CLIMATOLOGICAL DATA FOR AUGUST, 1913.

DISTRICT NO. 5, UPPER MISSISSIPPI VALLEY.

GEO. M. CHAPPEL, District Editor.

GENERAL SUMMARY.

August, 1913, takes rank as a notable month in the climatological history of the Upper Mississippi Valley. Over the southern half of the district it was a month of intense heat and a drought that compares with the severest of those experienced in the past. Previous records for high temperature in August were equaled or surpassed in numerous instances, and areas of considerable extent received less moisture than ever previously reported in this month. The effects of the hot, dry weather were characteristic—man, beast, and vegetation suffering. Heat prostrations occurred, especially among urban dwellers, much stock was lost, and all vegetation suffered severely. Corn was damaged beyond recovery over a wide territory, and will make scarcely half a crop in places. Water for live stock became a serious question in some sections, and many cattle had to be shipped to market. In the Missouri area it was reported that trees of all kinds were dying, especially those on the higher lands. In that State the drought was perhaps as disastrous as that of 1901.

The most important storms of the month were those of the 10th–11th in Iowa and Illinois, and the 19th–20th in southwestern Minnesota. The former was, over a large territory, the severest storm of the present summer. Wind and lightning caused much damage, but the accompanying heavy rainfall, which greatly relieved the droughty conditions, more than compensated the adverse features of the storm. The storm of the 19th–20th was productive of considerable damage in southwestern Minnesota. The remarkably heavy rainfall of 8 inches occurred at the cooperative station at Worthington, the rain having begun at 4 p. m. of the 19th and ended at 5 a. m. of the 20th. The electrical features of this storm were pronounced, and much loss was occasioned by lightning. Haystacks and barns were burned in numerous instances, and many cattle were killed. A third severe storm prevailed on the 17th, at Dubuque, Iowa, and its vicinity, and is described elsewhere.

The following table presents in condensed form the leading features of climatological interest for the various parts of the district:

Parts of States within district 5.	Temperature.				Precipitation.					
	Mean.	Departure.	Highest.	Lowest.	Average.	Departure.	Greatest total.	Least total.	Average snowfall.	Average number of days with precipitation.
North Dakota	68.5	+4.0	104	40	3.04	+0.55	5.80	1.08	....	7
Minnesota	69.6	+3.1	102	35	2.92	−0.43	9.00	0.54	....	8
South Dakota	71.4	+3.1	98	45	3.41	+0.57	3.41	3.41	....	8
Wisconsin	68.7	+1.8	101	36	2.57	−1.09	5.37	0.62	....	7
Iowa	76.0	+4.6	106	43	3.03	−0.92	7.13	0.60	....	7
Missouri	82.6	+6.9	109	45	1.47	−1.76	3.51	0.66	....	4
Indiana	73.3	+1.9	104	47	3.56	−0.54	5.94	2.13	....	8
Illinois	77.5	+3.9	106	45	2.33	−0.85	5.56	0.23	....	7

TEMPERATURE.

The mean temperature for the district as a whole was 72.8°, or 3.7° higher than the normal. The month averaged almost a degree warmer than July; usually in this district July is about 2° warmer than August. The month was comparatively warm in all parts of the district, but the excess of temperature at and near the northeastern boundary was slight. The greatest excess occurred in the Missouri area, where it was more than 6°. Over that region the month was, with the single exception of August, 1900, the warmest August in the history of the Weather Bureau, and even few Julys have been warmer. South and west of a line drawn through southern Iowa and Illinois and terminating at the eastern border of the district a little south of Springfield, Ill., the mean temperature averaged above 80°; the highest mean reported was 84.8° at Steffenville, Mo., while the month was considerably warmer than the average August over much of the northern half of the district, in several other years the month of August has been warmer than the one under discussion. The lowest mean temperature was 63.8° at Hannah, N. Dak., and Little Fork, Minn.

In many parts of the district the highest temperature of the month equaled or exceeded all previous records for August. At Davenport, Iowa, the record was changed from 98° to 101°; at Hannibal, Mo., from 100° to 102°; at Springfield, Ill., from 100° to 101°; and at Minneapolis, Minn., 99° to 100°. At Des Moines and Keokuk, Iowa, the records of 103° and 102°, respectively, were equaled. Most of the highest temperatures at the several stations occurred in the hot periods that prevailed on and about the 2nd, 9th, and 16th. In southern sections there was but little respite from the heat at any time during the month, some stations experiencing a temperature of 90° or higher almost every day. At Greenville, Ill., there were 27 such days, and at Hannibal, Mo., 24. At the former station 12 days had a temperature of 100° or higher. In most instances the lowest temperatures at the various stations occurred during the last decade, cool periods centering about the 23d and 29th. As is usually the case in this district, the highest monthly minimum temperature occurred at Cairo, Ill., 63°. This was the only station at which the temperature remained above 60° all the month. In 13 cases, all in Minnesota or Wisconsin, the minimum temperatures of the month was below 40°, the lowest being 35°, at Little Fork, Minn., on the 24th.

PRECIPITATION.

The average precipitation for the district was 2.73 inches, or 0.72 inch less than the normal. In Dakota there was an excess of moisture that averaged about half an inch, but in the other State areas a general deficiency obtained. Of the 208 stations outside of the Dakotas that have normals, only 46 reported more than the nor-

mal rainfall. In genera the precipitation was greatest in the norther part of the district, and least in the southern, but the distribution over limited areas was characteristic of that in the summer season, large differences occurring among stations comparatively near to one another. In each of the State areas, except the small South Dakota, Indiana, and Missouri sections, amounts exceeding 5 inches and less than an inch were recorded, save in North Dakota, where the least amount was 1.08 inches. The greatest amount reported was 9 inches, at Worthington, in southwestern Minnesota, 8 inches of this having fallen in 11 hours. The least amount reported was 0.23 inch, at East St. Louis, Ill.

Over the northern half of the district the precipitation was quite timely; in Iowa and Missouri but little occurred in the first and last decades; while in Illinois the distribution in point of time was similar to that in Iowa and Missouri, in the southern part, but was more favorable in the northern part of the State. Sixteen instances of excessive precipitation at the rate of 2.50 inches or more in 24 hours were reported, most of these rains occurring on the 10th–11th and 17th–18th. The average number of rainy days for the district as a whole was 7.

RIVERS.

The larger streams of the district fell steadily all month, but in the Mississippi River the stages were sufficient for navigation, and mills and power plants suffered no shortage of water.

MISCELLANEOUS.

Northwesterly winds prevailed over the Dakotas, and over the remainder of the district they were from some southerly point, southeasterly being reported the greatest number of times. The highest velocity recorded was 48 miles an hour from the north, at St. Paul, Minn., on the 21st. The amount of sunshine was more than the normal over much of the district. The average number of clear days was 15; partly cloudy, 10; cloudy, 6.

SEVERE STORM AT DUBUQUE, IOWA.

By JAMES H. SPENCER, Local Forecaster.

A severe thunderstorm occurred during the afternoon and night of August 17. It was the severest storm at this station in a year. There appeared to be two storms, the first beginning at 3.50 p. m., and the second at 6.36 p. m. The first storm moved slowly over the station from the southeast, an unusual direction at this station. The second came from the northwest. From 7.30 p. m. to 8.15 p. m. 1.40 inches of rain fell; the total amount for the entire storm was 2.28 inches. The thunder during these storms was loud and the lightning vivid and blinding. Peter J. Meyer, a farmer living at Holy Cross, was killed by lightning. In Dubuque County one residence and at least seven barns, with their contents, were destroyed by fire resulting from lightning. Several horses were killed, as well as a number of other stock. The greatest damage was in the northern half of the county. Several small bridges were either swept away or damaged by freshets resulting from the heavy rain. In a few districts corn was beaten down, but the beneficial effects of the rain far exceeded the damage wrought. In Dubuque the steeple of the Westminster Presbyterian Church was struck by lightning, and damaged to a considerable extent; and the Iowa Telephone Co. suffered heavily, more than 1,000 telephones having been put out of commission. It is estimated that the total damage from the storm in Dubuque County was at least $25,000.

ERRATA.

Report for July, 1913: Sandy Lake, Minn., monthly mean temperature, published 62.3, should be 64.3, and departure from the normal, published −4.6, should be −2.6. Charles City, Iowa, total precipitation, published 2.81, should be 2.82, and departure from the normal, published −0.77, should be −0.76. Perry, Iowa, monthly mean temperature, published 78.5, should be 77.5, and departure from the normal, published +3.9, should be +2.9. Wausau, Wis., lowest temperature, published 42, should be 43.

