T.
		A.	2															1					1	4	4		1							13	6	A.
Wyoming	11	T.																				3	1											4	2	T.
		A.																																0	0	A.
Sums	2,644	T.	50	15	103	52	152	52	47	127	58	20	3	36	55	39	22	10	6	49	19	31	66	105	159	132	75	50	54	82	96	94		1,859		T.
		A.	86	8	10	5	19	5	4	1	4	1	1	2	3	3	2	6	1	0	5	7	8	8	30	11	5	6	6	8	0	2		257		A.

TABLE X.—*Hourly sunshine as deduced from sunshine recorders, April, 1897.*

Stations.	Instrument.	Percentages for each hour of local mean time ending with the respective hour.																Hours of sunshine.			
		A. M.								P. M.								Total.			Personal estimate.
		5	6	7	8	9	10	11	Noon	1	2	3	4	5	6	7	8	Actual.	Possible.	Per cent of possible.	
																		Hours.	*Hours.*		
Albany, N. Y	T.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38
Atlanta, Ga	T.	.....	54	52	57	60	57	59	65	68	65	65	61	56	51	52	.....	230.4	391.6	59	54
Atlantic City, N. J	P.	.....	72	70	67	72	82	84	79	74	71	71	68	66	50	48	.....	278.6	397.0	70	57
Baltimore, Md	T.	.....	49	47	46	55	61	67	70	66	62	59	56	47	33	33	.....	215.3	397.0	54	55
Binghamton, N. Y	T.	29	30	38	41	45	54	63	60	63	59	52	43	36	37	36	.....	190.9	401.1	48	42
Bismarck, N. Dak	P.	45	42	42	44	45	44	53	52	48	45	42	46	48	40	36	43	183.8	408.4	45	41
Boston, Mass	T.	71	46	61	61	62	64	65	64	58	54	56	52	53	51	38	.....	227.4	401.1	57	50
Buffalo, N. Y. *	T.	.....	30	45	50	61	73	77	77	81	85	69	61	46	38	19	.....	205.0	346.1	59	30
Charleston, S. C	T.	.....	43	38	52	70	77	85	85	87	82	76	70	64	67	67	.....	272.6	390.5	70	61
Chattanooga, Tenn	T.	.....	52	46	47	55	58	65	70	62	65	58	52	49	35	34	.....	212.7	392.7	54	47
Cheyenne, Wyo	P.	.....	31	51	64	71	70	70	66	66	66	62	59	60	52	41	.....	241.0	399.4	60	52
Chicago, Ill	T.	0	28	31	36	48	55	59	64	67	67	65	60	45	27	19	.....	196.1	401.1	49	46
Cincinnati, Ohio	T.	.....	44	40	45	49	54	52	54	59	62	58	55	47	28	26	.....	198.5	397.0	49	44
Cleveland, Ohio	T.	0	6	8	25	38	44	48	47	59	50	38	26	23	14	14	.....	129.9	401.1	32	26
Columbus, Ohio†	T.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30
Denver, Colo	P.	.....	54	64	77	88	83	85	78	68	67	71	69	47	49	57	.....	275.2	398.6	69	51
Des Moines, Iowa	T.	71	42	41	42	43	47	55	52	48	46	54	44	46	46	46	.....	187.5	401.1	47	44
Detroit, Mich	T.	0	24	27	40	52	52	59	54	58	51	41	36	27	25	24	.....	164.5	401.1	41	33
Dodge City, Kans	P.	.....	58	65	70	71	75	72	72	66	67	63	68	62	58	37	.....	260.2	396.2	66	57
Dubuque, Iowa	T.	0	35	31	38	48	48	52	50	56	54	52	46	42	35	38	.....	180.1	401.1	44	49
Eastport, Me	P.	0	22	34	39	40	50	49	46	49	55	54	58	52	43	31	0	182.7	405.2	45	37
Erie, Pa	T.	0	30	31	36	49	54	59	58	55	59	60	55	40	27	19	.....	184.3	401.1	46	40
Eureka, Cal	P.	.....	21	35	47	56	58	65	73	72	74	69	65	63	66	54	.....	238.0	399.4	60	51
Fresno, Cal	T.	.....	92	87	86	93	95	94	95	98	98	99	97	90	88	88	.....	367.3	394.8	93	88
Galveston, Tex	P.	.....	32	44	67	76	90	88	89	76	81	76	81	72	58	25	.....	277.1	386.4	72	64
Helena, Mont	P.	64	54	53	59	63	62	61	61	58	60	61	61	52	51	58	71	237.5	408.4	58	54
