The nature and method of formation of anchor ice, which is also called ground ice or "ground-gru," has not yet been thoroughly investigated, as could easily be done, by laboratory experimentation, but the various hypotheses that have been advanced concerning its formation substantially agree in the idea that we have here a case of water cooled slightly below its freezing point and prevented from freezing by the rapid current of the river; when the eddies and movements of the water cease, or become sluggish, as at the bottom surface or behind any obstacle, then it freezes, and in so doing attaches itself to the obstacle as a nucleus or base which is usually, of course, considerably below the surface of the stream.

THE CHINOOK AND THE SIGNS OF ITS APPROACH.

In the Montana Weather Report for February, 1897, Mr. Coe says:

Generally an aurora is visible from twenty-four to sixty hours prior to the chinook, and a falling barometer is nearly always in evidence. A perfectly calm and a cloudless sky precedes its coming. The smoke from fires ascends perpendicularly, wavering now and then, as if undecided in the direction it should go, or hangs suspended in the motionless air, like a miniature cloud. There is an awesome hush; all nature seems to be resting. The mountains stand out in bold relief against the intensely blue sky, the glistening whiteness of their slopes relieved by the dark green of the pine groves, presenting a lovely view. Suddenly, from each sharp peak a horizontal streamer of snow is seen to unfurl. It is the colors at the front of the advancing host, and mankind in the valleys and plains below exclaim: "The chinook is coming!"

The clouds, which immediately form at the crest of the mountains in the oncoming rush of heated air, are identical in form and color at all times—a huge, billowy mass of vapor, which seems to have been condensed at the summit of the Rockies, and rapidly rolls down the length of the Marias Pass to the plains below, very quickly hiding the mountains from sight. Sometimes the southwest wind comes in a boisterous manner, with rush and roar, chasing the snow in long, drifting lines, but soon moistening it, so that in a few hours it becomes compact and looks as if the hot breath of a flame had passed over it. At other times the atmosphere seems to quiver with heat, and the gentle breeze comes creeping and sighing in light puffs, coquettishly chasing the snow in eddies around projections, and anon tossing it in fanciful shapes on high; eventually the wind increases in force, but never varies the smallest fraction of a degree in its direction. Sometimes, above a considerable tract of country, the chinook blows only at an elevation, and descends many miles to the eastward, even melting the snow on the Sweet Grass Hills (70 miles distant) to some extent, while no change is perceptible at this point. At other times, as at present, a well-defined chinook may be "in sight" on the mountains, and continue so for hours, while the temperature is near the zero mark at this station.

To illustrate this eccentricity of the meteorological phases, I cite the following extremes between two localities, but 38 miles apart: At Kipp, elevation 4,400 feet, time 8:15 p. m. (one hundred and fifth meridian), date February 13, the record is as follows: temperature 6°, wind northwest, clear, snow on ground 7 inches. At Summit, altitude 5,500 feet, a station at the head of the Marias Pass, on the Great Northern Railway, at the same time, the report is: temperature 39, wind southwest, dense clouds, snow on ground 3 feet, melting rapidly; like conditions for the past thirteen hours. At Kipp slight change occurred in temperature until it rose to 40° in twelve minutes at 2:10 p. m., February 15, 1897.

FROST FORMATIONS.

In the American Meteorological Journal for February, 1895, page 387, Vol. XI, there is an exceedingly interesting communication from Mrs. Edson relative to the formation on Roan Mountain, Tenn., of frost needles at the surface of gravelly soil. A physical explanation of the method of formation of the ice columns was given by the Editor in the same journal for April, 1863, Vol. IX, p. 523. The subject is one that lends itself to laboratory experimentation. A peculiar type of the formation is described in the January report of the Alabama section of the Climate and Crop Service, by Mr. Alexander M. Valerio, voluntary observer at Daphne, as follows:

On January 27 the minimum temperature at this station was 14°. The next morning, going down the hillside by my house I noticed, on the dry grass and low brush, what at first sight I took for snow and nearer for bunches of cotton, but which on closer examination I found to be frost work of a very peculiar shape and form, looking very much like fine stick or ribbon candy, or fine venetian glass. These ribbons, beautifully curled and feather-like, came out from the stubs of the plants and, from a sample which I inclose, you will notice the bark was taken off the plants. The width of the frost ribbon was as the length of the cracks in the plant. They looked like fine shavings of a very white wood and crumbled at the touch.

METEOROLOGICAL TABLES.

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

For text descriptive of tables and charts see page 166 of REVIEW for April, 1897.

TABLE I.—*Climatological data for Weather Bureau Stations, May, 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. + 2.	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.							54.0	+ 0.4											4.28	+ 0.7											
Eastport	76	69	74	29.90	29.99	+ .03	46.6	− 0.5	64	5	52	32	8	41	23	44	42	89	7.88	+ 4.2	18	7,536	s.	32	s.	13	3	6	22	8.0	
Portland, Me.	103	81	89	29.83	29.93	− .04	52.2	− 1.3	74	5	59	36	8	46	34	48	44	78	5.87	+ 2.3	19	5,359	s.	38	s.	23	6	4	21	7.7	
Northfield	872	15	59	29.02	29.95	− .02	51.9	− 0.8	77	20	63	24	8	41	37	48	43	73	3.46	+ 0.3	13	6,689	n.	36	s.	23	4	12	15	6.8	
Boston	125	115	181	29.82	29.96	− .02	57.6	+ 1.4	76	18	66	39	8	50	30	53	49	77	4.00	+ 0.4	15	8,008	sw.	36	sw.	13	9	5	17	6.5	
Nantucket	14	43	54	29.98	29.99	+ .01	53.6	+ 1.6	66	*	58	41	8	49	15	51	50	91	2.30	− 1.2	15	8,952	sw.	36	se.	2	6	8	17	6.9	
Woods Hole	.....	51	57	.....	.....	.....	54.0	− 0.4	65	18	59	42	8	49	19	....	...	....	3.02	− 0.3	14	11,288	s.	44	s.	13	13	6	12	5.2	
Vineyard Haven	.....	20	....	.....	.....	.....	57.6	+ 1.1	76	10	66	42	8	50	30	...	....	...	3.28	− 0.2	12	.....	sw.	....	.....	...	10	8	13	....	
Block Island	27	39	48	29.94	29.97	− .03	53.1	+ 0.8	68	18	58	42	8	48	19	50	48	86	4.31	+ 0.5	13	11,039	sw.	40	w.	9	8	15	8	5.6	
Narragansett Pier	.....	10	....	.....	.....	.....	55.5	+ 0.9	70	18	62	37	8	49	22	....	....	....	3.63	− 0.4	9	.....	s.	....	.....	...	16	3	12	....	
New Haven	107	118	140	29.84	29.96	− .04	58.2	+ 1.6	81	10	67	40	5	50	28	52	47	72	5.03	+ 1.4	13	7,430	s.	34	e.	1	9	8	14	6.2	
Mid. Atlan. States.							61.7	− 0.5											5.01	+ 1.3											
Albany	97	84	113	29.86	29.97	− .01	58.8	− 0.5	77	9	68	38	8	49	34	52	46	67	4.69	+ 1.5	16	6,390	s.	36	se	20	11	8	12	5.8	
Binghamton	875	79	90	.....	.....	.....	55.2	.....	81	9	66	32	8	45	42	....	....	...	4.01	.....	14	5,177	nw.	31	s.	23	7	13	11	6.2	
New York	314	298	326	29.63	29.96	− .04	59.3	− 0.2	79	10	67	44	8	52	23	52	47	70	5.30	+ 2.1	11	10,303	nw.	48	e.	2	10	13	8	5.2	
Harrisburg	377	94	102	29.58	29.99	+ .01	60.6	+ 0.4	79	20	70	42	8	52	27	53	46	62	5.30	+ 0.6	12	5,681	nw.	33	e.	1	9	9	13	6.2	
Philadelphia	117	168	184	29.85	29.97	− .05	62.6	+ 0.3	82	10	72	46	8	54	24	54	48	62	4.33	+ 1.1	12	8,494	sw.	34	se.	1	9	12	10	5.6	
Atlantic City	52	68	76	29.98	29.98	− .03	58.0	+ 1.0	76	18	64	45	*	52	26	54	52	82	1.71	− 1.1	12	8,502	sw.	36	s.	13	9	13	9	5.0	
Baltimore	123	68	82	29.84	29.97	− .05	62.8	− 1.1	84	10	72	44	4	54	31	55	48	61	6.88	+ 3.1	13	4,196	nw.	26	se.	1	12	8	11	5.2	
Washington	112	59	76	29.87	29.99	− .04	62.4	− 1.2	83	10	72	43	3	52	30	56	51	69	6.97	+ 3.0	12	5,641	s.	32	n.	21	17	5	9	4.5	
Cape Henry	.....	5	34	.....	.....	.....	64.4	− 0.4	56	*	72	45	4	56	32	...	....	....	5.32	+ 1.2	15	.....	se.	....	.....	...	9	6	16	....	
Lynchburg	685	83	88	29.28	30.02	+ .01	63.0	− 2.7	86	7	74	40	3	52	35	56	50	65	4.27	+ 0.4	10	3,328	nw.	24	nw.	24	9	14	8	5.4	
Norfolk	57	88	93	29.96	30.02	.00	65.3	− 0.4	84	7	74	43	9	56	35	58	55	76	5.36	+ 1.1	15	6,484	sw.	30	sw.	13	13	6	12	5.0	
S. Atlantic States.							69.0	− 1.5											2.55	− 1.5											
Charlotte	773	67	76	29.19	30.00	− .02	66.6	− 1.9	88	20	77	43	2	56	31	58	52	66	3.72	− 0.6	12	4,898	ne.	29	s.	12	14	10	7	4.1	
Hatteras	11	17	36	30.01	30.02	− .01	66.0	− 0.5	79	29	70	53	9	62	19	62	59	79	4.08	− 0.5	9	10,767	sw.	47	n.	6	11	14	6	4.6	
Kittyhawk	9	12	30	29.99	30.00	− .03	63.2	− 2.6	83	30	70	47	5	56	28	60	57	80	5.20	+ 1.5	10	12,052	ne.	47	ne.	6	13	11	7	4.1	
Raleigh	375	93	101	29.64	30.03	+ .01	66.2	− 1.3	86	21	76	44	4	56	29	58	52	65	2.85	− 2.8	12	4,953	n.	25	n.	5	10	12	9	4.9	
Wilmington	78	82	88	29.95	30.03	+ .01	68.4	− 1.6	89	29	77	49	6	60	30	61	57	71	2.49	− 1.7	7	6,757	s.	32	s.	13	14	15	2	3.9	
Charleston	48	60	72	30.01	30.06	+ .03	72.2	− 0.5	92	24	79	53	2	66	22	64	60	70	1.20	− 2.8	5	8,558	s.	34	w.	13	20	10	1	3.0	
Columbia	.....	5	....	.....	.....	.....	70.4	− 1.6	95	29	82	46	2	58	34	....	....	....	1.30	− 2.6	7	.....	ne.	....	.....	...	18	6	7	....	
Augusta	180	89	103	29.83	30.02	+ .02	70.8	− 2.0	93	29	82	48	2	59	32	62	57	66	2.22	− 1.2	5	4,928	w.	33	nw.	31	17	9	5	3.2	
Savannah	98	63	86	29.94	30.05	+ .01	72.8	− 0.7	94	29	82	51	2	63	28	64	59	69	1.10	− 1.8	5	6,432	s.	25	w.	13	22	5	4	3.2	
Jacksonville	43	69	84	30.00	30.05	+ .03	73.2	− 1.9	93	29	83	53	2	64	29	66	62	74	1.35	− 2.6	6	6,149	ne.	28	se.	14	24	3	4	3.5	
Florida Peninsula.							75.6	− 1.6											5.15	+ 1.2											
Jupiter	28	13	30	30.00	30.03	+ .01	74.7	− 1.4	87	31	81	57	3	69	21	69	66	76	10.73	+ 4.9	10	8,320	s.	35	ne.	18	12	11	8	5.1	
Key West	22	42	50	30.01	30.03	+ .02	77.8	− 2.0	86	14	82	70	8	74	14	71	68	72	4.38	+ 1.2	12	8,596	e.	34	ne.	18	18	9	4	3.6	
Tampa	36	60	68	30.00	30.04	+ .02	74.4	− 1.4	90	26	84	55	3	65	24	66	62	70	0.33	− 2.6	5	5,306	w.	24	w.	1	22	8	1	2.3	
East Gulf States.							71.7	− 1.6											1.26	− 2.8											
Atlanta	1,131	92	126	28.87	30.05	.00	67.9	− 0.9	88	28	78	41	2	58	28	58	51	59	0.34	− 3.2	3	6,963	nw.	36	w.	2	13	12	6	3.8	
Pensacola	56	78	90	30.00	30.06	+ .04	71.7	− 2.4	86	22	80	51	2	64	25	65	60	69	1.26	− 2.1	5	6,874	sw.	26	sw.	3	18	9	4	3.4	
Mobile	57	88	96	30.00	30.06	+ .05	71.2	− 2.9	87	22	81	52	2	62	27	63	58	68	3.54	− 0.8	6	5,661	n.	32	nw.	14	24	5	2	2.9	
Montgomery	221	100	107	29.80	30.08	+ .01	71.1	− 2.2	91	*	82	47	2	60	32	62	56	61	0.68	− 3.4	4	4,697	ne.	25	nw.	4	22	7	2	2.1	
Vicksburg	254	65	73	29.76	30.03	+ .03	71.4	− 1.6	87	29	80	54	2	62	26	61	55	62	0.89	− 4.0	6	4,352	nw.	26	s.	8	21	9	1	2.6	
New Orleans	54	112	120	30.00	30.06	+ .07	74.3	− 0.8	88	21	82	58	*	66	23	65	60	67	0.25	− 4.6	4	5,864	se.	32	n.	14	17	9	5	3.7	
Port Eads	.....	27	....	.....	.....	.....	74.3	− 0.3	85	31	80	59	*	69	16	....	....	....	1.87	− 1.4	3	.....	e.	....	.....	...	22	7	2	....	
West Gulf States.							72.5	− 0.7											2.61	− 1.8											
Shreveport	249	77	84	29.77	30.03	+ .05	72.3	− 2.0	89	24	83	53	1	62	27	63	58	66	3.29	− 0.9	7	3,782	se.	22	s.	10	18	4	9	4.2	
Fort Smith	481	63	72	29.52	30.02	+ .08	69.2	− 0.1	89	27	80	47	2	58	33	61	56	66	2.90	− 1.8	9	4,064	e.	20	e.	22	16	5	8	4.1	
Little Rock	302	71	79	29.74	30.06	+ .08	68.9	− 1.4	90	28	79	49	2	59	28	59	53	62	1.15	− 4.6	8	4,088	n.	23	nw.	28	17	6	8	4.4	
Corpus Christi	20	42	50	29.99	30.01	+ .04	75.8	+ 0.1	88	13	80	60	2	72	22	71	69	80	2.28	− 1.0	6	9,539	se.	48	n.	13	10	20	1	4.3	
Galveston	42	85	96	30.01	30.05	+ .07	74.8	− 1.2	83	31	79	62	1	71	13	70	67	80	1.27	− 2.6	5	6,357	se.	24	n.	1	20	9	2	3.2	
Palestine	510	54	61	29.50	30.04	+ .05	71.8	− 0.2	89	25	82	48	2	62	33	64	60	73	4.27	− 1.6	11	3,702	se.	20	se.	5	12	13	6	4.7	
San Antonio	704	95	104	29.28	30.00	+ .05	74.8	− 0.2	90	23	85	56	*	64	27	65	61	68	3.13	− 0.1	8	5,762	se.	42	se.	7	10	12	9	5.3	
Ohio Val. & Tenn.							61.3	− 3.9											3.35	− 0.5											
Chattanooga	762	106	112	29.26	30.06	+ .04	65.8	− 2.5	87	28	76	42	2	56	33	57	50	61	3.26	− 0.9	7	5,160	sw.	32	sw.	2	13	13	5	4.7	
Knoxville	980	80	88	29.02	30.06	+ .03	63.2	− 3.0	87	8	74	41	2	53	33	55	49	64	6.11	+ 2.2	14	3,944	w.	24	w.	23	15	5	11	4.6	
Memphis	399	140	154	29.63	30.06	+ .07	68.2	− 1.8	90	28	77	48	1	59	26	58	51	58	1.37	− 3.2	8	6,157	sw.	26	w.	13	17	10	4	3.8	
Nashville	545	128	134	29.48	30.05	+ .06	64.4	− 3.6	87	28	75	40	2	54	32	55	49	62	1.22	− 2.4	7	4,605	nw.	28	nw.	1	17	9	5	3.6	
Lexington	989	75	122	28.98	30.03	+ .06	59.4	− 4.0	87	8	68	33	2	50	34	53	48	68	4.48	+ 1.0	13	7,560	nw.	38	s.	23	13	7	11	5.3	1.5
Louisville	525	114	136	29.48	30.05	+ .06	61.6	− 4.5	90	8	72	37	2	51	33	53	47	64	3.30	− 0.4	12	5,480	s.	31	w.	15	11	9	11	5.2	
Indianapolis	823	154	164	29.16	30.04	+ .04	58.0	− 4.9	85	8	68	34	2	48	30	53	50	75	4.37	+ 0.2	16	6,419	nw.	45	w.	20	15	11	5	4.2	2.4
Cincinnati	628	152	157	29.37	30.04	+ .05	59.5	− 5.0	84	8	69	33	2	50	29	52	46	65	2.46	− 1.0	10	5,220	nw.	33	w.	23	13	10	8	4.5	1.5
Columbus	824	87	100	29.14	30.02	+ .03	57.9	− 3.8	82	9	68	33	2	48	32	52	48	72	3.68	− 0.6	11	4,773	w.	30	w.	23	11	9	11	5.1	T.
Pittsburg	842	116	126	29.11	30.01	+ .01	58.0	− 4.5	81	23	68	37	2	48	31	53	49	73	2.70	− 0.7	15	4,482	w.	28	s.	1	8	13	10	5.5	
Parkersburg	638	77	84	29.35	30.04	+ .04	58.6	− 4.9	85	9	70	35	2	48	36	53	48	70	3.95	0.0	11	4,436	nw.	34	nw.	24	10	11	10	5.2	
Lower Lake Region.							54.3	− 1.4											3.03	− 0.4											
Buffalo	768	178	206	29.14	29.96	− .02	53.8	+ 0.1	75	11	61	41	3	47	24	48	43	70	2.62	− 0.8	13	10,116	w.	48	w.	14	6	16	9	6.2	
Oswego	335	76	87	29.58	29.94	− .05	53.4	− 0.4	78	*	61	37	8	46	35	48	43	72	2.76	− 0.1	13	7,023	w.	42	se.	2	8	7	16	6.2	
Rochester	523	81	90	29.39	29.96	− .02	55.5	0.0	82	23	65	36	8	46	33	49	43	67	1.33	− 2.0	13	5,610	sw.	26	sw.	23	9	10	12	5.9	
Erie	714	92	102	29.22	29.98	− .00	53.7	− 2.0	79	9	61	40	22	46	25	50	47	80	3.04	− 0.8	13	7,098	w.	40	w.	14	12	8	11	5.3	
Cleveland	762	190	201	29.17	29.99	− .01	54.8	− 1.9	80	9	62	38	22	47	28	49	45	72	3.73	+ 0.1	13	9,120	nw.	40	nw.	14	10	10	11	6.1	
Sandusky	629	62	74	29.32	29.99	− .01	56.6	− 1.9	83	9	64	37	2	49	30	50	44	67	3.84	+ 0.4	15	6,121	sw.	32	sw.	9	8	7	16	6.2	
Toledo	674	122	127	29.27	29.99	+ .01	56.0	− 2.7	80	9	65	35	2	47	28	50	45	71	3.28	− 0.1	10	6,667	w.	38	sw.	14	8	10	13	5.7	
Detroit	730	160	166	29.20	29.99	.00	54.8	− 2.8	79	9	63	36	2	47	29	50	45	74	4.03	+ 0.5	10	6,458	sw.	33	sw.	12	8	12	11	5.8	
Upper Lake Region.							50.3	− 0.5											2.55	− 0.3											
Alpena	609	61	65	29.30	29.97	.00	48.6	− 0.4	80	9	56	34	1	41	29	44	41	77	5.43	+ 2.0	17	6,808	nw.	35	sw.	9	7	13	11	6.2	
Grand Haven	628	55	64	29.30	29.98	+ .02	51.2	− 2.7	82	8	60	34	1	43	34	46	42	72	1.18	− 2.2	11	7,635	nw.	31	sw.	20	10	13	8	5.1	
Marquette	734	67	95	29.17	29.96	− .02	47.6	− 0.4	78	17	55	32	1	40	29	43	38	71	1.89	− 1.1	16	7,371	nw.	34	nw.	28	6	13	12	6.7	T.
Port Huron	639	70	108	29.30	29.99	+ .01	53.2	+ 0.8	80	19	62	36	31	44	32	47	43	73	4.32	+ 1.0	15	7,264	s.	36	w.	12	10	11	10	5.3	
Sault Ste. Marie	624	58	65	29.28	29.96	+ .02	45.8	− 1.2	72	17	55	30	16	36	36	41	36	73	4.26	+ 2.0	14	6,520	nw.	35	nw.	24	11	7	13	5.9	T.
Chicago	824	241	274	29.14	30.02	+ .05	55.0	− 1.3	81	19	63	33	1	47	38	48	42	66	0.84	− 2.9	10	12,155	n.	49	n.	2	12	14	5	4.3	
Milwaukee	671	106	149	29.29	30.01	+ .03	53.7	+ 0.3	83	18	63	32	1	44	33	48	42	69	1.01	− 2.6	7	6,896	w.	35	w.	23	11	6	14	5.6	0.1
Greenbay	617	49	57	29.33	30.00	+ .02	53.8	+ 0.4	84	5	64	32	1	44	36	47	41	67	2.40	− 1.4	9	6,635	s.	32	n.	2	10	15	6	5.5	T.
Duluth	702	95	106	29.24	30.00	+ .04	48.4	+ 0.2	87	17	57	32	1	40	41	42	35	64	1.63	− 2.0	13	6,747	ne.	36	ne.	18	10	12	9	5.0	T.
North Dakota.							57.0	+ 3.1											0.37	− 1.5											
Moorhead	935	54	60	28.98	29.98	+ .05	56.2	+ 3.1	90	17	70	26	24	42	48	48	41	62	0.80	− 1.7	10	8,290	se.	38	se.	25	13	12	6	4.3	
Bismarck	1,674	16	29	28.23	29.99	+ .10	57.2	+ 2.9	90	4	71	23	14	43	43	47	38	53	1.10	− 1.4	6	8,333	nw.	36	nw.	8	19	11	1	3.5	
Williston	1,875	15	31	27.98	29.94	+ .05	57.6	+ 3.3	90	*	72	25	13	43	45	48	38	54	0.72	− 1.4	6	7,493	n.	48	w.	8	22	8	1	3.2	
Upper Miss. Valley.							59.9	− 1.1											1.77	− 2.3											
Minneapolis	.....	99	...	.....	.....	.....	57.4	+ 0.9	87	5	69	31	1	46	38	....	....	....	1.87	− 1.8	10	.....	w.	....	.....	...	15	7	9	...	
St. Paul	837	114	124	29.10	30.00	+ .07	56.8	− 0.4	86	5	68	34	1	46	34	47	38	55	1.81	− 1.6	10	5,797	nw.	31	s.	26	11	8	12	5.2	
La Crosse	.....	70	78	.....	.....	.....	57.4	− 0.6	87	6	68	34	1	46	37	....	....	....	1.59	− 1.7	6	5,771	s.	39	w.	10	11	10	10	5.0	
Davenport	599	71	79	29.36	30.00	+ .03	59.6	− 0.8	82	7	70	36	1	49	29	51	43	57	1.91	− 2.4	10	5,415	nw.	36	nw.	23	13	11	7	4.5	
Des Moines	867	84	88	29.13	30.06	+ .12	59.7	− 1.5	83	6	71	39	*	48	35	51	43	58	2.31	− 2.4	7	5,884	n.	37	sw.	19	18	9	4	3.3	
Dubuque	698	49	56	29.26	30.01	+ .05	58.7	− 0.5	84	6	70	35	1	48	34	50	41	57	2.09	− 1.9	7	5,544	w.	28	nw.	20	22	7	2	2.5	
Keokuk	614	64	78	29.38	30.03	+ .08	61.2	− 1.0	85	20	71	35	2	51	31	52	46	60	1.86	− 2.2	7	5,359	nw.	36	nw.	13	18	10	3	2.9	
Cairo	359	87	93	29.66	30.05	+ .09	64.6	− 2.5	85	22	74	42	1	56	27	57	52	68	1.12	− 2.7	8	5,184	n.	32	n.	24	10	12	9	4.9	

TABLE I.—*Climatological data for Weather Bureau Stations, May*, 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	30.03	+ .04	59.9	− 2.5	82	20	70	36	1	50	36	52	45	62	2.19	− 2.8	7	6,264	s.	26	sw.	20	13	14	4	4.5	
Hannibal	534	75	107	.....	.....	.....	61.0	.....	84	22	72	40	31	50	33	....	....	....	1.13	− 2.9	8	6,058	sw.	33	sw.	8	17	12	2	3.1	
St. Louis	567	111	210	29.46	30.06	+ .10	63.5	− 2.5	84	22	72	43	2	55	29	57	53	73	1.59	− 3.0	9	6,457	s.	29	sw.	20	17	8	6	4.0	
Missouri Valley.							61.5	+ 0.4											1.66	− 2.8											
Columbia	.....	4	84	.....	.....	.....	62.7	+ 0.1	86	22	75	38	2	50	38	....	....	....	3.19	− 2.7	9	5,307	nw.	30	nw.	13	13	8	10	5.2	
Kansas City	963	78	95	29.04	30.06	+ .12	64.5	0.0	87	20	74	41	14	54	30	54	46	57	1.24	− 3.4	10	5,468	n.	29	nw.	13	12	14	5	4.3	
Springfield, Mo.	1,324	100	103	28.65	30.04	+ .08	63.4	− 3.8	84	27	72	39	14	54	26	55	49	65	2.48	− 3.6	7	6,412	se.	30	sw.	27	9	18	4	4.3	
Topeka	.....	81	....	.....	.....	.....	64.6	+ 2.1	90	26	76	38	14	53	36	....	...	....	2.43	− 3.0	9	.....	n.	....	.....	...	9	17	5	....	
Lincoln	1,199	74	84	28.76	30.02	.....	60.8	− 0.3	88	26	73	34	24	48	35	55	51	72	2.22	− 2.6	11	7,565	se.	38	nw.	13	10	19	2	4.6	
Omaha	1,103	92	97	28.86	30.03	+ .08	61.8	− 0.2	87	19	72	38	14	51	31	53	46	61	2.16	− 2.2	11	5,762	se.	26	nw.	23	16	11	4	4.0	
Sioux City	1,139	96	109	.....	.....	.....	59.1	+ 1.4	88	19	72	35	24	46	42	....	....	....	1.24	− 2.2	7	9,480	s.	44	nw.	23	16	5	10	4.2	
Pierre	1,460	50	61	28.43	29.96	+ .07	60.9	+ 3.4	90	16	74	31	14	48	41	50	40	51	0.45	− 1.9	5	7,980	se.	40	s.	7	16	10	5	3.7	
Huron	1,310	63	72	28.62	30.00	+ .07	56.8	+ 1.3	87	5	71	27	24	43	44	50	43	60	0.46	− 2.6	5	9,826	se.	40	se.	25	11	18	2	4.0	
Yankton	1,234	51	57	28.71	30.01	+ .09	60.1	+ 0.1	86	19	72	32	24	48	40	50	41	54	0.78	− 3.6	8	7,389	s.	31	nw.	23	14	11	6	3.9	
Northern Slope.							59.6	+ 5.6											1.17	− 1.2											
Havre	2,494	15	33	27.31	29.88	− .03	60.6	+ 7.3	89	16	76	35	10	46	44	49	37	49	0.42	− 1.1	7	7,889	w.	47	sw.	25	17	10	4	3.9	
Miles City	2,372	41	49	27.45	29.89	− .02	63.5	+ 7.1	92	16	77	36	14	50	41	50	38	48	0.35	− 1.9	7	5,952	se.	48	w.	7	16	9	6	3.5	
Helena	4,108	88	93	25.85	29.98	+ .05	60.0	+ 7.0	83	14	72	35	7	48	35	47	34	44	1.14	− 0.4	7	6,430	sw.	48	sw.	25	17	10	4	3.7	T
Rapid City	3,251	53	61	26.63	29.94	+ .01	59.8	+ 6.7	88	25	73	31	14	47	40	49	36	46	1.82	− 1.8	7	6,371	se.	36	se.	24	13	12	6	4.5	
Cheyenne	6,105	58	60	24.07	29.98	+ .06	55.0	+ 3.7	79	25	68	28	9	42	39	44	33	53	3.07	+ 0.8	15	6,588	s.	35	sw.	21	7	17	7	5.7	
Lander	5,372	28	36	24.68	29.97	+ .05	57.6	+ 5.7	82	31	73	29	9	42	40	46	33	48	1.25	− 1.4	9	3,964	sw.	36	sw.	7	5	21	5	5.5	
North Platte	2,826	43	52	27.11	30.01	+ .09	60.4	+ 1.9	87	19	74	28	14	47	37	52	45	61	0.11	− 2.6	4	7,341	se.	46	s.	18	14	17	0	3.6	
Middle Slope.							63.4	+ 0.8											2.87	− 0.7											
Denver	5,290	83	151	24.78	29.99	+ .07	60.6	+ 4.0	84	31	74	40	11	48	34	49	40	54	3.15	+ 0.3	9	5,472	s.	42	n.	26	6	17	8	5.7	
Pueblo	4,713	74	81	25.30	29.96	+ .08	61.6	+ 1.9	90	31	76	38	1	47	42	49	38	50	1.93	+ 0.1	10	5,619	nw.	38	nw.	21	10	16	5	4.8	
Concordia	1,398	42	47	28.55	30.02	+ .07	63.2	+ 0.7	89	26	76	35	14	51	42	54	46	60	2.13	− 2.1	9	5,434	s.	24	s.	26	11	16	4	4.8	
Dodge City	2,504	44	52	27.42	29.99	+ .10	64.4	+ 1.0	87	31	76	39	3	53	36	56	51	70	1.49	− 1.7	10	8,010	s.	40	s.	31	10	19	2	4.2	
Wichita	1,351	78	85	28.61	30.03	+ .13	65.1	− 0.7	88	*	76	40	14	54	36	56	49	63	2.48	− 1.5	9	5,466	s.	24	w.	21	9	12	10	5.0	
Oklahoma	1,218	54	53	28.75	30.02	+ .12	65.8	− 2.1	85	*	75	42	1	57	30	60	56	76	6.02	+ 0.7	12	6,950	s.	48	nw.	13	18	10	3	3.8	
Southern Slope.							66.8	− 0.8											4.58	+ 1.8											
Abilene	1,749	47	54	28.21	30.02	+ .10	70.4	− 1.4	89	22	80	48	1	60	28	61	57	70	4.73	+ 1.2	10	6,887	se.	46	nw.	10	7	15	9	5.2	
Amarillo	3,691	53	61	26.29	30.01	+ .10	63.3	− 0.1	82	26	74	45	4	53	30	56	51	72	4.44	+ 2.4	11	10,975	s.	44	n.	27	2	14	15	6.9	
Southern Plateau.							72.2	+ 1.7											1.26	+ 0.8											
El Paso	3,767	10	110	26.14	29.86	+ .01	74.0	+ 0.7	94	*	88	51	5	60	36	54	34	32	0.46	0.0	4	8,264	e.	48	s.	25	17	11	3	3.2	
Santa Fe	6,998	47	50	23.32	29.97	+ .06	56.9	+ 0.6	74	17	67	36	4	46	27	46	35	52	4.35	+ 3.3	15	5,019	se.	36	sw.	1	12	15	4	4.8	
Phœnix	1,076	47	57	28.66	29.77	.....	77.5	+ 2.9	104	28	94	52	3	61	39	56	37	28	0.01	− 0.2	1	3,454	e.	26	nw.	29	24	3	4	1.8	
Yuma	139	16	50	29.62	29.76	− .08	80.4	+ 2.6	102	28	96	54	2	65	41	60	43	32	T.	0.0	0	4,389	s.	36	w.	2	26	5	0	1.3	
Middle Plateau.							61.2	+ 5.2											0.63	− 0.5											
Carson City	4,720	82	92	25.26	29.95	....	59.4	+ 4.5	85	28	74	29	8	45	43	46	31	42	0.23	− 0.4	5	5,635	nw.	47	w.	6	15	14	2	3.8	
Winnemucca	4,340	59	70	25.66	29.95	+ .02	60.8	+ 6.9	90	29	75	29	8	46	39	47	31	40	0.69	− 0.3	8	6,479	sw.	48	ne.	24	8	15	8	5.1	
Salt Lake City	4,344	83	90	25.62	29.94	+ .01	63.4	+ 4.1	88	29	76	35	8	51	35	53	43	52	0.98	− 0.7	6	5,020	se.	40	s.	1	7	11	13	6.4	
Northern Plateau.							61.1	+ 5.0											1.11	− 0.4											
Baker City	3,470	49	47	26.46	29.99	+ .04	58.2	+ 5.1	88	29	71	31	2	45	41	47	36	53	1.55	− 0.4	6	5,095	s.	29	sw.	16	10	13	8	5.0	0.1
Idaho Falls	4,742	10	56	25.25	29.98	+ .05	58.6	+ 7.0	89	30	74	27	8	43	41	45	31	41	0.84	− 0.1	6	6,865	s.	51	s.	25	18	9	4	3.3	
Spokane	1,943	99	107	27.95	29.97	+ .02	62.4	+ 5.6	95	29	76	37	*	49	38	51	42	54	1.01	− 0.4	6	4,726	sw.	32	sw.	6	17	6	8	4.1	
Walla Walla	1,018	65	73	28.93	29.99	+ .05	65.3	+ 2.5	100	29	78	40	*	52	38	54	44	51	1.05	− 0.6	8	4,289	s.	34	n.	29	16	11	4	3.9	
N. Pac. Coast Reg.							60.0	+ 1.6											1.71	− 1.1											
Fort Canby	179	10	34	29.87	30.07	+ .05	54.1	+ 1.5	85	12	60	43	2	48	31	50	47	83	1.85	− 1.3	13	8,411	n.	57	s.	6	11	9	11	5.4	
Port Angeles	29	47	61	.....	.....	.....	51.8	+ 1.2	78	28	59	38	2	44	30	...	....	....	0.63	− 0.7	6	5,517	w.	30	w.	29	14	11	6	4.4	
Pysht	.....	5	....	.....	.....	.....	54.8	.....	83	28	66	38	1	43	39	...	....	....	1.88	− 0.7	11	.....	w.	....	.....	...	14	10	7	....	
Seattle	119	100	108	29.93	30.06	.....	58.4	.....	90	28	68	42	2	49	34	51	45	66	1.30	.....	7	3,710	nw.	34	sw.	6	12	9	10	4.9	
Tacoma	213	....	....	.....	.....	.....	57.2	.....	88	28	67	40	2	48	33	...	....	....	1.46	.....	8	.....	.....	....	.....	...	12	5	14	5.4	
Tatoosh Island	86	12	21	30.00	30.10	+ .09	50.7	+ 0.2	67	13	55	43	*	46	18	48	46	83	3.45	− 1.1	12	7,363	sw.	55	e.	28	11	8	12	5.7	
Astoria	.....	39	60	.....	.....	.....	57.3	+ 2.0	80	12	65	40	2	50	28	....	....	....	2.38	− 1.2	10	.....	w.	....	.....	...	17	3	11	....	
Portland, Oreg	153	208	213	29.88	30.04	− .01	61.4	+ 1.9	93	28	72	40	8	51	35	52	45	62	0.90	− 1.5	8	6,154	nw.	37	s.	6	10	18	3	4.2	
Roseburg	521	56	67	29.46	30.02	− .04	60.4	+ 2.7	92	12	73	36	8	48	41	51	45	66	0.89	− 1.1	8	3,073	nw.	24	sw.	6	14	11	6	4.4	
Mid. Pac. C'st Reg.							60.7	+ 1.5											0.35	− 1.3											
Eureka	64	60	69	30.01	30.07	+ .05	53.8	− 0.7	70	11	58	39	2	47	22	50	48	90	0.75	− 2.3	7	5,321	nw.	32	nw.	25	9	16	6	5.3	
Redbluff	334	54	58	29.57	29.91	− .08	72.6	+ 4.7	98	19	86	46	7	59	34	56	43	41	0.06	− 1.3	2	5,586	se.	26	se.	5	25	6	0	1.8	
Sacramento	71	106	117	.....	.....	..	67.0	+ 2.2	93	19	79	45	5	55	37	....	....	....	0.30	− 0.7	1	8,314	sw.	33	nw.	10	23	8	0	2.4	
San Francisco	153	161	167	29.82	29.98	− .02	57.4	− 0.6	88	19	64	47	5	51	30	52	49	80	0.61	− 0.1	2	10,048	w.	45	w.	11	13	16	2	4.1	
Point Reyes Light	.....	12	....	.....	.....	.....	53.9	+ 1.8	81	19	60	44	8	48	29	....	....	....	0.02	− 1.9	1	.....	nw.	....	.....	...	13	6	12	....	
S. Pac. Coast Reg.							65.1	+ 0.7											0.07	− 0.3											
Fresno	332	67	70	29.52	29.86	− .04	71.7	+ 3.5	99	20	88	45	2	56	39	56	44	45	0.00	− 0.4	0	5,019	nw.	24	nw.	28	24	7	0	1.7	
Los Angeles	330	74	76	29.60	29.95	− .01	62.6	− 0.6	76	9	71	48	*	54	26	56	54	82	0.10	− 0.3	3	3,141	w.	20	n.	14	2	22	7	5.5	
San Diego	69	59	70	29.85	29.95	− .08	60.9	− 0.9	67	*	64	50	2	58	11	56	54	81	0.12	− 0.2	5	4,413	nw.	23	se.	2	15	4	12	5.1	
San Luis Obispo	201	10	46	29.77	29.99	.....	61.2	.....	90	9	73	41	27	50	40	53	48	69	0.04	.....	1	3,902	w.	28	w.	1	12	6	13	5.1	