TABLE 1.—*Climatological data for August, 1913. District No. 5, Upper Mississippi Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
North Dakota.																				
Amenia	Cass	954	17	69.8	+ 3.6	103	2	48	26†	41	1.08	− 2.00	0.45	0	3	18	3	10	se.	C. E. Wood.
Bottineau	Bottineau	1,638	21	67.4	+ 4.3	97	14	42	26	42	3.11	+ 1.14	1.78	0	9	10	11	10	se.	H. F. Steinmeir.
Bowbells	Burke	1,958	1	66.4	.....	98	14	40	25	41	3.57	.....	1.40	0	10	20	2	9	.....	G. H. Phelps.
Cando	Towner	1,488	12	69.1	+ 7.1	104a	2	41a	29	47a	1.70	− 0.83	0.57	0	5	.....	.....	.....	.....	E. T. Judd.
Crosby	Divide	.....	6	69.8	.....	89	1†	42	26	41	1.76	.....	0.47	0	10	20	8	3	nw.	H. C. Kaschau.
Devils Lake	Ramsey	1,482	8	67.6	+ 2.5	95	4	46	29	39	3.93	+ 1.17	1.10	0	10	17	7	7	se.	U. S. Weather Bureau.
Donnybrook	Ward	1,760	14	67.6	+ 2.7	96	14	41	26	43	3.26	+ 0.92	0.82	0	9	16	10	5	nw.	C. J. De Vore.
Dunseith	Rolette	.....	17	66.2	+ 2.7	91	14	45	22†	38	3.73	+ 1.50	1.34	0	9	13	14	4	nw.	C. E. Goodsell.
Eckman (near)	McHenry	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. Yenny.
Fessenden	Wells	1,610	1	68.3	.....	99	4	42	1†	52	2.23	.....	0.73	0	8	13	13	5	nw.	G. T. Seymour.
Forman	Sargent	1,249	21	72.3	+ 4.7	102a	14	45a	29	44a	2.57	− 0.40	1.35	0	9	12	10	9	nw.	A. Maltby.
Grafton	Walsh	827	21	67.8	+ 3.5	99	2	42	24	48	2.36	− 0.34	1.06	0	11	19	4	8	nw.	A. R. T. Wylie.
Granville	McHenry	1,504	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. A. Christianson.
Hannah	Cavalier	1,568	8	63.8	.....	95	4	40	23	43	3.67	.....	1.01	0	8	.....	.....	.....	nw.	J. Moffatt.
Hansboro	Towner	.....	5	66.4	.....	95	2	40	6	43	3.00	.....	1.17	0	7	24	4	3	nw.	Geo. Dale.
Hillsboro	Traill	901	7	70.8	.....	98	2†	49	25†	44	1.54	.....	0.96	0	7	17	10	4	nw.	F. E. Mayall.
Lakota	Nelson	1,579	12	67.0	+ 4.0	95	2	40	1	44	3.52	+ 1.05	2.05	0	8	8	21	2	nw.	C. R. Pettes.
Langdon	Cavalier	1,615	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Woolner.
Larimore	Grand Forks	1,134	18	68.8	+ 4.8	97	14	47	6	39	2.29	− 0.69	0.92	0	6	20	2	9	nw.	J. M. Freeman.
Lisbon	Ransom	1,091	9	69.8	+ 3.7	103	2	45	25	48	4.93	+ 3.01	2.05	0	8	15	6	10	nw.	W. S. Adams.
McKinney	Renville	1,640	19	67.2	+ 4.0	99b	14	40b	1†	53b	3.37	+ 1.80	1.00	0	6	10	21	0	nw.	N. P. Swenson.
McLeod	Ransom	1,075	1	69.2	.....	95	2	46	28†	40	5.80	.....	2.34	0	8	17	6	8	nw.	Martin Reinholt.
Manfred	Wells	1,605	10	68.0	+ 4.3	98	4	42	29†	46	2.97	+ 0.55	1.21	0	7	15	14	2	nw.	P. B. Anderson.
Mayville	Traill	975	17	71.2	+ 5.2	99	2	47	24	47	1.91	− 1.32	1.30	0	5	21	3	7	.....	W. C. Gould.
Milnor	Sargent	1,097	1	.....	.....	.....	.....	.....	.....	.....	2.92	.....	1.45	0	7	6	20	5	se.	Hj. Edman.
Minot	Ward	1,557	17	68.4	+ 6.2	98	14	43	26	45	3.76	+ 1.52	1.60	0	9	19	2	10	w.	Louise Bates.
Minto	Walsh	820	20	69.0	+ 4.4	98	2	46	6†	45	2.74	+ 0.10	1.11	0	6	15	10	6	nw.	S. S. Marsh.
Oriska	Barnes	1,270	8	69.8	.....	104	2	45	9	48	2.84	.....	0.96	0	10	9	21	1	nw.	J. J. Taylor.
Park River	Walsh	998	9	69.4	.....	88	2	46	24	40	2.87	.....	1.70	0	8	22	6	3	nw.	F. J. Prochaska.
Pembina	Pembina	789	39	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. W. Shumaker.
Power	Richland	1,020	21	68.2	+ 1.7	99	2	45	21†	41	5.43	+ 2.95	2.03	0	6	14	10	7	se.	J. A. Power.
Towner	McHenry	1,482	11	68.6	+ 4.6	96	4	41	26	49	2.74	+ 0.37	0.95	0	7	7	22	2	nw.	B. Bagley.
University	Grand Forks	830	21	69.6	+ 4.8	97	2	47	29	43	1.52	− 1.11	1.13	0	6	10	11	10	se.	U. S. Weather Bureau.
Wahpeton	Richland	962	19	68.8	+ 1.4	101	2	42	11	42	4.50	+ 1.27	3.81	0	6	15	11	5	se.	Fred E. Smith.
Walhalla	Pembina	966	6	.....	.....	.....	.....	.....	.....	.....	3.11	.....	1.50	0	3	.....	.....	.....	.....	Ivanhoe Lee.
Westhope	Bottineau	.....	7	69.1	.....	100	14	43	25	48	3.02	.....	1.46	0	7	14	15	2	nw.	W. A. Meddaugh.
Willow City	do	1,471	21	66.6	+ 2.8	94	4†	40	26†	45	2.74	+ 0.79	1.03	0	7	9	20	2	nw.	M. A. Ostby.
Minnesota.																				
Albert Lea	Freeborn	1,229	22	72.7	+ 3.5	99a	17	51a	23†	34a	1.70	− 2.22	1.00	0	3	12	17	2	sw.	Edward Carey.
Alexandria	Douglas	1,391	19	70.0	+ 3.1	100	15	45	30	36	5.31	+ 1.67	2.45	0	9	12	5	14	nw.	P. O. Unumb.
Angus	Polk	870	11	67.1	+ 3.1	95	2	42	29	46	1.21	− 2.15	0.78	0	9	14	10	7	nw.	John Nadvornik.
Bagley	Clearwater	.....	7	64.8	.....	91	2	39	18†	41	2.02	.....	1.40	0	5	15	15	1	se.	Jens Nelson.
Baudette	Beltrami	1,084	3	65.8	.....	91	14	44	24	36	4.21	.....	0.74	0	12	17	12	2	w.	J. A. Gjelhaug.
Beardsley	Bigstone	1,090	17	73.9	+ 6.0	101	2	45	4	49	2.66	− 0.94	1.42	0	9	8	16	7	nw.	G. L. Fitzgerald.
Bemidji	Beltrami	1,400	9	.....	.....	.....	.....	.....	.....	.....	0.54	.....	0.21	0	5	.....	.....	.....	.....	C. W. Warfield.
Bird Island	Renville	1,039	23	71.7	+ 3.0	99	15	48	29	34	2.85	− 0.58	1.25	0	10	12	12	7	se.	Dr. F. L. Puffer.
Brainerd	Crow Wing	1,215	7	68.6	.....	97	15	48	30	36	2.04	.....	0.87	0	8	17	3	11	.....	Theodore Miller.
Caledonia	Houston	1,179	20	70.3	+ 1.7	91	15	52	29	26	2.62	− 1.39	1.60	0	7	16	9	6	se.	W. D. Belden.
Campbell	Wilkin	975	7	69.0	.....	95	2	45	29†	41	3.08	.....	1.72	0	7	12	3	16	se.	J. T. Neisess.
Cass Lake	Cass	1,300	6	.....	.....	.....	.....	.....	.....	.....	1.28	.....	0.91	0	4	.....	.....	.....	.....	C. W. Burns.
Collegeville	Stearns	1,282	20	70.1	+ 1.6	95	15	53	29†	29	4.88	+ 1.91	2.32	0	11	14	6	11	sw.	F. Tembreull.
Crookston	Polk	863	24	68.6	+ 2.9	95	2†	48	8	38	0.89	− 2.47	0.45	0	5	18	2	11	s.	A. G. Andersen.
Detroit	Becker	1,364	17	67.0	+ 2.4	94	2	41	26	46	2.95	− 1.13	0.75	0	9	22	5	4	w.	G. W. Peoples.
Ely	St. Louis	1,330	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Iver Wisted.
Fairmont (near)	Martin	1,240	26	72.8	+ 3.6	95	15	52	29	32	2.39	− 0.70	1.00	0	10	14	9	8	nw.	W. F. Wherland.
Faribault	Rice	1,003	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. A. B. Moulton.
Farmington	Dakota	902	25	72.4	+ 3.8	98	15	46	30	38	1.85	− 1.71	0.49	0	10	15	3	13	nw.	E. D. Akin.
Fergus Falls	Otter Tail	1,210	21	70.0	+ 2.4	95	2	46	29	33	4.74	+ 1.86	3.11	0	8	14	12	5	se.	C. E. Kissinger.
Fort Ripley	Crow Wing	1,136	5	67.8	.....	98	15	42	30	40	2.86	− 0.34	0.70	0	7	14	0	17	s.	J. J. Tucker.
Fosston	Polk	1,289	3	.....	.....	.....	.....	43	29	.....	1.25	.....	0.46	0	9	16	11	4	nw.	O. N. Hem.
Glencoe	McLeod	1,000	16	71.8	+ 3.8	96	15	49	29	38	1.75	− 1.49	1.00	0	2	18	12	1	s.	L. V. Koos.
Grand Meadow	Mower	1,338	25	72.4	+ 4.0	98	15	49	30	34	2.26	− 1.56	0.93	0	7	16	11	4	se.	C. F. Greening.
Gull Lake Dam	Cass	1,215	2	68.4	+.....	95	15	42	30	35	3.48	.....	1.40	0	11	16	9	6	nw.	U. S. Engineer Corps.
Hallock	Kittson	815	14	67.3	.. 3.4	96	2	46	1†	46	5.56	+ 2.14	2.00	0	10	16	7	8	n.	D. A. Robertson.
Halstad	Norman	870	7	68.4	.....	100a	2	44	29	46a	2.52	.....	1.00	0	11	22	0	9	se.	A. G. Holstrom.
Hinckley	Pine	1,050	8	67.8	+.....	96	15	44	30	34	3.02	.....	1.23	0	6	13	10	8	e.	W. R. Newman.
International Falls	Koochiching	1,112	10	65.8	.. 4.7	90	14	39	24	44	5.42	+ 2.11	1.50	0	11	15	13	3	nw.	C. Ardles.
Itasca State Park	Clearwater	1,500	2	66.3	.....	88	14†	44	31	38	1.23	.....	0.42	0	10	17	14	0	sw.	J. A. Stillwell.
Lake Crystal	Blue Earth	990	5	72.8b	+.....	92b	15	.....	.....	29b	.....	.....	.....	0	....	9b	8b	6b	s.	W. P. Cobb.
Leech Lake Dam	Cass	1,301	25	66.6	.. 3.4	90	14	45	24†	37	1.65	− 2.15	0.53	0	9	11	15	5	se.	U. S. Engineer Corps.
Little Falls	Morrison	1,115	4	69.5	.....	97	15	53	31	34	.....	.....	.....	0	....	24	5	2	n.	William Batters.
Littlefork	Koochiching	.....	3	63.8	.....	97	3	35	24	49	3.37	.....	1.42	0	11	8	22	1	.....	O. C. Olson.
Long Prairie	Todd	1,299	21	.....	+.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Sheets.
Lynd	Lyon	1,175	20	71.2	.. 3.3	95	15	48	29	36	4.07	+ 0.61	1.10	0	9	19	7	5	sw.	J. W. Rouse.
Mankato	Blue Earth	758	15	.....	.....	.....	.....	.....	.....	.....	3.64	− 0.07	1.64	0	12	17	2	12	se.	C. G. Staley.
Milaca	Mille Lacs	1,072	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. H. Foss.
Milan	Chippewa	955	19	70.6	+ 2.3	97	15	47	29	36	2.75	− 0.29	1.65	0	8	12	9	10	se.	O. K. Opjorden.
Minneapolis	Hennepin	918	22	72.8	+ 3.1	100	15	55	30	26	1.40	− 2.29	0.81	0	8	11	10	10	s.	U. S. Weather Bureau.
Montevideo	Chippewa	900	23	72.6	+ 3.7	102	15	48	29	39	1.49	− 1.18	1.08	0	7	10	13	8	se.	L. G. Moyer.
Moorhead	Clay	935	32	69.9	+ 4.0	100	2	50	29	40	2.70	− 0.40	1.08	0	10	22	6	3	se.	U. S. Weather Bureau.
Mora	Kanabec	1,001	8	68.2	.....	96	15	44	30	35	4.59	.....	0.91	0	12	15	9	7	e.	Hans Peterson.
Morris	Stevens	1,170	28	70.6	+ 3.2	95	2†	49	29	36	5.00	+ 1.98	1.80	0	9	17	8	6	s.	D. T. Wheaton.
New London	Kandiyohi	1,215	19	72.8	+ 4.1	98	15	57	31	27	6.14	+ 3.07	2.10	0	7	14	14	3	se.	Harold Swenson.
New Richland	Waseca	1,180	19	72.5	+ 2.3	96	15	51	29	30	4.79	− 0.06	1.72	0	6	14	15	2	se.	N. O. Tyrholm.
New Ulm	Brown	791	33	73.3	+ 2.1	100	15	51	29	33	3.10	− 0.45	1.20	0	9	3	7	21	s.	A. L. Henle.
Osakis	Douglas	1,343	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. B. Johnson.
Park Rapids	Hubbard	1,426	23	67.4	+ 3.4	94	2†	47	31	40	1.75	− 2.13	0.35	0	12	13	3	15	nw.	Dr. P. A. Walling.
Pierz	Morrison	.....	.....	67.8	.....	95	15	46	30	34	4.24	.....	1.48	0	6	16	3	12	w.	E. H. Kerkhoff.
Pine River Dam	Crow Wing	1,251	26	68.2	+ 2.8	96	15	46	30	38	2.54	− 1.52	1.40	0	6	15	8	8	e.	U. S. Engineer Corps.
Pokegama Falls	Itasca	1,280	26	65.0	+ 2.1	89	15	41	24†	40	4.09	+ 0.40	1.81	0	9	17	9	5	se.	Do.
Redlake	Beltrami	1,152	5	67.4	.....	89	2	40	24	38	1.82	.....	0.70	0	6	14	11	6	s.	A. C. Goddard.
Red Lake Falls	Red Lake	1,001	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. G. Buse.
Red Wing	Goodhue	680	17	.....	.....	.....	.....	.....	.....	.....	1.42	− 2.65	0.56	0	12	14	4	13	se.	Louis Back.
Redwood Falls	Redwood	1,050	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. V. Hockett.