Idaho Falls, Idaho	T.	100	53	43	45	69	75	83	82	80	74	70	61	58	54	49	.....	257.7	402.1	64	73
Indianapolis, Ind	T.	.....	33	29	41	48	62	55	64	67	65	64	55	44	35	32	.....	200.4	398.6	50	39
Kansas City, Mo	P.	.....	38	35	43	49	51	52	56	54	57	50	52	49	38	43	.....	190.9	397.0	48	40
Little Rock, Ark	T.	.....	44	49	50	54	72	78	82	86	86	78	70	67	61	48	.....	265.5	392.7	68	47
Los Angeles, Cal	P.	.....	55	63	71	68	76	80	84	86	94	94	93	89	85	63	.....	314.1	391.6	80	69
Louisville, Ky	T.	.....	43	35	41	55	60	66	69	71	69	68	57	51	37	38	.....	218.4	396.2	55	40
Minneapolis, Minn	T.	40	38	30	29	37	45	57	57	59	50	42	36	18	13	16	50	153.9	405.2	38	.....
Nashville, Tenn	T.	.....	55	53	57	58	56	59	61	64	66	63	64	63	61	48	.....	235.3	393.6	60	54
New Orleans, La	T.	.....	24	21	19	19	33	42	53	51	44	45	34	22	17	16	.....	125.6	387.4	32	32
New York, N. Y	T.	.....	41	60	74	80	85	93	96	84	82	81	86	80	64	37	.....	304.6	399.4	76	58
Northfield, Vt	P.	3	32	37	48	45	50	49	52	54	50	52	53	47	37	27	100	184.7	403.6	46	35
Omaha, Nebr	P.	.....	46	36	49	50	49	52	54	51	56	56	60	47	42	41	.....	197.8	399.4	50	41
Philadelphia, Pa	T.	.....	60	62	67	75	76	78	80	77	78	73	67	67	68	72	.....	285.7	398.6	72	51
Phœnix, Ariz	P.	.....	87	96	100	96	96	99	99	98	95	98	94	91	91	80	.....	371.3	390.5	95	89
Pittsburg, Pa	T.	.....	27	28	33	39	46	53	57	61	59	56	46	39	25	26	.....	172.7	399.4	43	38
Portland, Me	T.	0	30	46	57	64	70	73	81	78	81	71	64	58	53	38	25	253.9	403.6	63	49
Portland, Oreg	T.	25	36	33	40	55	67	76	73	73	74	73	68	60	61	67	50	250.4	407.0	61	60
Do	P.	25	36	39	53	57	70	79	69	68	75	78	75	74	64	67	50	264.5	407.0	65	60
Raleigh, N. C	T.	.....	55	51	69	77	77	82	89	91	92	88	81	74	61	53	.....	297.9	393.6	76	57
Rochester, N. Y	T.	14	35	40	48	53	55	61	58	48	52	50	47	43	27	24	.....	187.0	402.1	47	44
St. Louis, Mo	T.	.....	35	38	49	59	67	64	61	62	58	59	47	41	37	40	.....	206.1	397.0	52	38
St. Paul, Minn	P.	60	41	45	57	60	61	61	57	61	62	59	51	50	41	32	90	216.1	405.2	53	46
Salt Lake City, Utah	P.	.....	66	58	65	74	72	74	70	66	74	72	63	61	59	53	.....	265.9	399.4	67	50
San Diego, Cal	P.	.....	41	47	52	64	78	87	88	87	92	90	90	86	78	66	.....	298.2	390.5	76	75
San Francisco, Cal	T.	.....	55	58	70	79	89	93	93	94	96	93	91	83	67	48	.....	320.9	396.2	81	70
Santa Fe, N. Mex	P.	.....	58	74	83	90	86	86	75	72	68	70	65	71	64	35	.....	237.2	393.6	73	62
Savannah, Ga	P.	.....	47	41	51	61	68	70	64	64	65	66	68	69	51	49	.....	236.1	389.9	61	53
Seattle, Wash	T.	14	30	33	44	57	64	67	69	72	81	75	67	53	39	34	20	222.4	410.4	57	57
Spokane, Wash.†	P.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43
Tampa, Fla	T.	.....	65	52	47	40	56	61	62	67	66	61	52	35	43	47	.....	206.7	385.4	54	50
Vicksburg, Miss	T.	.....	61	60	80	84	85	86	86	77	86	88	87	76	61	49	.....	303.1	389.9	78	75
Washington, D. C	P.	.....	57	59	69	70	67	69	72	75	74	73	68	69	59	49	.....	266.8	397.0	67	60
Wilmington, N. C	T.	.....	37	42	54	75	84	85	87	85	84	84	67	62	52	44	.....	271.4	391.6	69	62