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, May, 1897.*

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
	°	°	°	*Ins.*	*Ins.*
Alabama.					
Alco †	91	42	70.0	1.15	
Ashville †	95	38	68.2	1.62	
Bermuda †	92	42	69.5	1.07	
Birmingham	90	43	70.0	3.93	
Brewton †	93	44	69.5	0.50	
Bridgeport †	.....	.....	.....	5.72	
Citronelle †	90	49	72.4	0.68	
Clanton †	89	42	67.8	0.40	
Cordova †	.....	.....	.....	3.99	
Daphne †	91	45	71.6	1.61	
Decatur †	92	36	66.3	3.30	
Demopolis	92	42	69.6	0.80	
Elba †	93	40	68.6	1.20	
Eufaula *a* †	97	48	72.4	1.85	
Evergreen †	87	42	67.0	1.10	
Florence *a* †	.....	.....	.....	2.56	
Florence *b* †	90	40	66.6	2.19	
Fort Deposit †	94	46	71.2	T.	
Gadsden	94	39	68.4	1.51	
Goodwater †	92	40	69.3	0.10	
Greensboro †	90	45	69.2	1.09	
Hamilton	92	36	66.2	2.09	
Healing Springs †	91	42	68.4	2.14	
Highland Home † *	88	50	71.2	0.20	
Livingston	93	42	70.8	0.47	
Lock No. 4	91	39	67.4	1.72	
Madison Station †	91	35	65.2	4.42	
Maple Grove	92	32	64.4	0.75	
Marion †	90	46	70.4	1.00	
Mount Willing †	94	39	69.3	0.57	
Newbern †	88	44	70.6	1.61	
Newburg	92	40	66.2	1.53	
Newton †	91	43	69.4	1.68	
Opelika †	94	42	69.4	1.03	
Oxanna †	87	37	65.4	1.73	
Pineapple	95	49	71.0	0.60	
Pushmataha †	91	46	70.7	1.54	
Rockmills †	88	38	65.8	0.40	
Scottsboro †	92	36	65.6	5.63	
Selma †	92	45	70.6	0.73	
Sturdevant †	.....	.....	.....	0.42	
Talladega *1	88	50	68.9	1.74	
Tallassee †	.....	.....	.....	1.39	
Thomasville	74	44	71.2	0.77	
Tuscaloosa †	91	45	70.3	2.71	
Tuscumbia	91	40	67.2	1.61	
Union †	95	40	69.1	1.44	
Union Springs †	94	46	71.6	1.15	
Uniontown †	90	49	72.0	1.07	
Valleyhead	86	33	64.7	3.94	
Warrior †	.....	.....	.....	0.69	
Wetumpka	92	43	69.1	0.93	
Wilsonville †	.....	.....	.....	0.90	
Arizona.					
Arizona Canal Co. Dam	106	50	77.6	0.08	
Benson *8	95	63	77.7	0.00	
Bisbee †	89	45	70.0	0.05	
Buckeye †	104	50	76.8	T.	
Calabasas	96	48	70.9	0.01	
Casa Grande *8	110	60	80.8	0.00	
Cedar Springs	.....	.....	.....	0.53	
Congress	97	49	76.2	0.14	
Dragoon	.....	.....	.....	0.95	
Dragoon Summit *5	91	60	75.3	0.33	
Dudleyville	100	42	73.2	0.28	
Farleys Camp †	106	52	79.4	T.	
Flagstaff †	84	34	61.0	0.12	
Fort Apache	89	32	62.8	0.34	
Fort Grant †	92	40	70.6	0.04	
Fort Huachuca †	92	43	68.6	0.26	
Fort Mohave	.....	57	.....	0.00	
Gilabend *a* *8	107	67	85.8	0.00	
Glendale	103	45	74.1	0.00	
Holbrook †	90	38	63.8	0.13	
Lochiel *1	92e	48e	66.6e	0.32	
Maricopa *8	108	63	88.1	0.00	
Mesa †	103	48	77.0	0.16	
Mount Huachuca	92	40	69.4	0.16	
Music Mountain	95	49	74.3	0.07	
Natural Bridge	.....	.....	.....	0.27	
Oracle †	93	48	71.9	0.04	
Oro	.....	.....	.....	0.13	
Oro Blanco	97	44	72.3	0.35	
Pantano *8	100	60	75.8	0.00	
Parker	112	48	80.8	.....	
Payson	.....	.....	.....	0.18	
Peoria †	100	51	76.4	T.	
Phœnix	100	48	75.6	0.00	
Pinal Ranch	.....	.....	.....	0.26	
Reymert †	107	49	79.4	T.	
St. Helena Ranch	.....	.....	.....	0.39	
San Carlos †	102	43	73.2	0.30	
San Simon *8	96	55	75.9	0.00	
Showlow	.....	.....	.....	0.07	
Signal †	106	51	77.2	T.	
Texas Hill *8	108	61	85.1	0.00	
***Arizona*—Cont'd.**					
Tombstone	92	43	72.4	T.	
Tuba	94	40	65.4	0.26	
Tucson *c* †	98	52	75.6	0.00	
Walnut Ranch *†1	87	50	65.7	0.48	
Whipple Barracks †	92	35	61.4	0.19	
Willcox *8	88	58	72.4	0.00	
Williams	86	34	57.9	0.85	
Arkansas.					
Amity	89	45	68.5	1.65	
Arkansas City †	.....	.....	.....	7.47	
Batesville	91	44	66.4	1.07	
Beebranch †	92	43	66.9	1.25	
Blackton	.....	.....	.....	1.75	
Blanchard Springs †	91	44	69.0	1.40	
Brinkley	91	44	68.0	2.35	
Camden *a* †	.....	.....	.....	2.77	
Camden *b* †	93	42	68.6	2.78	
Canton *1d	90	40	64.8	.....	
Conway	95	43	70.1	1.44	
Corning †	90	42	66.1	2.79	
Dallas	91	40	69.2	2.41	
Dardanelle	.....	.....	.....	2.09	
Elon †	90	41	71.0	2.89	
Fayetteville †	87	38	65.0	0.67	
Forrest	91	44	68.0	1.13	
Fulton †	.....	.....	.....	3.83	
Helena *a* †	.....	.....	.....	0.44	
Helena *b*	93	48	70.6	0.34	
Hot Springs *a*	93	45	70.6	2.22	
Hot Springs *b*	.....	.....	.....	1.63	
Hot Springs (near)	.....	.....	.....	1.69	
Jonesboro	91	33	66.4	1.81	
Keesees Ferry †	92	38	66.0	2.24	
Lacrosse †	98	39	64.4	1.15	
Lonoke *1	92	49	69.3	0.38	
Luna Landing *6	86	53	69.9	4.57	
Lutherville *1	99	51	70.6	.....	
Malvern †	96	43	69.2	1.72	
Marianna *1	95	53	72.0	.....	
Marvell	95	46	69.7	0.85	
Moore	92	48	74.2	1.05	
Mossville	85	43	65.9	2.96	
Mount Nebo †	87	45	66.9	1.08	
New Gascony *1	86	51	69.9	1.55	
Newport *a* †	.....	.....	.....	3.11	
Newport *b* †	90	44	65.8	2.94	
Newport *c* †	93	42	67.3	3.14	
Oregon *1	82	36	60.2	.....	
Osceola †	89	45	67.3	1.84	
Ozark †	90	49	70.9	1.15	
Picayune †	90	47	71.0	3.81	
Pinebluff †	94	45	70.6	1.56	
Pocahontas †	85	41	65.9	3.05	
Prescott	92	45	70.7	2.72	
Russellville	91	44	68.4	1.17	
Silver Springs †	88	34	62.8	1.86	
Stamps	92	47	71.7	1.72	
Stuttgart †	91	44	68.2	1.52	
Texarkana †	94	47	72.0	4.31	
Warren †	98	47	69.2	3.50	
Washington *†1	92	48	69.7	4.12	
Wiggs *1	89	48	69.7	2.07	
Witts Springs †	87	42	63.6	0.81	
California.					
Adin	93	30	60.6	0.88	
Agnew	92	34	59.6	0.00	
Arlington Heights	93	44	65.8	0.02	
Athlone *8	98	51	75.1	0.00	
Azusa	.....	.....	.....	0.28	
Ballast Point L. H	.....	.....	.....	0.05	
Barstow †	100	65	81.2	0.00	
Bear Valley †	.....	.....	.....	0.80	
Berkeley	91	48	60.3	0.20	
Bishop †	92	35	63.4	0.12	
Bishop Creek *8	95	50	74.6	0.18	
Boca *8	85	29	53.7	0.50	
Bodie †	79	18	48.0	0.51	
Bowmans Dam *†1	79	34	55.8	0.92	
Caliente *8	95	55	74.8	0.13	
Calloway Canal *†5	100	43	72.4	0.06	
Campbell	93	35	61.6	0.06	
Cape Mendocino L. H	.....	.....	.....	0.45	
Castle Pinckney *1j	76	50	57.8	T.	
Cedarville †	88	30	58.9	0.80	
Centerville *1	98	53	64.4	0.16	
Chico *8	98	53	74.8	0.18	
Chino *†5	89	52	64.5	0.00	
Cisco *8	75	30	46.1	.....	
Claremont †	85	42	62.0	0.21	
Corning *8	98	55	72.7	T.	
Coronado	75	55	65.4	0.12	
Craftonville	96	46	68.2	0.56	
Crescent City †	85	34	53.4	0.85	
Crescent City L. H	.....	.....	.....	1.24	
Daunt	.....	.....	.....	1.85	
Davisville *b*	93	47	68.7	0.12	
***California*—Cont'd.**					
Delano *8	95	50	72.0	0.00	
Delta *8	99	47	70.9	0.00	
Descanso *5	84	28	56.2	0.21	
Drytown	93	38	64.3	0.30	
Dunnigan *8	92	58	75.0	0.26	
Durham *1	90	48	67.3	0.17	
East Brother L. H	.....	.....	.....	0.25	
Edmanton *1	86	32	56.5	0.06	
Elsinore	97	45	70.0	0.03	
Escondido	91	38	65.8	.....	
Fallbrook *1	84	48	62.5	0.21	
Famosa †	96	46	73.8	0.00	
Folsom City *b* *1	99	56	71.3	0.51	
Fordyce Dam †	.....	.....	.....	2.47	
Fort Bragg †	.....	.....	.....	0.62	
Fort Ross	76	40	55.4	0.86	
Glendora	.....	.....	.....	0.45	
Goshen *8	100	48	70.6	0.00	
Grand Island *5	94	49	70.8	0.30	
Grass Valley	.....	.....	.....	0.13	
Greenville †	91	25	59.4	0.05	
Guinda	.....	.....	.....	0.00	
Healdsburg *1	92	44	61.9	0.30	
Hollister	93	38	60.2	0.06	
Humboldt L. H	.....	.....	.....	0.55	
Hydesville	79	35	54.7	0.32	
Iowa Hill *1	85	49	64.5	0.15	
Jackson	82	36	61.6	0.03	
Jolon	.....	.....	.....	0.00	
Keeler *8	100	51	77.5	T.	
Keene *8	89	48	65.6	0.00	
Kennedy Gold Mine	91	40	65.8	0.45	
Kernville	.....	.....	.....	0.00	
King City *8	98	44	65.2	0.00	
Kingsburg *8	95	55	75.2	0.00	
Kono Tayee	88	43	67.6	0.90	
Lagrange *5	99	47	72.6	T.	
Laporte *†1	80	36	55.1	0.71	
Las Fuentes Ranch	.....	.....	.....	0.00	
Lemoore *a* *8	98	53	72.7	0.00	
Lick Observatory	75	33	58.0	0.28	
Lime Kiln	100	45	73.2	.....	
Lime Point L. H	.....	.....	.....	0.65	
Lodi	93	41	65.7	0.10	
Los Alamos †	.....	.....	.....	0.00	
Los Gatos *b*	94	40	62.6	0.00	
Lytton Springs	94	48	65.8	0.15	
McMullin *1	102	48	74.7	.....	
Malakoff Mine *1	86	44	65.4	0.20	
Mammoth Tank *8	110	65	88.7	0.00	
Manzana	93	40	65.7	0.01	
Mare Island L. H	.....	.....	.....	0.28	
Marysville	94	48	69.8	0.36	
Merced *8	98	54	73.6	0.00	
Mills College	.....	.....	.....	0.18	
Modesto *8	90	58	70.6	0.10	
Mohave *8	102	55	75.9	0.00	
Mokelumne Hill *3	.....	50	65.4	0.27	
Monterey *8	74	44	58.2	0.08	
Mount Breckenridge	.....	.....	.....	0.40	
Mount Frazier	.....	.....	.....	0.28	0.8
Mount Glenwood *1	95	55	72.2	0.27	
Mutah Flat †	.....	.....	.....	0.00	
Napa	98	44	65.0	0.25	
Needles	107	64	85.4	0.00	
Nevada City †	85	34	61.6	0.22	
Newcastle *a* †	91	42	65.7	0.15	
Newhall *8	92	40	65.3	0.08	
Nordhoff †	88	.....	.....	0.00	
North Ontario	85	46	62.6	0.07	
North San Juan *1	95	54	71.8	0.03	
Oakland *a*	92	47	61.0	0.29	
Ogilby *8	109	70	86.4	0.00	
Oleta *1	86	46	62.8	0.35	
Orangevale †	97	48	70.2	0.45	
Orland *8	110	56	76.9	0.00	
Oroville *b*	100	50	73.6	0.30	
Otay Dam *1	88	55	65.6	0.00	
Palermo †	99	45	71.8	0.20	
Paso Robles *b*	88	40	61.5	0.00	
Peachland *1	91	48	60.3	0.51	
Piedras Blancas L. H	.....	.....	.....	0.35	
Pigeon Point L. H	.....	.....	.....	0.10	
Pilot Creek	.....	.....	.....	0.17	
Placerville	90	35	61.8	0.36	
Point Ano Nuevo L. H	.....	.....	.....	0.05	
Point Arena L. H	.....	.....	.....	0.10	
Point Bonita L. H	.....	.....	.....	0.94	
Point Conception L. H	.....	.....	.....	0.00	
Point Fermin L. H	.....	.....	.....	0.00	
Point George L. H	.....	.....	.....	0.08	
Point Hueneme L. H	.....	.....	.....	0.04	
Point Lobos	81	45	55.0	0.71	
Point Loma L. H	.....	.....	.....	0.00	
Point Montara L. H	.....	.....	.....	0.05	
Point Pinos L. H	.....	.....	.....	0.11	

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.*
California—Cont'd.					
Point Reyes L. H.	.....	.....	.....	0.20	
Point Sur L. H.	.....	.....	.....	0.17	
Pomona (near)	90	42	65.9	T.	
Poway *[3]	84	55	59.6	0.12	
Quincy †	88	28	60.4	0.00	
Ravenna *[8]	98	52	69.2	0.11	
Redding *b* †	96	47	71.8	0.00	
Represa	90	42	67.4	0.35	
Riovista	91	46	67.5	T.	
Roe Island L. H.	.....	.....	.....	0.00	
Rosewood	98	38	68.3	0.01	
Sacramento *a*	92	46	68.4	0.36	
Salinas *[8]	85	50	61.0	0.00	
Salton *[8]	112	74	94.0	0.00	
San Bernardino †	93	43	65.6	0.11	
San Jacinto	94	32	64.3	0.14	
San Jose *b*	90	35	61.4	0.16	
San Leandro *[1]	91	55	62.6	0.12	
San Luis L. H.	.....	.....	.....	0.07	
San Mateo *[5]	91	53	65.6	0.00	
San Miguel *[8]	91	45	64.7	0.00	
San Miguel Island	74	46	58.1	0.03	
Santa Ana *[8]	78	56	67.6	0.13	
Santa Barbara *a*	74	46	59.5	0.00	
Santa Barbara L. H.	.....	.....	.....	0.00	
Santa Clara *a*	.....	.....	.....	0.05	
Santa Cruz *b* †	91	38	60.0	0.24	
Santa Cruz L. H.	.....	.....	.....	0.13	
Santa Maria	85	42	64.6	0.01	
Santa Monica *[8]	77	57	67.1	0.00	
Santa Paula *b* †	85	39	59.0	0.00	
Santa Rosa *[8]	98	41	65.2	0.57	
Saticoy	.....	.....	.....	0.10	
Shasta	.....	.....	.....	0.01	
Sneddens Ranch * † [1]	78	18	48.0	0.00	
S. E. Farallone L. H.	.....	.....	.....	0.03	
Stanford University	92	41	60.4	0.00	
Stockton *a*	94	45	66.0	0.09	
Summerdale †	80	36	57.9	0.28	
Susanville †	89	34	65.3	0.90	
Sutter Creek * [5]	85	36	61.0	0.75	
Tecarte Dam * [4]	96	39	57.4	0.00	
Tehama *[8]	96	51	74.8	0.08	
Templeton *[8]	88	48	62.4	0.00	
Trinidad L. H.	.....	.....	.....	0.66	
Truckee *[8]	82	30	56.3	T.	
Tulare *b*	.....	.....	.....	0.00	
Tulare *c*	100	40	73.2	0.00	
Turlock *b* †	100	40	68.7	0.00	
Ukiah †	91	36	62.9	0.09	
Upper Lake	92	39	65.6	0.22	
Upper Mattole *[1]	95	35	59.9	0.53	
Vacaville *a* *[1]	95	53	68.8	0.27	
Ventura †	79	37	57.2	0.04	
Volcano Springs *[8]	116	70	86.0	0.00	
Walnutcreek	97	44	66.4	0.00	
West Palmdale *[5]	97	40	68.9	0.32	
Westpoint †	.....	.....	.....	0.64	
Wheatland †	98	46	69.4	0.26	
Williams *[8]	95	44	73.8	0.20	
Wilmington *[5]	79	51	67.3	T.	
Wire Bridge *[5]	95	50	71.2	0.17	
Yerba Buena L. H.	.....	.....	.....	0.40	
Yreka †	95	30	62.2	0.58	
Yuba City *[5]	93	50	69.8	0.42	
Engineers Quarters ‡	.....	.....	.....	0.15	
Morses House ‡	.....	.....	.....	0.18	
Deep Creek ‡	.....	.....	.....	0.19	
Holcomb Creek ‡	.....	.....	.....	0.11	
Colorado.					
Alma †	64	21	41.4	1.79	7.0
Antlers †	87	35	60.6	1.50	
Arkins	.....	.....	.....	3.61	
Boulder	78	42	60.2	2.30	
Boxelder	.....	.....	.....	3.49	
Breckenridge †	71	15	44.8	1.54	6.0
Canyon †	91	39	62.7	1.12	
Cheyenne Wells	92	37	61.8	1.44	
Collbran	.....	.....	.....	1.10	
Colorado Springs †	80	36	55.8	1.27	
Crook	91	33	61.8	3.52	
Delta	92	34	62.8	0.65	
Downing †	88	38	60.8	1.65	
Dumont †	75	33	51.0	3.75	
Durango	77	36	56.8	3.22	
Fleming	.....	.....	.....	3.30	
Fort Collins †	82	33	58.0	2.06	
Fort Morgan	88	36	61.6	1.47	
Garnett	78	25	51.8	1.14	
Gleneyrie †	79	35	54.8	2.20	
Gold Hill *[1] [e]	77	43	53.4	.....	
Grand Junction †	89	39	65.3	0.62	
Greeley †	88	34	60.2	3.20	
Gulch †	.....	.....	.....	2.00	
Holly	.....	.....	.....	1.50	
Holyoke *a*	.....	.....	.....	2.44	
Colorado—Cont'd.					
Holyoke (near)	.....	.....	.....	1.94	
Hugo (near)	85	32	57.6	0.70	
Husted †	86	32	55.9	1.23	
Lake Moraine †	66	25	43.0	3.10	
Lamar †	96	40	66.6	1.00	
Laporte	.....	.....	.....	3.35	
Las Animas †	93	41	64.3	0.80	
Lay †	85	21	56.1	0.75	
Leadville (near) * † [1]	65	31	43.4	1.34	
Lerroy †	88	34	60.4	3.08	
Longmont †	90	38	63.2	2.59	
Longs Peak	68	23	45.0	1.60	4.0
Loveland	.....	.....	.....	1.21	
Meeker †	88	25	56.8	1.64	
Millbrook †	74	27	51.4	2.05	
Minneapolis †	92	37	64.2	0.89	
Montrose †	84	34	59.2	1.50	
Moraine †	71	24	48.8	2.30	
Pagoda †	82	22	54.8	1.85	
Paonia †	.....	.....	.....	0.02	
Parachute †	86	34	61.2	0.66	.....
Pinkhamton * [1]	82	29	55.2	2.06	
Rangely †	86	33	60.4	0.09	
Redcliff	.....	.....	.....	0.76	
Rico †	73	25	48.4	4.15	
Ruby	.....	.....	.....	3.65	6.0
Saguache †	76	32	54.7	1.53	
St. Cloud	.....	.....	.....	2.47	
San Luis †	80	26	53.0	2.20	
Santa Clara * [1]	78	38	51.5	5.37	
Seibert †	.....	.....	.....	0.91	
Sherwood Ranch	70	27	47.2	.....	
Stamford * [1]	66	30	41.4	3.05	13.0
Steamboat Springs	.....	.....	.....	1.50	
Sulphur Springs †	81	25	52.3	1.48	
Surface Creek †	87	29	58.6	1.23	
Thon †	90	36	59.0	2.10	
T. S. Ranch †	82	39	60.2	0.55	
Vilas	.....	.....	.....	1.14	
Walden [g]	78	20	49.2	.....	
Wallet †	.....	.....	.....	0.25	
Wray †	89	37	63.7	3.34	
Yuma	.....	.....	.....	1.62	
Connecticut.					
Bridgeport	82	40	58.7	6.62	
Canton †	81	31	55.6	4.96	
Colchester	81	37	57.8	5.01	
Hartford *b*	.....	.....	.....	5.85	
Middletown	84	34	59.4	5.00	
New London †	74	39	55.4	4.76	
Norwalk	82	38	58.3	7.34	
Southington * [1]	83	34	58.0	5.50	
Storrs	81	36	56.0	4.44	
Voluntown †	81	37	57.7	4.46	
Waterbury	81	37	59.0	5.34	
West Cornwall †	77	35	54.3	4.22	
Windsor	83	36	59.4	5.47	
Delaware.					
Milford	85	41	63.9	3.04	
Millsboro	84	41	62.5	3.10	
Newark	81	40	60.6	6.17	
Seaford †	82	42	61.8	3.72	
District of Columbia.					
Distributing Reservoir * [5]	80	48	63.8	6.82	
Receiving Reservoir * [5]	80	44	63.2	6.33	
West Washington	85	37	62.1	7.02	
Florida.					
Amelia †	86	55	72.0	0.89	
Archer †	94	50	72.7	0.53	
Bartow	93	51	74.7	1.80	
Boca Raton †	87	59	75.8	11.00	
Brooksville †	93	59	75.6	0.90	
Clermont †	96	56	76.7	0.85	
De Funiak Springs	92	43	71.2	1.25	
Earnestville †	96	52	76.4	3.10	
Emerson †	99	47	74.4	0.93	
Eustis †	95	56	75.0	1.84	
Federal Point †	91	51	71.4	1.39	
Fort Meade † [1]	92	47	73.1	5.50	
Frostproof †	96	49	75.4	2.07	
Gainesville	96	52	75.4	2.18	
Grasmere †	97	52	75.2	3.30	
Huntington	95	57	74.7	2.38	
Kissimmee	.....	.....	.....	4.26	
Lake Butler †	90	54	72.7	2.81	
Lake City †	99	53	77.4	0.66	
Lemon City †	90	.....	.....	7.20	
Macclenny †	98	51	73.9	1.20	
Manatee †	.....	.....	.....	1.15	
Milton * [1]	88	46	70.6	1.13	
Mullet Key †	88	66	76.2	0.27	
Myers †	92	52	75.6	2.50	
New Smyrna [c]	90	48	72.2	3.84	
Oakhill * [1]	90	62	76.1	.....	
Ocala * † [1]	91	63	74.5	0.82	
Orange City	95	55	75.6	2.40	
Florida—Cont'd.					
Orange Park	92	51	72.6	1.55	
Orlando †	91	55	72.8	1.25	
Oxford * † [1]	94	61	75.4	0.50	
Plant City †	95	50	75.0	2.63	
Quincy	91 [e]	64 [e]	78.8 [e]	2.98	
St. Francis †	94	50	71.1	1.65	
St. Francis Barracks	87	50	72.1	1.43	
Tallahassee †	93	47	72.4	0.43	
Tarpon Springs †	86	54	72.6	0.32	
Georgia.					
Adairsville †	91	38	66.8	0.73	
Alapaha	96	46	71.8	1.15	
Albany †	96	43	71.6	1.49	
Allentown †	95	45	71.4	2.82	
Americus †	97	44	72.4	1.06	
Athens † [g]	93	45	70.8	0.61	
Bainbridge †	95	41	72.3	1.87	
Belleville	98 [e]	50 [e]	72.8 [e]	4.20	
Blakely †	93	47	73.0	1.81	
Camak †	92	42	70.2	2.10	
Canton †	.....	.....	.....	0.70	
Cartersville	87 [d]	40 [d]	64.8 [d]	0.27	
Cedartown	90	42	66.2	0.75	
Clayton †	87	38	65.4	1.46	
Columbus	96	44	70.8	0.31	
Cordele	95	43	70.7	2.15	
Covington	85	41	63.8	0.95	
Dahlonega †	86	39	64.4	0.90	
Diamond	90	36	63.2	1.67	
Eastman †	94	45	71.0	3.53	
Elberton †	91	42	69.8	1.01	
Fleming †	95	45	70.6	0.57	
Fort Gaines	94	46	71.2	2.33	
Franklin	89	42	67.7	0.49	
Gainesville	90	40	66.9	1.15	
Gillsville †	91	42	63.6	0.00	
Greenbush	88	34	64.4	4.22	
Griffin †	.....	.....	.....	0.97	
Hawkinsville	93	36	67.8	0.05	
Hephzibah * † [6]	88	54	72.4	0.90	
Jesup	95	49	72.4	1.66	
Lagrange †	92	45	69.8	1.16	
Leverett	97	43	69.8	1.55	
Louisville †	95	43	70.6	1.39	
Lumpkin	94	46	72.0	0.64	
Macon † *b*	94	41	71.5	0.87	
Marietta	87	39	66.0	0.41	
Marshallville †	90	47	71.6	0.96	
Milledgeville †	92	41	71.1	1.87	
Millen	96	48	71.7	4.61	
Monticello * † [1]	89	54	71.9	0.40	
Morgan †	94	43	70.2	1.25	
Newnan †	95	42	69.5	0.66	
Piscola	95	49	74.2	0.95	
Point Peter	92	42	66.8	0.96	
Poulan †	94	44	70.3	1.36	
Quitman †	97	47	72.3	2.07	
Ramsey	87	34	65.0	2.33	
Rome †	89	39	67.2	0.91	
Sparta	93	43	70.0	0.92	
Talbotton †	90	43	68.3	2.17	
Tallapoosa	91	39	66.8	0.50	
Thomasville †	94	47	72.2	2.57	
Toccoa †	92	43	68.4	0.85	
Union Point	91	43	69.6	2.03	
Washington †	95	42	70.6	3.73	
Waycross	94	49	71.9	3.39	
Waynesboro	92	45	70.7	3.94	
Westpoint	92	44	75.2	1.06	
Idaho.					
American Falls	91	30	61.4	0.60	
Blackfoot †	95	32	59.7	0.23	
Boise Barracks †	100	30	63.4	0.60	
Burnside †	85	21	57.9	0.78	
Cœur d'Alene	93	33	60.2	.....	
Corral * † [1]	82	36	58.0	0.53	
Downey	87	20	58.2	0.60	
Fort Sherman †	95	33	60.9	0.78	
Gimlet †	87	25	58.6	0.52	
Idaho City	86 [d]	24 [d]	60.2 [d]	1.43	
Kootenai †	94	37	63.8	1.26	
Lake †	78	30	49.0	0.26	
Lewiston *a* † [c]	100	37	68.5	2.94	
Lost River †	.....	.....	.....	0.42	
Martin †	83	20	53.5	.....	
Marysville	89	19	55.1	0.70	
Moscow	92 [f]	32 [f]	59.6 [f]	1.20	
Murray †	91	27	57.3	1.19	
Nampa	98	28	63.7	0.49	
Oakley	96	23	61.2	0.90	
Ola †	92	27	61.8	1.10	
Paris	87	23	55.5	0.47	
Payette †	99	34	66.1	1.03	
Pollock †	98	35	65.0	1.38	
Rexburg	88	22	58.2	0.27	
Roseberry †	80	28	53.2	1.28	