TABLE 1.—*Climatological data for August, 1913. District No. 5*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Sky. Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
***Minnesota*—Contd.**																				
Reeds Landing	Wabasha	681	17								1.35	− 2.64	0.50	0	7	18	0	13	se.	John Deschneau.
Rochester	Olmstead	991	8	71.0		99	15	46	30	36	3.72		1.37	0	9	11	7	13	se.	Mary P. Leslie.
Roseau	Roseau	1,040	3	64.2		91	14	38	24	42	3.21		1.10	0	11	18	13	0	se.	M. J. Hegland.
St. Charles	Winona	850	22	71.0	+ 2.6	95	15	41	30	42	2.67	− 0.80	1.20	0	6	17	8	6	nw.	S. W. Gleason.
St. Cloud	Sherburne	1,020	36																	State Reformatory.
St. Paul	Ramsey	940	42	72.2	+ 2.7	98	15	52	30	26	1.59	− 1.87	0.95	0	9	8	16	7	se.	U. S. Weather Bureau.
St. Peter	Nicollet	825	18	73.6	+ 3.8	99	15	49	30	40	5.33	+ 1.86	2.00	0	7	16	8	7	nw.	State Hospital.
Sandy Lake Dam	Aitkin	1,234	20	65.6	+ 1.2	92	15	45	30	36	1.77	− 2.11	0.52	0	8	2	23	6	se.	U. S. Engineer Corps.
State Sanatorium	Cass	1,336	5	67.2		89	15	49	11	32	2.88		1.53	0	7	14	9	8	w.	Dr. G. W. Beach.
Stillwater	Washington	694	7								2.51		2.05	0	7	13	2	16	sw.	Oscar Ostrom.
Taylors Falls	Chisago	759	6	71.2		100	15†	48	30	36	1.92		0.95	0	6	12	15	4	nw.	Minneapolis Gen. Elec. Co.
Thief River Falls	Pennington	1,137	2	67.2		92	14	42	24†	43	0.97		0.53	0	6	17	6	8	n.	E. W. Lown.
Tracy	Lyon			75.4		101	15	51	29	37	2.29		0.83	0	8	14	11	6	s.	A. H. Rowland.
Warren	Marshall	859	1																	P. H. Holm.
Warroad	Roseau	1,069	3	64.9		92	14	40	24	40	3.32		0.80	0	9	20	9	2	e.	G. A. Sawyer.
Windom	Cottonwood	1,336	5	73.4[f]		100[f]	15	42[f]	29	40[f]	2.95		2.00	0	6	14[f]	4[f]	7[f]	se.	W. A. Peterson.
Winnebago	Faribault	1,100	15	73.4	+ 3.3	96	15	52	29	33	3.45	− 0.48	1.27	0	10	10	12	9	se.	H. H. Haight.
Winnibigoshish	Itasca	1,300	25	67.8	+ 3.5	90	15	44	24	35	1.76	− 1.99	0.45	0	9	18	8	5	se.	U. S. Engineer Corps.
Winona	Winona	700	17	73.4	+ 3.5	100	15	49	30	36	3.04	− 0.79	0.93	0	8	11	11	9	e.	P. C. Myers.
Worthington	Nobles	1,593	18	71.0	+ 2.6	92	15	50	29	30	9.00	+ 5.49	8.00	0	6	14	7	10	se.	M. P. Mann.
Zumbrota	Goodhue	917	17	70.8	+ 1.6	97	15	43	30	30	1.73		1.05	0	4	14	14	3	nw.	W. C. Rowell.
South Dakota.																				
Milbank	Grant	1,148	22	71.4	+ 3.1	98	15	45	4	46	3.41	+ 0.57	1.42	0	8	14	7	10	nw.	Miss Mary Patridge.
Sisseton	Roberts	1,202	7																	George Gray.
Wisconsin.																				
Antigo	Langlade	1,489	19	68.4	+ 3.6	90	15	41	25	43	1.16		0.48	0	5	22	2	7	se.	Elton C. Larzelere.
Barron	Barron	1,115	22	67.4	+ 2.7	93	15	43	30	33	3.26	− 0.32	1.80	0	7	11	17	3	nw.	Wm. A. Kent.
Beloit	Rock	750	47	71.9	+ 1.4	95	16†	49	23	33	2.11	− 1.60	0.91	0	5	17	10	4	s.	Smith Observatory.
Big St. Germain Dam	Vilas	1,590	3	65.7		91	15	38	30	38	2.28		0.80	0	10	15	14	2	sw.	Fred Hessen.
Brodhead	Green	812	15	72.8	+ 2.2	97	16	49	30	35	2.00	− 2.22	0.88	0	4	18	11	2	sw.	Hector D. Kirkpatrick.
Burnett	Dodge	880	9	68.8		93	16	45	23	31	2.54		1.36	0	8	5	16	10	se.	George S. Smith.
Cornell	Chippewa	993	1																	Brunet Falls Mfg. Co.
Cottage Grove	Dane	888	2								1.84		0.52	0	10	8	16	7	sw.	John E. Mellish.
Darlington	Lafayette	867	7	71.8		98	16	42	24†	38	3.95		1.80	0	6	14	10	7	se.	Sever P. Nelson.
Deerskin Dam	Forest	1,685	3	64.6		92	14	39	30†	42	3.96		1.10	0	7	10	19	2	w.	Wm. E. O'Neal.
Delavan	Walworth	920	22	70.8	+ 1.1	96	16	45	23	37	1.69	− 1.77	0.48	0	9	14	10	7	s.	Elwood S. Austin.
Dodgeville	Iowa	1,220	13	71.5[e]	+ 2.1	97[e]	16	53[e]	23†	34[e]	3.40	+ 0.28	2.30	0	6	13[e]	0[e]	15[e]	ne.	Chas. H. Berryman.
Downing	Dunn	983	11	68.3[b]	+ 2.1	95[b]	15	40[b]	30	36[b]	1.50	− 2.14	1.50	0	1	2[b]	7[b]	20[b]	se.	Eugene F. Stoddard.
Eau Claire	Eau Claire	800	22	70.5	+ 1.6	94	15	48	30	32	2.56	− 0.92	0.92	0	10	9	18	4	se.	Robert D. Whitford.
Glen Flora	Rusk	1,475	1	65.3		90	17	38	30	36	4.34		2.00	0	5	16	11	4	ne.	G. A. Durgin.
Grand Rapids	Wood	980	14	69.2	+ 1.6	96	15	46	23	36	2.16	− 1.05	0.75	0	12	9	16	6	se.	Geo. T. Nixon.
Grantsburg	Burnett	1,095	22	68.6	+ 2.5	98	15	43	30	34	2.83	− 0.71	1.34	0	6	24	6	1	s.	Chester Ahlstrom.
Hancock	Waushara	1,091	21	70.4	+ 1.9	92	15†	49	23	31	2.28	− 1.07	0.80	0	8	12	17	2	sw.	Frederick B. Hamilton.
Hatfield	Jackson	973	19	68.7	+ 1.5	96	15	41	30	38	1.48	− 1.98	0.72	0	7	5	19	7	se.	Columbia Construction Co.
Hayward	Sawyer	1,107	22	68.2	+ 2.8	99	15	42	30	39	0.81	− 2.71	0.57	0	6	9	18	4	s.	G. H. McElroy.
Hillsboro	Vernon	1,000	22	68.2	+ 1.0	93	15	42	30	37	2.69	− 0.58	0.72	0	6	12	15	4	sw.	Emil V. Wernick.
Koepenick	Langlade	1,683	22	65.0	+ 1.1	88	15	39	23	33	1.05	− 2.71	0.20	0	7				ne.	Edward S. Koepenick.
La Crosse	La Crosse	714	41	72.0	+ 2.0	95	15	52	30	30	2.53	− 0.88	1.24	0	10	7	13	11	s.	U. S. Weather Bureau.
Lake Mills	Jefferson	897	22	70.4	+ 1.2	98	16	50	23	33	2.46	− 1.13	0.88	0	10	11	12	8	se.	S. Newton Dexter Smith.
Lancaster	Grant	1,070	22	71.6	+ 1.8	98	16	47	30	41	1.29	− 1.76	0.48	0	3					Edward Pollock.
Long Lake	Oneida	1,592	5	64.7		92	15	36	30	40	4.46		1.09	0	10	15	13	3	w.	Louis Frank.
Madison	Dane	974	44	70.6	+ 1.0	93	16	54	25	28	1.59	− 1.62	0.65	0	8	7	14	10	se.	U. S. Weather Bureau.
Marshfield	Wood	1,276	0	66.8		94	15	42	30	33	3.88		1.45	0	9	6	20	5	se.	Agr. Exper. Station.
Mather	Juneau	962	9	67.2		93	15	41	30	38	2.44		1.14	0	9	11	10	10	e.	Frank Evans.
Mauston	do	882	17	68.8	+ 1.1	94	16	47	30	30	3.29	− 0.24	1.30	0	7	14	12	5	s.	Eugene L. Hitchcock.
Meadow Valley	do	974	23	67.6	+ 0.7	96	15	41	30	39	2.02	− 1.32	0.88	0	7	5	24	2	se.	Charles H. Johnson.
Medford	Taylor	1,420	24	67.4	+ 0.5	94	15	43	30	32	0.98	− 2.76	0.45	0	7	18	13	0	s.	Wm. Zeit.
Merrill	Lincoln	1,267	7	69.4		95	17	44	25	46	0.62		0.16	0	5	8	6	17	se.	O. F. Lueck.
Minocqua	Oneida	1,604	9	66.5		92	15	44	30	30	3.11		0.95	0	11	11	17	3	sw.	Benjamin W. Applebee.
Mondovi	Buffalo	738	5	70.4		94	15	45	30	37	2.56		1.06	0	14	19	7	5	nw.	Dr. Chas. Hebard.
Mount Horeb	Dane	1,226	9	69.8		95	16	41	24	34	2.04		0.60	0	7	16	5	10	s.	W. M. Lewis.
Muscoda	Grant	666	4	72.0		99	16	48	30	37	3.57		1.92	0	5	19	0	12	ne.	Wm. Hessler.
Neillsville	Clark	996	23	70.3	+ 3.2	99	15	43	29	35	2.01	− 1.62	0.71	0	3				nw.	Wm. Heaslett.
New Richmond	St. Croix	990	8	70.2		100	15	45	30	36	2.43		2.07	0	4	12	19	0	sw.	Franc A. R. Van Meter.
Osceola	Polk	806	22	70.8	+ 3.9	101	15	45	30	39	2.50	− 0.71	1.41	0	6	12	18	1	e.	Charles W. Staples.
Park Falls	Price	1,492	23	65.8		95	15	41	30	36	3.77		1.63	0	14	17	1	13	s.	Flambeau Paper Co.
Portage	Columbia	809	24	71.2	+ 2.4	90	15†	53	23†	30	4.02	+ 0.63	1.33	0	12	16	8	7	ne.	James H. Martin.
Port Edwards	Wood	969	3	67.6		93	15†	45	30	37	1.68		0.70	0	8	11	14	6	sw.	Nekoosa-Edwards Paper Co.
Prairie du Chien	Crawford	628	22	73.0	+ 2.0	100	16	48	30†	39	2.98	− 0.59	2.60	0	4	16	0	15	nw.	James A. Gillis.
Prairie du Sac	Sauk	750	5	70.8		92	15†	48	30	34	1.99		0.88	0	7	12	11	8	ne.	Wisconsin River Power Co.
Prentice	Price	1,551	15	65.6	+ 1.9	93	15†	39	30	40	1.81	− 2.29	0.56	0	10	8	7	16	sw.	Joseph G. Lash.
Rest Lake	Vilas	1,600	0	64.6		90	16†	38	30	35	2.27		1.09	0	6	12	5	14	s.	A. F. Miller.
Rhinelander	Oneida	1,550	7	66.4		91	15	40	24	38	1.83		0.77	0	8	18	8	5	sw.	Rhinelander Pow. Co.
Shullsburg	Lafayette	1,019	7	70.8		94	16	46	30	34	3.67		1.22	0	7	15	5	11	e.	Harrison B. Chamberlin.
Solon Springs	Douglas	1,083	7	65.0		98	15	38	30	36	3.20		1.40	0	5	15	6	10	sw.	John M. Sayles.
Spooner	Washburn	1,104	19	67.8	+ 1.5	96	15	45	30	40	4.67	+ 1.36	2.70	0	10	15	12	4		Horace A. Bresee.
Stanley	Chippewa	1,082	9	68.3		94	15	47	27†	33	1.85		0.80	0	7	15	13	3	se.	W. Humphrey Scott.
Stevens Point	Portage	1,113	20	69.8[a]	+ 2.4	94[a]	15	46[a]	23	38[a]				0		7	16	8	sw.	Postmaster.
Sugar Camp Dam	Oneida	1,582	3								2.66		1.37	0	4	20	9	2	se.	C. W. Cheever.
Tomahawk	do	1,451	0	68.0		92	15†	44	27	36	1.90		0.60	0	5	19	4	8	s.	Victor Extrom.
Trout Lake	Vilas	1,400	1	65.5		88	15	42	30	34	1.80		0.63	0	6	10	15	6	sw.	F. B. Moody.
Twin Lakes Dam	do	1,625	3								3.21		1.40	0	4	22[a]	8[a]	0[a]	sw.	Albert D. Hansen.
Valley Junction	Monroe	930	21	69.5	+ 2.5	95	16	44	30	41	2.54	− 1.08	1.40	0	5	19	1	11	w.	J. J. Donahue.
Viroqua	Vernon	1,412	23	70.8	+ 2.1	93	15	49	30	31	2.69	− 1.10	1.35	0	7	11	11	9	se.	Henry E. Rogers.
Vudesare	Vilas	1,700	5	65.1		98	15	40	30†	40	3.60		1.20	0	5	15	16	0	w.	Louis L. Thomas.
Watertown	Jefferson	824	22	68.4	+ 0.1	91	16	51	23	28	4.27	+ 1.48	1.74	0	11	9	16	6	ne.	Charles J. Salick.
Waukesha	Waukesha	864	22	69.8	+ 1.0	97	16	47	5	37	5.37	+ 2.29	1.70	0	12	8	22	1	e.	Carroll College.
Wausau	Marathon	1,212	18	67.2	+ 1.0	91	15	47	23	29	0.82	− 3.08	0.49	0	6	17	8	6	se.	A. A. Babcock, jr.
Weyerhaeuser	Rusk	1,297	11	66.1	+ 1.2	94	15	39	30	35	3.99		2.52	0	10	8	19	4	nw.	Miss Etta Stiles.
Whitehall	Trempealeau	675	22	69.8	+ 1.8	94	15	44	30	35	1.63	− 2.19	0.70	0	6	8	11	12	s.	Hans J. Haugh.