* All values are for 26 days; the total possible and personal estimate for 30 days are 402.1 and 33 respectively. † Instrument out of order.

TABLE XI.—*Accumulated amounts of precipitation for each 5 minutes, for storms in which the rate of fall equaled or exceeded 0.25 in any 5 minutes, or 0.75 in 1 hour during April, 1897, at all stations furnished with self-registering gauges.*

Station.	Date.	Total duration.		Total am't of precipitation.	Excessive rate.		Amount before excessive began.	Depths of precipitation (in inches) during periods of time as indicated.													
		From—	To—		Began—	Ended—		5 min.	10 min.	15 min.	20 min.	25 min.	30 min.	35 min.	40 min.	45 min.	50 min.	60 min.	80 min.	100 min.	120 min.
	1	2	3	4	5	6	7														
Atlanta, Ga.*																					
Baltimore, Md.	8-9			1.22														0.41			
Binghamton, N. Y.	8-9			0.76														0.11			
Bismarck, N. Dak.	3-4			0.86														0.11			
Boston, Mass.	8-9			1.65														0.21			
Buffalo, N. Y.	13			0.84														0.33			
Chicago, Ill.*																					
Cincinnati, Ohio	3-4			0.49														0.23			
Cleveland, Ohio†	8-9			0.44														0.06			
Denver, Colo.	29			0.48														0.23			
Des Moines, Iowa	22-23	8.05 p.m.	8.35 a.m.	2.95	8.38 p.m. 10.05 p.m.	9.00 p.m. 11.05 p.m.	0.05 0.48	0.08 0.13	0.18 0.43	0.32 0.73	0.41 0.88	0.96	1.07	1.17	1.24	1.31	1.33	1.41	1.50	1.53	1.57
Detroit, Mich.	23			0.39														0.31			
Dodge City, Kans.*																					
Duluth, Minn.	27-28			0.29														0.16			
Eastport, Me.	17	3.10 p.m.	7.30 p.m.	0.63	5.03 p.m.	5.25 p.m.	0.05	0.05	0.20	0.32	0.42	0.45									
Erie, Pa.	8-9			0.57																	
Galveston, Tex.	14	6.02 a.m.	9.07 a.m.	0.78	7.07 a.m.	7.25 a.m.	0.02	0.37	0.46	0.49	0.54	0.56	0.58	0.59	0.61						
Harrisburg, Pa.	8-9			1.13														0.14			
Hatteras, N. C.	15			0.37														0.35			
Indianapolis, Ind.	29			0.52														0.46			
Jacksonville, Fla.	9	3.30 a.m.	11.30 a.m.	1.75	3.30 a.m.	3.45 a.m.	0.00	0.32	0.50	0.55	0.58	0.61	0.63	0.64	0.65	0.67	0.69	0.70	0.74	0.79	0.85
Jupiter, Fla.	7	12.55 p.m.	2.15 p.m.	0.74	1.09 p.m.	1.17 p.m.	0.05	0.30	0.40	0.41	0.42	0.43	0.44	0.45	0.53	0.64	0.71	0.72			
Do	15	2.10 p.m.	3.20 p.m.	0.77	2.22 p.m.	2.37 p.m.	0.05	0.30	0.47	0.65	0.70	0.72	0.73								
