CLIMATOLOGICAL DATA FOR APRIL, 1911.

DISTRICT NO. 5, UPPER MISSISSIPPI VALLEY.

GEORGE M. CHAPPEL, District Editor.

GENERAL SUMMARY.

April was somewhat colder and wetter than usual; the temperature being below the normal in all of the States in the district, except North Dakota, and the precipitation above, except in Minnesota and Wisconsin. The conditions were, however, much nearer the normal and more favorable to agricultural interests than in April, 1910. The first 10 or 15 days were cold, and over the larger part of the district more or less stormy, temperatures below zero being recorded in North Dakota, northern Minnesota and Wisconsin, on the 1st and 2d, and freezing temperatures were frequent during the first decade as far south as Missouri, and occurred on many nights after that over the central sections. The precipitation came during four well-defined storm periods, as follows: 2–7, 11–14, 18–21, and 26–30, but the larger part of the precipitation fell during the first half of the month in the northern, and the latter half in the southern sections. Heavy snow fell on the 5th and 6th north of southern Iowa, and during the time the snowfall was the heaviest a severe thunderstorm occurred in Iowa and northern Illinois. The month closed with a cool wave approaching from the northwest, which caused freezing temperatures generally over North Dakota on the 30th. As a whole, however, the month was exceptionally favorable for out-of-door occupations, and especially favorable over the larger part of the district for farm work.

TEMPERATURE.

The temperature was below the normal, except in the northwestern part of the district, it being normal in Minnesota and slightly above the normal in North Dakota. The monthly means for the several States are as follows: North Dakota 41.5°; Minnesota, 43°; South Dakota, 42.4°; Wisconsin, 43.1°; Iowa, 46.6°; Missouri, 51.2°; Indiana, 47.1°, and Illinois, 49.3°, and the average departures ranged from −2.5°, in Missouri, to +1.6°, in North Dakota. The month opened with the temperature near or below zero in the extreme northern portion of the district, and below freezing almost to the southern limit of Illinois, and it remained much below the normal during the first decade. The second decade was somewhat warmer, but freezing temperatures and frosts were frequent as far south as the central sections. During the third decade there was a decided increase in temperature, especially in the Northern States, where maximum temperatures of nearly 90° were general, the highest being recorded at most stations on the 27th. The last five days were warm in the southern part of the upper Mississippi Valley, but the monthly maximum occurred at many stations on the 17th, and at some on the 12th. The month closed with a cool wave approaching from the northwest and freezing temperatures were general over North Dakota on the last day.

The monthly mean temperature for the district, as shown by the records of 286 stations, is 45.4°, which is 1° below the normal. The highest monthly mean was 57.9°, at Cairo, Ill., and the lowest, 36.6°, at Vudesare, Wis. The highest temperature reported was 89°, at McKinney, N. Dak., on the 27th, and the lowest, −10°, at Little Fork, Minn., on the 1st.

PRECIPITATION.

The precipitation was above the normal in all parts of the district except in Minnesota, South Dakota, and Wisconsin, it being normal in South Dakota and slightly below the normal in the other two States. The average amounts, with the departure from the normal for the various States, are as follows: North Dakota, 1.64 inches, +.13 inch; Minnesota, 1.93 inches, −.13 inch; South Dakota, 2.12 inches, normal; Wisconsin, 1.82 inches, −.56 inch; Iowa, 3.21, +.40 inch; Missouri, 4.91 inches, +1.24 inches; Indiana, 5.03 inches, +1.94 inches; Illinois, 4.86 inches, +1.46 inches.

The precipitation was well distributed throughout the month, except in the northwestern and extreme eastern parts of the district, where practically all of it came during the first 15 days, and it was fairly well distributed geographically, although the greatest amounts fell in the southern sections, as is usual for the season of the year. In Jackson and Union counties, in Illinois, the rainfall was excessive and exceeded the normal by about 7 inches. There were four well-defined storm periods, as follows: 2–7, 11–14, 18–21, and 26–30. Excessive amounts occurred on several days in Illinois, being especially marked on the 13th and, in the south end of the State, on the 14th. In Iowa the largest amounts were generally recorded on the 29th or 30th. Considerable snow fell between the 2d and 7th, and it was especially heavy in northern Iowa on the 5th and 6th, when many stations reported falls of from 3 to 12 inches.

The average precipitation for the district, as shown by the records of 301 stations, is 2.50 inches, which is 0.38 inch above the normal. The greatest amount, 12.07 inches, occurred at Cobden, Ill., and the least, a trace, at Pratt, N. Dak. The greatest amount in 24 consecutive hours, 3.60 inches, occurred at Cobden, Ill., on the 13th. The average depth of unmelted snowfall was 4.2 inches; the average for the several States or parts of States within the district are as follows: North Dakota, 6.1 inches; Minnesota, 6.4; South Dakota, 4.8; Wisconsin, 4.3; Iowa, 4.3; Indiana, 4.4; and Illinois, 1.6 inches. The greatest amount was 12.5 inches at Fayette, Iowa, and none occurred at two stations in Iowa, and 19 in Illinois. Measurable precipitation occurred on an average of nine days.

SUNSHINE AND CLOUDINESS.

The average number of clear days was 12; partly cloudy, 7; and cloudy, 11. The duration of sunshine was slightly below the normal over the southern portion of the district and slightly above in the northern sections.