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.*
St. Maries	92	33	59.4	1.44	
Salubria	95	31	64.1	1.40	
Soldier†	87	29	55.8	0.47	T.
Swan Valley†	86	18	54.2	1.02	
Warren†	90	28	52.6	2.94	
Illinois.					
Albion†	87	37	61.5	2.61	
Alexander†	86	30	61.0	3.39	
Ashton*†[1]	87	38	59.8	1.58	
Atwood *a**†[2]	90	32	54.6	3.56	T.
Atwood *b*	.....	.....	.....	3.77	
Aurora *a*	92	31	59.6	1.06	
Aurora *b*	86	30	56.4	1.27	
Beardstown†	.....	.....	.....	2.38	
Bloomington†	88	31	60.1	1.90	
Bushnell†	89	33	60.2	1.11	
Cambridge	83	35	58.9	1.48	
Carlinville†	85	34	61.1	2.66	
Carlyle	.....	.....	.....	2.77	
Carrollton	81	35	59.4	2.09	
Charleston	82	34	58.4	2.93	
Chemung	82	30	54.2	1.67	
Chester	.....	.....	.....	3.16	
Cisne†	87	35	60.6	2.13	
Clearcreek†	89	30	58.0	0.95	
Coatsburg†	87	32	61.4	1.75	
Cobden†	85	37	62.2	2.00	
Danville	88	35	59.2	2.14	
Decatur†	86	32	59.0	3.21	
Dixon†	85	33	58.2	0.96	
Duquoin*[1]	88	41	63.1	2.45	
Dwight†	87	28	58.5	1.81	
East Peoria†	88	28	57.8	1.45	
Effingham†	84	32	59.4	2.63	
Evanston*[10]	82	36	54.2	.....	
Fort Sheridan†	83	32	54.8	1.32	
Friendgrove*†[4]	.....	38	60.2	2.94	
Galva†	85	33	59.2	1.06	
Glenwood*†[1]	86[d]	36[h]	56.0[d]	1.32	
Golconda†	88	35	64.4	1.70	
Grafton†	.....	.....	.....	1.17	
Greenville†	88	33	62.2	0.91	
Griggsville†	88	35	62.2	2.91	
Halliday*[5]	87[e]	47[e]	68.1[e]	2.68	
Havana†	84	40	61.8	1.08	
Herrin*[1]	84	40	63.4	2.58	
Hillsboro†	85	35	60.8	1.59	
Iron†	86	34	61.4	3.26	
Joliet†	88	32	58.6	1.25	
Jordans Grove†	86	36	61.3	1.57	
Kankakee *a*†	.....	.....	.....	1.51	
Kishwaukee	84	31	56.9	0.91	
Knoxville *a*	.....	.....	.....	1.20	
Lagrange†	83	32	55.4	1.85	
Laharpe*[1]	86	34	59.9	2.41	
Lanark*†[1]	83	28	54.8	1.24	
Lexington	88	34	60.8	1.68	
Loami†	.....	.....	.....	3.27	
Louisville†	83	36	59.7	2.31	
McLeansboro†	86	35	61.4	2.53	
Martinsville†	85	35	58.8	3.47	
Martinton†	88	32	58.0	1.78	
Mascoutah*[5]	90	38	61.6	2.27	
Mattoon*[1]	78	34	59.5	1.98	
Minonk†	88	31	58.5	1.05	
Monmouth†	85	32	59.4	0.94	
Morrisonville†	83	33	58.9	4.09	
Mount Carmel†	.....	.....	.....	3.14	
Mount Pulaski	83	32	59.6	1.47	
Mount Vernon	86	34	60.8	1.30	
New Burnside†	88	37	62.8	1.10	
Olney *a**[1]	90	36	63.2	2.75	
Oregon†	83	31	57.2	1.58	
Oswego*[1]	86	30	55.8	1.19	
Ottawa†	87	29	57.8	0.99	
Palestine†	87	37	59.0	3.45	T.
Paris	88	35	57.9	2.04	
Peoria *a*†	.....	.....	.....	1.75	
Peoria *b*†	87	35	60.0	1.29	
Philo†	85	32	56.8	1.97	
Plumhill†	88	36	62.4	1.53	
Rantoul†	86	31	57.8	2.23	T.
Reynolds	83	34	59.0	1.86	
Riley†	83	31	55.8	1.08	
Robinson*†[3]	88	40	58.6	3.67	
Rockford†	85	32	58.0	1.12	
Rose Hill†	.....	.....	.....	4.10	
Roundgrove†	88	29	59.7	1.95	
St. Charles*†[1]	85	34	57.0	1.41	
St. John*†[1]	87	44	63.2	2.45	
Scales Mound	85	27	56.6	1.52	T.
Streator†	85	35	58.4	1.13	
Sycamore†	81	31	56.2	1.10	
Tiskilwa*†[3]	86	34	57.5	1.42	
Tuscola†	85	32	57.8	2.78	
Warsaw†	.....	.....	.....	0.53	

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
Illinois—Cont'd.	°	°	°	*Ins.*	*Ins.*
Walnut†	.....	32	.....	1.25	
Wheaton*[3]	.....	32	56.2	1.02	
Winnebago†	82	32	56.9	1.31	
Zion†	80	31	56.4	2.21	
Indiana.					
Anderson†	85	33	57.1	3.25	0.5
Angola*[1]	82	35	56.4	3.32	
Auburn	83	33	55.8	3.93	
Bloomington†	86	38	59.4	2.37	
Bluffton†	89	32	57.4	5.94	
Bright†	82	33	58.4	2.31	2.0
Butlerville†	87	34	58.1	3.03	2.2
Cambridge City†	83	33	55.6	4.10	0.1
Columbia City*[1]	80	34	56.8	3.51	
Columbus†	86	33	56.0	1.39	
Connersville†	83	33	56.1	2.98	T.
Delphi†	87	34	57.0	3.09	T.
Edwardsville*†[1]	86	41	61.8	3.37	
Evansville†	90	41	61.6	2.89	
Farmland†	82	33	56.0	3.21	4.0
Fort Wayne	84	34	57.0	3.28	
Greencastle†	84	34	57.4	2.72	0.5
Greensburg	84	33	63.0	3.33	
Hammond†	82	32	54.5	2.40	
Huntington	84	34	57.0	3.42	T.
Jasper†	89	39	60.2	3.50	
Jeffersonville	86	39	60.8	3.88	
Knightstown†	84	34	57.4	4.12	1.0
Knox	88	34	59.0	2.20	
Kokomo†	88	33	58.7	2.99	T.
Lafayette†	86	34	56.4	3.40	T.
Laporte	87	23	52.9	3.34	
Logansport *b*†	86	34	57.5	2.22	
Madison†	86	40	59.9	2.87	
Marengo†	90	38	60.6	2.59	T.
Marion†	85	33	56.9	4.38	2.0
Mauzy†	84	32	57.1	3.36	2.5
Mount Vernon†	87	38	62.1	2.47	
Northfield†	83	33	56.0	3.41	T.
Princeton*[1]	90	39	59.9	2.75	
Richmond	84	33	56.4	3.61	
Rockville†	86	34	57.2	1.94	
Rushville†	.....	.....	.....	3.35	0.5
Salem	89	32	57.6	2.49	
Scottsburg	88	37	59.8	2.60	T.
Seymour†	86	34	58.7	1.40	
Shelbyville	87	34	59.0	3.50	2.5
South Bend†	83	33	55.6	3.09	
Syracuse†	.....	.....	.....	3.56	T.
Terre Haute†	87	34	59.6	2.85	
Tipton†	88	32	58.8	3.93	
Topeka†	79	32	55.5	3.04	
Valparaiso†	88	30	57.0	5.15	0.3
Vevay	88	34	62.1	4.30	T.
Vincennes†	85	38	61.4	2.31	
Warsaw†	84	32	58.3	3.37	
Washington†	91	38	60.5	3.06	
Winamac	.....	.....	.....	4.08	T.
Worthington†	86	36	59.0	2.23	0.3
Indian Territory.					
Afton	90	43	65.6	0.42	
Healdton†	88	45	67.4	8.41	
Kemp†	91	44	70.4	7.98	
Lehigh†	89	42	68.0	3.94	
Purcell	90	43	67.8	6.13	
South McAlester	93	42	69.4	2.70	
Tahlequah	89[e]	40[e]	64.7[e]	4.59	
Tulsa†	.....	.....	.....	0.80	
Wagoner	94	45	70.0	0.26	
Iowa.					
Adair	.....	.....	.....	2.97	
Afton	91	33	61.8	2.19	
Algona*[1]	86	38	58.3	0.56	
Alta *a*†	84	32	57.8	0.98	
Amana†	85	33	58.5	3.56	
Ames *b*	91	34	58.8	2.58	
Ames (near)	.....	.....	.....	2.05	
Atlantic†	86	28	57.8	2.68	
Atlantic (near)	84	33	59.5	3.07	
Audubon	84	30	55.8	1.32	
Belknap	83	34	59.0	0.45	
Belleplaine	85	29	56.2	3.42	
Bonaparte†	89	32	60.5	0.60	
Britt	86	27	55.4	0.98	
Carroll	85	30	57.3	2.79	
Cedarfalls	87	30	58.6	2.64	
Cedar Rapids†	86	34	58.0	2.10	
Centerville	85	33	60.5	0.60	
Chariton	83	35	59.6	1.30	
Clarinda†	86	39	61.6	2.01	
Clinton	87	33	59.9	0.98	
College Springs	90	35	61.6	3.07	
Corning†	86	34	58.6	2.18	
Council Bluffs	88	37	62.2	2.02	
Cresco†	85	28	55.8	0.59	
Decorah†	86	28	56.2	0.79	

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
Iowa—Cont'd.	°	°	°	*Ins.*	*Ins.*
Delaware*[3]	85	31	57.2	2.12	
Denison†	85	34	57.3	1.78	
Dows	84	26	55.0	3.24	
Eldora	90	28	58.1	3.37	
Elkader†	88	28	56.8	2.39	
Estherville†	89	30	55.4	1.29	
Fairfield†	84	30	58.6	0.58	
Fayette†	85	27	55.7	2.74	
Fonda	95	30	60.0	0.70	
Forest City	82	31	56.0	1.68	
Fort Madison*†[1]	96	42	64.3	1.94	
Fredericksburg	.....	.....	.....	2.26	
Galva†[h]	84	26	55.3	0.52	
Gardengrove	85	29	58.6	1.71	
Gladbrook	.....	.....	.....	1.90	
Glenwood†	87	30	58.0	3.26	
Grand Meadow*[1]	82	32	55.9	2.07	
Greene	89	28	57.8	2.07	
Greenfield†	87	33	59.4	2.09	
Grinnell†	81	33	58.6	1.53	
Grundy Center	86	29	56.7	3.30	
Guthrie Center	87	32	58.6	3.00	
Hampton	85	31	57.2	2.45	
Hawkeye	.....	.....	.....	2.29	
Hopeville†	83	35	59.2	3.13	
Humboldt†	88	28	58.0	1.49	
Independence†	88	28	55.3	2.10	
Indianola†	84	33	59.0	3.59	
Iowa City *a*†	85	34	58.4	3.11	
Iowa City *b*	83	34	57.6	.....	
Iowa Falls†	88	28	57.2	2.45	
Keosauqua	87	34	60.3	1.14	
Knoxville	85	36	60.5	1.68	
Lansing	88	30	57.9	0.94	
Larchwood	.....	.....	.....	0.21	
Larrabee†	88	28	56.4	0.98	
Leclaire	.....	.....	.....	1.59	
Lemars	84	28	57.2	1.10	
Lenox*[1]	84	42	60.7	1.69	
Logan†	84	35	60.4	1.80	
Malvern*[1]	92	31	58.1	2.47	
Maple Valley	.....	.....	.....	0.91	
Maquoketa	84	38	59.7	1.40	
Marshall†	86	32	58.4	2.23	
Millman	.....	.....	.....	2.83	
Mooar	85	33	57.8	0.94	
Mountayr†	87	34	60.8	2.60	
Mount Pleasant*[1]	82	38	61.8	1.80	
Mount Vernon *a**[1]	86	34	59.6	1.88	
Mount Vernon *b*	86	32	58.6	2.05	
Neola	89	32	59.6	1.55	
New Hampton	85	30	59.1	3.99	
Newton†	85	32	59.1	2.98	
North McGregor	.....	.....	.....	1.50	
Northwood	85	29	55.2	1.53	
Odebolt	.....	.....	.....	0.96	
Ogden	84	33	59.3	1.75	
Osage*†[3]	.....	38	54.6	.....	
Osceola	83	23	59.4	3.40	
Oskaloosa†	86	32	59.4	0.30	
Ottumwa[1]	84	38	60.8	0.63	
Ovid†	84	32	59.2	1.77	
Plover	86	28	57.7	0.47	
Primghar	85	29	58.2	1.07	
Red Oak	88	31	61.5	1.99	
Rockwell City	87	35	60.4	3.40	
Sac City†	83	32	56.8	1.90	
St. Charles	87	35	60.1	2.52	
Seymour†	86	32	60.6	1.15	
Sibley	87	29	56.0	0.73	
Sidney	84	37	61.2	2.63	
Sigourney	87	34	60.0	1.94	
Spencer	86	28	56.8	0.62	
Spirit Lake†	88	32	57.7	0.96	
Stuart	84	32	58.8	2.26	
Toledo	84	29	57.6	2.57	
Villisca†	85	34	59.7	1.83	
Vinton*[1]	83	31	58.0	1.87	
Washington	85	30	58.7	0.98	
Waterloo	86	30	57.2	2.06	
Washta	.....	.....	.....	1.34	
Waverly	85	31	56.9	2.87	
Webster City	82	33	57.4	2.82	
Westbend*†[1]	83	36	56.3	0.71	
Whitten*[1]	86	39	57.4	2.50	
Wilton Junction†	84	31	58.8	2.43	
Winterset†	85	35	58.6	1.82	
Kansas.					
Abilene†	94	33	64.2	2.47	
Achilles*[3]	91	40	58.2	0.55	
Altoona*†[3]	89	45	64.4	1.01	
Anthony	.....	.....	.....	2.99	
Assaria*[5]	94	33	64.4	0.62	
Atchison†	90	38	64.0	3.06	
Augusta	89	37	64.3	2.79	
Baker	90	40	63.8	3.51	

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.*
Beloit†	91	32	65.2	0.76	
Burlington†	90	36	65.5	0.60	
Campbell	96	34	63.1	2.93	
Colby†	90	31	61.4	1.73	
Columbus†	88	36	64.2	2.60	
Coolidge†	96	37	65.3	1.80	
Cunningham†	96	35	64.8	2.04	
Delphos*[1]	89	37	64.0	1.75	
Downs	.....	.....	.....	1.95	
Dresden*[1]	90	40	59.9	0.69	
Elgin*[1]	89	45	65.8	2.26	
Ellinwood†	89	37	63.4	2.71	
Emporia†	85	36	65.0	1.50	
Englewood†	91	40	66.0	3.26	
Eureka†	.....	.....	.....	1.49	
Eureka Ranch†	90	32	63.6	1.15	
Fall River	90	39	64.8	3.20	
Fort Riley†	90	37	64.3	3.09	
Fort Scott†	87	39	64.0	2.85	
Frankfort	98	39	66.1	4.34	
Garden City†	92	38	67.0	0.61	
Garfield	.....	.....	.....	0.85	
Gibson*[5]	84	31	60.6	3.04	
Goodland	96	35	64.3	1.01	
Gove*†[1]	92	46	62.7	3.53	
Grainfield*[6]	82	38	61.5	1.50	
Grenola	88	37	64.5	1.56	
Halstead	84	36	61.0	3.09	
Hays†	80	38	58.8	1.65	
Horton	89	37	63.4	2.90	
Hutchinson†	88	39	64.8	2.98	
Independence†	94	40	66.7	1.23	
Lakin†	96	33[d]	66.3[b]	0.01	
Lawrence	88	38	63.3	2.26	
Lebo†	90	36	64.4	2.25	
Linn	.....	.....	.....	2.72	
Macksville	86	35	62.6	3.17	
McPherson	90	34	62.8	2.92	
Manhattan *b*	94	37	65.1	2.30	
Manhattan *c*	92	33	63.4	2.43	
Marion†	92	34	65.8	3.50	
Meade†	92	43	68.0	3.77	
Medicine Lodge†	94	37	66.4	2.53	
Minneapolis†	93	30	63.0	2.84	
Morantown†	87	35	63.8	2.27	
Morton†	90	41	66.2	1.67	
Mounthope*[1]	87	50	64.2	3.18	
Ness City	.....	34	.....	1.45	
Newton	86	37	63.2	5.02	
Norton	90	31	61.2	0.53	
Norwich†	91[d]	40[e]	63.7[d]	2.75	
Oberlin†	.....	.....	.....	0.28	
Olathe†	90	36	64.1	1.75	
Osage City†	91	37	64.0	2.71	
Oswego	91	39	66.8	1.24	
Ottawa	90	35	63.8	3.24	
Phillipsburg	92	30	61.4	0.18	
Pleasant Dale	90	34	62.8	3.20	
Pratt	92	31	65.2	3.90	
Rome*†[1]	87	39	63.6	1.61	
Russell	89	33	64.2	0.49	
Salina†	92	30	63.9	1.54	
Sedan†	87	39	64.7	1.84	
Seneca	91	35	62.1	2.98	
Toronto	90	35	64.0	1.23	
Ulysses†	91[f]	42[f]	65.2[f]	1.73	
Wallace*†	94	38	65.9	0.49	
Wamego*[1]	92	42	63.9	2.00	
Wellington*[1]	86	38	65.5	0.65	
Yates Center	90	33	64.0	1.31	
Kentucky.					
Alpha†	90	40	62.8	2.35	
Ashland	88	35	61.0	4.20	T.
Bardstown†	90	37	60.4	3.47	
Blandville†	84	36	63.2	1.97	
Bowling Green *a*[1]	86	38	60.2	2.75	
Bowling Green *b*†	87	41	62.9	2.43	
Burnside†	.....	.....	.....	3.18	
Caddo†	84	32	60.4	4.47	2.0
Canton*†[1]	87	45	64.1	2.83	
Carlisle	89	34	59.7	5.00	T.
Carrollton†	88	37	63.7	3.10	T.
Catlettsburg†	.....	.....	.....	4.97	0.7
Earlington	88	39	63.4	1.78	
Edmonton†	84	40	61.2	1.88	
Ensor	86	41	62.0	2.08	
Eubank†	88	35	60.0	3.89	
Falmouth†	.....	.....	.....	5.51	T.
Fords Ferry†	89	36	63.2	1.75	
Frankfort†	89	37	61.0	3.71	
Franklin†	83	39	63.4	1.30	
Georgetown	84	37	60.7	.....	
Greensburg†	92	37	62.5	5.04	
Henderson†	91	40	63.6	2.08	
Hopkinsville†	89	37	62.9	2.58	
Leitchfield†	90	35	59.8	3.10	
Kentucky—Cont'd.	°	°	°	*Ins.*	*Ins.*
Louisa *a*	.....	.....	.....	3.36	0.5
Lyndon	86[d]	36[d]	59.3[d]	3.62	
Marrowbone†	87	36	61.0	2.47	
Maysville	88	35	59.8	5.99	
Middlesboro†	87	37	59.8	6.04	
Mount Sterling†	84	36	59.6	4.78	T.
Owensboro†	87	41	60.2	2.19	
Owenton†	89	33	60.8	4.38	
Paducah *a*†	.....	.....	.....	2.60	
Paducah *b*†	90	40	65.8	2.53	
Pilot Oak	.....	.....	.....	1.22	
Pleasure Ridge Park†	90	38	59.6	3.56	
Richmond†	88	34	60.5	3.42	T.
Russellville†	89	37	63.4	1.59	
St. John†	87	38	59.1	3.39	
Sandyhook	.....	.....	.....	4.37	0.1
Shelbyville†	91	37	60.8	4.45	
Southfork[2]	.....	.....	58.2	5.58	
Williamsburg†	87	40	63.5	4.40	
Louisiana.					
Abbeville	90	50	73.2	1.75	
Alexandria†	91	45	70.8	5.29	
Amite†	91	50	71.8	4.44	
Bastrop†	89	46	69.8	3.00	
Baton Rouge†	90	49	72.4	4.57	
Calhoun	91	51	70.8	2.70	
Cheneyville†	91	42	70.4	3.97	
Clinton†	92	44	72.2	1.27	
Covington	91	44	72.2	3.27	
Donaldsonville†	95	50	75.6	1.10	
Elm Hall	89	48	70.8	0.90	
Emilie†	89	50	71.8	2.00	
Farmerville	89	48	70.2	3.74	
Franklin†	92	52	73.9	4.23	
Grand Coteau	87	51	72.8	2.45	
Hammond	91	46	68.5	4.72	
Houma	89	46	72.6	0.15	
Jeanerette	92	46	73.7	2.46	
Lafayette†	92	48	73.4	2.93	
Lake Charles†	89	54	72.6	1.98	
Lake Providence	88	49	68.8	0.54	
Lawrence	89	53	72.5	2.75	
Liberty Hill	94	43	71.2	2.49	
Mansfield†	89	44	70.0	3.87	
Melville	92	55	73.6	3.90	
Minden	93	46	72.6	1.46	
Monroe†	91	51	72.0	1.73	
Montgomery	96[e]	45[e]	73.2[e]	0.72	
New Iberia	90	51	73.0	0.75	
Oakridge†	96	44	70.3	1.35	
Oberlin	91	47	71.4	1.40	
Opelousas†	91	45	68.8	3.25	
Oxford†	87	44	69.0	2.29	
Paincourtville†	93	47	73.6	0.82	
Plain Dealing†	88	48	70.4	2.36	
Rayne	93	46	73.1	2.91	
Robeline	91	42	69.4	0.88	
Ruston	89	51	71.4	2.04	
Schriever	93	44	72.4	3.32	
Shellbeach	90	62	75.6	4.08	
Southern University†	85	50	70.2	0.50	
Sugar Ex. Station†	88	51	73.0	1.11	
Sugartown†	89	49	73.6	1.97	
Thibodeaux	.....	.....	.....	3.07	
Venice†	88	55	72.7	0.65	
Wallace	89	50	73.2	0.61	
Whitehall	94	44	73.0	3.68	
White Sulphur Springs	93	48	72.2	2.87	
Maine.					
Bar Harbor	78	30	50.4	6.36	
Belfast*[6]	67	39	51.3	5.02	
Cornish*[1]	74	38	53.6	6.66	
Fairfield	75	29	53.6	4.47	
Flagstaff	74	22	50.1	7.83	
Fort Fairfield	75	27	51.2	3.80	
Gardiner	76	34	55.8	5.94	
Kineo†	80	30	49.0	3.96	
Lewiston	76	37	55.6	5.25	
Mayfield	75	27	51.0	5.04	T.
North Bridgton	76	32	54.8	5.47	T.
Orono	76	29	53.0	4.49	
Maryland.					
Annapolis	80	42	64.1	6.67	
Bachmans Valley	80	36	59.0	7.52	
Boettcherville[2]	.....	.....	57.6	4.60	
Charlotte Hall†	85	42	63.6	4.69	
Cherryfields†[2]	.....	.....	61.5	2.83	
Chestertown†	79	45	61.3	4.71	
Collegepark	81	39	60.1	7.45	
Cumberland *b*	84	45	62.9	3.47	
Darlington†	83	42	61.2	5.47	
Denton	82	41	59.0	2.97	
Easton†	83	43	61.9	3.32	
Ellicott City	76	48	62.2	6.73	
Fallston*[1]	81	44	60.2	5.92	
Flintstone	86	33	58.3	4.30	
Maryland—Cont'd.	°	°	°	*Ins.*	*Ins.*
Frederick	83	39	61.5	3.71	
Grantsville	78	30	53.1	3.86	
Greatfalls*[5]	83	46	63.1	5.42	
Greenspring Furnace	84	37	60.3	5.10	
Hagerstown†	84	42	62.0	4.30	
Jewell†	84	41	60.1	5.79	
Johns Hopkins Hospital	80	42	62.5	6.34	
Laurel	82	37	61.3	5.62	
McDonogh[8]	81	44	67.1	.....	
Mardela Springs†	82	41	62.5	3.79	
Mount St. Marys Coll.†	81	41	60.6	5.97	
New Market	83	40	61.4	5.31	
Pocomoke City	86	43	65.5	3.07	
Port Deposit	81	42	61.3	5.16	
Princess Anne	82	37	61.1	3.12	
Sharpsburg	83	39	60.1	5.25	
Smithsburg	80	39	60.6	5.52	
Solomons†	81	44	62.4	2.41	
Sunnyside	76	28	51.4	5.83	6.0
Taneytown†	85	40	61.5	7.34	
Van Bibber	81	41	61.6	5.36	
Western Port	86	34	59.0	3.80	
Westminster	84	41	61.6	6.63	
Woodstock	82	43	61.3	6.64	
Massachusetts.					
Amherst	81	32	57.0	4.24	
Bluehill (summit)	81	35	55.6	4.38	
Cambridge *a*	78	36	58.2	3.78	
Chestnut Hill	80	36	58.4	4.40	
Concord†	82	31	56.5	4.39	
Fallriver	76	36	57.2	4.10	
Fitchburg *b*	81	36	56.9	4.41	
Framingham	83	35	60.2	4.46	
Groton	82	31	56.4	4.78	
Hyannis*†[1]	72	45	58.9	2.89	
Lawrence	85	34	58.3	4.84	
Leeds	84	34	57.3	4.34	
Lowell *a*	78	34	58.1	4.94	
Middleboro	79	34	56.2	4.19	
Monson	84	30	58.2	5.15	
New Bedford *a*	74	38	55.3	6.07	
Pittsfield	75	33	55.8	3.66	
Springfield Armory	85	30	56.0	4.70	
Taunton *b*	81	37	56.8	5.10	
Wakefield	78	35	57.7	5.66	
Westboro†	85	28	59.2	4.04	
Worcester *b*	80	39	57.8	4.52	
Michigan.					
Adrian	79	34	55.4	3.41	
Allegan	82	30	54.0	3.00	
Alma	81	30	53.8	2.68	
Ann Arbor	81	34	55.0	4.74	
Arbela	80	31	54.4	5.68	
Badaxe†	81	31	52.8	4.97	
Baldwin	83	26	51.4	2.52	T.
Ball Mountain	76	33	53.0	4.77	
Baraga	85	25	46.8	2.54	T.
Battlecreek	82	33	55.5	2.85	
Bay City *b*	79	.....	.....	3.65	
Benton Harbor[k]	84	34	54.7	0.11	
Benzonia	82	29	53.0	2.60	T.
Berlin	81	30	52.7	4.34	
Berrien Springs	84	33	53.8	2.87	T.
Big Rapids	80	30	52.2	2.02	
Birmingham	81	30	55.9	4.78	
Bois Blanc*[10]	71	21	47.1	.....	
Boon	80	26	49.3	3.68	0.5
Calumet	78	29	47.7	3.67	2.0
Camden	80	32	54.0	3.10	
Carsonville	89[e]	32	53.9[e]	4.79	
Charlevoix	76	33	51.2	2.25	
Cheboygan	79	31	49.1	3.25	
Clinton	82	33	55.5	3.50	
Cold Water	80	33	54.9	5.20	
East Tawas	76	32	50.6	3.29	
Eloise	81	34	54.5	3.76	
Escanaba†	71	31	48.9	1.92	T.
Fairview	79	34	53.4	3.08	
Fitchburg	80	32	53.2	3.85	
Flint	81	32	52.5	3.65	
Gladwin	75	31	52.7	3.30	
Grand Rapids *b*	80	33	55.4	1.66	
Grape	82	34	55.9	2.83	
Grayling	81	28	49.8	2.63	T.
Hanover	80	33	54.4	4.28	
Harrison	77	30	50.4	2.38	
Harrisville	74	32	48.2	4.67	
Hart	84	30	52.1	1.81	T.
Hastings	78	31	55.2	2.58	
Hayes	87	31	52.8	4.09	
Hesperia	83	27	53.6	1.74	
Highland Station	.....	.....	.....	3.54	
Hillsdale	80	33	54.2	4.08	
Holland*[10]	78	33	53.4	.....	
Howell	80	32	54.0	2.20	
Humboldt	80	24	47.4	2.32	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.*
***Michigan*—Cont'd.**					
Ionia	82	30	55.2	1.92	
Iron River	80[e]	20[e]	44.7[e]	2.09	T.
Ivan	76	29	50.0	3.98	T.
Jackson	81	34	56.0	2.93	
Jeddo	81	32	52.1	4.43	
Kalamazoo	81	33	55.0	3.30	
Lake City	80	28	50.4	2.28	
Lapeer	83	29	54.0	5.06	
Lathrop	82	24	46.9	2.04	
Ludington	73	28	51.0	2.73	
Luzerne	85	27	49.9	3.33	
Mackinaw City	75	30	46.1	2.52	
Madison	81	34	56.4	3.10	
Mancelona	79	28	49.6	4.30	0.5
Manistee	80	28	49.6	2.79	T.
Manistique	67	23	45.7	2.51	T.
Mayville	78	32	51.7	5.06	
Middle Island *[10]	72	33	47.5	.....	
Midland	78	31	53.0	2.12	
Mottville	83	30	55.3	4.28	
Mount Clemens	84	29	54.6	3.47	
Mount Pleasant *b*	80	31	53.7	1.65	
Muskegon	81	34	52.3	1.13	
Newberry	75	20	45.7	2.95	1.0
North Manitou Island *[10]	68	22	47.6	.....	
North Marshall	79	30	53.0	3.21	
Northport	80	32	49.6	3.17	T.
Old Mission	77	30	49.6	3.84	
Olivet	78	34	54.4	3.30	
Ovid	79	32	53.6	3.40	
Owosso	81	33	54.4	3.32	
Parkville	.....	.....	.....	3.74	
Petoskey	76	30	46.5	3.23	
Plymouth	81	31	54.6	4.19	T.
Point Aux Barques *[10]	80	36	52.1	.....	
Pontiac	81[c]	30[c]	56.0[c]	3.17	
Port Austin	80	29	50.4	2.61	
Powers	83	27	50.0	2.21	
Reed City	81	27	51.4	2.29	
Rockland	84	22	49.1	2.70	
Rogers City	79	27	48.0	5.89	
Romeo	80	34	54.8	4.72	
Saginaw	81	31	54.6	4.08	
St. Ignace	70	28	46.4	2.67	
St. Johns	81	33	54.6	3.26	
Sandbeach *b*	80	30	50.4	3.74	
Saranac	82	30	54.9	1.99	
Sidnaw	82	24	47.1	1.81	T.
Somerset	78	33	54.2	3.05	
South Haven	83	33	52.2	1.59	
Stanton	80	30	53.5	1.94	
Sturgeon Point *[10]	62	35	48.3	.....	
Thomaston	83	23	47.7	3.98	1.7
Thornville	83	34	55.5	5.15	
Three Rivers	.....	.....	.....	5.17	
Thunder Bay Island *[10]	62	33	45.5	.....	
Traverse City	88	31	51.8	3.48	
Valley Center	80	27	52.9	3.10	
Vandalia	81	32	55.8	4.37	
Wasepi	80	33	54.3	4.24	
Waverly	87	29	53.0	1.77	
West Harrisville	76	31	49.1	3.98	
Wetmore	80	24	45.8	3.15	4.0
White Cloud	81	28	53.8	2.14	
Ypsilanti	81	34	54.6	4.67	
Minnesota.					
Adal†	89	24	56.2	0.48	
Albert Lea *g*	86	33	58.2	1.60	
Alexandria†	88	28	54.6	0.59	
Belleplaine *[1]	87	34	54.0	1.10	
Bird Island	87	27	56.0	1.29	
Blooming Prairie†	86	27	55.0	0.95	
Bonniwell	94	30	56.1	0.65	
Caledonia†	86	29	56.6	1.31	
Camden	89	21	57.0	1.39	
Campbell	93	22	55.6	0.45	
Collegeville	87	33	56.6	1.48	
Crookston†	86	27	55.0	1.21	T.
Dawson	.....	.....	.....	1.65	T.
Detroit City	91	25	58.2	1.34	
Faribault	86	25	55.3	1.11	
Farmington†	90	26	53.8	0.85	
Fergus Falls†	86	29	55.5	1.52	T.
Glenwood†	92	28	55.4	1.22	
Grand Meadow†	87	25	54.5	1.55	
Granite Falls	88	29	56.4	2.10	
Lake City	91	30	57.1	1.83	
Lakeside†	87	29	55.1	1.30	
Lake Winnibigoshish [1]	86*	26	51.6	1.13	
Lambert†	84	22	53.6	0.67	T.
Leech Lake [1]	82*	23	51.4	0.98	
Lesueur *[1]	90	28	55.7	0.78	
Long Prairie†	89	24	54.0	1.56	
Luverne†	88	28	55.0	1.56	
Mapleplain	89	29	56.2	1.45	
Maplewood *[1]	86	41	57.8	.....	
***Minnesota*—Cont'd.**					
Mazeppa [1]	92*	28	55.4	0.70	
Milaca	.....	.....	.....	3.50	
Milan†	91	22	57.3	0.86	T.
Minneapolis *a*†	90	30	56.6	1.92	
Minneapolis *b* [1]	85*	25	54.9	1.62	
Minnesota City *†[1]	92	32	57.4	2.90	
Montevideo†	92	30	57.3	1.40	
Morris	93	30	57.0	0.90	
Mount Iron	83	23	49.4	.....	
New London	85	28	53.8	1.75	
New Richland *[1]	86	34	56.4	.....	
New Ulm†	87	33	57.0	0.76	
Park Rapids†	88	25	51.6	1.05	
Pine River [1]	85*	27	53.8	1.33	
Pleasant Mounds†	87	28	56.0	0.80	
Pokegama Falls [1]	86*	18	50.8	1.50	
Redwing	.....	.....	.....	1.54	
Reeds	.....	.....	.....	1.81	
Rolling Green	81	29	55.2	0.60	
Roseau *g*	86	27	52.4	1.36	
St. Charles†	89	25	56.4	1.71	
St. Cloud	78	30	53.8	1.96	
St. Olaf	88	31	55.6	0.77	
Sandy Lake Dam [1]	82*	25	51.4	1.89	
Shakopee [6]	84*	30	56.1	0.86	
Tower†	83	20	50.0	1.60	1.0
Two Harbors†	79	31	47.0	2.55	T.
Wabasha *[1]	92	36	56.8	2.24	
Willmar†	85	29	55.0	2.01	
Worthington	81	30	55.6	0.93	T.
Zumbrota [1]	86*	23	56.4	.....	
Mississippi.					
Aberdeen†	96	38	67.4	3.40	
Agricultural College	92	47	70.2	1.26	
Austin†	92	45	68.8	0.37	
Batesville†	90	44	66.3	1.32	
Bay St. Louis	86	52	72.4	0.19	
Biloxi†	88	52	72.4	0.67	
Booneville†	91	40	67.8	1.16	
Briers†	88	54	69.7	0.82	
Brookhaven†	97	41	71.4	1.71	
Canton†	91	49	70.6	1.07	
Columbus *a*†	.....	.....	.....	1.13	
Columbus *b*†	100	42	70.3	1.01	
Corinth†	91	41	67.0	2.60	
Crystal Springs†	97	46	71.0	1.32	
Edwards	92	47	72.1	0.74	
Enterprise	91	42	69.2	0.92	
Fayette†	92	44	70.8	3.97	
French Camps†	91	37	66.2	2.23	
Fulton†	94	40	68.0	3.31	
Greenville *a*	89	53	70.8	1.51	
Greenville *b*†	91	49	70.4	2.19	
Hattiesburg†	95	49	74.0	0.62	
Hazlehurst†	96	49	71.2	1.30	
Hernando†	91	40	67.8	1.30	
Holly Springs†	93	44	68.0	1.39	
Jackson†	93	42	69.2	1.92	
Lake†	90	45	68.0	1.32	
Leakesville†	91	42	71.0	2.84	
Logtown†	90	49	72.5	1.10	
Louisville†	92	41	68.1	0.99	
Macon†	92	40	68.2	1.80	
Magnolia†	92	42	71.6	4.63	
Mayersville	87	54	71.4	1.25	
Meridian†	91	42	68.9	1.34	
Mosspoint	92	50	72.7	.....	
Natchez†	88	43	71.4	1.25	
Okolona†	96	44	69.1	3.06	
Pontotoc	92	43	68.0	2.01	
Port Gibson†	92	43	69.4	1.82	
Rosedale	90	57	71.9	.....	
Stonington *[1]	88	52	72.3	.....	
Thornton†	90	54	72.0	0.55	
Topton *[5]	90	54	75.0	0.85	
Water Valley *†[1]	90	46	65.7	4.05	
Waynesboro *b*†	89	44	69.3	2.40	
Windham†	94	38	69.4	4.19	
Woodville†	89	48	71.4	4.29	
Yazoo City†	94[f]	52	72.4	0.43	
Missouri.					
Akron	.....	.....	.....	1.76	
Appleton City	90	33	65.2	1.69	
Arlington†	.....	.....	.....	3.49	
Arthur *†[3]	.....	50	63.5	2.54	
Avalon	85[d]	36[e]	62.3[e]	3.68	
Bagnell†	.....	.....	.....	3.50	
Birchtree	85	36	61.1	2.85	
Bolckow†	.....	.....	.....	2.90	
Boonville†	.....	.....	.....	2.77	
Brunswick	85	37	61.2	4.78	
Carrollton†	86	41	63.2	3.65	
Conception	82	39	61.4	2.95	
Cowgill *[5]	84	42	63.0	2.36	
Darksville†	93	36	64.6	2.97	
Downing	.....	.....	.....	1.03	
***Missouri*—Cont'd.**					
East Lynne *[3]	.....	40	59.4	2.82	
Edgehill *[5]	86	44	64.6	2.56	
Eightmile *[1]	84	38	61.3	2.49	
Eldon *[1]	92[d]	43	62.3	1.59	
Elmira	90	36	61.8	3.60	
Emma *[3]	.....	46	62.8	2.90	
Fairport	.....	.....	.....	2.05	
Farmersville	.....	.....	.....	2.32	
Fayette	87	39	64.2	2.85	
Fulton	.....	.....	.....	2.49	
Gallatin *[1]	83	38	62.3	2.32	
Glasgow	85	37	62.2	3.14	
Gordonville *[3]	.....	44	59.2	1.56	
Gorin	.....	.....	.....	1.64	
Halfway	91	37	63.8	3.40	
Harrisonville†	88	36	62.3	3.27	
Hastain	87	37	63.8	3.90	
Hermann†	.....	.....	.....	3.01	
Houston	88	38	62.2	2.09	
Houstonia	.....	.....	.....	3.21	
Irena	.....	.....	.....	3.57	
Ironton†	87	30	60.8	2.78	
Jefferson City†	90	42	63.9	2.90	
Kidder	85	35	61.0	2.23	
Lamar†	87	38	64.6	1.67	
Lamonte	.....	.....	.....	5.20	
Lebanon	86	40	63.6	3.21	
Lexington†	88	39	63.4	2.33	
Liberty	89	38	62.8	2.58	
McCune *†[1]	85	41	60.8	3.04	
Mansfield	.....	.....	.....	2.10	
Marblehill	87	30	60.6	1.47	
Marshall†	90	35	63.0	1.77	
Maryville	85	35	60.4	3.83	
Mexico†	86	36	62.4	3.99	
Mine La Motte†	83	34	59.8	4.28	
Mineralspring	86	37	62.3	2.84	
Montreal *[1]	84	44	61.4	1.73	
Mount Vernon	86	38	64.4	4.22	
Neosho	85	32	62.6	1.73	
Nevada *[1]	85	43	65.1	1.97	
New Haven *[1]	85	44	65.8	2.58	
New Madrid	80	40	61.6	1.89	
New Palestine *†[1]	84	44	65.6	3.65	
Oakfield	85	41	63.7	1.98	
Oakmound	.....	.....	.....	1.60	
Oakridge *[4]	.....	43	60.5	3.44	
Olden†	86	38	62.0	2.54	
Oregon *a*	85	39	63.1	3.44	
Oregon *b* *[1]	85	41	62.1	3.33	
Osceola†	.....	.....	.....	3.35	
Palmyra *[5]	86	40	63.3	1.37	
Phillipsburg *†[1]	92	42	62.4	1.58	
Pickering *[3]	.....	38	58.4	3.54	
Platte River *[3]	86	44	61.2	5.34	
Poplar Bluff	90[g]	39[h]	63.8[h]	3.02	
Potosi	81	38	55.2	1.89	
Princeton	88	35	60.6	2.30	
Rhineland	85	37	62.2	3.66	
Richmond	85	40	62.8	3.84	
Rolla	.....	.....	.....	3.61	
St. Charles	83	38	61.2	1.76	
St. James *[3]	.....	44	59.6	.....	
St. Joseph†	.....	.....	.....	4.16	
St. Louis	85	38	60.1	1.65	
Sarcoxie *[3]	.....	36	61.0	3.70	
Sedalia	86	38	62.4	5.38	
Seymour *[1]	88	38	61.8	2.51	
Shelbina	.....	.....	.....	1.50	
Sikeston	87	39	64.2	2.77	
Stellada†	88	36	62.9	2.12	
Sublett	86	33	60.0	0.70	
Taneyville	87	40	60.7	.....	
Unionville†	89	33	63.6	1.27	
Vichy	86	35	63.0	4.20	
Virgil City	.....	.....	.....	1.13	
Warrenton	87	36	61.8	2.18	
Wheatland	.....	.....	.....	3.84	
Willow Springs	86	38	62.0	1.51	
Zeitonia *[1]	88	36	63.1	1.25	
Montana.					
Augusta†	93	28	62.5	0.86	
Bigtimber†	86	36	62.2	1.05	
Billings†	90	36	61.8	0.20	
Boulder	86	30	57.4	1.12	
Bozeman†	85[j]	29	57.6[e]	0.35	
Bozeman Exper. Stat'n.	81	30	58.3	0.78	
Butte†	82	30	56.6	1.44	T.
Castle	78	28	53.2	0.88	0.8
Chinook†	96	33	65.5	0.38	
Choteau†	90	27	59.8	1.05	
Columbia Falls	86	28	59.0	0.82	
Deer Lodge	86	.....	.....	0.70	T.
Ekalaka	88	30	59.3	1.25	
Fort Benton	92	36	64.0	1.14	
Fort Custer†	91	36	64.0	0.54	