Do	30	7.30 a.m.	5.05 p.m.	4.25	10.03 a.m.	†	0.10	0.42	0.55	0.68	0.78	†	†	†	†	†	†	†	†	†	2.46
Kansas City, Mo.	24			0.79														0.56			
Key West, Fla.	6	11.06 p.m.	11.55 p.m.	0.95	11.33 p.m.	11.50 p.m.	0.05	0.45	0.70	0.85	0.88	0.92	0.93	0.94	0.95						
Lincoln, Nebr.	23-24	5.50 p.m.	3.45 a.m.	2.13	7.27 p.m.	7.47 p.m.	0.37	0.18	0.48	0.78	1.08	1.12									
Little Rock, Ark.	28	8.43 p.m.	9.30 p.m.	0.39	9.05 p.m.	9.15 p.m.	0.02	0.10	0.32	0.37											
Louisville, Ky.	25			0.41														0.23			
Memphis, Tenn.*																					
Milwaukee, Wis.	24			0.56														0.45			
Montgomery, Ala.	29	9.45 a.m.	12.35 p.m.	1.35	10.13 a.m.	10.30 a.m.	0.01	0.25	0.56	0.87	0.95	1.00	1.03	1.07	1.10	1.13	1.16	1.22			
Nantucket, Mass.	9			1.23														0.60			
Nashville, Tenn.	4			1.42														0.65			
New Orleans, La.	6	6.40 p.m.	8.05 p.m.	1.09	6.47 p.m.	7.20 p.m.	0.01	0.20	0.29	0.39	0.63	0.80	0.86	0.89	0.92	0.96	0.97	0.98			
Do	8	6.05 p.m.	8.05 p.m.	0.78	6.18 p.m.	6.53 p.m.	0.02	0.09	0.39	0.58	0.59	0.63	0.74	0.76							
New York, N. Y.	17			0.50														0.20			
Norfolk, Va.	5			0.15														0.15			
Omaha, Nebr.	22-23	9.20 p.m.	6.50 a.m.	1.05	9.38 p.m.	10.05 p.m.	T.	0.12	0.28	0.35	0.44	0.46	0.47	0.48							
Philadelphia, Pa.	8-9			1.36														0.32			
Pittsburg, Pa.	26	2.10 p.m.	2.40 p.m.	0.43	2.18 p.m.	2.30 p.m.	0.01	0.19	0.37	0.40	0.42										
Portland, Me.	15			0.35														0.19			
Portland, Oreg.	19			0.75														0.12			
Raleigh, N. C.	9	6.20 a.m.	5.15 p.m.	2.10	6.35 a.m.	7.15 a.m.	0.03	0.10	0.35	0.44	0.60	0.75	0.82	0.85	0.91	0.94	0.96	1.00	1.06	1.15	1.23
Rochester, N. Y.	5			0.18														0.12			
St. Louis, Mo.	1			1.44														0.48			
St. Paul, Minn.	21			0.17									0.17								
Salt Lake City, Utah	20-21			0.99														0.25			
San Diego, Cal.	26			0.02														0.02			
San Francisco, Cal.	6			0.03														0.03			
Savannah, Ga.	26	2.50 p.m.	3.15 p.m.	0.27	2.58 p.m.	3.02 p.m.	T.	0.26													
Tampa, Fla.	29-30	10.30 p.m.	3.25 a.m.	1.72	12.48 a.m.	1.12 a.m.	0.25	0.09	0.35	0.55	0.80	0.96	0.99	1.01	1.03	1.05	1.06	1.11			
Vicksburg, Miss.	3	7.00 a.m.	7.45 a.m.	0.51	7.11 a.m.	7.27 a.m.	0.01	0.19	0.34	0.48	0.49										
Washington, D. C.	8-9			1.10														0.54			
Wilmington, N. C.	‡	5.05 p.m.	9.30 a.m.	1.71	5.15 p.m.	5.35 p.m.	0.05	0.15	0.36	0.40	0.50	0.54	0.56								