WIND.

Southeast winds prevailed. The highest velocity reported was 48 miles per hour, from the northwest, at Minneapolis and St. Paul, Minn., on the 15th.

MISCELLANEOUS.

A severe local storm occurred at Kemper, Jersey County, Ill., at 5.23 p. m. on the 4th, which damaged property to the amount of several thousand dollars and slightly injured two children.

The continued cool weather, or the absence of any extremely warm weather, kept vegetation and especially fruit buds very nearly dormant, except in the extreme southern part of the district, and fruit trees of all kinds are blooming about a month later than last year.

The rain was beneficial in replenishing the water supply, putting the ground in good condition for cultivation, and starting the growth of grass and cereals.

A severe thunderstorm occurred during a heavy snowstorm in Iowa and northern Illinois on the 2d, and many buildings and haystacks were fired by lightning. More than one-half inch of hail fell at Springfield, Ill., on the same day.

RIVERS.

There was only a slight fluctuation in the stage of the rivers, and all streams in the district are considerably below the normal stage for April. The upper Mississippi River was slightly higher at the close of the month than at the beginning, but it was still low for the season. The stage at Dubuque was 3 feet on April 1 and 4 feet on April 30. The Wisconsin River also continues low for the spring of the year; on April 30 it was 4.6 feet at Wausau, 2.4 feet at Grand Rapids, 4.2 feet at Portage, and 2.5 feet at Muscoda, Wis. At the close of the month the Mississippi River was considerably lower at all stations in the Davenport river district than at the same time in 1910. In the vicinity of Keokuk, Iowa, the streams continued low for the season, and the low stage of water in the Mississippi River has been favorable for construction work on the Mississippi Water Power Dam, which is progressing rapidly.

TABLE 1.—*Climatological data for April, 1911. District No. 5, State of North Dakota.*