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.*
Fort Keogh†	94	35	63.6	0.35	
Fort Logan†	84	30	56.2	1.22	
Fort Missoula	88	33	59.0	1.09	
Glasgow	94	28	60.3	0.18	
Glendive†	98	34	64.4	0.95	
Greatfalls†	94	34	61.5	0.95	
Harlem†	85	24	53.8	.....	
Hogan†	90	34	57.4	1.10	
Kalispell	89	32	59.0	0.34	
Kipp†	93	21	57.1	1.00	
Lewistown	87	28	57.6	0.84	1.0
Livingston†	87	23	57.8	0.60	T.
Manhattan†	85	31	60.2	1.71	1.0
Martinsdale†	86	29	57.6	0.96	
Marysville†	81	32	57.0	1.12	T.
Monarch	83	27	55.8	0.66	
Poplar†	93	28	60.6	0.47	
Radersburg	.....	.....	.....	1.50	
St. Ignatius Mission†	91	30	60.6	.....	
St. Pauls†	85	20	51.2	1.10	
Troy	90	28	59.4	0.52	
Utica†	87	31	58.8	1.33	
Virginia City†	83	26	57.3	2.91	2.5
Wibaux†	.....	.....	.....	0.85	
Yale†	86	31	56.9	0.90	
Nebraska.					
Agee*1	88	39	59.4	2.31	
Albion	95	29	62.4	2.69	
Alliance*1	84	37	59.0	2.52	
Ansley†	91	23	62.2	1.54	
Arapaho*1	89	34	62.6	2.50	
Arborville*1	90	26	58.7	3.02	
Arcadia	92	28	60.4	1.25	
Ashland *a*†	90	36	61.4	2.12	
Ashland *b**1	93	42	64.0	2.41	
Ashton	92	31	60.6	0.48	
Auburn*†1	90	37	62.2	5.26	
Aurora*1	88	42	62.1	2.09	
Bassett	92	25	60.1	1.13	
Beatrice†	88	34	60.6	2.41	
Beaver City†	91	31	62.6	0.85	
Benedict	.....	.....	.....	3.35	
Benkelman	.....	.....	.....	0.25	
Bluehill*1	89	38	63.0	2.40	
Brokenbow	.....	.....	.....	0.37	
Burchard	.....	.....	.....	2.50	
Burwell	.....	.....	.....	0.60	
Callaway†	85	29	59.8	0.30	
Camp Clarke	.....	.....	.....	0.85	
Central City	.....	.....	.....	1.75	
Chester*1	85	38	60.0	1.98	
Columbus†	88	33	60.2	1.12	
Cornlea	.....	.....	.....	2.69	
Creighton†	88	27	58.6	0.65	
Crete	86	35	60.4	1.69	
Culbertson	.....	.....	.....	0.75	
Curtis *a*	91	34	64.2	0.43	
David City*†1	86	42	60.4	2.65	
Divide	.....	.....	.....	0.61	
Dunning*1	88	27	62.5	0.34	
Eden	.....	.....	.....	4.00	
Edgar*1	88	40	63.3	4.44	
Elba	.....	.....	.....	0.56	
Ericson*†1	92	45	66.0	2.07	
Ewing†	.....	.....	.....	0.30	
Fairbury†	89	28	61.8	3.65	
Fairmont†	89	34	60.2	2.06	
Fort Robinson	90	27	60.1	0.65	
Franklin	101	32	64.6	1.13	
Fremont†	88	34	59.6	0.86	
Geneva†	88	33	61.2	2.61	
Genoa	90	33	60.4	1.64	
Gering†	92	26	61.0	1.79	
Gothenburg	98	27	64.1	0.55	
Grand Island *a**1	95	38	64.4	1.68	
Grand Island *b*	88	31	60.3	1.59	
Greeley	.....	.....	.....	1.90	
Haigler*1	94	40	64.6	1.62	
Hartington†	89	28	59.0	0.98	
Harvard*1	90	43	61.3	3.06	
Hastings*1	89	43	61.4	2.82	
Hayes Center	.....	.....	.....	0.37	
Hay Springs	90	26	58.4	2.27	
Hebron†	88	33	60.9	3.27	
Hickman	.....	.....	.....	2.36	
Holdrege *b**1	94	42	63.7	2.80	
Imperial *a*†	93	32	63.0	1.95	
Indianola (near)*1	88	38[d]	62.9[e]	0.74	
Kearney*5	88	40	63.5	1.18	
Kennedy	94	19	59.8	1.76	
Kimball†	89	32	59.4	3.86	
Kirkwood*1	92	41	60.7	1.50	
Lexington†	87	23	60.1	0.30	
Lincoln *b*†	88	37	62.1	2.94	
Lincoln *d*	92	35	61.8	2.43	
Lodgepole†	93	24	60.6	3.38	
Nebraska—Cont'd.	°	°	°	*Ins.*	*Ins.*
Loup *a*	.....	.....	.....	0.58	
Loup *b**1	88	28	59.5	0.65	
Lynch*†1	91	33	59.4	1.34	
Lyons	88	32	59.0	1.21	
McCook*1	88	46	65.8	0.11	
McCool	.....	.....	.....	2.25	
Madison*1	85	28	56.8	1.25	
Madrid*5	90	35	61.6	0.88	
Marquette	.....	.....	.....	2.48	
Minden *a**1	91	34	60.8	2.11	
Minden *b*	.....	.....	.....	2.50	
Monroe	.....	.....	.....	1.33	
Nebraska City *a*	85	36[c]	60.6	3.24	
Nebraska City *b**1	86	38	60.8	3.67	
Nemaha*1	95	41	62.8	2.92	
Nesbit	91	25	59.8	0.27	
Norfolk*†5	85	32	60.2	1.03	
Norman	90	30	61.4	1.96	
North Loup†	90	28	60.4	0.72	
Oakdale†	90	30	59.0	1.12	
Odell*5	90	46	65.1	2.43	
O'Neill†	84	28	57.9	1.35	
Ord	92	26	59.3	1.05	
Osceola	.....	.....	.....	2.94	
Ough†	.....	.....	.....	0.68	
Palmer *b*	.....	.....	.....	2.30	
Plattsmouth *a*†	.....	.....	.....	2.68	
Ravenna *a*	89	26	59.6	1.94	
Ravenna *b**1	88	32	60.4	1.47	
Redcloud *a*	.....	.....	.....	1.63	
Redcloud *b**1	87	46	64.7	2.65	
Republican*1	88	38	64.6	1.40	
Rulo*1	88	48	65.0	4.30	
St. Libory	90	31	61.6	1.00	
St. Paul	88	32	62.6	0.50	
Salem*1	82	44	62.9	5.30	
Santee Agency†	89	31	61.5	0.86	
Sargent	.....	.....	.....	0.81	
Schuyler	.....	.....	.....	0.69	
Seneca*1	90	40	63.8	0.50	
Seward*1	90	45	60.4	5.23	
Springfield*1	88	38	60.8	2.81	
Springview	93	30	62.2	2.11	
Stanton*1	85	36	59.3	1.27	
Stockham	.....	.....	.....	3.60	
Strang*1	90	44	65.8	3.39	
Stratton	.....	.....	.....	0.45	
Stromsburg	.....	.....	.....	2.57	
Superior*5	87	40	63.2	1.71	
Sutton	.....	.....	.....	2.12	
Syracuse	.....	.....	.....	2.45	
Tecumseh *b*†	92	31	59.3	7.09	
Tekamah	90	33	59.6	0.61	
Thedford*1	90	32	62.2	0.90	
Turlington†	87	34	60.6	4.01	
Valentine†	88	26	59.4	3.71	
Valparaiso	.....	.....	.....	2.52	
Wakefield	86	31	58.4	1.51	
Wallace*1	90	50	63.2	T	
Wayne	.....	.....	.....	2.76	
Weeping Water*1	88	34	58.2	0.45	
Westpoint†	87	32	59.6	1.47	
Whitman	.....	.....	.....	1.13	
Wilber*1	88	43	65.2	1.86	
Willard	.....	.....	.....	0.18	
Wilsonville*1	92	32	61.3	1.26	
Wisner	.....	.....	.....	2.82	
Woodlawn	.....	.....	.....	2.13	
York*1	88	40	60.8	2.24	
Nevada.					
Austin	84	29	53.6	0.61	
Battle Mountain*1	93	36	58.8	0.35	
Beowawe*1	94	40	53.8	0.00	
Candelaria[e]	89	32	62.7	0.55	
Carlin*1	94	30	60.0	0.10	
Carson City	86	25	59.3	0.20	
Cloverdale*1	87	50	64.1	1.16	
Clover Valley	.....	.....	.....	0.18	
Cranes Ranch	.....	.....	.....	1.11	
Darrough Ranch	.....	.....	.....	0.33	
Downeyville	99	32	67.3	0.53	
Duckwater	92	30	60.2	0.77	
Elko*5	88	34	57.2	T.	
Elko (near)	96	24	58.3	T.	
Ely	85	18	54.6	1.35	
Empire Ranch	94	35	64.2	1.31	
Fenelon*1	85	28	56.0	0.35	
Golconda*1	92	48	64.6	0.15	
Halleck*1	94	34	56.8	1.00	
Hamilton	86	15	53.0	0.96	
Hawthorne *a**3	88	47	66.4	0.23	
Hawthorne *b*	91	34	64.0	0.23	
Hot Springs*1	93	50	69.1	0.05	
Humboldt*1	91	40	63.5	0.40	
Keysers Springs	.....	.....	.....	0.50	
Lewers Ranch	85	28	58.2	0.20	
Nevada—Cont'd.	°	°	°	*Ins.*	*Ins.*
Los Vegas[g]	87	44	68.2	0.22	
Lovelock*1	96	50	66.8	T.	
McGill	86	20	56.4	0.77	
Midas	82	31	58.4	1.12	
Mill City*1	95	45	64.4	0.00	
Monitor Mill	88	12	53.8	1.33	
Osceola	87	32	60.1	0.52	
Palisade*1	81	40	61.7	0.20	
Palmetto	87	28	56.6	1.10	
Reno*3	88	39	60.6	.....	
Reno State University	86	28	58.4	1.73	
Ruby Valley	.....	.....	.....	0.69	
St. Thomas	110	45	74.5	1.00	
San Antonio	92	31	63.0	0.30	
Silver Peak	94	39	67.2	0.10	
Sodaville	97	34	65.0	0.41	
Tecoma*1	90	39	58.0	T.	
Toano*1	88	29	59.6	1.85	
Tuscarora	80	19	53.2	1.14	T.
Tybo	90	27	59.6	0.90	
Verdi*1	90	32	61.1	0.40	
Wadsworth*1	96	40	64.6	0.30	
Wells	94	18	59.1	0.90	
New Hampshire.					
Bethlehem	76	25	53.4	5.52	
Concord	78	34	57.2	3.93	
Durham	77	35	55.0	4.94	
Grafton†	78	25	54.0	4.90	T.
Hanover	75	28	54.0	6.07	
Keene	80	26	55.6	3.62	
Lancaster	78	26	53.3	4.42	
Nashua	83	28	58.0	4.48	
Newton	77	30	55.6	4.59	
North Conway	77	28	55.0	6.55	
Peterboro	78	24	55.8	4.03	
Plymouth	82	28	55.4	4.57	
Sanbornton†	75	31	54.2	4.91	
Stratford	81	26	55.9	4.92	
West Milan	78	17	51.6	4.60	
New Jersey.					
Allaire	88	41	63.8	.....	
Asbury Park	85	41	60.0	2.81	
Barnegat	86	40	61.6	2.01	
Bayonne	85	40	61.9	5.93	
Beachhaven[f]	80	46	59.0	1.42	
Belvidere	84	35	60.0	8.21	
Beverly†	86	40	62.5	5.68	
Billingsport*1	83	49	61.8	6.33	
Blairstown	82	36	60.2	8.97	
Boonton	83	38	60.0	7.53	
Bridgeton	84	46	64.1	4.75	
Camden	82	43	61.7	5.23	
Cape May	78	42	59.8	3.25	
Cape May C. H.†	83	42	60.3	2.50	
Charlotteburg	81	29	57.0	8.23	
Chester	80	35	57.8	7.66	
Clayton	83	40	61.2	3.93	
College Farm†	82	44	61.3	6.45	
Deckertown	82	33	59.5	4.26	
Dover	84	34	59.0	8.85	
Egg Harbor City	85	38	60.6	3.55	
Egg Island	.....	.....	.....	3.44	
Elizabeth†	86	41	62.3	6.37	
Englewood	85	34	59.2	8.58	
Franklin Furnace	82	33	58.2	5.16	
Freehold	82	41	60.9	5.14	
Friesburg	.....	.....	.....	3.79	
Gillette	85	37	59.0	6.30	
Hammonton	.....	.....	.....	4.69	
Hanover	81	40	59.0	7.18	
Hightstown	84	40	62.8	6.06	
Imlaystown	85	39	62.5	5.34	
Junction	.....	.....	.....	8.76	
Lambertville	83	36	60.8	8.80	
Moorestown	84	40	61.4	5.38	
Newark *a*	83	46	61.9	6.30	
Newark *b*†	84	44	61.7	6.56	
New Brunswick *a*	85	39	62.8	7.38	
New Brunswick *b*	81	39	59.3	6.94	
Newton	80	37	59.1	6.48	
Ocean City	77	41	58.6	1.99	
Oceanic	81	45	63.8	4.39	
Paterson	86	41	62.4	6.92	
Perth Amboy	85	40	61.0	5.25	
Plainfield	83	39	60.6	6.56	
Rancocas	.....	.....	.....	5.91	
Readington*6	82[c]	50	64.8	.....	
Rivervale	78	33	57.8	6.27	
Roseland	84	33	59.2	8.02	
Sergeantsville	79	39	59.4	9.11	
Somerville	86	35	61.4	7.84	
South Orange	83	43	60.7	6.69	
Staffordville	.....	.....	.....	2.28	
Toms River	87	36	60.0	3.19	
Trenton	83	44	64.5	5.59	
Vineland	86	41	61.8	4.18	

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.
New Jersey—Cont'd.	°	°	°	*Ins.*	*Ins.*
Woodbine	83	40	59.9	2.76	
New Mexico.					
Albert	88	41	64.7	3.00	
Albuquerque†	85	41	66.2	2.07	
Alma	89	32	64.2	0.11	
Angus V. V. Ranch	80	35	56.7	1.70	
Azteo†	85	32	59.2	1.56	
Bernalillo†	92	39	66.4	2.23	
Bluewater†	88	32	58.6	.....	
Buckmans	73	27	49.8	4.66	
Deming*[8]	96	56	71.3	0.00	
East Lasvegas†	77	37	57.1	6.63	
Eddy	93	46	69.8	1.52	
Engle†	93	40	66.6	1.20	
Espanola†	82	37	60.7	3.48	
Fort Bayard	86	32	63.6	T.	
Fort Union	76	33	53.4	9.73	
Fort Wingate	82	33	59.6	0.70	
Gallisteo†	80	43	62.7	4.80	
Gallinas Spring†	86	38	63.8	5.46	
Gila	95	38	69.9	0.07	
Gold Hill†	52	19	35.5	4.39	20.0
Hillsboro†	90	42	69.0	0.35	
Labelle†	69	23	45.5	5.05	23.0
Las Cruces†	92	39	69.0	1.54	
Lordsburg*[6]	90	58	75.0	0.00	
Los Lunas†	86	38	64.3	1.30	
Lower Penasco	84	43	63.6	0.85	
Monero†	81	29	53.5	2.55	
Ocate†	77	34	55.0	9.25	
Olio	93	34	64.6	1.59	
Puerto de Luna†	89	41	66.6	2.05	
Raton†	82	32	52.8	4.08	
Rincon†	94	44	71.0	0.88	
Roswell†	90	40	66.8	3.76	
San Marcial†	101	42	71.4	1.63	
Shattucks Ranch	89	34	62.6	1.26	
Springer†	84	31	59.0	5.26	
Valley Ranch	76	30	55.1	4.68	
White Oaks†	85	34	60.8	1.27	
Winsors Ranch	73	25	48.6	4.43	
New York.					
Addison	80	30	55.5	4.26	
Akron	.....	.....	.....	2.82	
Alfred	78	29	52.5	3.35	
Angelica†	79	27	52.5	4.07	
Appleton	77	34	53.7	2.46	
Arcade	78	30	52.2	4.30	
Atlanta	.....	.....	.....	2.91	
Avon	83	30	54.7	1.75	
Baldwinsville	80	35	56.8	2.22	
Bedford	83	35	57.9	9.83	
Big Sandy*[10]	75	34	53.8	.....	
Binghamton†	82	30	55.5	4.83	
Bolivar	81	25	52.8	2.80	
Boyds Corners	.....	.....	.....	5.56	
Brooklyn	75	46	61.0	6.90	
Canajoharie	81	32	57.6	3.82	
Canton	79	28	54.4	3.49	
Carmel	84	38	59.1	5.96	
Catskill	79	37	58.8	5.81	
Charlotte*[10]	76	34	49.3	.....	
Chenango Forks	.....	.....	.....	3.60	
Cherry Creek	.....	.....	.....	4.02	
Cooperstown†	78	33	53.6	5.21	
Cortland	79	27	54.1	4.23	
De Kalb Junction	.....	.....	.....	3.14	
Dryden	80	26	54.0	3.96	
Eagle Mills	.....	.....	.....	4.37	
Elmira†	84	33	58.6	5.56	
Fleming	80	34	56.1	2.17	
Fort Niagara†	75	38	54.8	3.07	
Franklinville	79	28	52.8	3.40	
Friendship	81	27	53.7	2.65	
Fulton	.....	.....	.....	2.07	
Garrattsville	78	30	52.6	7.30	
Glens Falls	82	30	56.9	3.81	
Gloversville	82	29	54.8	5.18	
Haskinsville	.....	.....	.....	3.06	
Honeymead Brook	83	32	56.7	4.44	
Humphrey†	79	30	53.6	3.84	
Ithaca	80	32	55.3	3.84	
Jamestown	77	34	54.4	3.45	
Kings Station	.....	.....	.....	6.35	
Lake George	76	29	55.5	4.52	
Little Falls	78	31	54.2	4.39	
Lockport	79	35	57.0	2.30	
Lowville	76	28	53.2	3.97	
Lyons	80	35	56.3	1.84	
Madison Barracks†	.....	28	.....	3.99	
Manhatton Beach	74	40	56.4	4.23	
Middletown	75	39	58.0	2.92	
Mohonk Lake	77	40	56.8	3.92	
Mount Morris	.....	.....	.....	2.55	
Newark Valley	.....	.....	.....	4.01	
New Lisbon	79	23	52.0	4.40	
New York—Cont'd.				*Ins.*	*Ins.*
Niagara Falls	.....	.....	.....	3.23	
North Hammond†	72	32	55.0	3.91	
North Lake	78	27	51.6	4.41	
Number Four†	75	26	50.2	3.99	
Ogdensburg	75	36	55.2	2.86	
Oneonta	85	29	56.3	7.42	
Oxford	80	26	55.0	5.47	
Palermo†	81	27	54.0	2.99	
Perry City	80	26	54.2	3.69	
Phœnix	.....	.....	.....	2.59	
Pine City	.....	.....	.....	4.55	
Pittsford	82	32	54.4	2.10	
Plattsburg Barracks†	75	33	53.7	3.41	
Port Jervis	83	34	58.2	5.57	
Potsdam	77	31	54.6	3.30	
Poughkeepsie	83	30	57.8	3.36	
Primrose	86	34	58.9	6.18	
Ridgeway	75	36	54.2	2.77	
Rome	83	31	55.8	4.12	
Romulus	81	32	56.0	4.80	
Rose	.....	.....	.....	2.12	
St. Johnsville	79	30	54.7	4.38	
Saranac Lake	78	23	52.9	3.41	
Scottsville	.....	.....	.....	1.89	
Setauket†	81	41	58.6	5.38	
Sherwood	.....	.....	.....	3.67	
Skaneateles	.....	.....	.....	3.31	
South Canisteo	82	26	53.5	3.18	
Southeast Reservoir	.....	.....	.....	6.03	
South Kortright†	79	24	53.6	5.33	
Straits Corners	80	27	54.4	4.27	
Tyrone	.....	.....	.....	1.05	
Wappingers Falls	84	34	61.1	3.92	
Warwick	.....	.....	.....	4.13	
Watkins	.....	.....	.....	3.58	
Waverly†	84	27	56.0	3.66	
Wedgwood	83	33	54.7	3.72	
Westfield	79	37	55.2	3.48	
Westpoint†	87	38	60.6	4.70	
Willetspoint	83	44	59.4	5.90	
North Carolina.					
Abshers	87	38	61.7	3.30	
Asheville†	84	35	59.8	3.59	
Beaufort†	82	50	67.8	5.27	
Biltmore†	84	35	60.2	2.59	
Bryson City†	.....	.....	.....	3.55	
Chapelhill†	37*	40*	64.8*	6.98	
Edenton	86	41	67.3	6.22	
Experimental Farm	86	43	66.3	3.39	
Fairbluff†	.....	.....	.....	3.10	
Falkland	.....	.....	.....	2.38	
Fayetteville†	91	45	67.5	5.88	
Flatrock	83	32	59.4	3.66	
Goldsboro†	92	45	67.8	4.13	
Greensboro†	88	39	64.8	3.58	
Henderson†	87	41	66.1	3.42	
Highlands	76	28	55.4	2.10	
Jacksonville	90	45	67.6	3.10	
Lenoir*†[1]	80	41	63.1	2.70	
Linville†	73	30	52.2	4.54	T.
Littleton†	86	35	63.6	4.46	
Louisburg†	87	.....	.....	4.05	
Lumberton†	92	48	69.3	5.39	
Lynn*†[2]	85	.....	63.0	3.09	
Marion	86	37	62.8	3.34	
Moncure†	85	40	65.2	3.15	
Monroe†	88	42	65.2	3.63	
Morganton†	87	38	64.6	1.97	
Mountairy†	84	37	61.4	3.89	
Mount Pleasant	86	43	65.7	2.19	
Murphy†	.....	.....	.....	2.97	
Newbern†	86	52	68.2	2.68	
Oakridge†	85	39	63.6	5.53	
Pantego*[3]	88	48	64.3	6.85	
Pittsboro†	83	39	64.0	5.09	
Rockingham†	92	46	68.5	2.40	
Roxboro†	85	36	63.2	4.61	
Salem†	86	38	64.2	3.03	
Salisbury†	89	42	66.6	4.73	
Saxon†	89	32	64.6	6.96	
Selma	89	40	66.4	3.27	
Settle	88	40	64.8	3.94	
Skyuka	75	50	61.1	2.36	
Sloan†	91	43	67.4	3.84	
Soapstone Mount†	87	38	64.4	3.87	
Southern Pines *a*†	92	41	68.0	2.52	
Southern Pines *b*	89	46	68.3	2.60	
Southport†	82	46	68.0	3.11	
Springhope*[1]	85	42	64.3	2.00	
Tarboro	90	37	66.2	3.46	
Waynesville†	83	34	58.2	0.99	
Weldon†	86	38	64.8	2.89	
Willeyton	85	38	64.8	4.49	
North Dakota.					
Amenia	90	25	53.8	1.12	
Ashley†	97	19	54.6	0.77	
North Dakota—Cont'd.				*Ins.*	*Ins.*
Bordulac	88	23	54.6	1.22	T.
Bottineau	82	26	52.0	.....	
Buxton	86	25	54.1	1.56	
Churchs Ferry	93	24	56.0	0.55	
Coalharbor†	91	27	55.8	0.79	
Devils Lake†	89	26	54.8	0.80	
Dickinson†	88	22	56.0	0.73	
Dunseith	.....	24	.....	0.06	
Falconer	94	24	57.1	0.09	
Fargo†	89	23	54.8	0.74	
Forman†	93	22	57.6	0.35	
Fort Berthold†	93	30	55.8	1.77	
Fort Yates†	93	24	58.3	0.80	
Gallatin†	96	16	55.8	0.79	0.1
Glenullin	91	.....	.....	0.84	
Grafton†	89	25	52.8	0.20	
Grand Rapids†	92	20	53.8	0.72	0.2
Hamilton	90	25	52.6	1.84	0.2
Jamestown†	84	28	55.4	1.08	
Langdon†	87	21	52.0	1.19	
Larimore†	90	21	52.1	0.35	
Lisbon†	92	22	55.9	0.76	
McKinney	94	24	56.2	0.32	
Mayville	94	27	56.7	0.78	
Medora†	95	26	57.5	0.38	
Milton†	90	23	53.0	T.	
Minnewaukon	90	23	55.2	0.46	
Minot†	95	25	58.0	0.66	
Minto†	92	23	54.2	0.83	
Napoleon†	90	21	55.3	0.67	
Neche†	93	23	53.2	0.91	
New England City	89	26	57.2	0.12	
Oakdale†	87	28	57.4	0.67	
Portal†	94	25	57.8	0.34	
Power†	94	24	57.2	0.88	
St. John†	87	25	52.0	1.00	T.
Sheyenne	91	20	54.9	0.69	
Steele†	90	21	55.2	1.04	
Towner†	93	24	54.7	0.00	
University†	86	25	53.6	1.76	T.
Valley City†	82	24	52.0	0.42	
Wahpeton†	98	24	58.4	0.87	
White Earth	90	27	59.4	0.08	
Wildrice†[2]	.....	.....	56.1	0.62	T.
Willow City	90	20	54.0	0.58	
Woodbridge†	88	20	52.3	0.65	
Ohio.					
Akron	80	34	55.4	5.13	
Annapolis	84	29	55.8	2.25	
Ashland	79	35	54.9	4.58	
Ashtabula	81	33	54.0	2.71	
Atwater	.....	.....	.....	3.02	
Auburn	.....	29	.....	4.32	
Bangorville	80	32	55.6	4.08	0.5
Basil	.....	.....	.....	2.83	
Bellefontaine	83	30	56.2	5.77	0.5
Bement	.....	.....	.....	5.55	
Benton Ridge	85	33	57.2	5.38	0.2
Bethany	88	33	59.0	3.30	3.0
Bigprairie	81	32	54.8	4.03	
Binola	84	36	59.0	6.35	
Bissells	80	33	50.8	5.11	
Bladensburg	82	30	54.5	1.83	
Bloomingburg	85	32	57.6	3.43	T.
Bowling Green	81	32	55.5	2.92	
Bucyrus	80	36	56.2	4.42	
Cambridge	82	30	55.4	3.00	
Camp Dennison	85	35	59.2	2.86	T.
Canal Dover	83	29	55.7	3.81	T.
Canfield	.....	.....	.....	2.80	
Canton†	82	32	55.9	4.39	
Carrollton	83	28	55.6	3.18	T.
Cedarville	.....	.....	.....	4.01	T.
Cherryfork	91	33	50.7	6.16	
Chillicothe†	83	35	58.3	4.87	T.
Circleville	82	34	58.3	3.08	
Clarksville	84	32	57.5	3.90	2.0
Cleveland *a*	82	38	55.0	4.95	
Cleveland *b*	81	36	55.0	4.00	
Clifton	85[d]	32[d]	54.7[d]	4.59	3.0
Coalton	86	33	58.9	3.96	T.
Colebrook	80	30	55.1	4.81	
Dayton *a*	87	32	58.4	3.51	0.5
Dayton *b*†	.....	.....	.....	3.57	T.
Defiance	83	32	55.0	3.14	
Delaware	83	33	57.4	4.44	
Demos	81	32	56.6	3.64	T.
Dupont	82	32	55.5	3.70	T.
Elyria	83	37	55.2	4.31	
Fairport Harbor*[10]	82	40	55.9	.....	
Fayetteville	84	33	58.2	3.98	3.0
Findlay	85	34	57.2	4.25	
Frankfort	78	34	54.6	3.79	T.
Garrettsville†	80	29	53.6	4.76	
Granville	82	32	56.0	4.34	
Gratiot	82	31	56.4	2.89	0.5