* Self register out of order. † Self register out of order after 10.25 a. m.: 2.46 inches fell from 10.00 a. m. to 12.00 noon, and estimated that 1.00 inch fell from 12.00 noon to 1.00 p. m., making a total fall of 3.46 inches in three hours. ‡ April 30 to May 1.

TABLE XII.—*Excessive precipitation, by stations, for April, 1897.*

Stations.	Monthly rainfall 10 inches, or more.	Rainfall 2.50 inches, or more, in 24 hours.		Rainfall of 1 inch, or more, in one hour.		
		Amt.	Day.	Amt.	Time.	Day.
Alabama.	*Inches.*	*Inches.*		*Ins.*	*h.m.*	
Mobile		2.59	3-4			
Montgomery		2.51	29-30	1.22	1 00	29
Mount Willing		2.75	29			
Rockmills		3.08	29-30			
Arkansas.						
Silver Springs		2.59	24-25			
California.						
Redding		2.51	19			
Florida.						
Archer		3.33	9			
Federal Point		2.82	12			
Jupiter		4.25	30	3.45	2 56	30
Lake Butler		3.45	9-10			
Lemon City	10.55	6.60	15			
Do		2.65	18			
Milton		3.30	1			
Do		2.60	8-9			
St. Francis Barracks		2.70	8			
Tallahassee		4.01	4			
Do		3.47	9			
Tampa				1.40	0 30	9
Do				1.00	0 30	30
Georgia.						
Clayton	11.65	2.90	1			
Do		5.02	4			
Columbus		2.61	1-2			
Dahlonega		2.88	4			
Piscola		2.95	9			
Illinois.						
Beardstown		2.63	1-2			
Indiana.						
Mount Vernon		2.50	1			
Princeton		2.80	8-9			
Indian Territory.						
Eufaula		5.60	24-25			
South McAlester		2.50	28			
Tahlequah		4.20	24-25			
Tulsa		2.80	28			
Iowa.						
Afton		6.12	23-24			
Centerville		3.10	1			
Do		2.50	23			
Charlton		2.85	22-23			
Clarinda		3.90	23-24			
College Springs		3.60	24			
Corning		4.00	24			
Des Moines		2.95	22-23	1.41	1 00	22
Gardengrove		3.76	24			
Grinnell		2.50	22			
Hopeville		7.00	23-24			
Knoxville		2.95	24			
Lenox		2.89	24			
Millman		2.84	23			
Mountayr		4.55	23-24			
Osceola		6.30	23-24			
Oskaloosa		2.75	24			
Ovid		3.24	24			
Villisca		3.71	23-24			
Wankee		4.18	23			
Winterset		3 08	1			
Kansas.						
Atchison		3.20	24			
Baker		2.80	23			
Elgin		3.00	27			
Grenola		2.52	27			
Manhattan		2.71	24			
Morton		2.67	23-24			
Oberlin		2.75	11-12			
Sedan		2.73	27			
Kentucky.						
Canton		2.60	25			
Eubank		2.96	4			
Marrowbone		2.58	3-4			
Middlesboro		3.75	3-4			
Paducah		3.80	*			
Russellville		2.73	8			
Southfork		2.60	4-5			
Williamsburg		3.26	3-4			
Louisiana.						
Abbeville	12.40	9.40	2-3			
Covington		2.71	3			
Donaldsonville	11.08	4.00	3			
Do		3.10	29			
Elm Hall		2.50	3			
Emilie		2.75	2-3			
Franklin		5.23	3-4			
Hammond		3.20	2-3			
Houma	10.64	6.01	2-3			
Jeanerette		4.50	2-3			
Lawrence		3.80	3			
New Iberia		3.05	3			
Do		3.75	14			
Oberlin				1.40	1 00	28
Paincourtville	10.28	4.82	2-3			
Port Eads	11.70	9.30	3			
Shellbeach		3.75	2			
Thibodeaux		6.00	3			
Wallace		3.45	2-3			
Maryland.						
Mardela Springs		2.76	8-9			

TABLE XII.—*Excessive precipitation*—Continued.