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.
North Dakota.																				
Amenia	Cass	945	14	41.8	0.0	85	27	7	1	53	2.20	+ 0.07	1.10	8.5	6	15	5	10	nw.	C. E. Wood.
Bottineau	Bottineau	1,638	16	40.1	+ 1.0	84	27	5	6	45	0.55	+ 0.07	0.21	9.0	6	15	4	11	se.	J. A. Kemp.
Cando	Towner	1,488	10	43.9[1]	+ 5.8	84	27	12	4	39	0.78	+ 0.18	0.52	.....	2	.....	.....	.....	.....	E. T. Judd.
Crosby	Divide	.....	5	40.1	.....	86	27	9	6	43	0.63	.....	0.25	2.5	4	15	8	7	nw.	H. C. Kaschau.
Devils Lake	Ramsey	1,482	6	40.1	+ 1.9	82	27	11	6	36	1.99	− 0.04	0.95	6.4	8	12	12	6	se.	U. S. W. B.
Donnybrook	Ward	1,760	12	40.2	+ 1.9	87	27	9	6	44	0.14	− 0.55	0.10	.....	4	16	8	6	nw.	C. J. DeVore.
Dunseith	Rolette	.....	14	40.6	+ 0.5	85	27	6	6	54	0.37	− 0.28	0.30	3.7	3	13	5	12	w.	L. H. Trowbridge.
Edmore	Ramsey	1,524	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. R. Aslakson.
Forman	Sargent	1,249	17	47.4	+ 4.3	84	27	10	6	55	2.45	+ 0.10	1.85	.....	6	12	5	13	nw.	A. Maltby.
Grafton	Walsh	827	20	41.4	+ 2.2	84	27	5	1	38	2.07	+ 0.59	1.04	7.7	6	.....	.....	.....	se.	A. R. T. Wylie.
Granville	McHenry	1,504	5	41.2	.....	86	27	12	6	46	0.31	.....	0.09	0.6	8	12	11	7	nw.	W. A. Christiansen.
Hannah	Cavalier	1,568	6	37.9	.....	80	27	4	1	37	2.12	.....	0.60	10.0	6	15	6	9	s.	J. Moffatt.
Hansboro	Towner	.....	3	39.4	.....	83	27	5	1	41	1.04	.....	0.40	4.5	7	19	5	6	se.	Geo. Dale.
Hillsboro	Traill	901	6	43.0	.....	85	27	10	7	46	2.84	.....	1.30	9.0	8	17	6	7	nw.	F. E. Mayall.
Lakota	Nelson	1,519	5	38.4	.....	81	27	6	7	36	2.44	.....	1.00	22.0	7	9	15	6	.....	C. R. Pettes.
Langdon	Cavalier	1,615	16	39.3	.....	80	27	6	1	39	1.88	.....	0.74	.....	5	17	0	13	w.	J. Woolner.
Larimore	Grand Forks	1,134	16	41.1	+ 1.2	85	27	10	6†	44	2.48	+ 1.02	1.60	6.8	6	.....	.....	.....	nw.	Reuben Gray.
Lisbon	Ransom	1,091	7	42.0	.....	78	16†	8	1†	50	2.68	.....	1.28	.....	8	14	6	10	se.	H. K. Adams.
McKinney	Renville	1,640	17	40.1	− 0.3	89	27	10	6	47	0.30	− 0.57	0.20	3.0	2	14	7	9	se.	N. P. Swenson.
Manfred	Wells	1,605	10	41.0	.....	87	27	11	8	42	1.40	.....	0.50	12.0	6	15	6	9	nw.	P. B. Anderson.
Mayville	Traill	975	15	47.3	+ 4.3	84	27	17	7	43	2.79	+ 1.07	1.04	.....	7	19	5	6	nw.	W. C. Gould.
Minot	Ward	1,557	13	42.2	+ 0.8	87	27	14	1	45	0.30	− 1.09	0.10	3.0	6	20	1	9	w.	J. J. Bates.
Minto	Walsh	820	18	42.6	+ 2.1	85	27	4[c]	2	40[c]	2.15	+ 0.49	1.53	.....	5	15	8	7	nw.	S. S. Marsh.
Oriska	Barnes	1,270	6	41.8	.....	84	27	9	8	49	2.73	.....	0.80	6.0	8	16	4	10	s.	W. E. Williams.
Park River	Walsh	998	8	42.1	.....	84	27	4	1	44	1.53	.....	0.91	10.0	5	17	8	5	nw.	A. Heyward.
Pembina	Pembina	789	13	39.1	+ 0.7	84	27	8	1†	38	3.14	+ 0.82	1.40	.....	6	21	1	8	w.	C. W. Shumaker.
Power	Richland	1,020	19	42.4	+ 0.6	85	27	4	2	46	1.82	− 0.02	1.26	7.0	3	13	6	11	nw.	J. A. Power.
Pratt	McHenry	.....	6	43.0	.....	86	27	12	6	53	T.	.....	T.	T.	0	21	2	7	nw.	W. B. Ahern.
Towner	do	.....	.....	42.7	.....	86	27	14	2	51	0.70	.....	0.20	4.0	4	14	11	5	se.	B. Bagley.
University	Grand Forks	830	19	43.7	+ 2.1	85	27	8	1	42	2.82	+ 0.58	1.51	7.5	6	19	1	10	s.	H. E. Simpson.
Wahpeton	Richland	962	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. G. Burch.
Walhalla	Pembina	966	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. H. Lee.