TABLE 3.—*Climatological data for August, 1913. District No. 5*—Continued

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Sky. Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
Iowa.																				
Albia	Monroe	959	15																	J. I. Chenoweth.
Algona	Kossuth	1,213	39	76.0	+ 5.1	97	17	52	29	33	2.76	− 1.16	1.10	0	7	22	6	3	nw.	Dr. F. T. Seeley.
Alta	Buena Vista	1,513	22	76.0	+ 5.5	100	15†	48	29	37	1.53	− 2.44	0.40	0	8	15	15	1	se.	David E. Hadden.
Amana	Iowa	721	37	75.9	+ 5.0	98	9	47	30	41	2.20	− 1.41	1.01	0	5	17	10	4	s.	C. Schadt.
Ames	Story	926	37	76.8	+ 4.6	103	9	49	30	47	2.72	− 0.95	1.18	0	6	14	10	7	s.	Iowa State College.
Baxter	Jasper	998	13	76.6	+ 4.7	104	2	46	29	48	2.14	− 2.41	1.14	0	9	22	8	1	sw.	W. R. Vandike.
Belle Plaine	Benton	886	23	76.0	+ 5.2	100	9	46	30	43	1.95	− 2.20	1.00	0	4	12	15	4	s.	O. C. Burrows.
Belmond	Wright	1,184	3	74.2		97	16†	49	29	39	2.24		0.65	0	8	10	4	17	se.	Geo. P. Hardwick.
Bloomfield	Davis	881	6	81.9		106	8	53	29	44	1.47		0.89	0	7	20	10	1	sw.	Albert Power.
Bonaparte	Van Buren		22	78.9	+ 4.6	104	8	52	22†	45	2.88	− 1.77	1.64	0	8					B. R. Vale.
Boone	Boone	1,134	8	76.3		103	9	50	29†	41	3.11		1.18	0	5	15	8	8		C. F. Henning.
Britt	Hancock	1,236	16	72.6	+ 2.6	95	15†	47	29†	39	2.55	− 1.50	0.82	0	12	14	10	7	s.	L. M. Goodman.
Burlington	Des Moines	544	17	79.4	+ 5.3	105	3†	53	30	40	2.41	− 3.03	0.80	0	6	23	0	8	s.	Max. E. Poppe, jr.
Carroll	Carroll	1,265	23	75.0	+ 3.9	97	3	49	29	38	3.01	− 0.70	1.35	0	6	20	6	5	nw.	Mrs. Jos. J. Wolfe.
Cedar Rapids	Linn	733	31	76.2	+ 3.5	104	9	52	30	38	2.81	− 0.69	2.34	0	5	13	8	10	w.	R. S. Toogood.
Charles City	Floyd	1,015	22	73.0	+ 2.3	96	16	49	30	35	3.67	+ 0.25	1.20	0	10	10	5	16	se.	U. S. Weather Bureau.
Clear Lake	Cerro Gordo	1,241	15																	
Clinton	Clinton	593	46	76.5	+ 5.2	102	16	48	30	41	1.77	− 1.88	0.83	0	9	17	7	7	nw.	A. E. Reid.
Columbus Junction	Louisa	595	12	78.2	+ 5.8	102	8	53	30	35	2.31	− 3.91	1.18	0	6	23	8	0	ne.	J. B. Johnston.
Davenport	Scott	580	42	77.5	+ 4.5	101	8	56	23	32	2.06	− 1.58	1.07	0	8	10	13	8	e.	U. S. Weather Bureau.
Decorah	Winneshiek	875	20	75.5	+ 5.3	101	15	48	30	39	1.28	− 1.76	0.75	0	5					F. H. Baker.
Delaware	Delaware	1,083	22	73.8	+ 4.2	98	9	47	30	38	2.12	− 1.42	0.95	0	6	16	11	4	se.	Nettie E. Ball.
Des Moines	Polk	861	35	78.7	+ 5.7	103	8	53	29	36	3.44	− 0.17	2.49	0	6	13	11	7	e.	U. S. Weather Bureau.
Dubuque	Dubuque	639	40	74.2	+ 2.2	98	9	52	30	31	3.60	+ 0.56	2.28	0	10	10	10	11	s.	Do.
Earlham	Madison		11	77.2[e]	+ 7.2	103	8	47	30	45[e]	4.30	− 0.83	3.00	0	3	22	5	4	sw.	George Phillips.
Elkader	Clayton	727	34								3.25	+ 0.35	1.65	0	4	20	4	7	se.	Chas. Reinecke.
Elma	Howard	1,182	3	70.6		96	16	43	30†	38	2.05		0.90	0	7	14	13	4	se.	H. A. Moore.
Estherville	Emmet	1,298	18	72.2	+ 2.0	97	15	50	30	35	3.00	− 0.60	1.40	0	4	15	14	2	se.	A. O. Peterson.
Fairfield	Jefferson	780	29	78.6[h]	+ 7.3	102	9	56[h]	29	29[h]	3.78	− 0.30	1.98	0	7				sw.	R. M. McKenzie.
Fayette	Fayette	1,003	23	72.6	+ 3.5	98	16	46	30	39	2.34	− 0.93	1.28	0	9	18	9	4	se.	R. Z. Latimer.
Forest City	Winnebago	1,226	19	73.3	+ 3.0	98	17	50	29	34	2.80	− 0.70	1.08	0	8	16	8	7	sw.	J. A. Peters.
Fort Dodge	Webster	1,126	13	75.4	+ 4.0	99	15†	52	24	35	4.28	− 1.36	1.80	0	6	18	2	11	sw.	J. F. Monk.
Fort Madison	Lee	516	64								1.94	− 1.85	0.96	0	6	10	12	9	s.	Miss L. A. McCready.
Gilman	Marshall	1,052	14																	J. L. Wylie.
Grand Meadow	Clayton	1,180	22	70.9	+ 2.0	90	15†	52	29†	28	3.53	+ 0.20	1.60	0	10	4	22	5	se.	F. L. Williams.
Grinnell	Poweshiek	1,023	21	77.6	+ 6.0	102	3†	49	29	44	2.23	− 2.39	1.10	0	5	18	8	5	w.	D. W. Brainard.
Grundy Center	Grundy	976	22	76.2	+ 5.2	99	16	48	30	42	2.11	− 1.46	1.40	0	5	19	11	1	se.	J. B. Calderwood.
Guthrie Center	Guthrie	1,077	18	77.9	+ 5.7	102	8	49	29†	43	2.83	− 1.49	2.38	0	6	21	7	3	nw.	D. G. Beardsley.
Hampton	Franklin	1,155	23	75.6	+ 5.0	101	16	52	29	36	2.36	− 1.01	1.20	0	5	10	14	7	se.	E. C. Grenelle.
Humboldt	Humboldt	1,095	25	74.8	+ 6.9	98	16	46	30	43	2.65	− 0.79	1.09	0	8	14	15	2	se.	J. P. Peterson.
Independence	Buchanan	921	49	74.6	+ 4.5	97	9	46	30	41	1.66	− 1.53	0.98	0	7	20	7	4	nw.	R. E. Dudley.
Indianola	Warren	969	22	79.4	+ 6.6	103	8	55	29	35	4.39	− 0.29	2.67	0	6				sw.	Prof. J. L. Tilton.
Iowa City	Johnson	683	53	75.2	+ 3.5	100	8	48	30	42	2.97	− 1.27	1.46	0	8	18	9	4	e.	Prof. A. G. Smith.
Iowa Falls	Hardin	1,170	20	73.0	+ 3.1	95	17	47	30	38	4.49	+ 1.11	1.78	0	8	18	7	6	n.	J. B. Parmelee.
Jefferson	Greene	1,052	14																	Ora M. Hall.
Keokuk	Lee	614	42	80.1	+ 5.5	102	8	57	29	34	1.63	− 1.61	1.21	0	4	17	12	2	s.	U. S. Weather Bureau.
Keosauqua	Van Buren	644	21	78.7	+ 4.2	105	8	47	30	51	3.80	− 0.02	2.00	0	7	12	17	2		J. H. Landes.
Knoxville	Marion	920	18																	Casey and Belville.
Lacona	Warren		14								1.93	− 1.89	1.80	0	7	14	15	2		J. B. Alter.
Lansing	Allamakee	632	8																	Chas. R. Serene.
Le Claire	Scott	576	13								2.86	− 0.73	1.60	0	10					Miss M. T. Disney.
Marshalltown	Marshall	947	21	76.9	+ 5.1	102	9	49	30	45	2.85	− 0.79	2.10	0	9	19	5	7	nw.	Jacob Eige.
Mason City	Cerro Gordo	1,132	16	72.7	+ 2.7	97	14†	48	30	39	3.26	− 0.34	2.31	0	5	14	14	3	e.	Dr. Roy Desart.
Monroe	Jasper	922	1	78.0		102	8	51	29	42	3.89		1.80	0	6	21	5	5	s.	J. A. Dibel.
Mount Pleasant	Henry	729	32	78.0	+ 4.7	101	8	51	30	35	3.10	− 0.97	1.01	0	7	18	11	2	se.	J. W. Edwards.
Muscatine	Muscatine	554	53								3.03	− 1.35	1.03	0	6					William Molis.
New Hampton	Chickasaw	1,169	16								2.57	− 0.46	1.82	0	6	21	6	4	e.	A. F. Kemman.
Nora Springs	Floyd	1,064		74.7		100	16	48	30	40	4.92		2.00	0	13	15	12	4	s.	Arthur Betts.
Northwood	Worth	1,122	17	72.2	+ 2.9	94	14†	49	30	34	3.55	− 0.49	0.95	0	10	14	9	8	se.	Chas. H. Dwelle.
Olin	Jones	760	15	75.6	+ 4.9	100	9	46	30	40	2.70	− 2.01	1.20	0	4	10	20	1	sw.	Dr. F. W. Port.
Osage	Mitchell	1,184	26	73.4	+ 5.4	99	15	50	30	34	4.40	+ 1.37	2.81	0	5	17	9	5	s.	Lester Coonradt.
Oskaloosa	Mahaska	843	37	77.5	+ 5.6	104	8†	48	30	43	3.95	+ 0.73	2.50	0	7	25	2	4	sw.	Joseph Boyd.
Ottumwa	Wapello	649	18								4.11	+ 0.02	1.64	0	6	21	4	6	e.	Chester Potter.
Pella	Marion	877	11	78.2	+ 3.8	105	8	47	30	45	3.95	− 0.23	1.50	0	6	26	1	4	s.	J. H. Ver Steeg.
Perry	Dallas	975	12	77.9	+ 5.4	102	9	48	30	44	4.09	− 1.33	1.91	0	9	16	15	0	s.	S. J. Brumfield.
Pocahontas	Pocahontas	1,248	9	73.9		97	16	48	29	35	5.80		3.21	0	6	18	9	4	ne.	F. E. Hronek.
Rockwell City	Calhoun		17	75.8	+ 3.5	95	3†	55	26†	34	4.25	+ 0.17	1.45	0	5	15	14	2		C. M. Randall.
Sac City	Sac	1,278	37	75.4	+ 4.9	97	15	50	30	38	2.22	− 1.35	0.87	0	8				se.	E. N. Baily.
Saint Charles	Madison	1,070	12	79.4	+ 6.2	103	8	55	29	37	4.51	+ 0.18	3.35	0	4	16	15	0	sw.	R. D. Minard.
Sigourney	Keokuk	877	17	77.6	+ 3.8	102	9	51	29	38	2.93	+ 0.08	0.78	0	8	7	24	0	w.	J. T. Parker.
Stockport	Van Buren	745	11	78.9		104	8	47	30	46	2.82	− 2.24	1.00	0	7	20	8	3	se.	C. L. Beswick.
Storm Lake	Buena Vista	1,440	24	76.1	+ 5.4	97	15†	55	22†	32	1.52	− 1.80	0.65	0	4	18	11	2	n.	Geo. H. Fracker.
Tipton	Cedar	807	14	78.0	+ 5.4	99	3†	53	23	32	1.79	− 2.87	0.78	0	5	16	12	3	s.	F. K. Gregg.
Toledo	Tama	856	19	76.2	+ 4.2	102	9	47	30	41	2.58	− 1.12	1.50	0	5	23	6	2	se.	I. F. Giger.
Washington	Washington	769	31	77.8	+ 4.7	103	8	52	30	37	3.87	+ 0.16	2.06	0	6	14	11	6	se.	Wm. A. Cook.
Waterloo	Black Hawk	862	30	73.8	+ 2.9	96	15	48	30	40	2.40	− 1.21	1.00	0	5	21	2	8	se.	Ralph B. Slippy.
Waukee	Dallas	1,039	10	79.0	+ 5.2	101	8	50	29	37	1.93	− 3.38	1.50	0	7	23	6	2	sw.	Samuel F. Foft.
Waverly	Bremer	948	17	73.4[e]	+ 2.6	100	16	46[f]	30	47[f]	0.60	− 2.36	0.55	0	2	21	9	1	ne.	Earl C. Moore.
Webster City	Hamilton		8	75.5		102	3	48	23†	45	4.07		1.48	0	7	17	14	0	se.	C. D. Carpenter.
West Bend	Palo Alto	1,197	20	73.6	+ 4.0	98	17	47	29	35	6.99	+ 3.05	3.15	0	10	16	9	6	ne.	Phil Dorweiler.
Whitten	Hardin	1,036	16	75.5	+ 4.6	97	17	50	29†	38	3.03	− 0.72	1.00	0	5	18	9	4	se.	Dr. F. P. Butler.
Winterset	Madison	1,129	22	79.6	+ 7.0	103	8	53	29	40	7.13	+ 3.40	3.90	0	6	15	7	9	se.	Dr. R. S. Cooper.
Missouri.																				
Gorin	Scotland	700	28								2.02	− 0.79	1.13	0	5	13	12	6	se.	J. W. Pulliam.
Hannibal	Marion	534	22	81.5	+ 6.5	103	7	54	30	39	1.35	− 2.03	0.69	0	7	14	14	3	sw.	U. S. Weather Bureau.
Louisiana	Pike	500	36	79.4	+ 4.8	102	7	45	29	49	2.38	− 0.53	1.00	0	7	22	9	0	se.	J. T. Farrel.
Macon	Macon	881	1	84.0		107	7†	56	29	46	0.87		0.57	0	3	25	4	2	sw.	John A. Cook.
Mexico	Audrain	797	36	83.4	+ 7.3	109	7	54	29†	49	0.66	− 2.07	0.39	0	3	25	2	4	s.	J. F. Llewellyn.
Palmyra	Marion	652	2	82.6		106	7	52	28	43	1.37		0.70	0	3	24	5	2	sw.	W. B. Markell.
Steffenville	Lewis	576	20	84.8	+ 8.8	109	16	52	30	51	1.12	− 2.35	0.92	0	3	16	13	2	ne.	Frank Hall.
Sublett	Adair	1,000	34	81.5	+ 7.1	104	7†	50	27†	47	0.70	− 2.57	0.50	0	2	16	15	0	sw.	Lewis Spriggs.
Vandalia	Audrain	776	3	82.4		101	7†	58	30	35	3.51		1.25	0	4	19	7	5	n.	C. B. Ellis.
Warrenton	Warren	865	23	83.7	+ 7.1	106	7†	58	23	39	0.74	− 2.00	0.41	0	5	19	6	6	s.	Prof. J. H. Frick.