Stations.	Monthly rainfall 10 inches, or more.	Rainfall 2.50 inches, or more, in 24 hours.		Rainfall of 1 inch, or more, in one hour.		
		Amt.	Day.	Amt.	Time.	Day.
Massachusetts.	*Inches.*	*Inches.*		*Ins.*	*h.m.*	
Hyannis		2.97	9			
New Bedford		2.68	9-10			
Vineyard Haven		3.00	8-9			
Woods Hole		3.06	8-9			
Mississippi.						
Bay St. Louis		4.97	1			
Biloxi		2.65	3			
Logtown				1.04	1 00	8
Waynesboro				1.10	0 40	29
Missouri.						
Columbia				0.99	0 18	28
Irena		2.73	24			
Mineralspring		3.00	7-8			
Oregon		2.60	23-24			
Platte River		2.65	23			
St. Louis (V. O)		2.79	1			
Sikeston		2.74	8			
Sublett		3.50	22-23			
Nebraska.						
Ashton		2.78	2			
Brokenbow		2.50	11-12			
Burchard		4.45	24			
Callaway		3.25	11-12			
Curtis		2.50	11			
Elba		2.66	3			
Ericson		2.79	3-4			
Greeley Center		3.00	3			
Kearney		2.50	3			
Lincoln (W. B.)				1.20	1 00	23
Loup		2.58	2-3			
Lynch		3.97	2-3			
Minden		2.52	3			
North Loup		2.95	2			
Rulo		2.82	23			
St. Paul		2.93	3			
Wilber		4.45	23-24			
New Jersey.						
Hammonton		2.66	8-9			
North Carolina.						
Flatrock		3.74	4			
Lynn	10.57	5.90	4			
Marion		2.74	4			
Morganton		2.71	4			
Raleigh				1.00	1 00	9
Oklahoma.						
Arapaho		3.32	27			
Beaver		4.60	23-24	1.00	0 20	27
Clifton		4.45	24-25			
Edmond	13.35	7.30	24-25			
Do		4.76	27			
Fort Reno		2.95	24-25			
Do		4.12	27-28			
Hennessey		2.62	27			
Keokuk Falls		3.65	24			
Kingfisher		4.13	27			
Oklahoma		2.79	24-25			
Ponca		6.38	27-28			
Pondcreek		3.06	24			
Prudence		3.10	27			
Sac and Fox Agency		3.00	24-25			
Do		2.80	27			
Stillwater		3.87	27			
Winnview		3.50	27			
Rhode Island.						
Block Island		3.73	8-9			
Kingston		2.63	9			
South Carolina.						
Georgetown		3.20	30			
Greenville		2.52	4-5			
Society Hill		3.50	8			
Walhalla		3.00	3-4			
South Dakota.						
Armour		2.50	3			
Greenwood		3.57	3			
Tennessee.						
Andersonville		3.45	3-4			
Decatur		3.97	3-4			
Elk Valley		3.65	3-4			
Erasmus		3.89	3-4			
Harriman		4.88	3-4			
Lynnville		2.80	3-4	1.00	0 15	8
Molino		2.77	3-4			
Oak Hill		2.59	3-4			
Palmetto		3.57	3-4			
Rockwood		3.62	3-4			
Rugby		3.78	3-4			
Tellico Plains		2.71	*			
Tullahoma		3.00	3-4			
Texas.						
Fredericksburg				1.04	0 30	13
Luling				1.02	0 50	8
New Braunfels				1.04	1 00	8
San Antonio				1.20	0 50	14
Tyler				2.00	2 00	25
Washington.						
Tatoosh Island		2.78	28-29			
Wisconsin						
Gratiot		4.25	24			

† March 31 to April 1.