Westhope	Bottineau	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. W. Clark.
Willow City	do	1,471	18	37.4	− 1.5	85	27†	− 5	2†	60	0.71	− 0.15	0.30	4.0	4	.....	.....	.....	nw.	M. A. Ostby.
Minnesota.																				
Albert Lea	Freeborn	1,229	20	43.8	− 1.8	78	17	14	1	43	2.29	− 0.20	0.90	5.0	10	7	12	11	se.	Edward Carey.
Alexandria	Douglas	1,391	17	42.8	+ 1.5	80	17	9	1	43	1.78	− 0.48	0.41	8.4	10	13	1	16	nw.	P. O. Unumb.
Angus	Polk	870	9	41.0	.....	84	27	7	1	40	1.83	.....	1.20	7.5	5	17	6	7	se.	John Nadvornik.
Bagley	Clearwater	.....	5	39.7	.....	80	27	0	1	45	1.21	.....	0.36	8.5	7	14	10	6	ne.	Jens Nelson.
Beardsley	Bigstone	1,090	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Roy A. Smith.
Beaulieu	Mahnomen	1,200	9	42.8	.....	80	28	6	6	39	1.26	.....	0.40	7.6	7	13	11	6	sw.	Dr. P. A. Slattery.
Bird Island	Renville	1,039	21	44.2	− 0.6	80	17	5	1	41	2.58	+ 0.41	0.58	6.3	9	9	12	9	se.	Dr. F. L. Puffer.
Caledonia	Houston	1,179	18	44.2	− 1.5	72	27	16	7	39	1.09	− 2.07	0.40	6.5	6	13	3	14	nw.	W. D. Belden.
Campbell	Wilkin	984	2	43.4	.....	82	17†	8	1	50	1.71	.....	0.40	6.5	7	16	3	11	se.	J. T. Neisess.
Cass Lake	Cass	1,300	4	.....	.....	.....	.....	.....	.....	.....	1.55	.....	1.10	5.0	3	.....	.....	.....	.....	C. W. Burns.
Collegeville	Stearns	1,282	18	44.6	− 0.1	78	17	14	1	38	1.55	− 0.47	0.37	2.7	8	12	6	12	s.	Fridolin Tembreul.
Crookston	Polk	863	21	41.2	− 0.6	82	27	9	1	42	2.25	+ 0.37	1.10	.....	9	18	2	10	s.	A. G. Andersen.
Detroit	Becker	1,364	15	41.0	+ 1.5	80	27	3	7	54	1.71	− 0.14	0.60	8.0	9	17	2	11	nw.	G. W. Peoples.
Ely	St. Louis	.....	.....	.....	.....	72	27	− 35	2	.....	.....	.....	.....	.....	.....	16	0	14	nw.	Rev. W. H. Farrell.
Fairmont (near)	Martin	1,240	24	44.2	− 0.9	75	17†	10	1	37	4.30	+ 1.53	1.35	8.0	11	6	14	10	se.	W. F. Wherland.
Faribault	Rice	1,003	14	43.7	− 1.1	77	18	13	1	40	2.47	+ 0.86	0.88	4.0	14	15	3	12	se.	Dr. A. C. Tanner.
Farmington	Dakota	902	23	45.8	+ 0.8	85	17	13	1	46	1.89	− 0.57	0.50	2.5	10	12	6	12	nw.	E. D. Akin.
Fergus Falls	Ottertail	1,210	19	43.4	+ 0.2	79	27	11	1	37	2.01	− 0.06	0.66	7.8	13	10	9	11	se.	C. E. Kissinger.
Fort Ripley	Crow Wing	1,136	4	42.6	.....	80	27	4	7	48	1.63	− 0.44	0.60	8.0	5	10	0	20	se.	J. J. Tucker.
Fosston	Polk	1,289	2	42.0	.....	80	27	6	1	39	1.36	.....	0.29	6.1	10	13	12	5	se.	O. N. Hem.
Fram	Marshall	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.81	.....	1.00	2.0	6	6	21	3	nw.	A. W. Clark.
Glencoe	McLeod	1,000	15	46.5	+ 1.4	80	17	11	1	39	1.97	− 0.04	0.70	8.5	7	19	11	0	s.	F. B. Reed.
Grand Meadow	Mower	1,338	23	42.6	− 1.9	75	17	9	7	44	2.44	+ 0.10	0.43	7.0	10	14	5	11	se.	C. F. Greening.
Gull Lake Dam	Cass	1,215	.....	43.4	.....	80	27	6	1	46	2.19	.....	0.50	11.0	6	11	13	6	n.	G. A. Williams.
Hallock	Kittson	815	12	41.1	+ 0.7	83	27	4	1	41	2.81	+ 1.72	1.50	.....	5	16	6	8	s.	D. A. Robertson.
Halstad	Norman	870	5	40.9	.....	84	27	7	7	47	2.87	.....	1.13	7.0	6	18	2	10	s.	A. G. Holstrom.
Hinckley	Pine	1,050	6	43.2	.....	78[a]	17	7[a]	1	50[a]	2.67	.....	0.63	9.0	6	11[a]	7[a]	11[a]	s.	W. R. Newman.
International Falls	Koochiching	1,112	3	39.6	.....	78	27	3	1†	46	1.20	.....	0.30	7.0	5	16	10	4	w.	Rees Roe.