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.*
Greenfield	82	35	59.6	3.10	T.
Greenhill	82	27	54.0	2.69	T.
Greenville	82	34	55.8	4.87	2.0
Hackney	.....	.....	.....	3.66	T.
Hanging Rock	88	36	60.7	4.58	T.
Hedges	82	32	56.0	3.48	
Hillhouse	81	28	53.2	4.44	
Hillsboro †	89	33	58.8	3.56	0.5
Hiram	79	33	54.6	5.01	
Jacksonboro	87	32	58.3	3.60	3.0
Kenton †	84	32	56.8	5.06	
Killbuck	82	29	56.1	2.74	
Lancaster	82	33	57.0	3.25	
Leipsic	84	30	56.2	3.44	
Levering	82	.....	.....	3.87	
Logan	86	33	58.4	2.69	
Lordstown	81	30	54.4	3.55	
Lowell	86	32	58.1	4.26	T.
McArthur	85	33	57.0	4.52	
McConnelsville †	83	33	56.9	3.68	T.
Mansfield †	.....	.....	.....	5.89	
Marietta *a* †	.....	.....	.....	3.90	
Marietta *b*	86	35	59.1	4.20	
Marion	83	32	56.6	5.97	
Medina	81	32	55.0	7.17	
Milfordton	82	32	55.4	3.12	
Milligan	87	32	58.5	2.23	T.
Millport	78	26	53.6	3.23	
Montpelier	80	34	55.3	2.67	
Napoleon	83	32	56.2	2.27	
Neapolis	.....	.....	.....	4.48	
New Alexandria	81	33	53.0	2.81	0.5
New Berlin	82	29	55.0	3.95	
New Bremen	84	32	57.4	3.04	
New Comerstown	84	35	56.6	4.24	
New Holland	83	34	57.6	1.88	0.2
New Paris	85	31	58.3	1.83	
New Waterford	.....	.....	.....	2.60	
North Lewisburg	84	33	57.2	4.80	1.0
North Royalton	81	33	55.0	6.28	
Norwalk	83	33	54.8	3.19	
Ohio State University	82	32	56.2	3.55	T.
Orangeville	80	29	54.8	4.00	
Ottawa	83	33	57.7	4.00	T.
Pataskala †	84	33	57.1	3.41	2.0
Perry	.....	.....	.....	3.62	
Philo	84	31	57.2	3.21	T.
Plattsburg	82	30	56.6	3.53	2.0
Pomeroy	87	36	59.9	5.44	T.
Portsmouth *a* †	.....	.....	.....	5.11	T.
Portsmouth *b*	91	36	62.0	4.93	
Ridgeville Corners	83	33	55.3	2.75	
Ripley	87	33	58.9	7.40	
Rittman	80	29	53.3	5.19	
Rockyridge	84	35	57.2	3.16	
Rosewood	80	31	56.1	4.80	
Shenandoah	81	32	54.6	4.88	
Sidney *b*	83	30	56.8	5.41	
Sinking Spring †	83	35	59.0	4.88	T.
Springboro	.....	.....	.....	3.20	4.0
Spring Valley	85	32	55.8	3.84	
Strongsville	.....	.....	.....	5.99	
Sylvania	83	31	54.8	3.53	
Thurman	88	34	57.4	3.28	
Tiffin †	80	36	56.4	4.86	0.2
Upper Sandusky	81	33	57.1	5.84	
Urbana	79	32	56.2	3.88	2.0
Vanceburg	85	35	59.7	7.09	T.
Van Wert	82	32	56.4	4.15	0.5
Vermilion	83	35	55.0	4.29	
Vickery	82	34	56.7	4.04	
Walnut	.....	.....	.....	4.12	0.5
Warren	82	31	55.8	3.98	
Wauseon	83	33	56.4	3.90	
Waverly	88	34	60.1	3.86	0.8
Waynesville	81	31	55.4	3.60	3.0
Wellington	82	35	60.0	5.42	
Westerville	79	35	56.2	3.38	1.0
Willoughby	.....	.....	.....	3.38	
Wooster *a*	.....	.....	.....	5.23	
Wooster *b* †	78	31	53.4	4.97	
Youngstown	83	30	55.4	2.75	
Oklahoma.					
Alva	95	45	68.8	4.00	
Anadarko †	90	49	68.0	7.12	
Arapaho †	91	42	67.2	8.80	
Beaver	.....	.....	.....	5.69	
Burnett †	86	39	66.0	5.85	
Clifton †	91	39	67.4	3.61	
Edmond	88	44	66.6	6.29	
Fort Reno †	85	42	65.6	6.07	
Fort Sill	86	43	67.2	8.07	
Hennessey	89	45	68.6	7.22	
Kingfisher	88	42	66.4	7.13	
Mangum †	89	42	67.0	3.52	
Norman †	90	47	68.3	6.07	

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
Oklahoma—Cont'd.	°	°	°	*Ins.*	*Ins.*
Ponca	90	36	65.2	3.05	
Pondcreek †	93	40	67.4	4.96	
Prudence †	92	36	66.2	8.26	
Sac and Fox Agency †	88	40	66.0	3.90	
Stillwater †	88	41	65.4	4.77	
Waukomis	92	40	66.0	5.38	
Winnview †	89	45	66.3	7.42	
Woodward	93	40	68.4	3.71	
Oregon.					
Albany *a*	93	37	60.9	1.07	
Arlington	95	37	65.0	0.30	
Ashland *b*	95	32	61.2	0.84	
Aurora *[8]*	98	45	65.4	0.69	
Aurora (near)	95	31	59.1	1.07	
Bandon	66	39	53.2	0.42	
Bay City †	.....	.....	.....	3.40	
Brownsville *[8]*	90	48	64.2	1.33	
Burns †	88	21	55.4	T.	
Burns (near) [k]	87	26	56.6	.....	
Canyon City	95	29	60.2	0.00	
Cascade Locks	92	42	62.4	1.33	
Corvallis *a*	95	36	58.2	1.09	
Dayville †	95[k]	30[k]	62.8[k]	0.96	
Eugene *a* †	91	36	58.8	1.50	
Falls City	.....	.....	.....	1.74	
Fife †	87	22	52.2	.....	
Forest Grove	98	34	60.8	0.52	
Fort Klamath	84	25	53.7	2.70	T.
Gardiner	80	39	56.6	1.52	
Glenora	99	29	58.4	2.45	
Government Camp	81	23	48.9	2.88	10.0
Grants Pass *a* †	97	32	63.0	0.74	
Happy Valley	88	19	54.6	1.39	
Hood River (near)	89	36	60.4	0.81	
Irvington	.....	.....	.....	0.86	
Jacksonville	92	32	60.0	0.57	
Joseph	85	29	55.6	0.46	
Junction City *[8]*	94	40	60.3	1.36	
Lafayette *[8]*	98	44	64.3	1.15	
Lakeview †	88	25	57.8	0.92	
Langlois	86	39	59.4	1.85	
Merlin *[8]*	102	44	65.8	0.41	
Monmouth *[8]*	92	45	64.2	0.90	
Mount Angel †	97	35	62.0	1.48	
Nehalem	.....	.....	.....	2.19	
Newport	83	38	53.2	2.29	
Pendleton	103	29	63.5	1.21	
Prineville	96	25	60.2	0.97	
Riddles *[8]*	99	31	58.6	0.46	
Salem *b* †	93	36	59.6	1.78	
Sheridan *[8]*	89	45	64.1	0.95	
Silver Lake	89	16	54.8	1.91	
Silverton *[8]*	98	44	62.4	1.21	
Siskiyou *[8]*	90	35	60.1	.....	
Sparta	84	30	56.4	2.08	
Springfield *[8]*	89	45	61.7	0.98	
Stafford	96[c]	34[c]	59.4[c]	1.27	
The Dalles †	95	38	64.4	0.27	
Tillamook Rock L. H.	.....	.....	.....	1.87	
Vale	95	27	62.5	1.99	
Vernonia	106	29	60.4	1.22	
West Fork *[8]*	103	32	58.9	0.70	
Weston	97	36	62.0	1.20	
Williams	91	29	59.8	0.91	
Pennsylvania.					
Altoona	83	39	60.3	2.52	
Aqueduct	83	35	62.4	5.93	
Beaver Dam	.....	.....	.....	2.87	
Bethlehem	.....	.....	.....	6.05	
Blooming Grove	81	31	55.3	6.87	
Brookville †	.....	.....	.....	1.71	
Browers Lock	.....	.....	.....	7.00	
Cameron	.....	.....	.....	3.85	
Canonsburg	82	35	58.0	1.79	0.5
Carlisle	82[c]	38[c]	60.8[c]	6.54	
Cassandra	78	33	54.4	4.18	
Cedarrun	.....	.....	.....	2.26	
Centerhall †	79	35	57.9	5.79	
Chambersburg †	81	34	57.6	6.03	
Coatesville	84	37	61.5	7.28	
Confluence †	83	33	57.6	3.91	
Coopersburg	78	38	59.8	8.74	
Davis Island Dam †	.....	.....	.....	3.57	
Derry Station	84	31	57.4	4.03	
Doylestown	.....	.....	.....	7.89	
Drifton	79[f]	34[f]	55.6[f]	4.86	
Driftwood	.....	.....	.....	4.40	
Dubois	.....	.....	.....	4.11	
Duncannon	.....	.....	.....	6.06	
Dunmore	82	27	57.0	5.15	
Dushore	80	25	54.9	4.87	
East Bloomsburg	.....	.....	.....	7.05	
East Mauch Chunk	84	35	59.5	7.64	
Easton	80	39	61.2	5.75	
Edinboro *[1]*	75	36	53.6	.....	
Ellwood Junction †	.....	.....	.....	2.61	

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
Pennsylvania—Cont'd.	°	°	°	*Ins.*	*Ins.*
Emporium	83	33	56.8	3.42	
Farrandsville	.....	.....	.....	4.53	
Forks of Neshaminy *[1]*	76	50	64.3	6.34	
Franklin	82	33	55.1	3.66	
Frederick	.....	.....	.....	8.85	
Freeport †	.....	.....	.....	3.65	
Girardville	.....	.....	.....	8.37	
Grampian	80	32	55.4	4.55	
Greensboro †	87	32	59.0	4.98	T.
Greenville	80	31	54.3	4.10	
Hallstead †	80[d]	29[d]	56.2[d]	4.87	
Hamburg	82	42	63.0	8.15	
Hollidaysburg	87	31	58.3	3.52	
Honesdale	.....	.....	.....	5.93	
Huntingdon *a* †	87	33	58.2	4.69	
Huntingdon *b*	.....	.....	.....	4.94	
Indiana	79	32	56.8	2.98	
Irwin	.....	.....	.....	2.79	T.
Johnstown †	83	34	57.0	3.71	
Karthaus	.....	.....	.....	2.65	
Keating	.....	.....	.....	4.34	
Kennett Square	80	39	60.7	7.96	
Lancaster [i]	81	36	56.8	.....	
Lansdale	.....	.....	.....	8.62	
Lawrenceville	82	28	57.6	4.35	
Lebanon	76	35	59.8	6.52	
Leroy †	78	33	55.0	4.84	
Lewisburg	80	32	58.4	4.30	
Lock Haven *a* †	88	33	60.7	5.00	
Lock Haven *b*	.....	.....	.....	4.65	
Lock No. 4 †	.....	.....	.....	2.63	
Lycippus	81	34	57.6	4.08	
Mifflin	.....	.....	.....	4.62	
Oil City †	.....	.....	.....	4.12	
Ottsville	.....	.....	.....	7.81	
Parker †	.....	.....	.....	3.41	
Philadelphia *b*	82	44	63.0	4.96	
Point Pleasant	.....	.....	.....	9.98	
Pottstown	83	43	63.0	7.27	
Quakertown	82	36	59.4	7.77	
Reading [2]	.....	.....	60.4	9.70	
Renovo *a*	.....	.....	.....	4.64	
Renovo *b*	87	35	58.9	4.41	
Ridgway †	.....	.....	.....	3.81	
Saegerstown	82	26	53.7	3.95	
St. Marys	80	31	53.7	3.44	
Salem Corners	77	39	55.8	5.84	
Scranton	81	35	58.0	4.82	
Seisholtzville	.....	.....	.....	8.58	
Selinsgrove	80	32	58.6	4.74	
Shawmont	.....	.....	.....	5.54	
Shinglehouse	82	25	53.4	3.20	
Skippack	81	32	58.6	9.25	
Smethport	80	28	53.2	2.90	
Smiths Corners	.....	.....	.....	10.05	
Somerset	79	30	52.6	4.65	
South Bethlehem	80	39	59.5	.....	
South Eaton	78	33	56.8	5.29	
State College	81	36	57.6	4.13	
Sunbury	.....	.....	.....	1.60	
Swiftwater	78	34	55.5	6.61	
Towanda	81	31	56.7	3.74	
Uniontown	80	31	56.6	4.52	
Warren †	81	33	55.5	4.20	
Wellsboro †	78	30	53.7	5.53	
West Chester	80	42	60.5	7.47	
West Newton †	.....	.....	.....	3.08	
White Haven	79	35	54.8	6.49	
Wilkesbarre †	84	33	59.6	5.81	
Williamsport	80	36	59.0	2.85	
York †	80	37	60.1	6.61	
Rhode Island.					
Bristol	71	39	55.9	4.28	
Kingston	78	36	55.8	3.95	
Providence *a*	84	41	60.4	4.46	
South Carolina.					
Allendale †	96	47	71.9	2.65	
Anderson †	.....	.....	.....	1.78	
Batesburg †	95	48	68.5	3.50	
Blackville †	93	45	69.8	4.28	
Camden †	.....	.....	.....	3.68	
Central † [e]	92	42	67.8	.....	
Cheraw *a* †	94	38	68.6	3.94	
Cheraw *b* †	.....	.....	.....	4.42	
Clemson College	90	42	67.0	0.81	
Conway †	.....	.....	.....	3.15	
Darlington (near)	.....	.....	.....	1.58	
Edisto †	.....	.....	.....	0.99	
Effingham †	.....	.....	.....	4.07	
Florence †	92	45	67.8	3.32	
Georgetown †	86	52	69.2	2.75	
Gillisonville †	97	45	72.2	1.00	
Greenville †	86	42	64.4	2.88	
Greenwood	92	43	69.4	2.20	
Holland	93	40	66.6	1.19	
Kingstree *a* †	92	49	70.4	2.73	

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.
South Carolina—Cont'd.	°	°	°	*Ins.*	*Ins.*
Little Mountain	91	42	69.4	2.78	
Longshore †	93	43	69.1	2.54	
Mount Carmel †	.....	.....	.....	2.97	
Pinopolis *[1]	89	52	69.1	1.19	
Port Royal †	94	53	73.0	1.47	
St. George †	94	48	70.7	0.88	
St. Matthews †	95	47	70.5	2.36	
St. Stephens †	.....	.....	.....	5.17	
Santuck †	91	42	66.6	3.61	
Shaws Fork *[1]	90	54	70.2	2.33	
Smiths Mills †	.....	.....	.....	3.39	
Society Hill †	88	49	68.0	2.09	
Spartanburg	93	43	67.9	1.52	
Statesburg †	91	47	71.1	2.08	
Trenton	92	45	71.6	2.80	
Trial †	92	46	69.2	1.67	
Walhalla	90	40	64.6	1.20	
Winnsboro	93	44	69.4	2.07	
Yemassee †	96	47	71.7	1.07	
Yorkville	89	44	68.6	2.27	
South Dakota.					
Aberdeen †	96	25	57.7	0.33	
Alexandria †	87	26	55.8	0.49	
Armour †	87	30	58.6	3.40	
Ashcroft †	91	23	58.2	1.72	
Brookings	89	26	56.1	0.83	
Canton	88	24	58.0	0.61	
Castlewood †	89	21	55.3	1.37	
Centerville	.....	.....	.....	1.09	
Chamberlain †	91	31	60.2	1.24	
Clark [h]	86	28	52.4	0.65	
Cross †	84	24	54.9	1.64	
Doland	87	20	56.0	1.33	
Edgemont	.....	.....	.....	0.51	
Farmingdale	.....	.....	.....	1.43	
Faulkton	88	26	57.6	0.29	
Forestburg †	88	30	59.0	0.93	
Fort Meade †	88	34	61.6	1.07	
Gary	92	29	54.8	1.86	2.0
Goudyville	91	20	56.6	0.21	
Greenwood †	85	32	60.2	2.13	
Highmore	90	26	59.9	1.86	
Hotch City †	90	26	59.6	0.97	
Hot Springs	85	28	59.6	0.67	
Howard †	86	24	56.2	1.02	
Kimball †	92	27	58.7	1.00	
Leslie †	93	24	62.7	T.	
Mellette †	91	25	58.4	0.38	
Menno †	89	27	60.0	0.76	
Millbank	90	26	56.2	2.05	
Mitchell †	87	26	56.7	1.36	
Nowlin †	97	26	58.5	0.05	
Oelrichs †	94	26	61.4	0.30	
Parker †	87	23	57.7	0.71	
Parkston	86[e]	25[e]	56.2[e]	2.10	
Plankinton †	92	28	58.9	0.68	
Rosebud	92	19	57.0	3.02	
Shiloh	90	20	57.3	0.25	
Silver City	.....	.....	.....	2.31	
Sioux Falls †	88	26	57.1	1.25	
Spearfish †	86	30	61.2	2.80	
Tyndall †	88	31	59.5	0.79	
Vermillion	90	30	60.1	0.31	
Watertown	84	20	54.2	1.13	
Webster †	90	22	54.5	0.84	1.4
Wentworth †	86	25	55.6	4.97	
Wessington Springs	88	27	59.1	0.68	
Tennessee.					
Andersonville	85	38	62.2	3.36	
Arlington †	95	40	65.7	0.81	
Ashwood *†[1]	87	45	66.2	3.73	
Benton (near) †	87	41	63.9	2.24	
Bolivar †	89	36	64.4	1.09	
Bristol †	83	35	58.5	3.37	
Brownsville †	90	44	67.0	1.08	
Byrdstown	87	37	62.4	3.71	
Cagle	81	41	62.4	3.40	
Carthage †	.....	.....	.....	1.79	
Center Point	.....	.....	.....	2.05	
Charlotte	87	35	63.4	0.62	
Clarksville	84	40	62.9	1.09	
Clinton †	.....	.....	.....	4.59	
Covington	91	41	67.0	0.72	
Decatur †	87	36	63.6	6.89	
Dyersburg	91	42	66.8	1.32	
Elizabethton †	84	34	60.4	4.34	T.
Elk Valley	86	36	61.8	3.74	
Erasmus	84	32	59.0	4.43	
Fairmount *[1]	80[k]	43[j]	61.0[j]	3.21	
Florence †	86	39	63.4	1.57	
Franklin	87	37	63.6	1.06	
Greeneville †	83	36	60.1	4.95	
Harriman	86	38	62.6	5.39	
Hickory Withe	90	42	66.3	0.94	
Hohenwald †	88	30	61.8	2.08	
Jackson †	88	39	65.1	1.18	
Tennessee—Cont'd.					
Johnsonville †	.....	.....	.....	0.77	
Jonesboro *†[1]	79	39	59.6	4.64	T.
Liberty †	87	40	63.9	3.21	
Loudon †	.....	.....	.....	4.70	
Lynnville †	88	40	64.0	3.16	
McKenzie †	89	37	64.7	0.60	
McMinnville †	84	38	62.6	5.60	
Milan †	92	40	65.0	0.90	
Molino †	90	37	65.4	4.84	
New Market	.....	.....	.....	4.36	
Newport †	85	41	62.2	4.49	
Nunnelly *[1]	88	45	64.4	1.04	
Oak Hill *[1]	83	39	60.9	3.27	
Palmetto †	86	38	64.8	2.72	
Paris Landing *[1]	85	40	63.9	0.20	
Pope	90	41	66.6	2.21	
Riddleton †	84	38	62.8	1.19	
Rockwood †	.....	.....	.....	2.94	
Rogersville †	81	38	59.9	4.66	
Rugby	83	34	60.0	3.99	
St. Joseph †	92	33	65.0	2.75	
Savannah	92	39	65.9	1.88	
Sewanee †	80	43	61.4	0.10	
Springdale *[1]	84	40	60.8	4.66	
Springfield *[1]	90	40	64.2	0.89	
Tellico Plains †	90	40	64.2	2.93	
Trenton	87	37	63.7	0.98	
Tullahoma †	83	33	60.4	3.85	
Union City †	89	39	65.6	1.58	
Waynesboro	90	34	63.2	1.59	
Texas.					
Albany *[1]	75	46	65.8	4.23	
Arthur City †	.....	.....	.....	4.23	
Austin *[5]	88	48	73.8	.....	
Ballinger †	91	45	69.9	3.75	
Beeville †	95	53	77.4	4.20	
Blanco †	90	52	72.0	0.51	
Boerne *†[1]	86	55	72.9	1.45	
Bowie	86	48	68.9	6.72	
Brazoria †	87	53	73.7	3.05	
Bremond *[1]	90	57	74.0	6.57	
Brenham †	93	53	74.6	1.62	
Brighton †	95	53	76.0	1.11	
Brownwood	93	41	71.4	7.52	
Burnet *[1]	89	54	73.7	1.75	
Camp Eagle Pass †	97	60	78.4	3.44	
Childress *[1]	92	46	66.9	5.15	
Coleman *[3]	.....	51	68.2	5.14	
Columbia †	88	52	71.9	2.80	
Corsicana *b* †	94	54	74.0	6.17	
Cuero †	90	52	74.8	2.23	
Dallas †	91	46	70.9	4.13	
Danevang †	92	50	73.6	3.77	
Dean	84	43	59.6	1.62	
Dublin †	89	45	68.4	6.26	
Duval *[1]	93	59	77.8	1.59	
Emory	.....	44	.....	3.19	
Estelle †	90	44	70.1	4.85	
Forestburg †	87	50	68.4	9.39	
Fort Clark	92	52	74.6	2.08	
Fort McIntosh	95	60	76.9	3.48	
Fort Ringgold †	95	55	77.2	3.95	
Fort Stockton	.....	.....	.....	1.36	
Fort Worth †	92[d]	48[d]	72.2[d]	5.01	
Fredericksburg *†[1]	88[d]	48	72.2[e]	2.04	
Gail	.....	.....	.....	5.20	
Gainesville †	86	44	68.9	6.02	
Georgetown *[1]	87[f]	46	69.8[e]	4.20	
Golindo	.....	.....	.....	6.40	
Grapevine †	88	47	69.9	5.99	
Hale Center †	87	50	66.6	5.26	
Hallettsville †	92	52	74.8	2.86	
Hearne †	94	52	76.4	4.25	
Henrietta †	89	46	69.6	6.88	
Hewitt	.....	.....	.....	7.50	
Houston †	86	53	73.3	7.16	
Huntsville †	91	50	73.6	1.50	
Junction City	91[d]	43[d]	72.0[d]	4.11	
Kent	.....	.....	.....	0.37	
Kerrville †	86	40	70.2	3.62	
Lampasas †	89	43	72.0	3.41	
Llano *† [5]	90	54	74.6	0.82	
Longview †	95	49	73.4	6.76	
Lufkin †	96	50	74.2	5.54	
Luling †	90	54	75.2	1.65	
Mann	94[f]	53[j]	69.8[h]	5.74	
Marathon	90	43	67.8	1.40	
Marshall	90	51	72.4	3.26	
Menardville	96[e]	49[e]	71.7[e]	3.55	
Midland	100	36	71.6	4.55	
Mount Blanco †	86	40	66.9	0.16	
New Braunfels †	88	52	73.6	1.75	
Orange †	88	49	70.8	1.06	
Panter †	.....	.....	.....	4.71	
Paris †	91	44	70.0	4.38	
Point Isabel *[1]	86	70	79.8	0.20	
Texas—Cont'd.					
Rheinland †	90	55	68.7	6.68	
Rocksprings	.....	.....	.....	4.59	
San Antonio	92	56	76.4	3.20	
Sanderson †	94	46	71.8	2.40	
San Marcos *b* †	93	48	73.9	2.40	
Sierra Blanca †	98	40	70.0	0.72	
Stafford †	96	49	74.3	7.77	
Sulphur Springs †	95	46	73.6	6.14	
Temple *a*	87	56	72.2	3.07	
Temple *b*	91[c]	42[c]	72.5[c]	1.65	
Tivoli	91	54	74.0	5.07	
Tulia	84	42	64.2	2.78	
Tyler	93	49	72.0	6.27	
Valentine †	92	42	66.8	2.81	
Waco †	92	48	74.4	5.81	
Waxahachie †	92	44	74.5	6.60	
Weatherford †	89	49	70.5	5.07	
Wichita Falls †	.....	.....	.....	6.60	
Utah.					
Alpine City †	.....	.....	.....	1.31	
Blue Creek *[8]	102	38	67.9	0.20	
Brigham City †	.....	.....	.....	0.38	
Cisco †	97	39	66.0	0.20	
Corinne	91	31	63.2	0.17	
Croydon	91	15	58.1	0.80	
Ferron	96	31	54.5	0.15	
Fillmore †	98	23	61.6	0.03	
Fort Duchesne †	88	29	59.9	0.16	
Frisco	89	32	59.0	0.20	0.3
Giles †	97	35	66.4	0.24	
Green River †	87	37	59.1	0.30	
Heber	88	22	56.8	0.70	
Koosharem	83	30	54.0	0.59	
Levan †	90	29	59.8	0.85	
Loa †	89	21	54.3	0.71	
Logan †	85	32[d]	60.8	0.56	
Mammoth †	93	30	61.6	0.18	
Manti †	98	28	62.3	T.	
Millville	.....	.....	.....	0.49	
Minersville	92	31	62.2	0.28	
Moab †	95	41	67.7	0.38	
Mount Pleasant †	99	30	63.2	0.58	
Ogden *a* *[8]	96	42	68.9	0.30	
Ogden *b*	92	32[c]	65.1	0.35	
Pahreah	95	40	65.4	0.50	
Park City †	74	30	51.2	0.08	
Parowan †	88	32	60.8	0.51	
Pinto	.....	.....	.....	0.52	
Promontory *[8]	95	40	68.6	1.33	
Richfield †	89	33	60.5	0.06	
St. George †	104	31	69.2	0.15	
Scipio †	90	24	58.8	0.78	
Snowville	88	24	59.8	0.33	
Soldier Summit †	91	12	52.8	0.10	
Terrace *[8]	87	30	58.8	0.01	
Thistle †	94	26	55.6	.....	
Tooele †	88	29	63.6	0.36	
Tropic	83	31	59.8	0.92	
Vernal	84	33	61.6	0.62	
Woodruff	80	20	49.8	0.10	
Vermont.					
Bennington	76	28	56.2	4.98	
Brattleboro	80	30	58.2	2.91	
Burlington †	74	35	57.4	5.00	
Chelsea †	75	30	52.2	5.02	
Cornwall	76	33	55.8	4.26	
Enosburg Falls	76	28	54.6	5.50	
Hartland †	78	29	54.0	6.01	
Jacksonville	72	24	51.0	3.97	
St. Johnsbury	74	28	55.0	4.33	
Strafford *†[1]	71	30	52.9	5.52	
Vernon *[6]	80	41	57.6	3.49	
Wells	76	31	55.0	5.60	
Woodstock	79	26	55.6	5.54	
Virginia.					
Alexandria	86	40	63.8	6.71	
Ashland †	87	39	64.2	3.01	
Barboursville	85	40	62.2	6.04	
Bedford City	89	34	61.2	3.70	
Bigstone Gap †	87	32	58.1	3.95	
Birdsnest *†[1]	86	51	66.0	4.65	
Blacksburg	81	30	56.2	4.23	1.0
Buckingham †	85	34	61.4	3.02	
Burkes Garden	79	29	55.6	3.89	3.0
Callaville †	84	36	63.4	3.25	
Christiansburg †	.....	.....	.....	2.88	
Clarksville †	.....	.....	.....	4.59	
Clifton Forge	88	37	56.2	4.46	
Danville †	.....	.....	.....	4.83	
Dale Enterprise †	88	29	58.6	5.37	T.
Doswell	85	40	67.1	2.70	
Farmville	90	35	64.0	3.65	
Fredericksburg †	89	40	63.4	4.59	
Gordonsville	79	40	62.2	.....	
Grahams Forge	83	33	58.0	2.78	T.
Guinea	91	30	59.0	6.23	