TABLE 1.—*Climatological data for August, 1913. District No. 5*—Continued,

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Sky. Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
Indiana.																				
Collegeville	Jasper	.....	14	75.4	+ 3.2	104	16	47	30	45	2.13	− 1.89	0.91	0	5	12	10	9	sw.	John Ziller.
Knox	Starke	716	8	73.2	.....	94	3†	50	30	37	5.94	.....	3.05	0	10	17	12	2	ne.	W. R. R. Tatman.
Laporte	Laporte	810	17	71.9	+ 0.5	94	3†	47	29	33	3.35	+ 0.13	1.50	0	7	17	5	9	sw.	Wm. M. Walton, jr.
Plymouth	Marshall	790	10	72.2	.....	92	9†	47	25	34	2.97	.....	0.97	0	11	14	12	5	sw.	J. W. Siders.
South Bend	St. Joseph	726	20	73.7	+ 2.0	95	16	49	25	33	3.41	+ 0.15	1.59	0	9	14	15	2	se.	Henry H. Swaim.
Illinois.																				
Aledo	Mercer	738	13	78.2	+ 5.7	101	8	56	23	35	2.49	− 0.36	1.03	0	5	20	1	10	ne.	William B. Frew.
Alexander	Morgan	670	20	80.4	+ 5.2	102	16	53	23†	42	1.79	− 1.66	0.76	0	4	13	11	7	nw.	George H. Hall.
Antioch	Lake	861	12	72.0	+ 2.2	100[a]	16	47	5	42[a]	1.81	− 1.89	1.08	0	5	12	10	9	sw.	J. C. James.
Astoria	Fulton	650	14	78.0	+ 5.3	101	8	50	30	39	0.88	− 2.17	0.30	0	7	16	14	1	s.	Edward V. Bohl.
Aurora	Kane	678	34	72.4	+ 1.4	97	3	49	30	39	4.37	+ 0.85	2.06	0	7	20	4	7	e.	Alice M. Holden.
Beardstown	Cass	448	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. L. M. Rice.
Bement	Piatt	700	6	.....	.....	.....	.....	.....	.....	.....	1.75	.....	1.00	0	5	18	13	0	ne.	Eugene Evans.
Bloomington	McLean	840	22	78.0	+ 3.9	101	16	52	5†	40	2.76	+ 0.03	1.33	0	6	19	10	2	ne.	Prof. H. N. Pearce.
Cairo	Alexander	359	41	81.1	+ 4.1	100	7	63	24	29	1.54	− 1.39	1.46	0	3	15	15	1	s.	U. S. Weather Bureau.
Camp Point	Adams	732	0	.....	.....	.....	.....	.....	.....	.....	1.02	.....	0.68	0	7	14	16	1	sw.	Capt. D. M. Morris.
Carbondale	Jackson	412	8	81.4	.....	105	6†	49	30	48	1.37	.....	0.95	0	6	20	10	1	sw.	State Normal University.
Carlinville	Macoupin	663	23	81.1	+ 5.0	105	8	53	29†	44	1.97	− 0.97	0.82	0	6	12	14	5	se.	Dr. J. D. Conley.
Carlyle	Clinton	470	28	.....	.....	.....	.....	.....	.....	.....	0.63	− 2.18	0.45	0	4	.....	.....	.....	.....	Harvey O. Jones.
Chester	Randolph	380	21	.....	.....	.....	.....	.....	.....	.....	0.76	− 2.39	0.26	0	8	.....	.....	.....	.....	Charles S. Gollon.
Clinton	Dewitt	727	3	77.8	.....	98	3†	53	30	36	2.20	.....	0.58	0	8	18	11	2	ne.	J. Frank Ziegler.
Cobden	Union	656	30	82.2	+ 4.6	104	6	52	24	36	1.45	− 2.20	0.70	0	3	20	8	3	n.	John Buck.
Dakota	Stephenson	929	8	72.8	.....	97	9	50	23†	39	4.59	.....	2.17	0	10	8	18	5	ne.	Elmer G. Smith.
Decatur	Macon	685	22	79.4	+ 4.6	101	8	51	30	42	2.18	− 1.02	1.10	0	8	23	7	1	sw.	Prof. J. H. Coonradt.
Dixon	Lee	725	23	73.8	+ 1.6	97	9	51	30	36	2.57	− 0.72	1.15	0	8	19	3	9	.....	H. U. Bardwell.
Duquoin	Perry	459	25	81.8	+ 3.9	106	6	52	30	45	3.12	+ 0.28	1.35	0	6	21	10	0	sw.	G. H. Knetzger.
Dwight	Livingston	600	20	75.8	+ 2.8	102	8†	51	5†	41	2.33	− 0.38	0.94	0	8	17	6	8	ne.	Edward O. Welch.
East St. Louis	St. Clair	481	2	.....	.....	.....	.....	.....	.....	.....	0.23	.....	0.15	0	4	.....	.....	.....	.....	W. McK. Brown.
Edwardsville	Madison	554	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Morgan.
Elgin	Kane	716	6	73.4	.....	96	16	50	30	34	3.25	.....	1.51	0	5	11	14	6	nw.	Elgin Observatory.
Ewing	Franklin	449	1	.....	.....	.....	.....	.....	.....	.....	2.74	.....	1.23	0	4	.....	.....	.....	.....	Ewing College.
Fairview	Fulton	733	2	.....	.....	.....	.....	.....	.....	.....	1.38	.....	0.69	0	10	.....	.....	.....	.....	Abram Wilson.
Galva	Henry	842	21	76.4	+ 3.4	101[a]	8†	52	29	38[a]	3.75	+ 0.45	1.79	0	9	18	5	8	se.	Prof. F. U. White.
Grafton	Jersey	422	20	.....	.....	.....	.....	.....	.....	.....	0.24	− 2.43	0.18	0	2	.....	.....	.....	.....	R. C. Goodrich.
Greenville	Bond	635	35	81.7	+ 5.9	105	8†	56	23	40	0.72	− 2.22	0.41	0	5	23	8	0	s.	H. W. Reidemann.
Griggsville	Pike	650	28	82.4	+ 7.0	103	15	57	23†	35	0.35	− 2.30	0.19	0	2	17	8	6	sw.	George F. Kneeland.
Havana	Mason	475	21	79.6	+ 3.5	102	16	49	30	44	1.79	− 1.11	0.80	0	7	16	11	4	s.	L. L. Eutenener.
Henry	Marshall	500	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. F. A. Powell.
Hillsboro	Montgomery	675	19	81.0	+ 4.7	104	8	56	23†	42	1.87	− 1.44	0.95	0	5	24	4	3	s.	Ira L. Woodward.
Joliet	Will	609	22	73.6	+ 1.8	99	3†	46	30	43	3.41	+ 0.03	1.59	0	8	16	9	6	ne.	F. M. Huhlig.
Kishwaukee	Winnebago	730	25	73.0[d]	+ 2.1	97[e]	9†	49	30	36[e]	2.72	− 1.09	1.06	0	9	17	12	2	se.	George Stevens.
La Grange	Cook	657	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Prof. F. E. Sanford.
La Harpe	Hancock	698	34	79.0	+ 4.6	104	16	46	30	47	1.39	− 2.32	0.50	0	7	20	11	0	sw.	George E. Campbell.
Lanark	Carroll	883	24	72.8	+ 2.3	99	3	45	30	45	5.56	+ 1.56	2.15	0	9	22	3	6	se.	M. N. Wertz.
La Salle	Lasalle	536	8	75.6	+ 3.6	100	8	54	30	36	3.71	+ 0.85	1.89	0	10	13	11	7	e.	U. S. Weather Bureau.
Lincoln	Logan	575	25	77.8	+ 3.9	100	8†	47	30	46	3.19	+ 0.16	1.58	0	9	20	6	5	s.	Prof. C. S. Oglevee.
Macomb	McDonough	700	9	.....	.....	.....	.....	.....	.....	.....	1.08	.....	0.40	0	6	.....	.....	.....	.....	State Normal University.
Manteno	Kankakee	711	2	.....	.....	.....	.....	.....	.....	.....	3.76	.....	1.41	0	9	21	6	4	ne.	C. B. Schmeltzer.
Martinton	Iroquois	633	26	.....	.....	.....	.....	47	30	.....	3.49	− 0.09	1.50	0	6	19	7	5	se.	Joseph H. Peltier.
Mascoutah	St. Clair	425	23	82.0	+ 5.6	106	6	51	30	45	1.98	− 0.87	1.30	0	4	19	11	1	s.	Dr. R. F. Lischer.
Minonk	Woodford	745	20	77.4	+ 3.9	102	8†	48	29	41	2.21	− 0.91	1.06	0	9	15	11	5	ne.	John C. Danforth.
Monmouth	Warren	784	21	78.8	+ 5.0	103	8	50	30	41	1.31	− 2.11	0.60	0	5	16	5	10	nw.	Dr. J. C. Hutchison.
Morris	Grundy	518	2	75.2	.....	100	3	48	30	42	2.27	.....	1.11	0	8	17	8	6	nw.	E. G. Cryder.
Morrison	Whiteside	685	19	75.2	+ 3.4	102	16	45	30	45	2.62	− 1.25	0.85	0	8	19	6	6	ne.	S. A. Maxwell.
Morrisonville	Christian	626	14	78.2[b]	+ 3.2	100[a]	16	50[b]	30	41[b]	1.38	− 1.50	0.49	0	5	.....	.....	.....	s.	J. D. Lowis.
Mount Vernon	Jefferson	511	19	81.5	+ 4.4	103	6†	51	23	37	0.80	− 1.96	0.36	0	3	20	8	3	s.	Theo. P. Stelle.
Nashville	Washington	503	13	.....	.....	.....	.....	.....	.....	.....	2.02	− 0.78	1.00	0	8	.....	.....	.....	.....	H. M. Potter.
Oregon	Ogle	702	4	73.4	.....	100	16	50	23	38	3.58	.....	0.90	0	9	17	2	12	s.	Fred A. Free.
Ottawa	Lasalle	500	27	.....	.....	101[a]	9	.....	.....	.....	2.98	− 0.33	1.38	0	10	17	5	9	nw.	Maude M. Harris.
Pana	Christian	692	27	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. G. N. Gilbert.
Pawpaw	Lee	930	1	.....	.....	.....	.....	.....	.....	.....	3.43	.....	1.46	0	11	.....	.....	.....	.....	A. C. McBride.
Peoria	Peoria	609	57	77.8	+ 5.3	101	8	54	30	38	2.87	− 0.06	1.41	0	10	15	11	5	s.	U. S. Weather Bureau.
Pontiac	Livingston	546	11	77.6	+ 3.6	101	16	52	5	36	3.86	+ 0.95	1.34	0	10	13	7	11	s.	George Butterworth.
Quincy	Adams	481	7	82.6	.....	103	7	57	30	39	1.35	.....	0.67	0	5	.....	.....	.....	.....	Fred J. Brinkoetter.
Riley	McHenry	956	54	71.6	+ 2.2	95	16	51	23†	32	3.69	+ 0.17	2.16	0	8	10	14	7	ne.	John West James.
Roberts	Ford	774	2	.....	.....	.....	.....	.....	.....	.....	2.18	.....	0.75	0	6	19	9	3	se.	R. E. Bradbury.
Rockford	Winnebago	763	21	73.2	+ 1.8	98	9†	50	23	37	2.78	− 0.80	1.58	0	8	22	3	6	.....	Dr. John R. Porter.
Rushville	Schuyler	670	22	80.4	+ 6.0	102	8	55	29	33	0.44	− 2.54	0.24	0	4	19	9	3	ne.	H. F. Dyson.
St. Charles	Kane	700	18	73.2	+ 2.0	100	9	50	30	37	2.81	− 1.18	1.05	0	7	16	12	3	ne.	Dr. Wm. H. Bishop.
St. Peter	Fayette	500	11	81.0	+ 4.8	106	8	55[a]	24	40	2.68	− 0.79	2.00	0	4	17	13	1	nw.	M. L. Lansford.
Sparta	Randolph	538	27	81.6	+ 5.6	105	6	55[a]	23	40[a]	1.87	− 1.38	0.97	0	5	23	7	1	se.	James A. Caldwell.
Springfield	Sangamon	644	33	79.9	+ 5.9	101	8	57	30	32	2.88	+ 0.08	1.35	0	6	17	10	4	s.	U. S. Weather Bureau.
Streator	Lasalle	626	20	76.4	+ 3.2	102	8†	50	30	39	3.28	+ 0.07	1.75	0	10	24	0	7	sw.	Miss Lora Sweetser.
Sullivan	Moultrie	530	13	81.0	+ 6.3	104	8†	53	30	40	1.30	− 1.97	0.50	0	8	21	10	0	sw.	C. A. Corbin.
Sycamore	Dekalb	855	33	72.6	+ 2.7	99	8	47	23	43	2.54	− 1.06	0.68	0	9	.....	.....	.....	se.	Geo. E. Valentine.
Tiskilwa	Bureau	798	29	.....	.....	.....	.....	.....	.....	.....	2.04	− 1.93	0.51	0	7	.....	.....	.....	.....	F. I. Smueker.
Walnut	do	717	22	75.9	+ 2.3	101[a]	8†	49	23	40[a]	1.51	− 1.98	0.60	0	9	17	8	6	e.	O. C. Nussle.
Warsaw	Hancock	501	15	.....	.....	.....	.....	.....	.....	.....	2.74	− 0.13	2.55	0	2	.....	.....	.....	.....	W. R. Kirkbride.
Waterloo	Monroe	719	2	.....	.....	.....	.....	.....	.....	.....	0.30	.....	0.30	0	1	.....	.....	.....	.....	Prof. J. E. Raibourn.
White Hall	Greene	573	5	81.0	.....	103	6†	50	30	46	2.87	.....	2.14	0	6	19	4	8	.....	Frank Dillman.
Windsor	Shelby	681	14	80.3	+ 5.8	105	8†	49	30	46	2.12	− 1.51	1.54	0	5	12	14	5	n.	Herbert Rose.
Winnebago	Winnebago	900	26	73.0	+ 2.1	99	16	51	5†	37	5.15	+ 1.38	2.40	0	8	18	11	2	sw.	Frank Osborn.
Yorkville	Kendall	584	26	72.9	+ 2.2	98	9	47	5	41	5.77	+ 2.38	2.00	0	8	19	3	9	w.	Herman A. Grimwood.

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for August, 1913. District No. 5, Upper Mississippi Valley.*

Stations.	Watershed.	Day of month. 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.
North Dakota.																																	
Amenia‖	Red				T.				T.	T.	.23	T.						T.	T.		.45	.40											1.08
Bottineau‖	Mouse							.25	T.		.44	.16		.15		.24	T.		.03	1.78	.01	T.							.05		T.		3.11
Bowells‖	do				.05			.59			.21	.15		.16		.05		.05	.79	1.40								.06		.06			3.57
Condo	Sheyenne							.47			.57							.38		T.								.03				.25	1.70
Crosby	Mouse			.47		.07	.09		.02		.51					.05		T.	.40	.10	.04	T.						T.		T.	T.	.01	1.76
Devils Lake	Sheyenne			.03	.04			.46		T.	1.10		T.			.03		.27	.01	.50	.78							T.			.71		3.93
Donnybrook	Mouse				.06	T.	.74		T.	T.	.82		.68	.04	.12			.20	.06	.54													3.26
Dunseith	do				.01			.38	.01		.93			.68		.25		.03		1.34								.08				.02	3.73
Eckman (near)	do																																
Fessenden‖	James							.32		.03	.43	.73							T.	.02	.60								.02		.08		2.23
Forman	Sheyenne							.02			.10		.10					.32	1.35	.06	.05	.55						.02						2.57
Grafton‖	Red							.10	.02		.07	1.06	.04								.70	.02				.02		.03	.11			.19	2.36
Granville	Mouse																																
Hannah	Pembina			T.				.34				.34	.11			.98		.03		1.01								.04					3.67
Hansboro	Red			.01				.20				.54		.03		.98		.07		1.17	.82												3.00
Hillsboro	do							T.		.05	.10	.15							.25	.96								.02			.01		1.54
Lakota	Sheyenne				.05				.40	T.	2.05							.08	.13	.70	.06							.05			T.		3.52
Langdon	Pembina																																
Larimore‖	Red							.05			.48	.63							.14		.92								.07				2.29
Lisbon‖	Sheyenne									T.	.22	.45	.02	1.45				.13	2.05	.06	.55	T.										T.	4.93
McKinney	Mouse	T.				T.	.75				.60			.25	1.00		.70				T.				T.						.07		3.37
McLeod	Sheyenne									.07	.85	.04		2.34				.07	1.70	.50	.23												5.80
Manfred	do							.26	.06	T.	1.21							.24	.15	.95	T.							T.			.10		2.97
Mayville	Red									.19	.08								.32	1.30								.02					1.91
Milnor	do								T.		.36		.17	.70			.07	.07	1.45	T.	.10												2.92
Minot‖	Mouse				T.			.40			.65	.06		.64		.05	T.	T.	.33	1.60		.02				T.			T.		.01	T.	3.76
Minto	Red			T.				.15			1.11							.05	.95									T.			.48		2.74
Oriska	Sheyenne							T.	T.	.20	.32			.30	.01	T.	.30	.63	*	.96	.10								.03				2.85
Park River	Red							.12			1.70	.30						.05		.45	.05							.05				.15	2.87
Pembina‖	do																																
Power	Sheyenne				T.			T.	T.	.07	1.30	T.		1.52			.32		2.03	.19	T.									T.		5.43
Towner	Mouse	T.									.95			.63		.06		.21	.26	.53								T.				.10	2.74
University	Red				.03			.05	T.		.19								.07	1.13	T.							.05	T.		T.		1.52
Wahpeton‖	do													.05				.10	3.81	.40	.06	.08											4.50
Walhalla	Pembina													1.05		.56					1.50												3.11
Westhope	Mouse							.18			.50			.38		.28		.07	.15	1.46													3.02
Willow City	do				T.	T.		.16	T.	.02	1.00			.37		.08		.08		1.03													2.74
Albert Lea	Mississippi												T.					1.00		.50	.20											T.	1.70
Alexandria ‖	do					T.		T.	.50	T.	.08	.02		.06			T.	.50	2.45	.78	.42	.50											5.31
Angus	Red							.06	T.	.01	.10	.01		.03					.09	.78					.01			.12					1.21
Bagley	do							1.40	.20												.38							.01	.03				2.02
Baudette	Rainy							.47	.16			.58	.06	.10	.01	.74				T.		.65	.27					.20	.31			.66	4.21
Beardsley	Minnesota				T.	T.		T.			.01	.09	.02	.03		T.	.50	.35	1.42	.15		.09									T.		2.66
Bemidji ‖	Mississippi						.11		.14			.07		.02								.20											0.54
Bird Island	Minnesota							T.	T.		T.	.04	.02	.05	.25		.02	1.25	.09	1.06								T.			.05	.02	2.85
Brainerd	Mississippi							.06		.05	.06	T.		.10				.29	.41	.20		.87		T.					T.				2.04
Caledonia ‖	do									.27	1.60	.03			T.		.01		.05			.08								T.		.58	2.62
Campbell ‖	Red				T.			T.		T.	T.	.06		.15				.62	1.72	.35	.10	.08											3.08
Cass Lake ‖	Mississippi								.12	.06		.19		T.					T.	T.		.91	T.					T.		T.			1.28
Collegeville	do					.11		.39			.03	.09		.10	.01			2.32	.58	.59	.03	.63											4.88
Crookston ‖	Red				T.				.18	.08	T.	.08	T.	T.					.10	T.	.45												0.89
Detroit ‖	do				T.	T.		T.	T.	.05	.20	.30	T.	.15				.20	.75	.35	.50	.45				T.				T.			2.95
Ely	Rainy																																
Fairmont (near)	Minnesota					T.			.16		.37	.33		.04	.01			.25		1.00	.17	.02							.04		T.		2.39
Faribault ‖	Mississippi																																
Farmington	do						.05	.05	.08		T.	.09	T.	.07	T.				.47	.08	.32	.49									.15		1.85
Fergus Falls	Red				T.			.08		.04	.09	T.		.27		T.		.13	3.11		.41	.61						T.			T.		4.74
Fort Ripley ‖	Mississippi					T.					.29			T.	.09			.70	.55	.35	.23	.65											2.86
Fosston	Red							.35	.04	.04		.46	.03							.15	.01	.09						.08					1.25
Glenoce	Mississippi																	1.00			.75												1.75
Grand Meadow	do								.08	T.	.61	.11	T.	T.				.30	.07		.93	.16									T.	T.	2.26
Gull Lake Dam	do					.04		.03	.11	.04		.04		.28				.67	.73	.11		1.40			T.				.03	T.			3.48
Hallock	Red							.10			1.15	.15	.60			.75			T.	2.00	.55				T.			.20	.05			.01	5.56
Halstad ‖	do				.04				1.00	.05	.12	.12							.26	.04	.85	.02							.01			.01	2.52
Hinckley	St. Croix							.06				.15		T.				1.23	1.04	.20	.34								T.				3.02
International Falls	Rainy							.10	.62			.50	.64	.10		1.50				.45		.84	T.	T.	T.			.17	.27	T.	T.	.23	5.42
Itasca State Park	Mississippi					.05		.42		.06	.09	.04		.03			.10	.06	.35	.03													1.23
Lake Crystal	Minnesota																																
Leech Lake Dam	Mississippi					.06		.53		.01		.19							.11		.18	.49						.06	.02				1.65
Little Falls	do																																
Littlefork	Rainy							.10	.20			.58	.06	.03		.17						1.42	.03					.17	.05			.56	3.37
Long Prairie	Mississippi																																
Lynd	Minnesota					T.		.03	T.		.50			.47	.25	.24	1.10	.78	.55	.15		T.										T.	4.07
Mankato ‖	do					.02			1.26	.04	.18	.20		.04			.02	.06	.01	.11	1.64	.06											3.64
Milaca	Mississippi																																
Milan	Minnesota							.12	T.				T.	.22			.10	1.65	.33	.23		.06									.04		2.75
Minneapolis	Mississippi					T.	T.	.06	.05		T.		T.	.01	T.	T.	.01	.10		.34	T.	.81				T.			.02		T.		1.40
Montevideo ‖	Minnesota							.06	.02			T.		.02	T.		T.	T.	1.08	.07	.23					T.			T.			.01	1.49
Moorhead	Red				T.			.01		.12	.28	.01		.10			.08		.46	1.08	.55							.01			T.		2.70
Mora	St. Croix					.02		.91	.48			.17	T.	.06			.05	.82	.02	.91	.27	.85							.03				4.59
Morris	Minnesota				T.			.05	T.		.03	.03	T.	.25			1.80	.50	1.28	.43		.63											5.00
New London	Mississippi				T.			.38	.04				T.	.49			T.	2.10	1.90	.72	.51										T.		6.14
New Richland	Minnesota							T.	1.17		1.72		T.	.04	T.			T.	.15		1.53	.18									T.	T.	4.79
New Ulm ‖	do								1.20	.15		.28		.10	.05		T.		.02	.40	.80	.10							T.			T.	3.10
Osakis	Mississippi																																
Park Rapids ‖	do								.15		.11	.14	.02		.18			.19	.35	.23	.05	.30				.01			.02				1.75
Pierz	do							.82						.12				1.17	.18	1.48		.47											4.24
Pine River Dam	do							.30		.10	T.			.24				.25	.25			1.40								T.			2.54
Pokegama Falls	do					.27		1.81	.63			.16			T.	T.	T.			.03		.97				.01		.05	.16				4.09
Red Lake	Red							.70	T.			.60	.15							.12								.19	.06				1.82
Red Lake Falls ‖	do																																
Red Wing ‖	Mississippi						.02		.04	.18	.16			.02		.02			.02		.08	.56			.04				T.	.08		.20	1.42
Redwood Falls	Minnesota																																
Reeds Landing ‖	Mississippi								.04	.14	.20										.23	.50								.04		.20	1.35
Rochester ‖	do								.13	1.16	1.37	.09						.10	.01		.42	.35										.09	3.72
Roseau	Red							.07	.11			.64				.78				.22	.02	1.10			.02	.02	.13	.10					3.21
St. Charles	Mississippi								.25	.23	1.20										.19	.58		T.								.22	2.67
St. Cloud	do																																
St. Paul	do					T.		.04	.03					.02	.01		T.	.10		.41	.26	.71				T.			.01		T.		1.59
St. Peter	Minnesota							1.28			.27		.10				.40		.90	2.00	.38												5.33