Itasca State Park	Hubbard	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. A. Stillwell.
Kelliher	Beltrami	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Gilmour.
Lake Crystal	Blue Earth	.....	4	45.9	.....	79	17	12	1	41	2.15	.....	0.91	2.5	7	14	4	12	nw.	W. P. Cobb.
Leech Lake Dam	Cass	1,301	23	40.0	+ 0.3	76	27	− 2	1	40	1.44	− 0.47	0.49	6.7	7	4	17	9	se.	Hans Olson.
Litchfield	Meeker	1,134	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	N. Y. Taylor.
Little Fork	Koochiching	.....	.....	38.4	.....	79	27	− 10	1	49	0.58	.....	0.15	1.0	4	13	12	5	.....	O. C. Olson.
Long Prairie	Todd	1,299	19	44.9	+ 2.4	80	17†	7	7	47	1.95	− 0.65	0.60	5.0	4	12	4	14	s.	A. L. Sheets.
Lynd	Lyon	1,175	19	44.2	− 0.6	78	17	10	1	46	2.38	− 0.50	0.70	5.0	7	16	6	8	sw.	J. W. Rouse.
Mankato	Blue Earth	758	12	.....	.....	.....	.....	.....	.....	.....	2.14	− 0.02	0.94	5.0	6	13	4	13	sw.	Sadie H. Blake.
Mapleplain	Hennepin	1,023	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. W. Richards.
Milaca	Mille Lacs	1,072	13	41.6	− 0.8	74[a]	27†	5[a]	1	43[a]	2.36	+ 0.77	0.41	9.5	7	9[a]	10[a]	10[a]	se.	C. H. Foss.
Milan	Chippewa	955	17	43.9	− 1.4	82	17	9	1	47	2.80	+ 0.74	0.55	11.0	6	1	22	7	se.	O. K. Opjorden.
Minneapolis	Hennepin	918	20	45.8	− 0.3	79	17	15	1	39	2.55	+ 0.11	0.55	8.7	12	10	7	13	s.	U. S. Weather Bureau.
Montevideo	Chippewa	900	21	44.7	− 0.8	82	17	10	1	47	1.86	− 0.65	0.59	8.0	6	13	6	11	se.	L. G. Moyer.
Moorhead	Clay	935	30	42.7	+ 1.3	84	27	10	1	48	1.95	− 0.38	0.96	9.2	10	16	3	11	se.	U. S. Weather Bureau.
Mora	Kanabec	.....	6	42.4	.....	78	27	6	1	50	2.80	.....	0.60	7.0	8	14	11	5	e.	Hans Peterson.
Morris	Stevens	1,170	26	42.6	− 1.6	81	17	9	1	49	1.83	− 0.62	0.50	9.0	7	18	5	7	s.	D. T. Wheaton.
New London	Kandiyohi	1,215	17	43.5	+ 0.3	74	17	6	2	34	1.77	− 0.62	0.67	4.5	5	12	12	6	sw.	Harold Swensen.
New Richland	Waseca	1,180	17	44.2	− 2.1	76	17	12	1	37	1.20	.....	0.23	7.0	9	11	9	10	ne.	N. O. Tyrholm.
New Ulm	Brown	791	31	45.6	− 0.3	80	17	13	1	43	2.88	+ 1.05	1.30	8.0	9	14	3	13	s.	A. L. Henle.
Osakis	Douglas	1,343	4	42.2	.....	80	17	6	1†	46	2.03	.....	0.45	7.3	11	14	4	12	ne.	J. B. Johnson.
Park Rapids	Hubbard	1,426	21	40.3	+ 0.4	79	27	1	7	48	1.57	− 0.76	0.45	6.5	9	13	3	14	s.	Dr. P. A. Walling.
Pine River Dam	Crow Wing	1,251	24	41.6	+ 1.0	77	27	3	1†	45	1.97	− 0.34	0.53	8.0	7	14	10	6	s.	Neal McKay.
Pokegama Falls	Itasca	1,280	24	40.8	+ 2.0	76	17	1	1	44	1.51	− 0.54	0.44	7.6	9	13	12	5	s.	A. L. Mampel.
Redlake	Beltrami	1,152	3	40.2	.....	80	27	1	1	36	0.90	.....	0.32	3.1	5	9	12	9	s.	A. C. Goddard.
Red Wing	Goodhue	680	15	.....	.....	.....	.....	.....	.....	.....	2.10	+ 0.47	0.60	3.2	11	14	3	13	se.	Louis Bach.
Redwood Falls	Redwood	1,050	4	45.6	.....	80	17	11	1	48	2.57	+ 0.39	0.60	10.0	8	14	10	6	nw.	N. B. Andersen.
Reeds Landing	Wabasha	681	16	.....	.....	.....	.....	.....	.....	.....	0.78	− 1.10	0.21	2.5	11	13	2	15	se.	John Deschneau.
Rochester	Olmstead	991	6	44.3	.....	79	17	15	1	44	1.86	.....	0.61	1.0	6	11	2	17	s.	S. R. Case.
Roseau	Roseau	1,040	3	40.8	.....	82	27	0	1	47	1.77	.....	0.90	.....	5	19	3	8	s.	A. Waag.
St. Charles	Winona	850	20	44.8	− 0.3	75	17	15	1	39	1.51	− 1.11	0.37	5.5	7	13	7	10	se.	S. W. Gleason.