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.*
Hampton	84	46	65.7	5.00	
Hot Springs	84	18	60.7	5.73	
Leesburg	88	39	63.2	3.26	
Lexington†	84	33	59.6	4.63	
Maidens	.....	.....	.....	2.16	
Manassas†	85	38	63.0	4.95	
Marion†	84	34	58.3	3.56	1.0
Monterey	78	29	55.4	7.04	
Petersburg†	88	41	65.3	3.40	
Quantico	84	32	59.9	.....	
Radford†	.....	.....	.....	2.80	
Richmond (near)†	88	37	65.0	2.46	
Rockymount†	85	36	63.4	5.03	
Salem†	86	39	63.0	4.03	
Saltville	83	35	58.0	3.08	
Smithville†	84	39	63.6	5.67	
Spottsville†	86	37	64.4	5.28	
Stanardsville†	85	40	60.8	4.45	
Staunton†	86	35	60.7	5.75	
Stephens City†	86	38	61.1	4.48	
Sunbeam†	79	38	60.5	4.06	
Swords Creek	84	35	58.0	4.08	
Warrenton	88	41	63.4	4.65	
Warsaw†	85	38	63.4	3.51	
Westbrook Farm	85	40	64.0	.....	
Woodstock†	83	39	61.4	5.41	
Wytheville	78	33	57.0	3.26	T.
Washington.					
Aberdeen	91	37	56.5	2.90	
Anacortes	.....	.....	.....	2.44	
Ashford†	.....	.....	.....	3.42	
Blaine†	84	30	52.4	4.33	
Bridgeport	102	34	65.5	0.10	
Centerville†	94	29	60.1	0.29	
Chehalis†	97	32	60.1	1.42	
Colfax†	98	33	59.4	1.93	
Coupeville†	79	38	53.8	2.18	
Dayton	95	32	62.1	0.48	
Ellensburg†	90	33	61.4	0.42	
Ellensburg (near)	98	32	62.7	0.25	
Elma	90	40	60.0	0.58	
Fort Simcoe†	101	31	66.2	0.32	
Fort Spokane	95	33	62.4	0.70	
Grandmound†	92	33	57.8	1.02	
Hunters†[9]	82	26	54.4	1.19	
Kennewick†	99	32	64.6	0.55	
La Center	98	36	60.5	0.71	
Lakeside	91	39	62.4	1.30	
Lapush†	72	38	51.4	3.42	
Loomis†	99	35	65.5	0.67	
Madrone†	85	36	56.3	1.04	
Mayfield†	97	33	59.0	2.34	
Moxee Valley†	99	30	62.7	0.26	
Northbend	92[d]	33[d]	56.7[d]	3.86	
Olga	78	39	54.6	2.29	
Olympia†	93	33	57.8	1.02	
Pinehill†	92	33	60.6	0.52	
Pomeroy†	96	42	66.5	1.48	
Pullman†	94	32	59.7	1.35	
Rosalia†	92	32	59.6	1.43	
Sedro†	88	36	58.8	1.89	
Silvercreek*[1]	94	32	57.4	2.49	
Snohomish†	88	36	58.3	2.51	
Southbend	94	34	58.7	2.58	
Stillaguamish	90	30	55.4	3.04	
Sunnyside†	99	31	64.3	0.20	
Union City†	88	38	59.0	1.16	
Vashon†	81	39	56.2	1.39	
Waterville†	96	30	59.7	1.11	
Wenatchee Lake	93	29	55.0	0.85	
West Ferndale	89	35	57.2	7.51	
West Virginia.					
Beckley	88	25	56.2	1.52	
Beverly†	80	33	58.8	5.01	4.0
Bloomery†	80	31	55.3	4.67	
Bluefield†	85	31	58.3	4.43	1.0
Buckhannon *a*†	.....	.....	.....	5.05	0.5
Buckhannon *b*	83	34	57.2	.....	.....
Burlington†	85	34	57.8	5.06	
Charleston†	.....	.....	.....	5.04	
Clay	87	35	59.7	.....	2.0
Dayton†	.....	.....	.....	3.54	
Elkhorn†	85	33	58.9	5.58	0.5
Fairmont†	.....	.....	.....	4.46	
Glenville†	82	33	56.8	5.31	T.
Grafton†	81	32	56.2	4.81	2.2
Green Sulphur	88	31	59.1	3.05	
Harpers Ferry†	.....	.....	.....	5.67	
Hewett†	88	35	60.8	5.67	
Hinton *a*†	.....	.....	.....	3.56	0.1
Hinton *b*†	88	35	60.8	.....	.....
Huntington	84	32	59.5	4.03	.....
Kingwood	78	32	55.7	5.37	.....
Marlinton†	80	29	55.1	7.06	T.
Martinsburg†	83	40	60.4	5.00	
Morgantown *a*†	.....	.....	.....	4.34	T.
West Virginia—Cont'd.	°	°	°	*Ins.*	*Ins.*
Morgantown *b*†	83	32	56.4	4.91	.....
New Martinsville†	90	34	59.2	3.21	
Nuttallburg†	83	30	55.3	4.05	
Oldfields†	88	32	58.7	5.24	T.
Philippi†	79	23	55.4	5.66	T.
Pleasant Hill*[1]	78	36	57.8	2.85	4.0
Point Pleasant†	88	34	61.1	4.45	T.
Powellton	84	36	59.0	4.43	1.0
Romney	85	39	61.0	4.66	
Rowlesburg†	.....	.....	.....	3.60	
Tannery*[1]	75	34	53.5	.....	
Weston *b**†	88	36	59.0	.....	5.0
Wheeling *a*†	.....	.....	.....	2.17	T.
Wheeling *b*†	83	38	60.4	4.58	0.5
White Sulphur Springs†	82	26	54.7	6.80	1.0
Wisconsin.					
Amherst	85	28	53.0	2.70	T.
Antigo	85	24	51.3	3.43	T.
Barron	89	21	52.7	2.17	T.
Bayfield	86	31	46.2	2.07	T.
Beloit	81	33	57.8	0.70	
Chilton	84	30	54.1	1.47	
Citypoint	89	28	56.0	5.27	
Crandon†	83	22	51.8	0.69	0.5
Delavan	81	29	55.2	1.02	
Dodgeville†	84	28	56.8	1.00	
Easton†	87	30	55.0	1.71	
Eau Claire	86	24	54.6	3.65	
Fond du Lac	85	29	54.9	1.25	
Grand River Lock	.....	.....	.....	1.19	
Grantsburg†	88	24	53.1	2.00	
Gratiot	86	30	57.8	.....	
Hartford	.....	.....	.....	1.21	
Hartland	83	31	55.0	0.94	T.
Harvey	85	30	56.2	0.94	
Hayward†	87	17	51.6	2.34	T.
Hillsboro	87	28	54.1	1.88	
Hudson	.....	.....	.....	2.11	
Koepenick*†[1]	86	34	54.4	2.10	
Lancaster†	85[d]	31	57.6	2.11	
Lincoln†[2]	.....	.....	53.9	3.27	T.
Madison†	79	33	56.9	0.51	
Manitowoc†	82	32	51.1	1.41	
Meadow Valley†	88	26	54.0	2.46	
Medford†	89	19	51.4	1.45	T.
Menasha	.....	.....	.....	2.36	
Neillsville†	86	26	52.8	2.67	
New Holstein	89	30	54.8	1.49	
New London	88	29	54.5	2.26	
Oconto	86	31	52.0	2.08	T.
Osceola†	93	19	54.7	1.60	
Oshkosh†	83	31	55.5	1.28	
Pepin	88	26	52.8	1.27	
Pine River†	88	28	55.4	1.39	
Portage†	87	28	56.5	0.56	
Port Washington	84	31	51.8	1.28	
Prairie du Chien	90	32	60.1	1.32	
Racine	85	32	53.6	0.87	
Sharon†	82	29	54.0	1.57	
Shawano	84	28	51.8	2.15	
Spooner†	90	14	51.2	2.40	
Stevens Point†	86	28	54.2	2.39	
Sturgeon Bay Canal*[10]	74	32	48.5	.....	
Valley Junction†	87	26	54.0	1.89	T.
Viroqua	85	29	55.6	1.23	
Watertown†	85	32	56.2	1.17	
Waukesha†	81	31	55.0	1.01	
Waupaca†	88	29	55.6	2.49	
Wausau†	83	27	52.6	2.20	T.
Wausaukee	82	29	51.2	1.93	
Westbend	84	30	53.4	1.10	T.
Westfield†	88	29	55.8	1.28	
Whitehall	90	30	56.1	3.64	
White Mound†	88	26	56.4	0.81	
Wyoming.					
Big Horn Ranch	74	26	52.2	0.77	
Carbon	92	27	56.4	1.46	
Fort Laramie†	90	25	60.0	1.28	
Fort Washakie†	82	25	56.6	1.75	
Fort Yellowstone†	77	23	54.0	1.55	0.5
Green River	89	23	58.1	0.30	
Laramie	74	24	50.9	1.85	
Lusk†	92	23	57.9	0.87	
Sheridan	91	26	58.8	0.49	
Strong	87	29	59.8	0.85	
Sundance	80	29	54.5	1.57	
Wheatland	91	25	59.8	0.87	
Mexico.					
Ciudad P. Diaz	92	58	77.4	2.95	
Leon de Aldamas	91	50	71.4	1.13	
Topolobampo*[1]	90	71	80.2	0.14	
New Brunswick.					
St. John	65	32	49.0	10.26	
West Indies.					
Grand Turk Island	.....	.....	.....	7.14	

Late reports for April, 1897.

Stations.	Temperature. (Fahrenheit.) Maximum.	Minimum.	Mean.	Precipitation. Rain and melted snow.	Total depth of snow.
Alaska.					
Coal Harbor	48	16	36.4	3.85	5.5
Arizona.					
Buttes	.....	.....	.....	0.00	
California.					
Placerville	82	28	54.4	2.23	
San Miguel Island	88	43	56.8	0.04	
Idaho.					
Moscow	78[f]	32[f]	50.2[f]	0.40	
Salubria	87	26	50.2	0.92	1.5
Illinois.					
Evanston*[10]	74	22	45.4	.....	
Kansas.					
Delphos*[1]	85	31	54.7	1.90	
Kentucky.					
Louisia *a*	.....	.....	.....	5.34	
Michigan.					
Mount Clemens	.....	.....	.....	1.63	T.
St. Ignace	66	19	38.4	.....	.....
Minnesota.					
Lutsen	63	8	35.8	1.18	
Missouri.					
Appleton City	84	28	54.0	5.70	
Bethany	81	38	61.3	2.42	
Nevada.					
Los Vegas	80	30	58.6	0.03	
New Jersey.					
Perth Amboy	86	24	50.8	3.28	0.5
Oregon.					
Umatilla	.....	.....	.....	0.26	
Washington.					
Mayfield	.....	.....	.....	3.59	
Mexico.					
Topolobampo*[1]	86	62	74.2	T.	

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.

A numeral following the name of a station indicates the hours of observation from which the mean temperature was obtained, thus:

[1] Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. ÷ 4.
[2] Mean of 8 a. m. + 8 p. m. ÷ 2.
[3] Mean of 7 a. m. + 7 p. m. ÷ 2.
[4] Mean of 6 a. m. + 6 p. m. ÷ 2.
[5] Mean of 7 a. m. + 2 p. m. ÷ 2.
[6] Mean of readings at various hours reduced to true daily mean by special tables.
[7] Mean from hourly readings of thermograph.
[8] Mean of 7 a. m. + 2 p. m. + 9 p. m. ÷ 3.
[9] Mean of sunrise and noon.
[10] Mean of sunrise, noon, sunset, and midnight.

The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.

An italic letter following the name of a station, as "*Livingston a*," "*Livingston b*," indicates that two or more observers, as the case may be, are reporting from the same station. A small roman letter following the name of a station, or in figure columns, indicates the number of days missing from the record; for instance, "[n]" denotes 14 days missing.

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.

Minnesota, Collegeville, April, 1897, make precipitation read 1.25 instead of 2.02.

Washington, Ashford, February, 1897, make precipitation read 8.24 instead of 7.91.

Page 137, line 9 from bottom, for "incidently," read "incidentally."

Page 148, bottom line, for $N\ R\ R$, read $N\ R\ R'$.

Page 162, line 20 from bottom, for $S_0\ K_0$, read $S_0\ K_1$.

Page 163, line 17, for William Wilson, read Alexander Wilson.

TABLE III.—*Data from Canadian stations for the month of May, 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	29.86	30.01	+ .06	47.8	+ 3.4	2.88	.....	s.	T.
Sydney, C. B. I	29.98	30.04	+ .07	47.2	+ 2.7	4.76	+ 0.43	sw.	2.0
Grindstone, G. St. L.	29.89	29.92	.....	41.2	.....	2.61	.....	sw.	
Halifax, N. S	29.92	30.05	+ .06	48.6	+ 1.6	4.63	— 0.09	s.	0.2
Grand Manan, N. B.	29.92	29.97	— .01	46.2	.....	7.76	+ 4.23	s.	
Yarmouth, N. S.	29.91	29.99	+ .01	49.5	+ 2.5	6.50	+ 3.47	s.	T.
St. Andrews, N. B.	.....	.....	.....	.....	.....	.....	.....	.....	
Charlottet'n, P. E. I.	29.95	29.99	+ .03	48.2	+ 1.6	3.25	+ 0.10	s.	
Chatham, N. B	29.95	29.97	+ .03	49.0	+ 3.0	4.78	+ 0.88	e.	0.3
Father Point, Que.	29.93	29.96	+ .02	42.8	— 0.7	3.14	+ 0.71	e.	
Quebec, Que	29.62	29.95	.00	48.1	— 1.4	5.14	+ 2.02	ne.	
Montreal, Que	29.72	29.93	.00	52.6	— 1.4	3.74	+ 0.66	sw.	
Rockliffe, Ont	29.41	29.92	— .02	50.8	+ 1.3	3.49	+ 0.89	nw.	
Kingston, Ont	29.63	29.94	— .02	52.1	— 0.9	2.83	+ 0.08	sw.	
Toronto, Ont	29.58	29.96	— .02	51.0	— 1.4	3.02	+ 0.37	sw.	
White River, Ont	28.65	30 01	+ .04	45.6	+ 2.0	1.27	— 0.24	n.	1.2
Port Stanley, Ont	29.34	29.98	.00	51.0	.....	2.75	— 0.09	n.	
Saugeen, Ont	29.24	29.96	.00	48.8	— 1.2	3.75	+ 1.18	n.	
Parry Sound, Ont.	29.24	29.94	— .02	49.8	— 0.7	3.86	+ 0.54	n.	
Port Arthur, Ont	29.28	29.98	+ .06	45.8	— 0.7	2.06	— 0.12	ne.	T.
Winnipeg, Man	29.12	29.94	+ .01	52.3	+ 2.3	1.59	— 1.23	n.	0.4
Minnedosa, Man	28.18	29.96	+ .07	51.4	+ 2.4	1.02	— 0.62	n.	0.1
Qu'Appelle, Assin.	27.71	29.93	+ .06	54.2	+ 4.2	0.25	— 1.27	nw.	
Medicine Hat, Assin	.....	.....	.....	.....	.....	.....	.....	.....	
Swift Curr't, Assin.	27.38	29.92	+ .03	56.9	+ 5.9	0.26	— 1.23	s.	
Calgary, Alberta	26.48	29.95	+ .07	55.8	+ 4.8	0.18	— 1.31	w.	
Prince Albert, Sask.	28.34	29.83	.....	53.2	.....	0.98	.....	e.	
Edmonton, Alberta.	27.62	29.92	+ .05	55.4	+ 5.8	0.33	— 1.27	nw.	
Battleford, Sask	28.22	29.93	.....	56.9	.....	0.24	.....	nw.	
Kamloops, B. C.	28.74	29.95	.....	61.5	.....	0.39	.....	e.	
Hamilton, Bermuda	29.98	30.14	+ .08	70.0	.....	5.06	.....	se.	
Banff, Alberta	25.34	29.93	... .	50.0	.....	1.37	.....	sw.	0.1
Esquimalt, B. C.	30.02	30.05	... .	52.0	.....	0.62	....	sw.	
Ottawa, Ont	29.60	29.96	.....	53.0	... .	3.31	.....	w.	
Sable Island, N. S.	.....	.....	.....	.....	.....	.....	.....	.....	

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.

April, 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 ...	30.17	30.07	30.12	69	78	71	79	68	74	57	68	n-ne.	4	7	0.01
2 ...	30.16	30.07	30.13	69	79	72	80	68	65	51	67	ene.	4	3	T.
3 ...	30.14	30.05	30.10	71	78	72	79	70	68	55	70	e-ne.	3-5	2	T.
4 ...	30.14	30.05	30.13	70	80	69	81	69	68	52	81	ne.	3	3	0.00
5 ...	30.15	30.06	30.15	70	80	71	80	68	72	50	70	ne.	3	2	0.12
6 ...	30.15	30.06	30.11	70	80	70	80	68	68	49	85	ne.	3	2	0.00
7 ...	30.14	30.05	30.12	70	80	70	81	68	72	40	68	ne.	3	1	0.04
8 ...	30.20	30.11	30.18	69	79	72	79	67	74	51	66	nne.	3	8-3	0.14
9 ...	30.22	30.14	30.17	67	73	69	76	66	90	63	57	nne.	4-5	9-4	0.42
10 ...	30.13	30.05	30.10	68	77	68	77	67	60	49	65	nne.	4	3	0.06
11 ...	30.12	30.01	30.05	64	78	68	79	64	85	49	73	nne.	3-1	2	0.00
12 ...	30.08	30.02	30.06	67	77	70	78	66	66	50	68	n.	3-0	4	0.00
13 ...	30.10	30.02	30.09	70	78	71	80	68	70	51	67	ene.	4	3	0.00
14 ...	30.15	30.08	30.15	68	80	70	81	65	65	51	72	nne.	4-0	2	T.
15 ...	30.16	30.08	30.15	71	79	72	81	69	68	58	71	ene.	4	7-2	0.00
16 ...	30.19	30.10	30.18	68	80	71	80	66	81	54	72	ne.	3	3	0.00
17 ...	30.17	30.09	30.19	70	78	72	81	67	74	53	67	ne.	4	4	0.00
18 ...	30.18	30.09	30.17	71	79	70	81	70	68	51	71	ene.	4	8-3	0.01
19 ...	30.18	30.15	30.15	72	81	72	82	69	64	49	68	ne.	4	4	0.00
20 ...	30.22	30.12	30.16	72	80	72	80	70	64	51	67	ne.	4-5	8	0.00
21 ...	30.21	30.12	30.15	71	81	72	81	71	68	52	73	ene.	4-5	6-3	0.01
22 ...	30.17	30.10	30.12	71	80	72	81	70	70	54	71	ne.	4	3	0.01
23 ...	30.14	30.07	30.11	71	80	72	81	69	74	51	69	ne.	4-3	2	0.09
24 ...	30.15	30.08	30.15	69	80	71	80	68	79	59	70	ne.	4-3	3-9	0.04
25 ...	30.21	30.12	30.20	69	77	71	78	67	72	59	68	ne.	4	7-3	0.18
26 ...	30.24	30.17	30.22	71	79	70	80	66	67	55	83	ne.	3	4	0.14
27 ...	30.22	30.14	30.20	70	80	71	80	68	67	51	72	ne.	3-0	3	0.14
28 ...	30.21	30.13	30.19	70	80	72	80	69	68	51	69	ne.	3-1	3	T.
29 ...	30.21	30.14	30.17	70	79	71	80	69	73	49	72	ne.	4-1	5	T.
30 ...	30.21	30.13	30.21	70	80	72	80	68	74	56	73	ene.	4	5	0.04
31 ...	.....	.....	.....	....	....	....	....	....	....	....	....	.....	.....	.....	.....
	30.17	30.09	30.15	70.0	79.0	70.9	79.9	68.0	70.9	52.4	70.4	ne.	3.6	3.8	1.45

Mean temperature: 6+2+9÷3 is 73.3°; the normal is 73.0°; extreme temperatures, 82° and 64°.

TABLE V.—*Mean temperature for each hour of seventy-fifth meridian time, May, 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.....	52.5	51.1	49.4	47.9	46.6	45.4	44.9	47.3	50.8	54.9	58.4	61.4	63.8	65.4	67.2	68.4	68.9	68.7	67.7	66.1	62.7	58.5	56.0	54.0	57.4
Boston, Mass.	53.4	52.9	52.6	52.3	52.2	52.3	53.6	55.5	57.1	58.5	59.3	60.0	60.1	61.2	62.3	61.7	61.6	61.3	60.0	58.1	57.0	56.0	54.7	54.1	57.0
Buffalo N Y.....	51.1	51.0	50.8	50.3	49.7	50.1	51.2	52.8	54.2	55.6	56.9	57.5	57.1	57.0	57.0	56.6	55.9	55.5	54.3	54.3	52.7	52.3	51.5	50.9	53.6
Chicago, Ill.....	52.4	51.6	51.2	50.5	49.7	49.2	49.8	51.7	52.9	54.8	56.8	57.3	57.7	58.4	59.4	59.6	58.8	58.9	57.8	57.1	56.5	55.3	54.3	53.5	54.8
Cincinnati, Ohio.....	55.9	54.8	54.0	53.2	52.7	52.1	52.6	54.3	56.6	59.2	61.4	62.9	63.5	64.8	65.5	65.9	65.7	65.8	64.9	64.0	62.4	60.7	59.1	57.6	59.6
Cleveland, Ohio	52.4	52.0	51.3	50.4	49.7	49.1	50.3	51.2	53.7	55.1	56.2	56.4	57.2	57.1	57.5	57.0	57.7	58.2	58.0	57.4	56.4	55.6	54.5	53.6	54.5
Detroit, Mich.....	51.1	50.3	49.7	49.3	48.9	48.9	49.8	51.5	53.7	56.0	57.6	58.8	59.8	60.5	61.2	61.1	60.9	59.6	58.3	56.6	55.2	54.4	53.1	52.0	54.9
Dodge City, Kans.....	58.1	57.3	56.8	55.9	55.2	54.5	54.0	55.3	58.1	62.2	65.5	68.1	70.1	71.7	73.0	74.0	74.0	73.6	72.3	69.4	65.9	62.8	61.2	60.0	63.7
Eastport, Me.....	44.0	43.8	43.2	42.8	42.7	43.0	43.5	44.8	46.1	47.0	48.3	48.9	49.7	49.6	49.6	49.2	48.5	47.9	46.8	46.2	45.5	44.9	44.9	44.5	46.1
Galveston, Tex.....	73.3	72.9	72.6	72.5	72.1	71.6	71.4	72.3	72.7	73.9	75.0	75.9	76.5	77.2	77.9	78.2	78.2	77.7	76.6	75.7	75.2	74.3	74.0	73.8	74.6
Havre, Mont.....	56.7	55.3	53.2	51.6	50.3	48.4	47.3	48.6	53.3	57.3	62.2	65.3	68.0	69.7	71.3	72.5	73.0	72.6	71.8	71.3	69.2	64.9	61.5	58.6	61.4
Kansas City, Mo.....	61.2	60.0	59.0	57.8	56.9	55.9	55.8	56.4	58.9	61.6	64.4	67.2	69.0	70.8	72.0	72.7	73.2	72.9	71.6	69.9	67.9	66.2	64.6	62.9	64.5
Key West, Fla.....	76.0	75.9	75.7	75.5	75.4	75.5	76.7	77.5	78.5	79.2	80.0	80.4	80.7	80.8	80.9	80.5	80.1	78.9	77.5	77.4	76.9	76.6	76.4	76.2	77.9
Memphis, Tenn.....	65.5	64.9	63.6	62.6	61.8	60.5	59.6	62.2	64.0	66.5	68.7	70.9	72.4	73.9	75.2	76.1	76.4	76.0	75.1	73.5	71.5	70.0	68.7	67.1	68.6
New Orleans, La.....	69.5	68.7	68.3	67.6	67.5	67.1	66.9	68.9	71.3	73.8	75.7	77.3	79.0	79.7	79.7	80.8	80.5	79.5	77.9	76.0	74.1	72.6	71.5	70.5	73.5
New York, N. Y.....	55.2	54.9	54.4	54.1	53.4	53.6	54.5	55.8	57.6	59.5	60.8	62.4	63.3	64.5	64.7	63.8	62.8	61.2	59.5	58.9	57.7	57.3	56.4	55.8	58.4
Philadelphia, Pa.....	57.3	56.5	55.9	55.7	55.2	55.9	57.7	60.0	62.2	64.0	65.6	67.2	68.8	70.2	70.3	70.1	69.4	67.9	65.5	63.7	61.4	60.1	59.1	58.2	62.4
Pittsburg, Pa.....	54.7	53.4	52.3	51.7	50.9	50.7	51.7	54.3	56.8	59.6	61.4	63.0	64.3	64.9	65.0	65.2	65.0	64.3	63.0	61.3	59.4	58.0	56.6	55.5	58.5
Portland, Oreg.....	60.5	58.7	57.0	55.8	54.6	53.7	52.4	52.0	51.9	53.2	55.1	57.2	59.8	61.1	64.0	65.6	67.7	68.8	69.7	69.2	69.0	67.2	64.1	62.5	60.4
St. Louis, Mo.....	60.7	59.6	58.5	57.7	56.8	55.7	55.5	57.9	59.2	61.5	63.7	66.4	68.2	69.0	70.1	70.5	70.4	70.5	69.7	68.0	67.0	65.1	63.5	62.4	63.6
St. Paul, Minn.....	53.1	51.7	50.4	49.4	48.1	47.2	47.1	48.7	51.7	54.6	57.2	59.2	61.5	62.9	64.3	65.4	66.1	66.4	65.5	63.7	61.4	59.4	56.9	54.7	56.9
Salt Lake City, Utah..	61.0	59.4	57.3	56.8	55.8	55.4	54.8	55.7	57.8	61.7	64.9	67.1	69.4	70.9	70.7	71.0	71.7	71.7	71.5	71.4	70.2	67.2	64.5	62.7	64.1
San Diego, Cal.....	59.5	59.3	58.9	58.9	58.8	58.5	58.1	57.9	57.9	58.6	59.6	60.9	61.9	62.6	63.5	63.6	63.7	63.2	62.8	62.3	61.5	60.7	60.2	60.0	60.5
San Francisco, Cal....	54.4	53.9	53.7	53.5	53.2	53.2	53.3	53.2	52.8	54.1	55.4	56.8	59.1	60.4	61.3	61.4	61.4	60.5	59.3	58.3	56.9	55.6	54.9	54.5	56.3
Savannah, Ga.....	67.3	66.5	65.7	64.9	64.3	63.7	65.1	68.7	71.6	74.6	77.4	79.6	80.2	80.5	80.2	79.9	78.5	76.5	74.3	72.3	71.2	70.4	69.4	68.7	72.1
Washington, D. C....	57.3	56.5	56.0	55.2	54.4	54.7	56.8	59.6	62.4	64.5	66.5	67.6	68.6	69.3	69.7	70.0	69.6	67.9	66.0	64.1	62.0	60.6	59.8	58.2	62.4

TABLE VI.—*Mean pressure for each hour of seventy-fifth meridian time, May, 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...	28.231	.238	.241	.245	.251	.259	.267	.272	.276	.277	.272	.264	.251	.237	.225	.213	.201	.192	.187	.189	.197	.207	.216	.223	.235
Boston, Mass.....	29.816	.816	.814	.816	.826	.838	.847	.848	.843	.839	.831	.819	.807	.799	.789	.786	.784	.789	.795	.800	.809	.813	.814	.813	.815
Buffalo, N. Y.....	29.129	.123	.120	.121	.127	.138	.143	.148	.150	.149	.144	.139	.133	.131	.126	.124	.124	.123	.124	.126	.136	.140	.140	.139	.133
Chicago, Ill.	29.127	.121	.120	.123	.129	.139	.149	.159	.163	.161	.164	.161	.153	.147	.139	.131	.125	.121	.119	.121	.129	.135	.134	.132	.138
Cincinnati, Ohio ...	29.354	.350	.344	.345	.350	.360	.372	.383	.386	.387	.387	.384	.374	.368	.360	.354	.351	.349	.351	.355	.359	.366	.368	.365	.363
Cleveland, Ohio	29.163	.159	.155	.155	.163	.169	.168	.182	.190	.190	.190	.187	.180	.176	.167	.166	.165	.161	.163	.165	.172	.177	.176	.175	.171
Detroit, Mich.....	29.196	.193	.187	.185	.189	.194	.201	.205	.207	.206	.205	.199	.195	.192	.187	.184	.184	.185	.188	.194	.204	.207	.207	.206	.196
Dodge City, Kans..	27.448	.450	.445	.441	.441	.443	.449	.459	.463	.462	.462	.457	.453	.440	.428	.416	.398	.390	.389	.388	.400	.414	.429	.433	.433
Eastport, Me.....	29.878	.877	.876	.882	.890	.900	.907	.914	.917	.915	.910	.905	.898	.889	.880	.875	.871	.871	.876	.880	.880	.876	.871	.865	.888
Galveston, Tex.....	30.027	.023	.015	.014	.016	.019	.029	.036	.044	.050	.058	.064	.052	.044	.032	.017	.002	.994	.990	.993	.005	.016	.025	.027	.025
Havre, Mont.....	27.322	.324	.325	.327	.332	.335	.342	.347	.351	.354	.349	.344	.336	.326	.313	.303	.295	.287	.284	.279	.284	.295	.308	.315	.320
Kansas City, Mo....	29.047	.048	.047	.049	.054	.061	.071	.079	.091	.092	.089	.083	.070	.053	.038	.024	.011	.003	.000	.004	.015	.026	.035	.039	.047
Key West, Fla.....	30.005	.996	.988	.986	.989	.996	.010	.019	.023	.028	.026	.021	.012	.999	.984	.975	.971	.976	.987	.001	.011	.019	.022	.018	.003
Memphis, Tenn.....	29.625	.625	.622	.625	.630	.639	.655	.666	.678	.684	.685	.681	.668	.655	.639	.624	.610	.603	.596	.600	.609	.618	.625	.628	.637
New Orleans, La....	29.991	.985	.986	.988	.993	.005	.018	.026	.034	.037	.034	.027	.014	.002	.983	.968	.960	.957	.958	.965	.973	.985	.992	.993	.995
New York, N. Y....	29.629	.623	.621	.621	.627	.635	.645	.651	.651	.648	.640	.630	.617	.607	.598	.593	.596	.602	.608	.613	.625	.630	.635	.633	.624
Philadelphia, Pa....	29.844	.840	.842	.843	.848	.854	.863	.872	.876	.875	.870	.858	.843	.828	.818	.815	.812	.813	.819	.828	.838	.843	.845	.845	.843
Pittsburg, Pa.....	29.107	.104	.102	.099	.101	.104	.115	.121	.123	.122	.119	.115	.105	.099	.090	.087	.086	.088	.093	.102	.110	.115	.115	.115	.106
Portland, Oreg.....	29.875	.880	.887	.891	.894	.897	.901	.908	.915	.920	.923	.924	.923	.919	.906	.896	.883	.868	.856	.846	.842	.846	.854	.866	.888
St. Louis, Mo.....	29.451	.448	.448	.450	.456	.468	.481	.492	.499	.500	.498	.487	.475	.466	.452	.439	.430	.423	.420	.420	.427	.440	.449	.451	.457
St. Paul, Minn.....	29.106	.108	.105	.107	.105	.113	.124	.130	.134	.131	.123	.115	.103	.093	.086	.076	.069	.062	.060	.062	.071	.080	.095	.101	.098
Salt Lake City, Utah	25.641	.643	.643	.642	.643	.643	.647	.653	.662	.665	.663	.661	.656	.645	.635	.622	.609	.598	.592	.593	.598	.607	.620	.628	.634
San Diego, Cal.....	29.885	.885	.879	.872	.863	.858	.855	.856	.868	.875	.881	.884	.887	.885	.882	.878	.868	.860	.854	.850	.851	.859	.869	.877	.870
San Francisco, Cal..	29.850	.849	.846	.841	.836	.834	.834	.835	.846	.854	.860	.862	.863	.861	.855	.847	.836	.824	.819	.814	.815	.821	.836	.845	.841
Savannah, Ga.....	29.923	.920	.918	.920	.928	.941	.956	.966	.971	.970	.965	.958	.935	.919	.904	.894	.889	.890	.896	.907	.919	.929	.934	.936	.928
Washington, D. C...	29.872	.867	.864	.868	.872	.882	.887	.891	.891	.889	.882	.870	.858	.847	.839	.832	.827	.824	.844	.850	.863	.869	.875	.878	.865