TABLE 2.—*Daily precipitation for August, 1913. District No. 5*—Continued.

Stations.	Watershed	Day of month.																															Total.
		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	
North Dakota—Con.																																	
Sandy Lake Dam	Mississippi								.42	.04		.02						.19	.19		.14	.52						T.	.25				1.77
State Sanatorium	do					.01				.48		.18		.05						1.53		.50								.07			2.88
Stillwater ‖	St. Croix								.04	.05		T.	T.	T.	.01	.02	T.		.03		.31	2.05			T.					T.			2.51
Taylors Falls	do					.15			.33									.12		.35		.95							.02				1.92
Thief River Falls ‖	Red							.03				.15							.10	.53		.01					.15						0.97
Tracy	Minnesota							T.	.23		.39	.05	T.		T.		.13		.53	.83	.05	.08											2.29
Warren	Red																																
Warroad	Rainy							.50			.45		.05			.70			T.	.06	.80							.12	.42		.22		3.32
Windom	Des Moines								.05		.62						.04		.08	2.00	.16												2.95
Winnebago ‖	Minnesota					T.			.01	.16	1.27	.43	T.	.14	T.	T.	.01	.12	T.	.10	1.20	.01	T.									T.	3.45
Winnibigoshish	Mississippi					.44		.45		.12		.15	.02			.08						.28						.04	.18				1.76
Winona	do					T.			.40	.80	.49		T.		T.			.07	.24		T.	.93								.03	T.	.08	3.04
Worthington ‖	Des Moines								.09		.14	.50					.23				8.00	.04											9.00
Zumbrota	Mississippi					T.			.01		.24			T.				T.			.43	1.05										T.	1.73
South Dakota.																																	
Milbank ‖	Minnesota						T.	.03	T.			.18		.07				.71	.82	1.42	.10	.08										T.	3.41
Sisseton ‖	do																																
Wisconsin.																																	
Antigo ‖	Wisconsin						.05			.28			.07	T.		.48														.28			1.16
Barron	Chippewa					T.			.09			T.					.70		1.80		.12	.40		.11					.04				3.26
Beloit	Rock				T.		.03		.74		.37	.06		T.	.91							T.							T.			T.	2.11
Big St. Germain Dam	Wisconsin			.04		.10			.65	T.	T.				.08	.02	.80					.14	.04		.07				.34				2.28
Brodhead	Rock								.45		.62	.05			.88				T.			T.							T.				2.00
Burnett	do			T.		T.	T.	T.	.01	.35	.57	T.	T.	T.	.02	.12	T.	1.36	T.	T.	T.	.06				T.	T.	T.	.05			T.	2.54
Cornell	Chippewa																																
Cottage Grove	Rock			T.		.01	T.	T.		.02	.52	T.	T.	T.	.37		.33	.44		.05		.05	.03					T.	T.		T.	.02	1.84
Darlington	do										.55	.05	.10	1.15					1.80		.30												3.95
Deerskin Dam	Wisconsin			.55					.70		T.			T.	.61	.40		1.10			T.	.08	T.					T.	.52	T.			3.96
Delavan	Rock						.22	.07			.07	T.	T.	T.	.42			.22	.48	.10		.05						T.	T.			.13	1.69
Dodgeville ‖	do														*	2.30			*	.40		*	.70										3.40
Downing	Chippewa							T.	T.						T.	T.						1.50											1.50
Eau Claire	do					.02		T.	.09	.92	.08	.07	.03	T.	.01		.28				.16	.90							T.				2.56
Glen Flora	Chippewa					.15			.61										2.00			.73								.85			4.34
Grand Rapids ‖	Wisconsin	.08								.75	.30	.05	.09	.02		.17			.06			.35	.24			.03				.02			2.16
Grantsburg	St. Croix								1.34		.01			.02				.35	.36			.75											2.83
Hancock	Wisconsin							.05	.05	.75	.05	T.		T.	.05	.80				.08		.45				T.			T.				2.28
Hatfield	Black									.39		.19			.06						T.	.72		.06		.03					.03		1.48
Hayward	St. Croix							.57				.06							.07		.03	.04							.04				0.81
Hillsboro	Wisconsin					T.		T.	.30		.63	.04	T.	T.	.50				T.		T.	.72							T.		T.	.50	2.69
Koepenick	do			.10			.05		.20							.20	.10					.20							.20				1.05
La Crosse	Mississippi					T.	.01	.15	.01	.60	.03							.01			T.	1.24							.05		.08	.35	2.53
Lake Mills	Rock						.33	.06			.10				.16		.04	.84	.02	.83		.02						T.	T.			.06	2.46
Lancaster	Mississippi										.48						.36		.45														1.29
Long Lake	Wisconsin			.72		.04			1.09						.63	.75	.68			.01		.05	.02						.47				4.46
Madison	Rock			.01		T.	T.	T.	T.		.65	T.	T.	T.	.22	T.	.29	.06	.06	T.		.14							T.			.16	1.59
Marshfield	Wisconsin			T.		T.		T.	.23	.18	.05	.02		T.	.02	T.		1.45		1.21	T.	.70		T.					.02				3.88
Mather ‖	do			T.					T.	1.14	.21		.06			.08						.80	.03		.05	.03			T.	T.		.04	2.44
Mauston	do								.15	.22	.30				1.30			.85				.25										.22	3.29
Meadow Valley	do									.88	.13	.06			.22	.10					.57	T.		.06				T.					2.02
Medford ‖	Black			.05			.10			.10	.05		T.					.15				.45						.08					.098
Merrill ‖	Wisconsin						.16		T.	.08	T.		T.			.10			T.			.15							.13		T.		0.62
Mincoqua	do			.01		.10		T.	.95			.02	.01		.02		.78					.36	.03		.09			T.	.74				3.11
Mondovi	Mississippi					T.		.01	.16	.40	.20	.25	T.		.18		.13				.07	1.06	.01	.01	.03					.03		.02	2.56
Mt. Horeb	Rock						.15	.03		T.	.50				.60				.30				.40						T.			.06	2.04
Muscoda ‖	Wisconsin								T.		.50	.10			1.92				.20			T.	.85									T.	3.57
Neillsville	Black								.71		T.					.65						.65											2.01
New Richmond	St. Croix								.10	T.	T.	T.	.10	T.				.16	T.			2.07											2.43
Osceola	do					T.		.10	.12			T.	T.	T.	T.			.37		.10	.40	1.41						T.	T.				2.50
Park Falls ‖	Chippewa			.03			.08		.55	.02	T.			.02	.03		1.63	.20	.13	.39	T.	.28			.03	.01			.37	T.			3.77
Portage ‖	Wisconsin			T.		T.	T.	.05	.04	.41	.43	.13	T.	T.	T.	.74		1.33	T.	T.	.11	.05	.15			.23	T.	T.				.35	4.02
Port Edwards	do		T.	T.					.10	.70	.13	.05	.04		.13							.50			.03				T.				1.68
Prairie du Chien ‖	Mississippi	T.							T.		.24	.08			.06				2.60				T.										2.98
Prairie du Sac	Wisconsin					T.					.88				.34		.01		.02	.20		.32										.22	1.99
Prentice ‖	Chippewa	T.		.05		T.	.18	T.		.06			.02			.05	T.	.50		.06		.56	T.		.15				.18				1.81
Rest Lake	do			.11		T.		.30		T.		T.		T.			1.09	T.	T.		.22	.15	T.		T.				.40				2.27
Rhinelander	Wisconsin								.42	.04					.01	.77		.27				.09	T.		.08				.15				1.83
Shullsburg	Mississippi					.30	.37	.20			.62			.21	.75				1.22			T.											3.67
Solon Springs	St. Croix			.20				.40		T.			T.	T.	T.			.70	1.40			.50							T.				3.20
Spooner	do					.08			.68	T.				.01			2.70	.07	.19	.01	.05	.44				T.		T.	.44	T.			4.67
Stanley	Chippewa				T.				.02		.03	.02			T.		.75					.80		.03				.20					1.85
Stevens Point	Wisconsin																																
Sugar Camp Dam	do					T.		1.37									.63				.11		T.	T.				.55	T.				2.66
Tomahawk	do			.50					.30								.60					.20							.30				1.90
Trout Lake	do							T.	.60	T.					.05		.63	T.				.10	T.	.02				.40					1.80
Twin Lakes Dam	do			.65						.52							1.40											.64					3.21
Valley Junction	do									.80	.60				.24							.80										.10	2.54
Viroqua	Mississippi							.04	.03		1.35			T.	.28							.88								.02	.09		2.69
Vudesare	Wisconsin			T.		.75		.30	1.20			T.				T.	.75											.60					3.60
Watertown ‖	Rock				T.		T.	T.	.12	.03	.62	.26			.18			1.74		.94			.12			.02			T.	.04		.20	4.27
Waukesha	Fox			T.		T.	.08	.38			.06	T.			.25	1.70	1.37	1.22		.04			.01			.01		T.	.03			.22	5.37
Wausau ‖	Wisconsin			T.			.12		.01	.49	T.		T.				T.		.01			.12				T.			.07				0.82
Weyerhaeuser	Chippewa					.08		.07	.05			.04		.04	T.		.02		2.52		.04	1.09		T.				T.	.04				3.99
Whitehall	Mississippi								.30		.30				.10						.70	.13										.10	1.63
Iowa.																																	
Albia ‖	Des Moines																																
Algona	do								.14	.06	.55	.06		.08					.77		1.10	T.											2.76
Alta ‖	Raccoon					T.		.12		.03	.40	.24		.03	T.		T.	.04		.40	.27												1.53
Amana	Iowa					T.		.39		T.	.71	1.01		.01					.08													T.	2.20
Ames	Skunk				T.	T.	T.	.53			.05	1.13		.24					T.	.10	.67												2.72
Baxter	do					T.	.01	.20		T.	.17	1.14		.04				T.	.40	.13	.04	.01											2.14
Belle Plaine	Iowa					T.	T.	.10		T.	.83	1.00	T.	.02					T.	T.		T.											1.95
Belmond	do					T.	T.	.02	T.	T.	.65	.18		.15			T.	.02	.60	T.	.60	.02							T.		T.		2.24
Bloomfield	Mississippi				T.	T.		.04			.04	.89	.12			.11	.08		.19				T.										1.47
Bonaparte	Des Moines						.05	.07			.05	1.64	.02				T.		.36	.63												.06	2.88
Boone ‖	do					T.	T.	.27	T.			1.18		.78	T.					.07	.81	T.	T.										3.11
Britt	Iowa					T.		.01	.03	.01	.38	.18		.05			.82	.06	.35	.02	.63	.01									T.	T.	2.55

TABLE 2.—*Daily precipitation for August, 1913. District No. 5*—Continued.