TABLE 1.—*Climatological data for April, 1911. 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 direction of wind.	Observers.
Minnesota—Continued.																				
St. Cloud	Stearns	1,020	33	44.8	+ 0.8	80	17	11	1†	44	2.19	− 0.17	0.76	5.7	8	12	9	9	se.	J. H. Capser.
St. Paul	Ramsey	837	40	45.0	− 0.7	78	17	15	1	40	2.22	− 0.11	0.60	5.5	13	8	11	11	se.	U. S. Weather Bureau.
St. Peter	Nicollet	825	17	45.8	+ 1.8	80	17	12	1	45	2.18	+ 0.32	0.82	.....	9	10	9	11	s.	F. W. Kruger.
Sandy Lake Dam	Aitkin	1,234	18	39.1	− 0.9	68	17	0	1	34	1.54	− 0.58	0.32	7.0	7	8	15	7	se.	A. Newstrom.
State Sanatorium	Cass	.....	3	42.6	.....	77	17†	7	6	35	1.53	.....	0.37	5.5	9	14	10	6	se.	Dr. W. J. Marcley.
Stillwater	Washington	694	6	.....	.....	.....	.....	.....	.....	.....	1.90	.....	0.62	.....	8	12	1	17	se.	Oscar Ostrom.
Taylors Falls	Chisago	759	4	44.0	.....	77	27†	13	7	41	.....	.....	.....	6.5	....	15	4	11	s.	Mpls. Gen. Elec. Co.
Warroad	Roesau	1,069	2	41.4	.....	82[a]	27	− 2[a]	1	41[a]	1.00	.....	0.71	.....	4	21	0	9	ne.	J. H. Sawyer.
West Concord	Dodge	1,232	2	44.2	.....	79	17†	12	1	42	2.46	.....	1.00	11.0	7	9	9	12	se.	H. H. Orcutt.
Winnebago	Faribault	1,100	12	45.1	− 0.5	79	17	13	1	41	2.47	+ 0.48	1.20	7.0	11	12	5	13	se.	H. H. Haight.
Winnibigoshish	Itasca	1,300	23	42.0	+ 2.6	75	17†	− 1	1	38	1.17	− 0.65	0.41	6.5	9	13	10	7	nw.	John Duncan.
Winona	Winona	700	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	P. C. Myers.
Worthington	Nobles	1,593	16	43.7	− 1.4	75	29	13	1	41	1.37	− 0.86	0.70	4.5	6	12	7	11	s.	M. P. Mann.
Zumbrota	Goodhue	917	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. C. Rowell.
South Dakota.																				
Milbank	Grant	1,148	20	42.4	− 1.7	81	17	12	1	44	2.12	0.00	0.77	4.8	7	17	2	11	nw.	I. T. Patridge.
Wisconsin.																				
Antigo	Langlade	1,489	17	42.0	− 0.2	74	27	5	1	37	0.54	.....	0.54	T.	1	16	5	9	se.	Elton C. Larzelere.
Barron	Barron	1,115	20	42.6	+ 0.4	76	27	8	1	44	1.27	− 1.09	0.23	5.0	8	16	6	8	s.	Wm. A. Kent.
Beloit	Rock	750	45	45.6	− 1.9	71	27	21	3	33	4.40	+ 1.63	1.24	4.3	8	18	1	11	s.	Smith Observatory.
Big St. Germain Dam	Vilas	1,590	1	39.2	.....	76	27	− 4	1	48	1.08	.....	0.55	3.3	5	20	4	6	sw.	Oscar Brehmer.
Brodhead	Green	812	13	45.6	− 1.4	73	27	18	1	42	4.79	+ 1.81	1.28	5.0	9	14	10	6	nw.	Hector D. Kirkpatrick.
Burnett	Dodge	880	7	43.2	.....	70	30	17	1	38	1.82	.....	0.55	6.5	10	5	9	16	ne.	Geo. W. Smith.
Cottage Grove	Dane	888	.....	.....	.....	.....	.....	.....	.....	.....	3.02	.....	0.53	4.6	13	9	8	13	sw.	John E. Mellish.
Darlington	Lafayette	867	5	44.4	.....	72	27	17	1	45	3.00	.....	0.90	2.0	6	15	4	11	se.	S. P. Nelson.
Deerskin Dam	Forest	1,625	1	37.8	.....	74	27	− 5	2	48	0.52	.....	0.32	1.4	3	20	5	5	w.	Wm. E. O'Neal.
Delavan	Walworth	920	20	44.6	− 1.5	72	27	17	1	36	3.39	+ 0.37	1.00	3.5	11	13	3	14	se.	Elwood S. Austin.
Dodgeville	Iowa	1,116	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. H. Butler.
Downing	Dunn	983	9	41.0	.....	77	29	8	1	51	0.50	.....	0.50	.....	1	4	0	22	w.	Eugene F. Stoddard.
Eau Claire	Eau Claire	800	20	45.1	− 0.5	76	27	14	1	40	0.91	− 1.67	0.27	2.5	8	9	12	9	s.	Robert D. Whitford.
Grand Rapids	Wood	1,021	12	42.6	− 1.5	76	27	12	1	45	1.28	− 1.27	0.38	4.0	10	10	8	12	nw.	Willis B. Raymond.
Grantsburg	Burnett	1,095	20	44.5	+ 1.4	79	17	4	1	42	2.27	− 0.51	0.70	7.0	4	11	4	15	se.	Theodore Olsen.
Hancock	Waushara	1,091	19	44.6	+ 0.1	75	27	15	1	38	1.23	− 1.35	0.40	4.0	4	11	9	10	se.	Frederick B. Hamilton.
Hatfield	Jackson	973	17	43.6	− 3.3	76	27	9	1	51	2.11	− 0.37	0.60	2.0	7	11	4	15	e.	Walter S. Woods.
Hayward	Sawyer	1,197	20	41.0	− 0.7	76	27	− 3	1	41	0.73	− 1.31	0.47	1.0	4	9	7	14	se.	William E. Swain.
Hillsboro	Vernon	1,000	20	41.2	− 3.4	70	27	4	7	45	3.00	+ 0.03	0.65	7.0	8	12	11	7	sw.	Emil V. Wernick.
Koepenick	Langlade	1,683	20	39.7	− 2.0	74	29	0	2	42	1.40	− 1.31	0.50	3.0	5	1	21	8	se.	Edward S. Koepenick.
Lac du Flambeau	Vilas	.....	1	39.7	.....	74	27	− 5	1	41	1.81	.....	0.63	3.5	5	16	6	8	s.	W. J. Lovett.
La Crosse	La Crosse	714	39	46.0	− 1.3	75	27	19	1	41	1.20	− 1.09	0.36	7.1	10	8	9	13	se.	U. S. Weather Bureau.
Lake Mills	Jefferson	897	20	44.6	− 1.1	74	27	17	7	36	2.95	− 0.11	0.94	5.2	12	8	11	11	se.	S. Newton Dexter Smith.
Lancaster	Grant	1,070	20	43.4[c]	− 3.2	71[c]	28	15[c]	7	37[c]	3.52	+ 0.57	0.99	8.0	9	12[c]	4[c]	11[c]	w.	Edward Pollock.
Long Lake	Oneida	1,592	3	37.9	.....	76	27	− 9	1	51	0.59	.....	0.43	1.8	5	12	7	11	s.	Louie Frank.
Madison	Dane	974	42	44.0	− 0.5	70	27	21	7	29	2.44	+ 0.06	0.76	5.5	14	9	5	16	se.	U. S. Weather Bureau.
Mather	Juneau	962	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Frank Evans.