TABLE VII.—*Average wind movement for each hour of seventy-fifth meridian time, May, 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	7.4	7.9	7.4	7.4	7.5	7.1	7.3	6.6	8.5	10.0	10.4	10.7	10.6	10.5	10.9	10.5	11.0	12.4	12.7	11.9	9.8	8.3	7.7	7.5	9.3
Albany, N. Y	5.1	5.7	5.6	5.3	5.5	5.8	6.5	8.3	10.3	9.9	10.4	10.5	11.2	12.3	12.3	12.4	12.1	11.3	9.5	8.9	7.6	7.0	6.7	5.8	8.6
Alpena, Mich	6.8	7.0	6.9	6.4	6.7	7.5	7.7	8.7	9.0	9.0	10.5	11.5	12.4	12.5	12.8	13.1	12.7	11.2	10.1	8.6	7.7	6.9	7.2	6.7	9.2
Amarillo, Tex	14.3	13.0	12.1	13.7	13.3	13.5	12.3	11.6	12.9	14.9	15.9	16.7	15.9	15.8	16.1	15.7	16.0	17.4	17.5	17.8	16.2	14.2	13.8	14.4	14.8
Atlanta, Ga	8.6	8.9	8.6	8.6	8.9	8.4	7.9	8.3	8.5	8.8	9.8	10.0	10.9	10.9	11.3	11.6	11.4	10.9	10.0	8.2	8.2	8.4	8.4	9.0	9.4
Atlantic City, N. J	10.5	10.3	10.4	10.6	10.1	10.1	11.7	11.9	12.8	12.8	12.9	12.9	13.1	13.1	13.3	12.9	12.8	11.6	10.3	9.6	9.6	9.9	10.3	10.6	11.4
Augusta, Ga	4.9	4.9	4.9	4.6	4.5	4.2	4.7	5.9	7.3	7.5	8.1	8.4	8.8	9.2	9.6	10.0	9.9	8.6	7.3	5.8	5.4	4.5	4.5	5.2	6.6
Baker City, Oreg	5.4	5.6	6.2	6.2	6.8	6.5	6.6	7.2	6.2	6.3	5.1	5.3	6.2	7.4	7.9	8.1	8.5	8.1	8.4	9.5	8.9	6.8	5.3	6.0	6.8
Baltimore, Md	3.8	3.9	3.7	3.6	3.9	4.0	4.5	5.3	6.5	7.1	7.5	7.9	8.3	8.3	8.2	7.5	7.2	6.7	5.6	4.4	4.5	4.2	4.2	4.5	5.6
Bismarck, N. Dak	8.3	8.0	7.7	7.7	7.2	6.6	7.4	8.7	10.6	11.6	13.6	14.1	15.4	15.6	15.8	16.0	15.4	14.6	14.8	13.9	10.7	8.7	7.9	8.4	11.2
Block Island, R. I	12.4	12.2	12.6	12.6	12.8	12.9	13.5	14.8	15.6	15.8	15.6	15.8	16.5	17.0	17.3	16.5	17.4	17.1	16.3	15.5	14.9	14.2	13.7	12.8	14.8
Boston, Mass	8.9	8.8	8.9	9.3	9.1	8.9	10.2	10.3	11.3	11.8	11.9	12.7	13.2	13.1	12.8	12.7	12.2	11.7	10.7	10.2	10.3	10.2	10.0	9.1	10.8
Buffalo, N. Y	12.3	12.2	11.9	11.9	13.0	12.4	11.9	13.5	12.9	12.9	13.9	13.8	14.9	15.2	14.9	15.5	15.8	15.2	14.6	14.5	13.9	14.1	12.7	12.4	13.6
Cairo, Ill	5.8	6.4	6.5	6.4	5.7	5.4	4.8	5.8	7.0	7.2	7.6	8.7	8.7	9.2	9.3	9.0	8.8	8.8	7.5	6.3	6.2	5.7	5.4	5.1	7.0
Cape Henry, Va	12.7	13.2	13.1	13.0	13.5	13.8	13.8	14.4	14.1	14.5	15.4	15.2	14.6	13.4	12.5	12.2	12.5	13.4	11.6	11.4	11.5	11.0	11.1	11.8	13.1
Carson City, Nev	7.7	7.3	6.2	5.8	5.5	4.8	4.5	4.1	3.1	3.5	4.1	5.3	6.6	7.2	7.5	8.6	10.8	12.2	12.7	12.8	13.9	11.5	8.7	7.5	7.6
Charleston, S. C	10.4	9.6	9.6	9.5	9.6	9.7	10.3	11.6	12.7	12.0	12.5	12.7	13.6	14.5	14.9	14.4	14.1	13.2	11.8	9.9	9.9	10.3	9.9	9.3	11.5
Charlotte, N. C	6.3	6.0	5.6	5.3	4.9	5.4	5.8	6.4	6.9	7.3	7.3	7.3	7.5	8.5	8.2	8.7	7.6	7.6	5.7	5.6	6.3	6.5	6.3	6.0	6.6
Chattanooga, Tenn	4.1	4.6	4.4	4.0	3.9	4.6	4.4	5.1	6.8	8.1	8.3	8.9	9.5	9.9	10.4	10.8	10.2	10.0	9.0	7.4	6.8	5.9	5.1	4.4	6.9
Cheyenne, Wyo	6.8	6.3	6.1	6.7	6.6	7.0	7.4	7.0	7.5	8.2	9.2	10.1	10.6	10.9	11.2	12.0	11.8	11.3	12.1	11.1	9.6	7.7	7.9	7.5	8.9
Chicago, Ill	15.4	16.1	16.3	15.7	16.7	16.9	16.7	16.3	17.3	17.5	18.0	18.9	18.8	18.0	18.5	17.1	16.3	15.1	14.6	14.5	14.5	14.4	13.9	14.6	16.3
Cincinnati, Ohio	4.4	4.8	4.6	4.4	4.3	4.4	5.2	6.4	7.4	8.6	9.4	9.8	10.1	10.0	10.4	10.2	10.2	8.9	7.6	6.4	5.6	5.5	5.5	4.6	7.0
Cleveland, Ohio	11.9	11.9	11.6	12.4	12.7	12.3	11.6	11.7	11.8	12.5	13.5	13.8	14.2	13.7	14.0	13.6	12.9	11.5	11.4	10.5	10.8	10.9	11.2	11.6	12.3
Columbia, Mo	6.0	6.3	5.9	5.9	5.5	5.8	6.0	5.7	6.6	7.9	8.7	8.8	8.8	8.8	8.9	9.5	8.4	8.4	7.7	6.6	6.0	6.2	6.3	6.4	7.1
Columbus, Ohio	4.7	4.0	3.9	4.3	4.4	4.5	4.7	5.1	6.2	7.6	8.2	8.5	9.3	9.3	9.3	8.8	8.9	8.2	7.1	5.9	5.4	5.5	5.1	5.0	6.4
Concordia, Kans	5.7	5.9	5.5	5.3	4.9	5.1	4.8	5.6	6.4	8.3	9.5	9.7	10.2	10.0	10.1	10.0	9.4	8.7	8.9	7.9	6.5	5.8	5.5	5.6	7.3
Corpus Christi, Tex	12.1	11.0	9.9	9.7	8.9	7.9	8.9	8.7	9.9	10.3	11.5	13.5	14.8	15.6	15.9	16.3	16.4	16.5	16.6	15.8	15.1	15.1	14.4	13.0	12.8
Davenport, Iowa	5.5	5.3	5.3	4.9	5.2	5.6	5.5	6.3	7.6	8.9	9.5	9.8	10.3	10.3	10.5	10.2	10.1	9.3	8.6	6.5	5.1	4.8	4.7	4.9	7.3
Denver, Colo	6.1	6.5	5.9	6.5	6.9	6.4	5.8	5.6	5.0	4.6	5.0	5.7	6.8	7.6	8.3	8.7	10.2	10.8	10.5	10.5	9.3	8.3	8.5	7.1	7.4
Des Moines, Iowa	5.8	6.0	5.8	5.9	5.5	5.3	5.6	6.3	6.9	7.9	9.5	10.2	11.2	11.2	11.2	11.9	11.6	10.8	9.5	7.6	6.5	6.0	6.0	5.7	7.9
Detroit, Mich	6.9	7.2	6.9	7.2	7.3	7.2	7.3	7.9	8.2	8.9	9.7	10.8	11.4	11.5	11.8	11.7	11.2	10.3	9.2	8.0	7.0	6.8	6.8	6.8	8.7
Dodge City, Kans	9.2	8.2	7.7	7.3	7.1	6.4	6.8	6.9	9.0	10.6	12.4	13.0	13.8	13.8	13.9	14.8	14.9	15.2	14.9	13.5	10.1	9.5	9.9	9.7	10.8
Dubuque, Iowa	5.6	6.0	5.6	5.4	5.6	5.9	5.8	6.8	7.9	9.1	9.5	10.1	10.4	10.6	10.7	10.0	9.7	8.4	7.5	6.2	5.7	5.8	5.5	5.7	7.5
Duluth, Minn	7.5	7.8	8.2	8.8	9.7	9.7	10.3	9.8	9.0	9.1	9.5	10.1	10.1	10.3	10.6	10.9	10.7	9.7	8.6	8.0	8.1	7.3	7.1	6.7	9.1
Eastport, Me	9.6	9.6	9.9	9.9	9.8	9.5	9.5	10.3	10.5	10.0	10.4	10.6	10.5	11.1	10.7	10.8	10.5	10.5	9.8	9.6	10.1	10.2	9.9	9.7	10.1
El Paso, Tex	10.9	11.3	10.9	11.2	10.5	9.6	9.4	9.3	9.4	9.5	9.2	9.4	10.3	11.1	11.3	11.8	12.4	13.4	14.1	14.8	13.5	11.4	11.1	10.9	11.1
Erie, Pa	8.3	8.6	9.2	9.4	9.0	8.6	8.6	9.6	10.3	10.8	11.3	11.4	11.6	11.5	10.8	10.7	10.9	10.3	8.6	7.6	8.0	7.9	8.1	7.8	9.5
Eureka, Cal	6.2	5.1	4.4	4.5	4.0	3.9	4.0	3.9	3.3	3.5	4.3	5.7	8.3	9.8	10.7	10.9	12.2	12.2	11.2	11.0	10.7	9.0	7.9	6.7	7.3
Fort Canby, Wash	11.5	10.2	10.1	10.2	10.2	10.3	10.6	9.9	10.5	10.7	11.8	11.4	10.8	10.8	11.1	11.5	12.1	11.8	12.0	13.1	13.2	13.7	12.4	11.6	11.3
Fort Smith, Ark	3.7	4.0	4.0	4.0	4.7	4.3	4.5	4.5	5.2	5.7	6.1	6.6	7.3	6.9	6.9	7.1	7.6	7.5	7.1	5.8	4.8	4.5	4.5	3.7	5.5
Fresno, Cal	8.8	9.3	8.2	6.9	6.5	5.7	5.1	5.1	4.9	5.3	5.8	5.9	5.2	5.4	5.6	5.7	6.1	6.4	6.9	7.4	8.8	9.3	8.7	8.9	6.7
Galveston, Tex	7.4	7.7	7.3	6.9	6.8	6.8	7.0	7.5	8.2	8.8	9.2	9.8	10.2	9.8	10.1	10.1	10.4	10.1	9.6	8.6	8.0	8.2	8.3	8.3	8.5
Grand Haven, Mich	8.9	8.7	8.5	8.6	9.6	9.5	9.7	10.4	11.6	11.5	12.4	12.6	13.2	13.1	12.9	11.7	11.1	10.3	9.5	8.9	8.5	8.1	7.9	8.6	10.2
Greenbay, Wis	8.2	7.7	7.5	7.7	7.3	7.1	7.4	8.2	8.7	9.4	9.8	10.3	9.8	10.4	10.6	11.3	11.4	10.4	9.6	8.7	8.1	7.7	8.2	8.5	8.9
Hannibal, Mo	6.1	6.5	6.2	6.0	6.5	7.1	6.8	6.7	8.0	9.1	9.8	10.1	11.3	11.5	11.3	11.2	10.6	10.1	9.0	7.4	6.7	5.8	5.7	5.9	8.1
Harrisburg, Pa	5.0	5.2	5.6	5.1	5.1	5.9	6.2	7.6	8.0	8.3	9.5	10.2	10.1	10.2	10.3	9.9	10.0	9.7	9.0	8.0	7.0	6.4	5.5	5.3	7.6
Hatteras, N. C	12.4	12.1	13.0	12.9	13.0	13.3	13.8	14.8	16.4	16.5	16.6	16.2	15.9	16.7	16.5	16.3	15.2	14.6	14.2	14.0	13.9	13.8	13.0	12.1	14.5
Havre, Mont	7.5	8.1	8.2	8.3	7.3	7.3	7.7	8.5	9.1	10.4	11.5	11.9	12.4	13.0	13.1	13.5	14.1	14.0	14.5	13.5	11.4	10.7	10.2	8.3	10.6
Helena, Mont	9.3	9.5	9.1	9.1	8.5	8.3	7.9	7.4	5.7	6.1	6.2	6.6	8.8	8.6	9.1	10.0	9.9	10.5	12.0	10.7	8.9	7.3	8.4	9.4	8.6
Huron, S. Dak	10.3	10.1	10.1	10.7	10.9	10.9	11.1	12.1	13.8	15.3	16.1	16.5	16.8	17.1	16.8	17.1	16.6	16.4	15.1	13.2	10.3	9.7	9.9	10.2	13.2
Idaho Falls, Idaho	8.5	7.5	8.2	8.1	7.9	7.1	6.9	6.7	6.7	7.8	9.2	8.9	9.1	9.3	10.3	11.4	12.1	12.3	12.5	12.1	11.6	10.3	8.7	8.5	9.2
Indianapolis, Ind	6.8	6.9	6.6	7.0	7.2	6.7	6.9	7.5	9.0	9.1	10.2	10.1	11.4	10.6	10.7	11.8	10.9	10.6	9.9	9.0	7.3	6.9	7.5	6.4	8.6
Jacksonville, Fla	6.4	6.6	6.8	6.0	5.6	5.3	5.8	7.2	8.5	9.6	10.2	10.3	11.3	11.2	11.5	11.8	11.6	11.0	9.3	7.8	6.2	6.4	6.5	5.6	8.3
Jupiter, Fla	10.1	10.0	9.6	8.9	8.4	7.9	7.9	8.8	10.6	11.4	12.6	13.2	13.7	14.3	14.0	13.7	13.5	12.3	11.2	11.3	11.1	11.5	11.7	10.6	11.2
Kansas City, Mo	6.1	5.9	5.8	5.9	5.5	5.6	5.8	6.5	7.0	7.9	8.6	8.7	9.6	9.4	10.0	9.6	9.5	9.7	9.1	7.5	5.3	5.3	6.1	6.0	7.3
Keokuk, Iowa	5.5	5.1	5.5	5.9	5.5	5.5	5.9	6.5	7.4	8.3	8.5	8.8	9.5	9.6	9.5	9.5	9.9	9.4	8.4	7.2	5.6	5.0	5.3	5.7	7.2
Key West, Fla	11.0	10.9	10.7	10.9	11.0	11.0	11.1	11.5	11.5	11.5	11.8	11.3	11.5	11.8	11.7	12.6	12.6	12.2	12.1	12.2	12.0	12.0	11.3	11.1	11.6
Kittyhawk, N. C	12.6	13.1	14.0	15.0	16.1	16.2	16.3	16.5	17.4	18.0	17.8	15.6	17.2	18.8	18.6	19.3	19.5	17.3	16.8	16.7	14.7	14.3	13.9	13.1	16.2
Knoxville, Tenn	3.3	3.1	3.1	3.4	3.4	3.7	3.6	4.5	5.6	6.0	6.2	6.7	7.9	8.1	7.7	7.8	7.6	7.6	6.6	5.5	4.7	3.7	3.6	3.7	5.3
La Crosse, Wis	6.0	6.2	6.4	6.8	6.5	6.4	7.1	8.2	8.4	8.5	9.3	9.6	9.4	9.4	9.1	9.4	9.7	9.1	8.8	7.7	6.7	6.0	6.2	5.5	7.8
Lander, Wyo	3.9	3.9	3.8	3.6	3.4	2.8	3.0	2.7	2.2	3.5	4.3	4.3	4.7	6.0	6.7	8.0	9.6	9.2	8.7	7.9	7.3	7.3	6.4	4.7	5.3
Lexington, Ky	9.9	10.2	10.2	9.7	9.4	9.1	9.1	9.5	9.6	10.1	11.1	11.2	11.6	11.9	12.0	12.6	12.4	11.5	10.0	8.7	8.5	8.4	8.6	8.6	10.2
Little Rock, Ark	3.5	4.0	4.2	4.2	4.6	4.5	4.3	4.5	5.2	6.2	6.9	7.2	7.0	7.5	7.3	7.5	7.5	7.3	6.4	5.4	4.8	4.4	3.9	3.6	5.5
Los Angeles, Cal	2.6	2.4	2.4	2.0	2.2	2..	1.9	1.9	2.1	2.4	2.5	2.8	3.4	4.3	5.7	7.0	8.2	8.5	8.3	8.2	7.5	5.5	4.2	3.5	4.2
Louisville, Ky	5.6	5.6	5.1	5.4	5.4	5.6	6.0	7.0	7.6	8.6	8.6	9.3	9.9	10.7	10.1	10.1	9.6	9.0	7.7	6.9	6.1	5.7	5.8	5.4	7.4
Lynchburg, Va	2.8	3.0	2.6	3.0	2.4	2.4	3.0	3.9	4.7	5.6	5.9	6.8	6.8	6.8	6.5	6.3	6.5	5.9	5.2	3.6	3.5	3.4	3.2	3.5	4.5
Marquette, Mich	9.5	9.8	9.8	9.7	9.6	9.4	9.1	10.2	10.4	11.4	11.3	10.6	11.8	12.1	12.2	11.0	9.7	9.9	9.0	7.9	7.7	8.2	8.3	9.2	9.9
Memphis, Tenn	7.9	8.2	8.2	7.6	7.8	7.9	7.9	7.7	8.0	8.2	8.6	8.9	8.9	8.8	9.0	9.9	10.0	9.6	8.5	7.1	7.0	7.5	7.2	8.0	8.3
Milwaukee, Wis	7.8	8.0	8.3	8.2	8.0	8.3	8.1	8.5	9.4	10.6	11.2	11.6	11.7	11.5	11.3	11.8	10.9	9.9	9.2	8.0	7.8	7.5	7.5	7.2	9.3
Mobile, Ala	5.0	5.4	5.3	5.0	5.1	5.2	4.8	5.2	5.8	6.8	7.6	8.3	10.4	10.9	12.4	13.5	13.1	11.9	9.7	7.6	6.7	6.2	5.7	5.1	7.6
Montgomery, Ala	5.5	5.6	5.1	4.4	4.4	4.1	4.0	4.8	6.1	6.5	6.8	7.9	8.8	8.9	8.6	9.2	8.9	8.3	7.1	5.4	5.4	5.2	5.0	5.4	6.3
Moorhead, Minn	9.1	9.6	9.3	9.5	9.6	9.4	10.0	10.1	11.2	12.1	12.2	12.3	12.3	13.2	14.1	14.3	14.1	13.5	13.2	11.9	10.4	9.2	8.4	8.5	11.1
Nantucket, Mass	10.0	10.1	10.8	10.9	10.8	11.8	12.3	13.5	13.8	14.4	14.4	14.2	13.9	13.8	13.7	13.0	12.5	11.9	11.1	10.5	10.5	10.4	10.3	10.2	12.0
Nashville, Tenn	4.0	4.0	3.4	3.4	3.7	3.8	4.0	4.9	5.7	6.4	7.1	8.3	8.9	9.0	9.0	9.3	9.2	9.1	8.4	7.2	5.7	5.2	4.8	3.9	6.2
New Haven, Conn	6.8	7.0	7.3	7.9	7.7	7.8	9.0	9.9	11.0	11.8	12.4	12.4	13.6	13.8	13.7	13.5	12.4	11.1	9.4	8.8	8.7	8.2	8.0	7.5	10.0
New Orleans, La	7.0	6.7	6.1	6.3	6.0	6.0	6.2	6.6	8.2	8.9	9.0	8.4	8.9	9.8	10.4	9.7	10.0	10.0	9.5	7.9	7.1	6.8	6.6	7.0	7.9
New York, N. Y	12.2	12.7	12.7	11.9	12.9	12.8	12.0	11.8	12.6	13.6	14.2	14.7	15.2	15.4	16.4	16.2	15.4	15.5	15.0	14.5	13.4	13.2	12.9	11.9	13.7
Norfolk, Va	7.8	7.5	7.6	7.4	7.6	7.4	8.5	9.4	10.3	10.7	10.3	10.5	10.8	10.3	9.9	9.6	9.1	9.1	8.4	7.9	7.5	7.2	7.1	7.5	8.7
Northfield, Vt	5.5	5.8	6.3	6.5	6.2	5.5	5.9	7.2	8.4	10.5	11.8	12.7	13.7	13.5	13.7	13.8	12.9	11.1	9.7	7.8	7.3	7.0	6.6	6.4	9.0
North Platte, Nebr	7.3	7.5	7.3	7.3	7.3	6.3	5.8	5.9	7.5	9.6	10.7	11.3	12.9	13.6	13.2	13.5	13.4	12.6	12.5	12.3	10.7	10.2	9.6	8.5	9.9
Oklahoma, Okla	6.9	7.4	7.5	7.6	7.4	6.8	6.6	6.9	8.5	10.5	12.4	13.2	12.4	12.1	12.7	12.4	13.2	11.4	10.4	9.2	7.5	7.2	7.2	7.8	9.3
Omaha, Nebr	6.5	6.3	5.9	6.1	6.0	5.3	5.4	5.8	6.9	7.9	8.4	9.2	10.3	10.7	10.6	10.4	10.5	9.3	9.0	8.5	6.9	6.3	6.7	7.0	7.7
Oswego, N. Y	9.0	9.0	9.0	9.0	9.4	9.8	9.9	10.0	10.4	10.7	11.2	11.3	10.5	10.3	10.2	9.4	9.0	7.9	7.8	8.1	8.3	8.5	8.7	9.0	9.4
Palestine, Tex	3.6	3.8	3.6	3.8	3.9	3.8	3.7	4.6	5.5	6.4	6.9	6.7	6.3	7.1	6.7	6.8	6.2	6.3	5.9	4.2	2.9	3.2	3.5	3.9	5.0
Parkersburg, W. Va	4.1	4.3	3.8	4.2	4.3	4.0	4.3	4.9	5.7	6.1	6.9	7.5	8.6	8.7	9.3	9.5	8.5	8.0	6.7	4.9	4.3	4.8	4.9	4.6	6.0

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.
Pensacola, Fla	6.7	6.9	7.0	7.1	7.5	7.3	7.0	7.1	8.9	9.5	9.8	9.6	11.0	12.4	13.2	13.6	14.1	13.5	11.2	9.2	7.9	7.3	7.0	6.7	9.2
Philadelphia, Pa	9.4	9.8	9.5	8.8	8.8	8.9	9.7	11.6	12.3	12.8	13.4	13.4	13.8	14.1	14.6	13.6	13.1	12.0	11.4	11.5	11.5	10.7	9.7	9.6	11.4
Phœnix, Ariz	3.3	3.5	3.4	3.4	3.3	4.2	4.5	5.0	4.9	5.0	4.6	4.7	4.6	4.8	5.3	6.3	6.4	6.5	6.7	5.6	4.2	4.1	3.9	3.2	4.6
Pierre, S. Dak	8.9	7.7	7.0	7.3	7.3	7.6	6.9	7.2	9.0	11.9	13.2	13.9	14.0	13.8	14.3	13.9	13.9	13.8	13.2	12.6	11.1	10.2	9.6	9.2	10.7
Pittsburg, Pa	3.7	3.7	4.5	4.4	4.3	4.5	4.6	4.8	5.8	6.8	7.5	7.6	8.4	8.4	9.1	9.0	8.5	7.2	6.5	6.3	6.0	4.9	4.1	4.1	6.0
Port Angeles, Wash.	5.9	5.5	5.9	5.8	6.3	6.2	5.5	5.9	5.0	4.5	6.1	7.0	7.7	8.9	9.4	9.5	10.2	10.6	10.9	10.6	9.8	8.1	6.9	5.8	7.4
Port Huron, Mich	8.5	8.2	8.2	8.6	8.2	8.1	7.6	8.9	9.5	9.9	10.5	10.6	11.5	12.1	13.5	13.6	13.0	11.8	10.2	8.9	8.3	8.4	8.0	8.3	9.8
Portland, Me	5.0	5.1	5.4	5.9	5.6	5.8	7.0	7.2	7.6	7.9	8.1	8.6	8.6	9.3	10.1	10.1	9.6	8.8	7.7	6.7	6.3	5.5	5.6	5.4	7.2
Portland, Oreg	9.7	9.4	8.2	8.6	8.1	6.5	6.3	5.4	5.9	6.8	8.4	8.4	9.2	9.2	8.6	8.9	9.1	9.3	9.1	8.8	8.4	8.4	8.4	9.4	8.3
Pueblo, Colo	5.3	4.4	5.2	5.2	5.2	4.8	4.8	5.0	4.9	5.4	6.7	8.6	8.6	9.1	9.2	10.1	10.8	12.0	11.9	12.0	9.8	8.8	7.4	6.2	7.6
Raleigh, N. C	5.6	5.7	5.7	5.0	5.3	5.5	5.5	6.9	7.7	8.5	8.3	8.1	8.9	8.6	9.1	8.5	7.7	7.3	5.3	5.0	5.0	5.2	5.5	5.7	6.7
Rapid City, S. Dak	6.3	6.5	6.7	6.6	6.5	6.5	6.6	6.0	7.1	9.1	10.6	11.1	11.8	12.7	12.4	11.3	11.8	10.7	10.8	9.8	7.5	5.5	5.6	5.9	8.6
Redbluff, Cal	7.8	7.5	7.1	6.2	6.1	6.1	5.8	5.5	5.7	6.1	7.7	8.3	7.9	8.4	8.2	8.3	8.5	8.6	8.9	9.1	9.0	8.4	7.8	7.1	7.5
Rochester, N. Y	6.0	6.2	6.5	6.3	6.1	6.3	7.1	7.9	8.0	8.1	8.4	8.4	9.1	9.1	9.1	9.1	9.2	8.5	7.4	6.5	6.9	7.1	7.0	6.7	7.5
Roseburg, Oreg	2.7	2.1	2.1	2.4	2.5	2.2	2.0	1.7	2.0	2.4	2.9	3.6	4.0	4.7	4.6	5.5	6.6	7.3	7.6	7.8	7.9	6.6	4.6	3.4	4.1
Sacramento, Cal	11.5	10.8	11.1	11.4	10.7	10.3	10.2	10.4	10.1	9.9	10.2	10.6	10.9	11.1	11.8	12.3	12.1	13.0	13.5	13.1	12.6	11.4	11.1	11.3	11.3
St. Louis, Mo	7.4	6.8	7.4	8.0	7.8	7.7	6.9	7.4	8.9	9.4	9.2	9.4	10.0	10.4	10.6	11.1	10.5	10.2	9.4	8.5	7.9	8.2	7.9	7.7	8.7
St. Paul, Minn	5.9	5.9	5.9	6.0	6.0	6.0	6.1	6.9	6.9	7.9	8.5	9.4	9.6	10.4	10.9	11.5	11.2	9.9	9.8	8.3	6.6	6.0	5.6	5.6	7.8
Salt Lake City, Utah	6.3	5.4	4.9	4.9	4.6	4.1	4.8	4.4	4.6	4.0	5.8	6.9	8.5	8.9	9.4	10.1	10.2	10.0	10.4	9.1	7.0	5.6	6.2	5.7	6.7
San Antonio, Tex	7.4	5.4	5.4	5.2	5.1	5.1	5.4	6.5	6.7	8.8	8.3	7.5	8.3	8.1	8.2	8.6	8.7	9.1	9.7	10.1	9.6	10.1	9.5	8.9	7.7
San Diego, Cal	4.0	3.8	3.4	3.7	3.5	3.6	3.6	3.5	3.2	3.1	3.5	5.3	7.9	8.9	9.7	10.3	10.3	9.7	9.2	8.6	7.5	6.3	5.3	4.4	5.9
Sandusky, Ohio	7.5	7.8	7.8	7.7	7.5	7.3	7.1	7.4	8.5	8.5	9.5	9.7	10.0	9.8	9.6	9.5	8.9	8.7	8.1	7.3	7.1	7.5	7.2	7.5	8.2
San Francisco, Cal	11.9	10.8	10.4	10.4	10.0	8.9	8.4	8.3	7.8	8.3	9.0	9.9	11.2	12.8	15.5	18.2	20.9	21.6	22.0	21.7	20.6	18.4	15.2	12.2	13.5
San Luis Obispo, Cal.	3.2	3.3	3.2	3.1	2.8	2.8	3.4	3.5	3.5	3.9	4.5	5.0	5.8	7.0	7.3	8.5	8.5	9.0	8.5	7.8	7.0	5.9	4.5	3.6	5.2
Santa Fe, N. Mex	6.4	6.5	6.4	5.3	4.7	4.0	4.3	3.7	3.8	4.5	5.1	6.4	8.7	9.7	9.7	9.7	9.5	10.2	9.5	8.3	7.0	5.7	6.1	6.6	6.7
Sault Ste Marie, Mich.	5.6	6.0	6.3	5.7	5.7	6.3	6.7	7.1	7.8	8.4	9.3	10.9	13.0	12.8	12.6	13.1	13.5	12.0	10.5	9.4	8.3	7.1	6.5	5.9	8.8
Savannah, Ga	6.7	6.9	6.5	6.4	6.4	6.2	6.6	8.1	9.5	9.3	8.9	9.8	10.6	11.4	12.0	11.9	11.8	10.7	9.3	7.6	7.8	7.8	7.8	7.5	8.6
Seattle, Wash	4.0	3.5	3.0	3.0	3.5	3.0	3.0	3.2	3.2	3.7	4.2	4.8	5.7	6.0	7.1	7.3	7.6	7.5	7.5	7.0	7.0	5.9	5.1	4.0	5.0
Shreveport, La	4.1	4.6	4.3	4.2	3.9	3.7	4.4	4.6	5.7	6.6	7.0	6.8	6.6	6.3	6.2	6.0	6.0	5.9	5.2	4.6	3.4	3.5	4.0	4.4	5.1
Sioux City, Iowa	9.9	9.7	9.5	8.7	9.4	9.5	9.2	9.8	10.6	12.3	14.6	15.6	17.3	16.9	16.7	16.6	16.5	16.3	15.5	14.1	12.7	11.9	11.4	10.9	12.7
Spokane, Wash	5.5	5.2	4.7	4.9	5.2	5.0	5.1	5.1	5.0	6.5	7.1	7.6	7.7	7.4	7.5	7.9	8.1	8.3	8.2	8.0	7.1	5.8	4.6	5.0	6.4
Springfield, Ill	6.4	6.9	7.1	7.1	6.8	6.4	6.8	7.6	8.7	10.0	10.7	11.2	10.8	11.1	11.0	11.1	10.7	9.8	8.9	7.1	6.1	6.6	6.6	6.5	8.4
Springfield, Mo	7.9	7.6	7.4	7.5	7.4	7.9	8.2	7.9	8.9	10.0	10.9	10.5	10.1	9.7	9.1	9.4	9.1	9.1	8.4	7.8	7.6	8.1	8.0	8.3	8.6
Tampa, Fla	4.9	4.5	4.2	4.3	4.2	4.3	4.7	5.9	7.8	8.4	8.7	8.7	9.7	10.3	10.4	10.8	11.1	10.2	9.5	7.3	6.2	5.7	5.1	4.4	7.1
Tatoosh Island, Wash.	7.5	8.0	9.0	9.5	9.4	10.3	9.8	10.2	10.4	10.9	11.6	12.1	11.4	11.6	10.6	10.9	11.4	10.5	10.1	9.8	9.0	8.5	7.7	7.3	9.9
Toledo, Ohio	7.5	7.6	7.2	7.2	7.7	7.5	7.6	8.5	8.9	9.5	10.1	10.5	11.5	12.1	12.2	12.2	11.5	10.4	9.1	7.5	7.2	7.5	7.1	7.1	9.0
Vicksburg, Miss	5.5	5.3	5.4	5.5	6.0	5.7	5.9	5.5	5.7	5.8	5.5	5.7	7.2	7.5	7.4	7.4	6.9	6.7	5.8	4.8	4.0	4.5	5.1	5.6	5.8
Vineyard Haven, Mass	8.6	8.1	8.1	7.8	7.7	8.1	9.3	10.6	11.4	12.1	12.1	12.6	12.8	12.7	12.7	12.5	11.6	10.7	10.3	9.6	8.6	8.7	8.5	8.7	10.2
Walla Walla, Wash	5.5	6.1	5.2	5.5	5.4	5.6	5.3	5.0	4.7	5.2	5.7	5.9	6.1	6.2	6.3	6.4	5.9	6.5	6.1	6.4	6.6	6.1	5.4	5.4	5.8
Washington, D. C	5.0	4.9	4.8	5.1	5.4	5.7	6.5	8.5	9.6	10.3	11.0	10.9	10.4	10.7	11.0	10.1	8.9	8.3	7.3	5.5	5.3	5.8	5.4	5.4	7.6
Wichita, Kans	5.2	5.3	5.8	5.8	5.4	5.7	6.1	6.6	7.7	8.6	9.0	9.4	9.6	9.9	9.9	9.6	9.2	8.7	8.3	7.4	5.9	5.5	5.8	5.9	7.3
Williston, N. Dak	7.5	7.0	7.0	7.2	6.9	7.6	6.5	6.4	8.4	10.5	11.2	11.4	12.7	13.0	14.1	14.1	13.3	13.6	13.0	13.8	11.0	8.8	8.1	8.6	10.1
Wilmington, N. C	6.4	6.5	7.1	7.1	6.7	6.8	7.3	8.6	10.3	10.7	10.9	10.7	11.1	12.2	12.8	12.8	12.5	11.3	9.3	8.3	8.0	7.4	6.8	6.3	9.1
Woods Hole, Mass	14.4	13.7	13.4	13.6	13.2	13.5	14.8	15.2	15.8	16.4	15.6	16.1	17.2	16.9	17.1	17.3	16.5	16.0	16.2	15.3	14.5	14.0	13.5	13.9	15.2
Yankton, S. Dak	7.6	7.3	7.3	7.8	7.3	7.0	7.0	7.5	9.3	10.9	12.7	12.8	13.0	13.1	13.4	13.1	12.8	12.3	11.7	10.8	9.4	8.2	8.3	7.3	9.9