Stations.	Watershed.	Day of month.																															Total.
		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	
Iowa—Contd.																																	
Burlington‖	Mississippi	T.					.01	.01				.52	.80						.80	.27													2.41
Carroll‖	Raccoon					T.		.15			.36	1.35		.61			.40			T.	.14										T.		3.01
Cedar Rapids‖	Cedar	T.						.08	T.		1.84	.50		.34	T.					.05												T.	2.81
Charles City	do					T.		.02	.01	.04	1.19	.02		.21			T.	.45	.55	.93	.35	T.									T.	T.	3.77
Clear Lake	do																																
Clinton	Mississippi					T.	.04	.10	.11		.25	.12		.83	.14				.15													.03	1.77
Columbus Junction	Iowa							.12			.33	.60	.05						1.18													.03	2.31
Davenport	Mississippi					.07	T.	.16		T.	.91	.24	T.	T.	.05			.04	.55		T.								T.			.04	2.06
Decorah	do								.15	T.	.75		.11	.09					.18											T.	T.		1.28
Delaware	do						T.	.12			.75	.21		.95	.03			T.											T.			.06	2.12
Des Moines	Des Moines				T.	T.	T.	.02		.01	2.05	.44		.02			T.		.90			T.									T.		3.44
Dubuque	Mississippi					.01	T.	.34			.12	.50	T.	.15	.16			2.05	.23										T.		.03	.01	3.60
Earlham	Raccoon										.41	3.00					T.		.89		T.	T.										T.	4.30
Elkader	Mississippi					T.		.07			1.23			.30				1.65														T.	3.25
Elma	Wapsipinic'n					T.		.05	.04		.23	.06						.72	.05		.90	T.									T.	T.	2.05
Estherville‖	Des Moines										.50	.40					.70				1.40												3.00
Fairfield	Skunk						.20					1.07	.40						1.81	.17												.02	3.78
Fayette	Mississippi					T.	T.	.07	.01		.61	.06		.22				1.28	.04	.03												.02	2.34
Forest City‖	Cedar							T.	.20		.40	.17		.10			T.	1.08	.11		.70	.04											2.80
Fort Dodge‖	Des Moines					T.		.20			.66	.07		.63						.92	1.80	T.										T.	4.28
Fort Madison	Mississippi					.10		.24			T.	.96							.40	.04		.20										T.	1.94
Gilman	Iowa																																
Grand Meadow	Mississippi					.02		T.	.06		1.37	.07	.03	.15			.01	1.60	.20										T.			.02	3.53
Grinnell	Iowa					.02		.21			.85	1.10		T.						.05													2.23
Grundy Center	Cedar						T.	.12			.29	.26		1.40							.04	T.											2.11
Guthrie Center	Raccoon				T.	T.	T.	.02			.25	2.38		.04					.13		.01	T.									T.		2.83
Hampton	Cedar						.06				1.20			.62				T.	.03		.45												2.36
Humboldt	Des Moines							.02			.48	.43	.28					.32		1.09	.02								T.		.01		2.65
Independence	Wapsipinicon.					.01	T.	.08			.21	.32		.98								.02										.04	1.66
Indianola	Des Moines			T.	T.	T.		.07		T.	.67	2.67	.17						.80			T.										.01	4.39
Iowa City‖	Iowa	.02					T.	.22	.33		.22	1.46	T.						.48	.21												.03	2.97
Iowa Falls‖	do					T.		.15	.03	T.	T.	.48	T.	1.48	T.				1.78	T.	.08	.46	T.									.03	4.49
Jefferson	Raccoon																																
Keokuk	Mississippi					T.		T.	.03			1.21							.13	.26		T.										T.	1.63
Keosauqua‖	Des Moines						.08	.18			.06	.90	.07				.46	T.		2.00												.05	3.80
Knoxville	do																																
Lacona	do				T.	T.	T.	.05			.90	.90	.01					.05	.01		T.											.01	1.93
Lansing	Mississippi																																
Le Claire‖	do	.01					.08	.09	.13		T.	.87	T.	.02	T.	.03			1.53	.07												.03	2.86
Marshalltown‖	Iowa					.01	T.	.10	.01		.13	2.10	.02	.35					T.	.08	T.	.05											2.85
Mason City	Cedar										.57	.11		.05					.22		2.31												3.26
Monroe	Skunk				T.	T.	T.	.16		.21	1.53	1.80	.06						.13													T.	3.89
Mount Pleasant	do					T.	.41	.01			T.	.90	.50						.52	1.01												.05	3.10
Muscatine‖	Mississippi	T.					T.	.18	.03		1.03	.75							.70	.34												T.	3.03
New Hampton	Wapsipinicon.																																
Nora Springs	Cedar					.01		.14	.06	.55	.15	.01	.01	.28		.20		1.04	.43		2.00	.04											4.92
Northwood	do					T.	T.	T.	.28	.14	.85	.23	.02	.03			T.	.95	T.	.03	.82	.20									T.	T.	3.55
Olin	Wapsipinicon.							.50			1.20	.30		.70	T.																	T.	2.70
Osage	Cedar								T.		.2	.08		T.				2.81	.08		1.17	T.											4.40
Oskaloosa	Des Moines							.05			.1	1.33	1.17						.33	.88												.01	3.95
Ottumwa	do																																
Pella	do				T.	T.	T.	.25		T.	.85	1.50	.15						.10	1.10		T.									T.		3.95
Perry	Raccoon				.02	T.	T.	.10			.18	1.91		.15					1.60	.06	T.	.03	.04								T.		4.09
Pocahontas	do							.06			2.01	.38		.14					1.20	2.01											T.		5.80
Rockwell City	do							.75		.75	.55			.75					T.		1.45												4.25
Sac City	do				.05			.16	T.	T.	.87	.07		.16					.41	.45		.05									T.	T.	2.22
St. Charles	Des Moines					T.	T.	T.		T.	.20	.90		.06					3.35		T.	T.									T.		4.51
Sigourney	Skunk					.02	.02	.30			.65	.78	.70						.02	.44												T.	2.93
Stockport	Storm Lake						.21	.03			T.	.90	.10		.03		T.		1.00	.55		T.										T.	2.82
Storm Lake	Raccoon				T.			.11		T.	.65								.53		.23								T.				1.52
Tipton	Cedar						T.	.23		T.	.78	.39		.06					.33			T.										T.	1.79
Toledo	Iowa					.01	T.	.27			.60	1.50		.20								T.											2.58
Washington	Skunk							.05		.10	.63	.77	.26						2.06														3.87
Waterloo‖	Cedar							.01	.03		1.00	.36		1.00	T.							T.										T.	2.40
Waukee	Raccoon				T.	T.	T.	.03		T.	.26	1.50	.01	.05					.04		.04	T.										T.	1.93
Waverly	Cedar							.05			.55																						0.60
Webster City	Des Moines					T.	.20			.22	.22	.78		1.10			.07		T.		1.48	T.									T.		4.07
West Bend	do					T.	T.	.03	.03	.06	.30	.85		.05					3.15		2.25	.26									.01		6.99
Whitten	Iowa					T.	T.	1.00			T.	.73		.76							.50	.04									T.	T.	3.03
Winterset	Des Moines				T.		T.				1.35	1.77		.07			.01		3.90	.03		T.										T.	7.13
Missouri.																																	
Gorin	Mississippi					.04						.66				.01	1.13			.18													2.02
Hannibal	do				T.	.02			T.			.36	T.	.10	.01		.16		.68	.02		T.										T.	1.35
Louisiana	do				T.		.03					.13	.18		.44	.48			1.00	.12													2.38
Macon	do					T.			T.			.27					.57			.03													0.87
Mexico‖	do						T.					T.	T.	T.	.39			.22		.05													0.66
Palmyra	do																.70	.63				.04											1.37
Steffenville	do					T.						.92		.05		T.	.15			T.													1.12
Sublett	do											.50					.20		T.	T.													0.70
Vandalia	do											1.21		T.		.50		.55	1.25														3.51
Warrenton‖	do													.01	.29			.01		.02			.41										0.74
Indiana.																																	
Collegeville	Iroquois						.91	.04	T.		T.	.65		T.	.20				T.	T.	T.		.33									T.	2.13
Knox	Kankakee	T.					.05	.03	.51		.64	.02		T.	.43				.07	3.05			1.11						T.			.03	5.94
Laporte	do								1.50		.50	.05		T.	.30	.32			.12				.56										3.35
Plymouth	do						.04	.02	.53		.97	.04		T.	.23	.10		.02	.03				.97									.02	2.97
South Bend	do								1.55		.05	T.			.06	.02		.06	.06				1.59						.01			.01	3.41
Illinois.																																	
Aledo	Mississippi					T.	.02	.03			1.03	.69							.72														2.49
Alexander	Illinois						.26	T.				T.	T.	.38				.76	.39			T.						T.				T.	1.79
Antioch	do								.11		.33				.22			1.08														.07	1.81
Astoria	do					T.	.06	.15	T.		T.	.30	.15	.07			T.		.13	T.		.02										T.	0.88
Aurora	do					T.	.48		.15		1.62		.01	.22	1.84														T.			.05	4.37

TABLE 2.—*Daily precipitation for August, 1913. District No. 5*—Continued.

Stations.	Watershed.	Day of month.																															Total.
		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	
Illinois—Contd.																																	
Beardstown‖	Illinois																																
Bement	Mississippi						.03	.24										.30		.18		1.00											1.75
Bloomington	Illinois						.05	.02			T.	1.33			.06			T.	1.19			.11	T.									T.	2.76
Cairo	Mississippi											T.	T.							.08		1.13	.33										1.54
Camp Point	do					T.	T.		T.		T.	.68	.01	.09	T.	T.	.01		.08	.13		.02										T.	1.02
Carbondale	do	.04						.09						.01			.08				.20		.95										1.37
Carlinville	Illinois						.05							.30				.31	.82	.38	.11						T.						1.97
Carlyle	Mississippi						.02							.12			.04					.45											0.63
Chester‖	do		.04					T.	.06			.01			.26			.08			.22	.01	.08										0.76
Clinton	Illinois						.06	.15				.03	.54		.37				.15			.58	.32										T.	2.20
Cobden	Mississippi	.57												T.				.70			T.	T.	.18										1.45
Dakota	do					.06		.14	.08		.93	.75	.02	.08	2.17				.31													.05	4.59
Decatur‖	Illinois						.01	.15						1.35	.15				.35	.02			.15										2.18
Dixon‖	Mississippi	.15					1.15	T.	.23		T.	.15	T.	.40	.08	.36			.05													T.	2.57
Du Quoin	do						.03				T.		.04	T.			.45	.02	1.23	T.	T.	1.35											3.12
Dwight	Illinois					T.	.44	.03	T.		T.	.65		.64	.30		T.	.10	T.			.06	.11									T.	2.33
East St. Louis‖	Mississippi												.05					.02			.15		.01										0.23
Edwardsville	do																																
Elgin	Illinois						T.		.39		1.18	.16	T.	T.	1.51					T.												.01	3.25
Ewing	Mississippi	.23														1.23					.37	.91											2.74
Fairview	Illinois					T.	.09	.07	.05		.03	.03	.69			T.			.26	.14		.01										.01	1.38
Galva‖	do	.02					.21	.05	.14			1.79		T.		.01		.20	1.29	.04												T.	3.75
Grafton‖	Mississippi								.18					.06																			0.24
Greenville	do						.16							.10						T.	.03	.41	.02										0.72
Griggsville	Illinois					T.	T.	.16				.19								T.												T.	0.35
Havana	do						.05	.25				.12	.80			T.	.10	.17	T.			.03											1.79
Henry	do																																
Hillsboro‖	Mississippi						.04								.95	.08					.72		.08					T.					1.87
Joliet	Illinois					.04	.80	T.	.20		.26	.41			1.59					T.		T.	.09						T.			.02	3.41
Kishwaukee	Mississippi					.03	.36		.14		.22	.76		.09	1.06				.03													.03	2.72
La Grange	Illinois																																
La Harpe	do					T.		.23	.04		T.	.50						.13	.37	.05		.07											1.39
Lanark	Mississippi					.06	.62	.04		T.	2.15	.12		.19	.99				1.30										T.			.09	5.56
La Salle	Illinois					.09	.15	.05	T.		1.68	.21	T.	.30	.03			1.10	.09			.01							T.			T.	3.71
Lincoln	Illinois						.03	.15	.14		T.	.15	1.58		.10				.08	.95		.01					T.						3.19
Macomb	do					.02	.01	.40				.30	.13		.22																		1.08
Manteno	do					T.	1.17	.02			.47	.41		.03	1.41			.04				.05	.16									T.	3.76
Martinton ‖	do						.68	.03	T.			1.00	.21		T.	1.50							.07									T.	3.49
Mascoutah	Mississippi						T.						T.					.45	.03		.20	1.30											1.98
Minonk	Illinois						.04	.04	.02		.02	1.04			.02				.21	.81												.01	2.21
Monmouth	Mississippi						.03	.15	T.		.60		.43							.10												T.	1.31
Morris	Illinois						1.11	.01	.18		.13	.23		.18	.41								T.									.02	2.27
Morrison	Mississippi						.18	.11	.34		.17	.07		.85	.58				.32										T.				2.62
Morrisonville	Illinois						.16	T.					T.	.49						.45		.24						.04					1.38
Mount Vernon ‖	Mississippi						.11												.33				.36										0.80
Nashville	do						.08					T.	T.				.05	1.00	.06	.09	.07	.60							.07				2.02
Oregon	do					T.	.90	T.	.45		.30	.75	.03	.26	.74				.10	T.												.05	3.58
Ottawa	Illinois						.78	.01	.04	.10		.22	1.38	.24					.13				.03									.05	2.98
Pana	Mississippi																																
Pawpaw	Illinois					.03	1.46	.04	.08		1.04	.41		.23	.08				T.	T.			.02						.02			.02	3.43
Peoria	do					.01	.02	.13	.04		.09	1.32	T.		T.			.33	.67			.25										.01	2.87
Pontiac	do					T.	.27	.05	T.		T.	1.34		.18	.37			.02	1.12			.19	.31									.01	3.86
Quincy ‖	Mississippi						T.			T.			.67	.23	.05	.05				T.	.35												1.35
Riley	do					.01			.05		2.16	.12		.01	.79				.53								T.	T.				.02	3.69
Roberts	Illinois					T.	.20	T.	T.		T.	.35	T.	.28	.26			T.	T.			.75	.34									T.	2.18
Rockford ‖	Mississippi	.01					.15	T.	.04		.58	.04	.34	T.	1.59					T.			T.	T.								.04	2.78
Rushville	Illinois				T.	.03			T.			.24				.03			.14													T.	0.44
St. Charles	do					T.	.11	T.	.25		.93	.32		.10	1.05				T.	T.									T.			.05	2.81
St. Peter	Mississippi						.13						.48	2.00							T.	T.	.07										2.68
Sparta	do													.04			T.	.07	.97	.76	.03							T.		T.			1.87
Springfield	Illinois					.08		T.				T.	.13	1.35	T.		.23		T.	.27		.82							T.				2.88
Streator ‖	do						.13	T.	.06	T.		1.75	.61		.05	.03			.58	.04	.01		.02										3.28
Sullivan	Mississippi						.02	.18					.23	.16	.04					.05	.50	.12											1.30
Sycamore ‖	do	T.					.22	.08	.09			.17	.63		.68	.36				.27												.04	2.54
Tiskilwa	Illinois					T.	T.	.08	.10		.63	.51		.05	T.			.27	.40			T.											2.04
Walnut	Mississippi					T.	.10	.04		.12	.25		.60	.03					.18			.16							T.			.03	1.51
Warsaw ‖	do							T.				2.55								.19													2.74
Waterloo	do						T.	T.											T.	.30									T.				0.30
White Hall	Illinois					T.	T.	.02				.05		.05	2.14				.01	.60	T.	T.											2.87
Windsor	Mississippi						.08						.25	.10					T.	1.54	T.	.15											2.12
Winnebago	do					.10	.45	.03			.50	.67		.12	2.40				.88														5.15
Yorkville	Illinois					.01	.64	.01	.02		2.00	1.64		.27	1.18																		5.77