Mauston	.....do	882	15	45.9	+ 0.9	80	30	12	7	44	2.15	− 0.25	0.80	8.0	4	16	2	12	se.	Eugene L. Hitchcock.
Meadow Valley	.....do	974	20	43.7	− 1.2	76	27	16	7	47	1.51	− 0.98	0.50	4.0	9	2	18	10	nw.	Charles H. Johnson.
Medford	Taylor	1,420	22	41.6	− 0.5	73	27	1	1	40	0.75	− 1.51	0.60	.....	2	18	8	4	s.	Wm. Zeit.
Merrill	Lincoln	1,267	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Wm. T. Hunter.
Minocqua	Oneida	1,604	7	40.0	.....	73	27	0	1	46	1.39	.....	0.65	2.0	5	13	11	6	s.	Benjamin W. Applebee.
Mondovi	Buffalo	738	3	45.2	.....	77	27	17	1	46	1.14	.....	0.27	2.5	11	14	5	11	nw.	Dr. Charles Hebard.
Mount Horeb	Dane	1,226	7	43.0	.....	73	27	17	1	37	3.66	.....	1.50	7.0	9	10	3	17	s.	W. M. Lewis.
Muscoda	Grant	666	2	44.9	.....	74	27	13	7†	44	2.70	.....	0.72	9.0	9	11	5	14	e.	Henry Eckstein.
Neillsville	Clark	996	21	44.6	+ 0.4	79	27†	10	1	48	1.66	− 1.18	0.80	2.0	4	11	0	19	se.	Wm. Heaslett.
New Richmond	St. Croix	900	6	44.4	.....	79	29	11	1	40	2.35	.....	1.10	7.0	8	11	10	9	se.	Franc A. R. Van Meter.
Osceola	Polk	806	20	47.8	+ 4.4	79	16	10	1	53	1.37	− 0.96	0.45	5.0	5	13	1	16	n.	Charles W. Staples.
Park Falls	Price	1,492	20	42.4	.....	74	27†	− 2	3	41	0.77	.....	0.40	1.2	6	9	8	10	ne.	Flambeau Paper Co.
Portage	Columbia	809	22	45.7	− 0.6	76	27	17	7	37	2.31	− 0.50	0.56	9.0	9	14	6	10	nw.	James H. Martin.
Port Edwards	Wood	969	1	45.7	.....	82	27	12	2	44	1.38	.....	0.60	6.5	8	6	2	22	se.	Nekoosa-Edwards Paper Co.
Prairie du Chien	Crawford	690	20	44.8	− 3.6	76	27	15	7†	45	2.06	− 0.48	0.64	9.0	8	10	1	19	s.	James A. Gillis.
Prentice	Price	1,551	13	38.5	− 2.4	76	27†	− 5	1	38	2.02	− 0.08	0.61	8.2	6	9	7	14	s.	Joseph G. Lash.
Rhinelander	Oneida	1,550	5	42.0	.....	75	27	5	1	40	1.18	.....	0.45	1.0	5	13	7	10	se.	John Lind.
Sauk City	Sauk	758	3	46.4	.....	75	27†	10	7	55	2.06	.....	1.05	8.1	5	11	8	11	.....	Killen Derleth.
Shullsburg	Lafayette	1,019	5	43.4	.....	71	27	16	1	41	2.57	.....	0.63	2.0	10	8	6	16	s.	Harrison B. Chamberlin.
Solon Springs	Douglas	1,083	5	40.7	.....	77	27	4	1	52	1.60	.....	0.60	3.0	8	15	2	13	sw.	John M. Sayles.
Spooner	Washburn	1,104	17	43.0	+ 0.6	77	27	4	1	40	0.86	− 1.03	0.47	2.5	5	18	2	10	n.	Horace A. Bresee.
Stanley	Chippewa	1,082	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. Humphrey Scott.
Stevens Point	Portage	1,113	18	44.3	− 0.3	76	27†	18	7†	39[a]	0.77	− 1.75	0.50	2.0	3	13	9	8	nw.	Garry E. Culver.
Sugar Camp Dam	Oneida	1,582	1	.....	.....	.....	.....	.....	.....	.....	0.24	.....	0.14	1.5	2	.....	.....	.....	s.	Robert Hayes.
Twin Lakes Dam	Vilas	1,625	1	.....	.....	.....	.....	.....	.....	.....	0.50	.....	0.38	1.8	2	15	10	5	n.	Albert D. Hansen.
Valley Junction	Monroe	930	19	43.2	− 1.5	76	27	12	1	45	3.09	+ 0.17	0.73	7.2	13	11	7	12	nw.	Frederick Muermann.
Viroqua	Vernon	1,412	21	45.0	− 0.4	73	27	15	7	34	1.91	− 1.49	0.60	9.5	12	6	13	11	nw.	Henry E. Rogers.
Vudesare	Vilas	1,600	3	36.6	.....	76	27	− 6	2	40	0.36	.....	0.36	3.5	1	18	6	6	w.	Louis L. Thomas.
Watertown	Jefferson	834	20	44.7	− 0.2	76	27	17	7	39	2.61	− 0.33	0.58	7.0	13	11	11	8	s.	Charles J. Salick.
Waukesha	Waukesha	864	20	43.9	− 1.7	76	27	18	1	40	3.08	+ 0.37	0.93	2.8	10	6	20	4	se.	Carroll College.
Wausau	Marathon	1,212	16	42.8	− 0.2	74	27	9	1	37	0.76	− 1.82	0.26	1.0	6	13	9	8	w.	George H. Halder.
Weyerhaeuser	Rusk	1,397	9	40.9	.....	77	24	5	1	53	1.12	.....	0.30	4.7	8	10	13	7	se.	Miss Etta Stiles.
Whitehall	Trempealeau	675	20	45.0	− 1.2	76	27	15	1	49	2.00	− 0.41	1.20	3.0	4	11	0	19	nw.	Hans J. Haugh.
Iowa.																				
Albia	Monroe	959	13	48.4	− 1.2	77	29	24	7	37	2.94	+ 0.11	1.00	0.5	10	13	3	14	e.	J. I. Chenoweth.
Algona	Kossuth	1,213	37	45.2	− 1.0	77	17	14	7	42	2.99	+ 0.51	0.85	8.0	10	17	4	9	se.	Dr. F. T. Seeley.
Alta	Buena Vista	1,513	20	44.8	− 1.9	75	17†	15	7	36	3.42	+ 0.39	1.78	6.2	12	8	12	10	se.	David E. Hadden.
Amana	Iowa	721	35	47.1	− 1.5	75	17	20	1	40	4.03	+ 1.12	1.12	3.6	11	11	8	11	se.	C. Schadt.
Ames	Story	926	35	48.2	− 0.9	77	17	17	7	43	3.65	+ 0.98	1.15	1.5	13	.....	.....	.....	s.	Iowa State College.
Baxter	Jasper	998	11	47.9	− 0.9	86	30	20	7	43	3.00	+ 0.13	0.88	2.0	13	9	10	11	ne.	W. R. Vandike.
Belle Plaine	Benton	828	21	47.0	− 1.9	78	17	18	1	43	3.55	+ 0.24	1.49	3.0	11	11	7	12	se.	S. P. Van Dike.
Belmond	Wright	.....	1	44.4	.....	78	17	6	7	44	2.20	.....	0.45	6.7	14	6	9	15	nw.	Geo. P. Hardwick.
Bloomfield	Davis	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Albert Power.
Bonaparte	Van Buren	.....	20	48.8	− 1.4	76	29	22	7	39	2.96	− 0.39	0.57	1.0	10	.....	.....	.....	.....	Hon. B. R. Vale.
Boone	Boone	1,134	6	46.4	.....	76	17	17	7	36	2.57	.....	1.07	T.	12	.....	.....	.....	.....	Carl Fritz Henning.