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

Stations.	Component direction from— N.	S.	E.	W.	Resultant. Direction from—	Duration.
	Hours.	Hours.	Hours.	Hours.	°	Hours.
New England.						
Eastport, Me	16	25	17	12	s. 29 e.	10
Portland, Me	15	20	15	21	s. 50 w.	8
Northfield, Vt	29	15	9	8	n. 4 e.	14
Boston, Mass	18	21	14	24	s. 73 w.	10
Nantucket, Mass	11	29	15	22	s. 21 w.	19
Woods Hole, Mass.*	4	19	6	6	s.	15
Block Island, R. I	14	20	14	33	s. 72 w.	20
New Haven, Conn	22	26	14	13	s. 14 e.	4
Middle Atlantic States.						
Albany, N. Y	20	24	6	19	s. 73 w.	14
Binghamton, N. Y †	10	7	5	13	n. 69 w.	8
New York, N. Y	17	27	11	24	s. 52 w.	16
Harrisburg, Pa	21	14	12	24	n. 60 w.	14
Philadelphia, Pa	21	23	9	22	s. 81 w.	13
Atlantic City, N. J	17	27	9	26	s. 60 w.	20
Baltimore, Md	20	18	14	25	n. 80 w.	11
Washington, D. C	24	23	9	18	n. 84 w.	9
Lynchburg, Va	17	22	11	25	s. 70 w.	15
Norfolk, Va	18	22	19	15	s. 45 e.	5
South Atlantic States.						
Charlotte, N. C	14	22	26	11	s. 62 e.	17
Hatteras, N. C	24	22	12	19	n. 74 w.	7
Kittyhawk, N. C.	22	20	20	19	n. 27 e.	2
Raleigh, N. C	23	20	9	22	n. 77 w.	13
Wilmington, N. C	21	26	12	16	s. 39 w.	6
Charleston, S. C	9	25	16	17	s. 3 w.	16
Augusta, Ga	24	18	12	18	n. 45 w.	8
Savannah, Ga	14	31	11	16	s. 16 w.	18
Jacksonville, Fla	16	27	23	15	s. 36 e.	14
Florida Peninsula.						
Jupiter, Fla	17	20	20	15	s. 59 e.	6
Key West, Fla	19	8	35	9	n. 67 e.	28
Tampa, Fla	23	5	21	23	n. 6 w.	18
Eastern Gulf States.						
Atlanta, Ga	22	16	12	30	n. 72 w.	19
Pensacola, Fla	21	23	13	22	s. 77 w.	9
Mobile, Ala	26	21	4	18	n. 70 w.	15
Montgomery, Ala	23	14	15	24	n. 45 w.	13
Vicksburg, Miss	20	18	21	17	n. 63 e.	4
New Orleans, La	21	24	24	14	s. 73 e.	10
Western Gulf States.						
Shreveport, La	16	22	25	16	s. 56 e.	11
Fort Smith, Ark	15	12	31	14	n. 89 e.	17
Little Rock, Ark	29	13	14	17	n. 11 w.	16
Corpus Christi, Tex	6	28	41	2	s. 61 e.	45
Galveston, Tex	8	34	27	10	s. 33 e.	31
Palestine, Tex	15	30	24	7	s. 48 e.	23
San Antonio, Tex	18	21	36	2	s. 85 e.	34
Ohio Valley and Tennessee.						
Chattanooga, Tenn	23	17	10	21	n. 45 w.	16
Knoxville, Tenn	29	8	15	23	n 36 w.	14
Memphis, Tenn	23	14	19	20	n. 6 w.	9
Nashville, Tenn	31	11	8	28	n. 27 w.	22
Lexington, Ky	24	18	13	23	n. 59 w.	12
Louisville, Ky	17	21	14	25	s. 70 w.	12
Indianapolis, Ind	21	17	9	24	n. 75 w.	16
Cincinnati, Ohio	19	20	17	22	s. 79 w.	5
Columbus, Ohio	16	17	10	32	s. 87 w.	22
Pittsburg, Pa	19	20	7	30	s. 88 w.	23
Parkersburg, W. Va	22	25	9	22	s. 77 w.	13
Lower Lake Region.						
Buffalo, N. Y	10	22	12	33	s. 60 w.	24
Oswego, N. Y	11	24	14	27	s. 45 w.	18
Rochester, N. Y	16	18	11	27	s. 83 w.	16
Erie, Pa	9	20	9	36	s. 68 w.	29
Cleveland, Ohio	20	23	6	25	s. 81 w.	19
Sandusky, Ohio	18	22	9	29	s. 79 w.	20
Toledo, Ohio	13	12	10	38	n. 88 w.	28
Detroit, Mich	16	22	9	34	s. 77 w.	26
Upper Lake Region.						
Alpena, Mich	22	16	18	22	n. 34 w.	7
Grand Haven, Mich	21	20	9	27	n. 87 w.	18
Marquette, Mich	32	11	9	29	n. 44 w.	29
Port Huron, Mich	25	25	8	16	w.	8
Sault Ste. Marie, Mich	25	9	21	25	n. 14 w.	16
Chicago, Ill	25	14	7	24	n. 57 w.	20
Milwaukee, Wis	21	13	17	21	n. 27 w.	10
Upper Lake Region—Cont'd.						
Greenbay, Wis	19	24	12	18	s. 50 w.	8
Duluth, Minn	31	9	25	16	n. 22 e.	24
North Dakota.						
Moorhead, Minn	22	20	23	17	n. 72 e.	6
Bismarck, N. Dak	26	16	18	13	n. 27 e.	11
Williston, N. Dak	26	19	16	12	n. 30 e.	8
Upper Mississippi Valley.						
St. Paul, Minn	26	21	8	25	n. 74 w.	18
La Crosse, Wis. †	10	13	4	8	s. 53 w.	5
Davenport, Iowa	20	18	12	29	n. 83 w.	17
Des Moines, Iowa	29	17	11	20	n. 37 w.	15
Dubuque, Iowa	16	17	8	31	s. 88 w.	23
Keokuk, Iowa	21	23	10	24	s. 82 w.	14
Cairo, Ill	30	15	19	13	n. 22 e.	16
Springfield, Ill	19	26	9	19	s. 55 w.	12
Hannibal, Mo. †	8	14	5	13	s. 53 w.	10
St. Louis, Mo	14	26	14	18	s. 18 w.	13
Missouri Valley.						
Columbia, Mo.*	11	7	11	10	n. 14 e.	4
Kansas City, Mo	28	18	16	13	n. 17 e.	10
Springfield, Mo	19	24	19	15	s. 39 e.	6
Lincoln, Nebr	18	26	20	14	s. 37 e.	10
Omaha, Nebr	21	22	18	12	s. 80 e.	6
Sioux City, Iowa †	10	15	6	5	s. 11 e.	51
Pierre, S. Dak	17	23	24	13	s. 61 e.	12
Huron, S. Dak	19	27	19	14	s. 32 e.	9
Yankton, S. Dak	16	20	17	16	s. 14 e.	4
Northern Slope.						
Havre, Mont	20	15	16	26	n. 63 w.	11
Miles City, Mont	21	18	21	16	n. 59 e.	6
Helena, Mont	13	23	8	36	s. 70 w.	30
Rapid City, S. Dak	21	20	16	23	n 82 w.	7
Cheyenne, Wyo	25	19	9	22	n. 65 w.	14
Lander, Wyo	19	24	17	21	s. 39 w.	6
North Platte, Nebr	13	27	16	19	s. 12 w.	14
Middle Slope.						
Denver, Colo	15	27	14	19	s. 23 w.	13
Pueblo, Colo	28	8	16	23	n. 19 w.	21
Concordia, Kans	14	29	16	11	s. 18 e.	16
Dodge City, Kans	14	31	20	8	s. 35 e.	21
Wichita, Kans	18	23	19	5	s. 70 e.	15
Oklahoma, Okla	15	29	23	7	s. 49 e.	21
Southern Slope.						
Abilene, Tex	13	32	29	6	s. 50 e.	30
Amarillo, Tex	16	32	13	8	s. 17 e.	17
Southern Plateau.						
El Paso, Tex	20	7	30	19	n. 40 e.	17
Santa Fe, N. Mex	14	24	26	16	s. 45 e.	14
Phœnix, Ariz	23	6	27	19	n. 25 e.	19
Yuma, Ariz	13	24	10	16	s. 29 w.	12
Middle Plateau.						
Carson City, Nev	23	12	6	35	n. 69 w.	31
Winnemucca, Nev	26	14	19	19	n.	12
Salt Lake City, Utah	17	22	28	14	s. 70 e.	15
Northern Plateau.						
Baker City, Oreg	27	26	11	12	n. 45 w.	1
Idaho Falls, Idaho	24	32	4	8	s. 27 w.	9
Spokane, Wash	14	28	15	20	s. 30 w.	15
Walla Walla, Wash	20	20	10	9	s. 6 e.	9
North Pacific Coast Region.						
Fort Canby, Wash	27	18	6	16	n. 48 w.	14
Port Angeles, Wash.*	2	0	7	23	n. 83 w.	16
Seattle, Wash	26	19	9	18	n. 52 w.	11
Tatoosh Island, Wash	11	25	13	26	s. 43 w.	19
Portland, Oreg	29	13	5	32	n. 50 w.	31
Roseburg, Oreg	33	5	13	24	n. 22 w.	30
Middle Pacific Coast Region.						
Eureka, Cal	26	13	6	31	n. 28 w.	63
Redbluff, Cal	25	23	23	12	n. 80 e	11
Sacramento, Cal	15	35	1	28	s. 53 w.	34
San Francisco, Cal	2	23	1	49	s. 66 w.	52
South Pacific Coast Region.						
Fresno, Cal	35	5	6	40	n. 48 w.	45
Los Angeles, Cal	9	24	12	30	s. 50 w.	23
San Diego, Cal	25	18	8	23	n. 71 w.	21
San Luis Obispo, Cal	22	11	2	30	n. 52 w.	36

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

TABLE IX.—*Thunderstorms and auroras, May, 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.										2		3	1	4									1	3						3	1	18	8	T.
		A.																																0	0	A.
Arizona	49	T.		4	1	1									1	1	1													2	9	4	2	26	10	T.
		A.																																0	0	A.
Arkansas	50	T.						1	2	5	6	8	4	2		1									3		1		1	10	3			47	13	T.
		A.																																0	0	A.
California	197	T.		2										4	5	15	4	2				2			7	2		1						44	10	T.
		A.																																0	0	A.
Colorado	71	T.	1	4	3	7	10	3	8	5	3	4	4	2	4	6	5	11	5	9	7	11	7	1		10	6	5	5		4	12	9	171	29	T.
		A.																											1				1	2	2	A.
Connecticut	14	T.										4		9	2	1							10			3	2					10	4	45	9	T.
		A.																			1													1	1	A.
Delaware	4	T.												3	1								3			2							2	11	5	T.
		A.		2																														2	1	A.
Dist. of Columbia	4	T.		1										1	1								1			1								5	5	T.
		A.																																0	0	A.
Florida	38	T.									1		3	12	12	9	11			1					1	4	1				3	1		59	12	T.
		A.																																0	0	A.
Georgia	50	T.	1			1						3		7	5	1	1	1					1							2		2	2	27	12	T.
		A.																																0	0	A.
Idaho	36	T.	3				6	2	1						5	8	9	7	3	1	2	6	5	1		7	7					1	2	76	18	T.
		A.																												1				1	1	A.
Illinois	97	T.		1						9	13		7		3	1	2				1	11		14	4				9	4	1			80	14	T.
		A.								1				1									1	1					1			1		6	6	A.
Indiana	49	T.							1	8	17		6			3	9					14		2	7	2								69	10	T.
		A.										1				1																		2	2	A.
Indian Territory	7	T.					1				2	2		1	1			1						2					1					11	8	T.
		A.																																0	0	A.
Iowa	101	T.								20	6	5			4					1	24	4	3	10			3	9	9	1				99	13	T.
		A.																																0	0	A.
Kansas	73	T.		3			1		4	11	3	10	2	11	4							5	8	7		2	11	6	12			1		101	17	T.
		A.		1				1																										2	2	A.
Kentucky	47	T.	1	1						5	8	1	7		1	5	2								5	2	1		1	3	1	1		45	18	T.
		A.																																0	0	A.
Louisiana	51	T.							3	8	7	7	4	10	10	4	1	1									1				5	8	3	72	14	T.
		A.																																0	0	A.
Maine	13	T.																					1								2		1	4	3	T.
		A.																			1													1	1	A.
Maryland	31	T.	1	1	1	2	1	2			1	2	5	10	5	4						5	12		4	10						3	4	73	18	T.
		A.																	1															1	1	A.
Massachusetts	27	T.										8											9			2	7					2	7	35	6	T.
		A.																													2			2	1	A.
Michigan	96	T.								14	20	1	5	1	2	5	3			3	1	9	1	5	7				1	1				79	16	T.
		A.																				2	3	2										7	3	A.
Minnesota	69	T.								8		1	1	1		1			1	4	9			3			2	2	2					35	12	T.
		A.													1			1	1					1							3	1		8	6	A.
Mississippi	45	T.	1							3	1	8	2	8	1	5									2	2					4	6	1	44	13	T.
		A.																																0	0	A.
Missouri	96	T.		1	1			2	1	15	19	5	10	8	3	1					4	11	9	18	10		11	24	18	10	2			183	21	T.
		A.																																0	0	A.
Montana	40	T.					1	1		1	1					1	2	5	3	2	2	2	1			1	6	1				5	1	36	18	T.
		A.	1	1																		1	3						1		1			8	6	A.
Nebraska	112	T.							8	7	1	7	1	1	1		1		1	5	11	1	14	4			3	7	12	1			2	88	19	T.
		A.																		1											3			4	2	A.
Nevada	39	T.	2	1	1	1		1				1			2	3	4	1	5	4	5	6	5	4	9	5							1	61	19	T.
		A.																																0	0	A.
New Hampshire	23	T.			1					1	2	3								5		5	3				1		1		1			23	10	T.
		A.						2													1			1							1		1	6	5	A.
New Jersey	54	T.	3	1		1						12	1	13	7	1	1		1				20			13	4					12	11	101	15	T.
		A.							1																				1					2	2	A.
New Mexico	42	T.	3	2	5	1	1	1	1			2	2	2			3	3	2	4	5	2		2	4	2	4		5		2	5	2	65	24	T.
		A.																																0	0	A.
New York	93	T.	1		1	1			1	1	5	7	1	9		3						6	4		6	13			1			2	1	63	17	T.
		A.																																0	0	A.
North Carolina	60	T.	14				10	1		2	3	4	11	9	11	6	5	2	5				18	4	11	15	1			3	15	14	8	172	22	T.
		A.																																0	0	A.
North Dakota	39	T.						1	7	2			1			1			4	3	4		4	1	1			1	1	1				32	14	T.
		A.		1									1	2	1							4	1		1						2	1	1	15	10	A.
Ohio	140	T.	1							2	36	6	10	7		11	9	1	2			35	6	1	28	13				2				170	16	T.
		A.																													2	2		4	2	A.
Oklahoma	20	T.		1		2	1		2	2	7	5	1	1	5									4					7	1				39	13	T.
		A.																																0	0	A.
Oregon	60	T.				2	6				1					1	3	5				1			2	2	1				5	1		30	12	T.
		A.																			1	1	1											3	3	A.
Pennsylvania	93	T.		1	1						8	3	4	10	4	10	1					2	10	1	13	14	1					6	5	94	17	T.
		A.																																0	0	A.
Rhode Island	6	T.																					3				2						2	7	3	T.
		A.																																0	0	A.
South Carolina	42	T.	7	1						2		3	3	10	9	5	3	1	1				2	3	8	2				2	5	7	3	77	19	T.
		A.																																0	0	A.
South Dakota	46	T.		1					2			1						3	1	9	5			2			3	2	3				1	33	12	T.
		A.																				1									1	1		3	3	A.
Tennessee	49	T.							1	7	5	9	5	3	3	1						1	5		5	2					1	7		55	14	T.
		A.																																0	0	A.
Texas	91	T.				3	6	7	9	1	3	5	13	12	10	14	3	13	7					5	5	2			4	4	4			130	20	T.
		A.																																0	0	A.
Utah	32	T.	2	5	3	4	1								1	3	3		1	1	7	6	2		2	3	1	1				4		50	18	T.
		A.																																0	0	A.
Vermont	13	T.									1	3								3		3	1			3	1							15	7	T.
		A.															1																	1	1	A.
Virginia	37	T.	6				1				6		10	5	4	1	1	2	1			1	8		4	14					1	4		69	16	T.
		A.																																0	0	A.
Washington	51	T.					13								1			5	2											2	19	1		43	7	T.
		A.																				1	1		1									3	3	A.
West Virginia	37	T.									5	1	3	1				2					1		5	6						2		26	9	T.
		A.																				1												1	1	A.
Wisconsin	58	T.		1						5		3		4	2	1				7	5	2			4				1	1				36	12	T.
		A.																				1	4		1						1		1	8	5	A.
Wyoming	11	T.		3		1		1	1	1					1		2			2	2	3	2	1			2	1				2	2	27	16	T.
		A.																																0	0	A.
Sums	2,644	T.	47	35	18	27	59	23	52	145	191	146	126	180	132	137	89	66	45	64	94	154	179	99	154	162	83	61	94	49	87	126	77	3,001		T.
		A.	1	5	0	0	0	3	1	1	0	1	1	3	2	1	1	1	2	1	4	12	14	6	2	0	0	0	4	1	16	6	4	93		A.

TABLE X.—*Hourly sunshine as deduced from sunshine recorders, May, 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.	Percent of possible.	
																		Hours.	*Hours.*		
Albany, N. Y	T.	33	29	32	46	59	63	71	75	73	71	68	57	52	42	24	21	242.1	454.9	53	42
Atlanta, Ga	T.	82	77	78	77	78	76	78	76	71	73	72	67	68	66	67	75	316.6	432.6	73	62
Atlantic City, N. J	P.	67	65	62	63	65	70	65	61	60	67	71	68	60	54	49	58	277.6	443.8	63	50
Baltimore, Md	T.	63	58	61	62	65	70	75	80	66	62	58	46	46	29	27	39	255.4	443.8	58	43
Binghamton, N. Y	T.	42	42	43	49	60	63	66	64	54	46	38	38	31	25	27	33	206.8	451.9	46	38
Bismarck, N. Dak	P.	68	71	71	72	72	77	83	71	67	77	76	76	73	54	58	53	329.5	467.4	71	65
Boston, Mass	T.	13	23	30	35	38	45	53	56	53	49	47	52	49	45	45	22	196.0	451.9	43	35
Buffalo, N. Y.*	T.	32	32	41	54	68	71	75	80	79	74	71	70	54	45	34	33	244.1	412.4	59	42
Charleston, S. C	T.	47	52	57	84	91	93	95	95	94	92	92	82	73	64	61	70	346.3	430.7	80	70
Chattanooga, Tenn	T.	48	48	50	60	65	64	70	65	64	63	59	56	61	38	36	50	248.3	434.2	57	53
Cheyenne, Wyo	P.	43	61	77	82	85	84	77	71	61	65	62	57	52	54	39	29	293.5	449.1	65	43
Chicago, Ill	T.	49	48	50	63	71	75	75	75	77	78	72	62	58	39	33	35	279.1	451.9	62	57
Cincinnati, Ohio	T.	58	58	56	55	67	69	69	70	71	68	69	65	60	58	58	69	281.5	443.8	63	55
Cleveland, Ohio	T.	8	6	7	17	33	50	62	66	67	65	60	51	39	31	24	32	182.3	451.9	40	39
Columbus, Ohio	T.	40	35	35	43	64	76	75	74	75	64	69	63	53	53	50	50	262.4	446.7	59	49
Denver, Colo	P.	75	75	78	91	93	89	91	80	73	66	63	65	53	47	44	42	320.5	446.7	72	43
Des Moines, Iowa	T.	63	71	68	68	76	82	80	86	83	83	76	69	59	55	54	47	323.7	451.9	72	67
Detroit, Mich	T.	33	29	29	50	61	68	71	73	72	75	68	64	58	33	24	22	245.3	451.9	54	42
Dodge City, Kans	P.	22	32	52	65	69	68	73	68	68	73	78	79	73	64	32	36	278.5	441.7	63	58
Dubuque, Iowa	T.	50	52	55	75	87	86	89	89	91	91	78	76	62	50	45	36	326.1	451.9	72	75
Eastport, Me	P.	17	16	15	18	23	28	32	33	35	43	39	36	35	30	23	19	130.7	460.7	28	20
Erie, Pa	T.	28	26	30	40	59	64	66	71	75	76	70	60	56	42	30	28	242.1	451.9	54	47
Eureka, Cal	P.	8	10	30	39	46	58	65	66	75	72	68	64	64	58	39	26	235.8	449.1	53	47
Fresno, Cal	T.	78	77	78	83	90	94	94	95	96	93	94	92	89	82	81	90	387.6	439.0	88	83
Galveston, Tex	P.	.....	31	72	75	79	75	78	76	78	79	83	88	81	75	55	.....	311.7	421.8	74	68
Harrisburg, Pa	T.	69	58	61	68	75	80	82	80	84	77	73	68	61	53	39	38	304.3	446.7	68	38
Helena, Mont	P.	64	67	75	74	73	70	74	78	72	63	71	71	65	61	60	49	321.2	467.4	69	63
Idaho Falls, Idaho	T.	43	39	40	63	76	85	85	89	87	82	77	71	60	41	23	29	291.9	454.9	64	67
Indianapolis, Ind	T.	64	61	64	68	72	70	69	68	75	76	77	72	64	54	53	62	300.1	446.7	67	58
Kansas City, Mo	P.	39	33	46	53	56	68	67	65	70	73	77	65	65	58	42	39	263.9	443.8	59	57
Key West, Fla	T.	.....	75	79	84	89	91	93	94	87	84	89	85	84	68	69	.....	348.5	414.6	84	64
Little Rock, Ark	T.	52	54	60	71	88	88	90	91	87	91	91	91	89	73	58	38	346.3	434.2	80	56
Los Angeles, Cal	P.	0	4	9	10	18	33	48	65	72	75	79	83	81	71	54	25	216.1	432.6	50	45
Louisville, Ky	T.	69	62	68	70	73	73	79	82	82	76	72	70	62	57	57	71	310.8	441.7	70	48
Minneapolis, Minn	T.	30	45	55	56	56	61	56	57	56	68	66	67	55	43	36	30	249.0	460.7	54	.....
Nashville, Tenn	T.	72	62	61	65	71	73	75	79	80	77	74	66	64	64	60	57	302.6	436.7	69	64
New Orleans, La	T.	60	59	58	60	69	72	70	74	75	68	67	63	49	42	44	.....	264.6	423.7	62	63
New York, N. Y	T.	41	38	54	63	71	75	76	84	89	83	83	79	72	62	34	36	304.9	449.1	68	48
Northfield, Vt	P.	28	31	39	42	52	50	51	50	51	46	46	49	49	42	20	10	195.9	457.9	43	32
Omaha, Nebr	P.	55	65	69	70	77	80	78	78	77	76	79	74	63	59	45	34	314.1	449.1	70	60
Philadelphia, Pa	T.	66	62	63	64	69	73	79	83	85	87	84	73	65	59	56	62	318.8	446.7	71	44
Phœnix, Ariz	P.	100	94	94	95	99	99	98	97	98	96	88	85	85	84	86	80	399.3	430.7	93	82
Pittsburg, Pa	T.	28	26	24	30	40	56	62	68	71	65	66	60	44	30	29	28	212.3	449.1	47	45
Portland, Me	T.	0	9	22	36	43	49	58	63	65	65	66	56	42	42	20	5	197.8	457.9	43	23
Portland, Oreg	T.	49	46	49	53	56	68	75	77	73	72	72	68	56	49	49	54	283.0	464.1	61	58
Portland, Oreg	P.	49	46	55	57	58	65	70	63	67	68	69	69	64	64	56	54	285.2	464.1	61	58
Raleigh, N. C	T.	33	36	37	53	75	84	91	93	86	87	81	77	59	52	45	43	296.6	436.7	68	51
Rochester, N. Y	T.	37	32	31	33	43	47	46	51	46	54	51	49	43	40	35	31	195.0	454.9	43	41
St. Louis, Mo	T.	49	60	69	74	78	87	88	91	81	77	80	76	79	71	52	53	334.7	443.8	75	60
St. Paul, Minn †	P.	41	41	52	54	51	55	41	29	31	44	51	62	61	58	38	43	149.4	316.1	47	35
Salt Lake City, Utah	P.	71	75	79	75	84	84	85	78	66	69	71	69	68	67	53	50	326.9	449.1	73	36
San Diego, Cal	P.	13	16	14	16	28	45	61	67	68	69	67	65	58	57	54	50	210.4	430.7	49	49
San Francisco, Cal	T.	22	36	45	52	56	81	96	98	99	99	100	91	78	59	35	36	319.9	441.7	72	59
Santa Fe, N. Mex	P.	36	49	72	79	79	85	77	70	68	55	51	45	49	38	21	7	260.8	436.7	60	52
Savannah, Ga	P.	75	73	77	85	84	88	90	85	87	80	82	88	73	50	32	.....	330.3	428.4	77	68
Seattle, Wash	T.	44	45	54	59	59	65	84	95	89	89	90	87	71	55	43	40	321.4	471.3	68	51
Spokane, Wash	P.	38	40	53	67	76	84	84	86	93	88	86	76	74	59	47	41	328.8	471.3	70	59
Tampa, Fla	T.	.....	83	84	82	79	85	82	79	82	82	80	73	72	74	75	.....	333.2	419.8	79	77
Vicksburg, Miss	T.	75	62	72	83	95	99	99	99	96	94	93	89	85	79	65	.....	371.3	428.4	87	74
Washington, D. C	P.	46	45	44	59	67	70	74	71	66	73	64	69	62	42	36	42	265.6	443.8	50	55
Wilmington, N. C	T.	14	11	40	69	81	90	97	97	93	95	89	81	72	52	21	25	307.8	432.6	71	61

* All values are for 28 days; the total possible and personal estimate for 31 days are 454.9 and 38 respectively.
† All values are for 21 days; the total possible and personal estimate for 31 days are 460.7 and 48 respectively.

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 May, 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	14			0.20														0.12			
Atlantic City, N. J	1-2			0.66														0.28			
Baltimore, Md	21	1.43 p.m.	2.35 p.m.	0.72	1.49 p.m	2.00 p.m.	0.01	0.57	0.67	0.70	0.71										
Binghamton, N. Y	23-24			0.69														0.35			
Bismarck, N. Dak	17			0.60														0.50			
Boston, Mass	25			0.72														0.47			
Buffalo, N. Y	12			0.45														0.37			
Chicago, Ill	22-23			0.48														0.15			
Cincinnati, Ohio	23-24			0.42														0.33			
Cleveland, Ohio	9-10			0.75														0.32			
Denver, Colo	24	3.48 p.m.	5.10 p.m.	0.45	4.45 p.m.	4.55 p.m.	0.04	0.25	0.39	0.40											
Des Moines, Iowa	8-9			1.11														0.62			
Detroit, Mich	9			0.49														0.45			
Dodge City, Kans	27			0.39														0.33			
Duluth, Minn	22			0.49														0.22			
Eastport, Me	25-26			1.85														0.70			
Erie, Pa	20-21			0.65														0.22			
Galveston, Tex	11			0.79														0.28			
Harrisburg, Pa	14			0.52														0.40			
Hatteras, N. C	1	1.12 p.m.	10.15 p.m.	0.98	2.18 p.m.	2.33 p.m.	0.05	0.30	0.40	0.50											
Indianapolis, Ind	15	12.20 p.m.	2.20 p.m.	1.06	12.52 p.m.	1.43 p.m.	0.15	0.10	0.18	0.20	0.20	0.20	0.25	0.39	0.51	0.66	0.78				
Jacksonville, Fla	12	7.15 p.m.	10.20 p.m.	0.82	9.27 p.m.	9.45 p.m.	0.27	0.06	0.13	0.39	0.50										
Jupiter, Fla	30-31	5.00 a.m.	3.00 a.m.	8.76	†	8.50 a.m.		1.34	1.42	1.50	1.55	1.56	1.60	1.67	1.74	1.82	1.87				
Do					8.50 a.m.	9.40 a.m.		1.92	1.99	2.06	2.14	2.19	2.22	2.25	2.29	2.34	2.39				
Do					9.40 a.m.	11.30 a.m.		2.43	2.46	2.50	2.53	2.57	2.60	2.62	2.64	2.69	2.73				
Do					10.30 a.m.	11.20 a.m.		2.80	2.89	2.97	3.05	3.09	3.16	3.24	3.29	3.35	3.40				
Do					11.20 a.m.	12.10 p.m.		3.44	3.49	3.55	3.62	3.68	3.76	3.92	4.09	4.18	4.34				
Do					12.10 p.m.	1.10 p.m.		4.58	4.76	4.93	5.14	5.43	5.68	5.89	6.07	6.22	6.28	6.45			
Kansas City, Mo	27-28			0.39														0.35			
Key West, Fla	29-30	5.26 p.m.	12.10 a.m.	2.05	9.20 p.m.	9.35 p.m.	1.07	0.08	0.15	0.17	0.19	0.20	0.23	0.35	0.55	0.70	0.73	0.77	0.87		
Lincoln, Nebr	19-20			0.82														0.14			
Little Rock, Ark	28			0.52														0.38			
Louisville, Ky	11-12			0.71														0.46			
Memphis, Tenn	13	11.22 p.m.	11.42 p.m.	0.55	11.22 p.m.	11.42 p.m.	0.00	0.30	0.41	0.48	0.55										
Milwaukee, Wis	26			0.21														0.15			
Montgomery, Ala	14			0.39														0.38			
Nantucket, Mass	14			0.49														0.20			
Nashville, Tenn	10			0.53														0.50			
New Orleans, La	12			0.16							0.16										
New York, N. Y	24-25	8.40 p.m.	1.10 a.m.	0.80	9.54 p.m.	10.34 p.m.	T.	0.20	0.36	0.46	0.49	0.55	0.61	0.65	0.67						
Norfolk, Va	24	4.43 p.m.	6.35 p.m.	0.74	5.20 p.m.	5.45 p.m.	0.10	0.09	0.22	0.40	0.55	0.60									
Omaha, Nebr	11	4.58 p.m.	7.55 p.m.	0.50	5.12 p.m.	5.22 p.m.	T.	0.25	0.41	0.43	0.45										
Philadelphia, Pa	21	2.32 p.m.	4.50 p.m.	0.50	2.38 p.m.	2.53 p.m.	T.	0.30	0.37	0.41	0.43	0.45									
Pittsburg, Pa	1-2			1.05														0.34			
Portland, Me	2-3			1.68														0.33			
Portland, Oreg	16-17			0.35														0.07			
Raleigh, N. C	30-31			0.49														0.22			
Rochester, N. Y	14			0.19														0.17			
St. Louis, Mo	9			0.78														0.51			
St. Paul, Minn	18-19			1.05														0.29			
Salt Lake City, Utah	24			0.48											0.25						
San Diego, Cal	23			0.04																	
San Francisco, Cal	16-17			0.61														0.19			
Savannah, Ga	12			0.38														0.35			
Tampa, Fla	11			0.12														0.06			
Vicksburg, Miss	10			0.18														0.15			
Washington, D. C	12-13	11.30 p.m.	9.40 a.m.	1.75	12.35 a.m.	1.30 a.m.	0.15	0.13	0.15	0.30	0.39	0.41	0.45	0.48	0.56	0.66	0.72	0.81	0.89	0.98	1.07
	24	5.36 p.m.	8.24 p.m.	0.98	5.36 p.m.	6.21 p.m.	T.	0.05	0.30	0.33	0.40	0.42	0.46	0.55	0.69	0.73	0.75	0.79	0.85		
Wilmington, N. C	15	7.15 p.m.	9.10 p.m.	0.48	7.33 p.m.	7.45 p.m.	0.02	0.18	0.33	0.41	0.42										

* Self register out of order. † The storm began about 5 a. m. of the 30th, but the self register failed to record until 8 a. m., at which time 1.25 inches had fallen. Heavy rain continued from 8 a. m. to 1 10 p. m., during which time 5.20 inches were recorded, making a total fall of 6.45 inches in 8 hours and 10 minutes. Light rain continued after 1.10 p. m., until 10.30 p. m., when heavy rain again began, 0.90 falling in about 30 minutes, after which rain continued light until about 3 a. m. of the 31st. The accumulated amounts for each 5 minutes are given from 8 a. m. to 1.10 p. m., the first amount, 1.34, being the total fall from the beginning of the storm to 8.05 a. m.

TABLE XII.—*Excessive precipitation, by stations, for May*, 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.
	Inches.	*Inches.*		*Ins.*	*h.m.*	
Alabama.						
Birmingham		2.88	13			
Decatur		3.30	12-13			
Scottsboro		2.97	10			
Arkansas.						
Arkansas City		3.25	9-10	2.45	1 30	10
Fulton				2.43	1 00	11
Newport				1.50	1 00	12
Colorado.						
Arkins		2.68	20			
Boxelder		2.60	19-20			
Greeley				1.18	0 30	21
Wray		3.00	20			
District of Columbia.						
Washington		2.81	12-13			
West Washington		3.17	12-13			
Florida.						
Boca Raton	11.00	9.85	30-31			
Earnestville				2.12	0 30	15
Huntington				1.26	1 00	14
Jupiter	10.73	8.76	30-31	2.84	1 29	30
Kissimmee		2.55	12			
Lemon City		4.00	30			
Plant City				1.88	1 00	12
Georgia.						
Washington				2.25	2 00	1
Waycross		2.98	13-14	2.30	0 55	13
Illinois.						
Laharpe				1.75	1 30	27
Indian Territory.						
Healdton		5.58	9-10			
Kemp		3.69	10			
Tahlequah		4.35	28-29			
Iowa.						
Denison				1.00	1 00	19
Guthrie Center				1.70	1 30	19
Kansas.						
Delphos				1.12	1 00	26
Downs				1.43	0 40	10
Gove		2.66	8			
Meade				2.10	0 45	21
Louisiana.						
Alexandria		3.51	11			
Amite		3.15	12-13			
Covington		2.55	13			
Franklin				1.28	0 40	30
Hammond		2.85	12			
Lafayette				1.19	0 40	29
Mansfield				1.54	1 30	24
Thibodeaux				2.22	0 30	14
Maine.						
Bar Harbor		2.50	2-3			
Maryland.						
Bachmans Valley		2.74	13-14			
Boettcherville		3.00	1-2			
Collegepark		2.60	13			
Taneytown		3.35	12-13			
Mississippi.						
Windham		2.88	11			
Woodville		2.84	8			
Missouri.						
Elmira				1.36	1 00	22
Irena				1.07	1 00	22
Lamonte		3.38	26	3.38	3 00	26
Mount Vernon		3.00	9			
Platte River		3.82	25-26	3.00	3 00	25-26
Sarcoxie		2.74	9			
Sedalia		3.00	26			
Nebraska.						
Alliance				1.23	1 10	31
Arapaho		2.50	21			
Auburn		2.87	25-26			
Rulo				1.70	1 00	25
Tecumseh		4.40	26			
New Hampshire.						
Hanover		2.77	12-13			
New Jersey.						
Belvidere		2.62	13			
Charlotteburg		3.23	12-13			
Chester		4.00	1-2			
Dover		3.98	1-2			
Englewood		2.98	10	2.98	2 15	10
Hanover		2.58	13			

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.
	Inches.	*Inches.*		*Ins.*	*h.m.*	
New Jersey—Continued.						
Junction		4.25	1-2			
Rivervale		3.20	12-13			
Roseland		2.75	13			
Sergeantsville		2.59	1-2			
Somerville		2.52	1-2			
New Mexico.						
Galisteo		3.00	19			
Gallinas Spring				1.15	0 30	27
New York.						
Bedford		4.72	12-13	1.75	0 50	12
Catskill		3.30	13			
North Carolina.						
Beaufort		4.07	1			
Flatrock		2.88	1			
Lumberton		2.54	2			
Pantego		3.14	1			
Settle				1.12	0 45	11
North Dakota.						
Forth Berthold				1.03	1 00	25
Oklahoma.						
Arapaho		3.48	5-6			
Beaver				1.18	0 30	27
Prudence				1.30	1 00	13
Pennsylvania.						
Blooming Grove		3.32	1-2			
Coopersburg		3.58	12-13			
Duncannon				1.02	1 00	14
East Bloomsburg				1.10	0 45	14
Frederick		2.63	13			
Hamburg		2.50	1-2			
Huntingdon		3.00	1-2			
Ottsville		2.95	13			
Point Pleasant		3.08	1-2			
Do		2.82	13			
Pottstown		2.50	1-2			
Seisholtzville		3.03	1-2			
Smiths Corners	10.05	3.06	1-2			
Do		2.73	13			
Swiftwater		3.00	2			
South Carolina.						
Georgetown		2.75	13			
South Dakota.						
Armour		2.55	18	0.95	0 25	18
Wentworth		3.09	26-27			
Tennessee.						
Clinton		2.60	12-13			
Decatur		3.91	12-13			
Erasmus		3.07	12-13			
Knoxville		2.97	12-13			
Texas.						
Beeville		2.75	11	2.75	2 25	11
Brownwood		3.95	5-6			
Columbia				1.17	1 00	14
Dublin		2.65	6-7			
Forestburg		4.58	9-10			
Gail		4.50	28	4.50	2 00	28
Golindo				1.80	1 30	11
Hearne		2.75	16			
Henrietta				1.35	1 00	22
Houston		2.55	24-25			
Junction City				1.24	1 00	24
Longview		2.55	28-29	1.00	1 00	28
Lufkin		2.51	30			
Rheinland				1.12	1 00	26
Rocksprings		3.10	12-13	1.34	1 15	11
Do				2.00	1 15	12
Do				1.00	1 00	13
Sanderson				1.00	1 00	11
San Marcos				1.17	1 00	5
Stafford		2.50	24	1.00	1 00	6
Tivoli				1.40	0 30	11
Waxahachie		3.10	10			
Virginia.						
Alexandria		3.22	12-13			
Barboursville		2.94	12-13	1.33	1 20	24
Guinea		3.00	23			
Staunton		3.53	1			
Wisconsin						
Citypoint		4.40	19	4.40	1 30	19