* Precipitation included in that of the next measurement.
‡ Separate dates of falls not recorded.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE No. 3.—*Maximum and minimum temperatures for August, 1913. District No. 5, Upper Mississippi Valley.*

Date.	North Dakota.										Minnesota.																	
	Bottineau.§§		Devils Lake.		Lisbon.§§		Minot.§§		Pembina.§§		Collegeville.		Cookston.§§		Grand Meadow.		Montevideo.§§		Moorhead.		New Ulm.§§		Pine River Dam.		St. Paul.		Winnibigoshish.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	91	50	88	54	92	49	91	55	.....	.....	83	62	87	53	82	57	92	55	89	53	88	56	85	56	85	59	84	60
2....	93	60	95	59	103	55	95	58	.....	.....	84	65	95	57	91	60	88	60	100	60	93	62	91	53	91	65	89	54
3....	84	59	81	51	81	55	85	55	.....	.....	84	67	78	54	89	65	85	65	80	58	88	62	86	55	82	66	86	52
4....	95	55	95	56	94	49	97	55	.....	.....	84	59	85	58	85	56	89	50	89	53	90	57	83	47	83	60	80	51
5....	78	59	78	58	87	52	79	58	.....	.....	86	67	78	60	83	57	80	65	83	62	85	63	84	56	83	64	86	62
6....	85	54	80	50	84	53	85	51	.....	.....	75	59	79	53	84	56	82	55	82	54	85	61	77	56	80	65	84	60
7....	76	59	75	54	84	59	74	60	.....	.....	82	57	83	58	85	62	88	60	83	60	80	64	77	51	79	63	72	52
8....	76	46	78	52	85	48	76	51	.....	.....	77	60	81	48	81	61	75	58	83	51	74	53	77	59	74	64	76	55
9....	72	47	70	54	69	52	71	53	.....	.....	79	61	73	55	82	61	86	55	70	59	85	60	76	55	86	63	75	58
10....	55	49	57	48	61	58	62	51	.....	.....	68	54	64	54	76	64	72	63	62	57	78	65	68	51	68	59	74	56
11....	86	49	81	54	85	49	86	51	.....	.....	73	54	78	54	70	57	79	61	80	60	75	61	74	50	66	57	71	51
12....	93	52	86	62	83	63	93	58	.....	.....	73	55	88	55	82	61	81	63	84	64	75	62	80	56	72	61	78	56
13....	92	60	87	65	88	64	92	64	.....	.....	84	72	86	67	86	65	85	62	84	66	92	66	86	64	88	65	83	65
14....	97	67	92	65	98	65	98	65	.....	.....	86	78	95	65	95	68	95	68	95	64	96	70	89	63	85	70	88	65
15....	78	56	81	59	87	67	80	56	.....	.....	95	72	87	68	98	69	102	74	89	71	100	73	96	70	98	73	90	64
16....	87	47	87	54	87	59	84	51	.....	.....	89	70	86	55	96	73	93	69	89	62	90	78	94	68	90	75	89	61
17....	68	57	71	55	83	59	68	55	.....	.....	81	63	81	56	96	69	84	66	82	59	80	68	82	61	89	69	89	58
18....	83	56	78	57	78	61	79	55	.....	.....	77	62	73	61	88	64	83	63	76	64	90	68	75	59	80	70	81	56
19....	80	57	74	60	82	65	82	58	.....	.....	70	59	80	61	86	67	82	67	81	62	89	69	74	56	83	69	82	54
20....	81	60	86	61	89	63	86	62	.....	.....	85	59	88	63	89	67	92	65	89	61	92	68	86	59	89	69	83	62
21....	73	47	70	53	73	60	74	52	.....	.....	78	61	71	60	82	67	79	66	72	57	84	69	81	68	83	62	76	62
22....	78	48	77	50	82	50	80	47	.....	.....	78	56	78	53	76	54	81	53	78	52	78	55	75	56	75	58	75	58
23....	81	51	77	50	84	53	83	47	.....	.....	83	56	78	55	80	52	85	53	82	55	84	54	80	56	79	57	78	58
24....	83	52	86	52	86	48	94	49	.....	.....	83	54	83	55	86	60	84	52	82	52	87	56	74	49	79	60	77	44
25....	81	51	82	54	90	45	85	53	.....	.....	83	62	84	60	88	59	93	61	87	59	84	58	83	61	85	62	80	55
26....	80	42	78	48	83	49	79	43	.....	.....	77	57	76	52	82	58	86	55	79	50	86	59	76	55	80	61	78	58
27....	81	55	76	57	80	52	85	52	.....	.....	77	55	70	54	84	50	86	66	75	58	83	56	73	53	80	60	70	51
28....	76	45	74	51	89	50	78	51	.....	.....	71	58	73	54	77	55	75	55	76	54	80	62	76	50	77	61	65	50
29....	85	43	81	46	94	47	88	45	.....	.....	73	53	77	51	78	52	83	48	80	50	76	51	74	53	76	57	75	50
30....	85	50	84	58	80	55	87	48	.....	.....	72	53	80	53	83	49	78	53	74	55	78	54	73	46	78	52	77	50
31....	85	55	83	53	86	50	89	51	.....	.....	80	53	84	55	73	64	85	65	85	52	85	57	82	48	78	62	75	49
Mns..	81.9	52.8	80.3	54.8	84.7	54.9	83.4	53.5	.....	.....	79.7	60.4	80.6	56.7	84.3	60.6	84.8	60.4	81.9	57.9	84.8	61.8	80.2	56.1	81.3	63.2	79.5	56.0

Date.	Wisconsin.														Iowa.													
	Eau Claire.		Grantsburg.		Hancock.		La Crosse.		Madison.		Prentice.		Wausau.		Algona.		Cedar Rapids.§§		Charles City.		Davenport.		Des Moines.		Dubuque.		Keokuk.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1....	82	57	83	54	85	57	83	58	80	62	78	49	80	55	87	67	94	58	87	56	92	60	93	57	87	59	90	60
2....	89	57	88	55	90	59	90	60	83	63	82	52	83	55	92	72	94	60	92	58	95	63	95	60	91	61	92	66
3....	85	70	83	49	92	68	87	68	83	63	82	42	81	67	91	79	97	60	91	66	98	68	99	67	91	68	98	68
4....	80	57	82	50	77	53	80	59	75	59	77	46	77	49	85	69	84	64	81	60	84	62	78	68	81	60	85	68
5....	77	59	87	68	79	58	74	60	76	56	78	56	76	55	84	65	81	61	76	60	84	59	94	67	80	61	91	61
6....	81	60	85	56	76	58	82	60	78	64	78	55	77	57	81	64	80	62	80	60	84	68	83	68	79	65	91	67
7....	77	56	79	54	77	53	80	61	75	56	72	50	76	51	87	65	90	63	84	63	90	63	98	68	79	61	101	71
8....	73	62	77	59	84	53	78	65	88	70	70	60	74	58	82	68	100	63	87	64	101	77	103	71	91	70	102	78
9....	83	59	83	57	81	59	82	62	85	65	82	53	81	58	85	61	104	71	88	64	98	81	100	80	98	67	99	81
10....	80	61	70	51	78	59	72	62	72	59	82	54	69	59	82	67	77	70	76	62	87	65	81	66	77	64	87	75
11....	69	56	62	53	75	53	67	58	64	58	69	44	65	48	76	61	74	63	72	60	76	65	81	67	67	62	84	67
12....	69	60	76	54	77	57	72	61	76	59	74	55	70	55	80	63	81	64	80	60	82	65	84	68	75	63	86	71
13....	84	62	83	64	83	60	83	64	76	64	78	58	80	58	86	68	84	65	85	66	87	69	92	72	83	64	92	73
14....	83	66	88	66	90	67	89	70	85	68	78	64	84	62	93	71	96	69	95	70	92	75	99	76	92	73	96	77
15....	94	69	98	73	92	67	95	73	90	72	93	69	91	68	96	75	101	74	96	71	99	74	100	75	98	73	100	77
16....	89	71	87	68	92	74	93	74	93	71	93	66	82	73	95	77	100	75	96	74	100	76	93	75	97	76	96	78
17....	90	70	83	62	92	68	94	73	87	69	85	62	90	67	97	70	98	75	94	67	97	74	93	72	95	68	97	74
18....	84	69	73	60	88	65	87	68	74	69	85	58	84	66	88	65	84	72	85	67	84	69	88	69	87	70	94	72
19....	83	65	80	60	80	63	87	67	79	66	85	58	80	63	89	68	88	72	86	67	89	70	90	68	85	68	89	63
20....	83	66	86	60	81	64	86	70	81	67	85	54	80	61	88	68	89	71	86	68	88	71	92	74	86	69	92	72
21....	84	65	85	61	86	65	87	64	84	66	83	62	85	64	87	70	91	72	87	61	92	74	92	70	87	68	95	78
22....	75	56	83	56	82	51	74	58	71	59	78	51	67	52	75	54	77	58	75	56	77	58	77	58	73	58	78	61
23....	79	53	78	50	80	49	78	55	74	55	74	44	75	47	81	53	82	55	78	54	80	56	83	56	79	56	79	59
24....	76	55	76	51	73	54	81	56	73	56	74	46	73	50	85	59	87	57	83	58	83	59	87	60	82	58	85	58
25....	84	60	73	59	83	53	89	59	82	54	78	47	81	52	89	61	91	59	88	59	87	61	92	67	86	60	89	63
26....	81	55	79	52	84	56	82	60	78	66	78	52	76	52	85	59	93	62	84	56	94	67	93	67	86	63	91	67
27....	79	52	79	54	78	51	81	55	78	61	70	41	74	48	87	73	89	59	85	53	87	63	91	65	83	56	94	67
28....	75	65	78	51	79	60	79	58	77	62	68	55	74	58	80	65	83	60	77	57	83	64	82	58	80	64	88	67
29....	76	55	73	52	75	54	76	54	71	57	67	50	67	52	80	52	81	57	77	53	81	60	84	53	77	56	84	57
30....	77	48	75	43	80	50	80	52	76	55	70	39	74	48	89	53	90	62	84	49	87	57	93	56	83	52	91	57
31....	78	55	78	50	76	61	75	62	76	62	80	50	78	57	76	63	90	53	82	65	87	68	99	74	85	65	99	72
Mns..	80.6	60.4	80.6	56.5	82.1	58.7	82.0	62.1	78.7	62.4	78.3	53.0	77.5	56.9	85.7	65.3	88.7	63.7	84.5	61.4	88.5	66.5	90.6	66.8	84.5	63.8	91.5	68.7

TABLE No. 3.—*Maximum and minimum temperatures for August, 1913. District No. 5*—Continued.

Date.	Hannibal, Mo.		Leporte, Ind.		Illinois.															
					Cairo.		Greenville.		La Salle.		Monmouth.		Mount Vernon.§§		Peoria.		Springfield.		Winnebago.	
	Max.	Min	Max.	Min.	Max	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	89	66	82	65	89	76	93	70	89	57	92	54	92	76	90	55	90	68	88	51
2	90	61	86	65	91	72	96	62	92	59	95	59	97	60	91	60	91	68	90	56
3	97	61	94	67	92	69	100	62	98	62	100	62	97	62	98	60	98	68	93	62
4	88	70	85	56	96	71	95	66	82	60	90	62	98	67	86	65	87	67	81	53
5	95	65	85	52	93	70	97	58	86	54	92	56	93	62	87	58	91	59	87	51
6	96	74	83	64	97	72	103	66	84	65	92	65	103	69	91	69	97	69	83	61
7	103	74	85	61	100	77	102	69	88	63	95	66	100	68	93	66	96	71	88	57
8	102	83	91	60	94	79	105	75	100	78	103	80	100	70	101	78	101	80	96	59
9	99	79	94	67	86	75	101	73	99	81	101	77	100	73	100	78	98	77	98	68
10	94	74	89	62	85	72	93	71	85	66	92	71	98	72	87	68	91	73	84	63
11	88	70	73	60	89	74	93	69	72	65	84	65	92	69	83	68	87	72	66	59
12	96	74	81	61	91	76	98	72	81	66	80	68	102	71	83	69	86	71	78	56
13	92	74	80	58	95	78	89	73	84	66	94	70	92	78	91	71	85	72	83	58
14	97	76	84	68	93	75	99	69	89	73	99	70	99	70	90	75	88	74	86	67
15	101	76	85	67	94	75	104	71	93	72	102	71	103	72	98	73	96	74	94	70
16	100	76	94	71	96	76	103	72	100	73	101	73	103	72	100	73	97	74	99	72
17	98	70	88	64	95	76	105	70	87	71	100	72	98	70	97	73	95	73	93	71
18	96	70	89	65	96	75	101	70	84	72	90	70	95	72	90	69	93	74	86	69
19	92	71	83	60	92	75	93	70	90	67	90	72	94	73	90	72	84	72	86	66
20	94	71	85	63	94	72	97	71	87	66	95	69	93	72	90	70	91	72	86	64
21	99	74	85	67	91	67	101	69	87	68	95	71	96	72	92	72	94	72	90	65
22	81	65	81	65	84	67	86	68	75	60	83	58	83	69	76	58	80	66	81	55
23	82	60	71	58	80	64	87	56	78	55	83	54	84	51	78	54	80	60	86	53
24	87	57	72	53	81	63	89	58	83	58	89	55	82	62	84	55	84	62	80	61
25	92	57	83	49	83	64	92	58	86	58	90	59	80	59	88	58	87	61	86	59
26	95	70	86	63	87	64	98	59	92	66	96	62	93	60	94	63	91	65	84	52
27	97	72	79	54	89	67	99	59	85	60	93	59	95	64	90	66	92	67	88	56
28	94	64	84	51	94	70	104	68	86	64	89	70	102	68	90	63	96	69	86	57
29	87	55	78	47	88	69	93	60	79	58	84	55	98	64	82	54	85	62	76	52
30	93	54	79	49	88	64	96	57	84	54	91	50	98	65	87	54	88	57	83	51
31	100	75	78	54	94	65	101	62	86	63	98	66	98	64	95	67	97	69	85	61
Mns	94.0	69.0	83.6	60.2	90.9	71.3	97.2	66.2	86.8	64.5	92.8	64.9	95.4	67.6	90.0	65.6	90.8	69.0	86.1	59.8

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.