TABLE 1.—*Climatological data for April, 1911. 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 direction of wind.	Observers.
***Iowa*—Continued.**																				
Britt	Hancock	1,236	14	46.4	+ 0.7	77	17	13	7	41	2.09	− 0.12	0.71	6.0	13	11	10	9	s.	L. M. Goodman.
Buckingham	Tama		11								2.42	+ 0.35	0.64		7					J. S. Guynn.
Burlington	Des Moines	544	15	48.5	− 3.0	75	17	24	1	35	4.21	+ 1.05	1.16	0.5	10	14	2	14	e.	Max E. Poppe, jr.
Carroll	Carroll	1,265	21	47.0	− 1.1	76	28	20	6	42	3.02	− 0.18	0.94	T.	9	12	4	14	ne.	Mrs. Jos. J. Wolfe.
Cedar Rapids	Linn	733	29	46.3	− 3.4	75	17	22	1†	39	5.09	+ 2.35	1.10	2.5	11	12	3	15	e.	R. S. Toogood.
Charles City	Floyd	1,015	20	44.2	− 2.1	76	17	8	7	42	2.79	− 0.04	0.77	10.2	11	5	11	14	s.	U. S. Weather Bureau.
Clear Lake	Cerro Gordo	1,241	13	45.6	− 1.4	75	17	15	1†	39	1.45	− 0.19	0.40	5.0	7	11	0	19	s.	Oscar Stevens.
Clinton	Clinton	593	44	47.4	− 1.2	73	17	20	1	42	5.33	+ 2.32	1.05		12	8	9	13		Luke Roberts.
Columbus Junction	Louisa	595	10	48.5	− 1.2	76	29	21	1	37	3.53	+ 0.75	1.25	4.0	10	15	8	7	se.	J. B. Johnston.
Davenport	Scott	580	40	48.2	− 2.0	71	17	23	1	30	3.63	+ 0.75	0.94	6.0	16	14	3	13	e.	U. S. Weather Bureau.
Decorah	Winnishiek	875	18	44.6°	− 3.1	77°	17	6°	7	50°	2.19	− 0.31	0.73	10.0	6					F. H. Baker.
Delaware	Delaware	1,083	20	44.0	− 1.8	70	26	16	7	39	3.48	+ 0.70	0.67	7.5	10	11	9	10	se.	William Ball.
Des Moines	Polk	861	33	48.6	− 2.0	75	17	26	7	35	4.23	+ 1.25	1.52	0.4	12	6	8	16	e.	U. S. Weather Bureau.
Dubuque	Dubuque	639	38	46.4	− 2.5	70	17	23	7	35	3.17	+ 0.25	1.05	5.4	13	9	8	13	se.	Do.
Earlham	Madison		9	48.3		79	17	18	9	41	4.72	+ 1.06	1.60	7.0	8	10	2	18	se.	George Phillips.
Elkader	Clayton	727	32	45.7	− 2.3	75	17	9	7	46	2.92	+ 0.23	0.83	11.0	10	13	7	10	se.	Chas. Reinecke.
Elma	Howard		2	43.2		72	17	5	7	39	1.86		0.60	8.5	12	6	14	10	se.	H. A. Moore.
Estherville	Emmet	1,298	16	43.2	− 3.1	78	17†	13	1	43	2.72	+ 0.51	1.50	7.0	8				n.	A. O. Peterson.
Fairfield	Jefferson		27	48.8	− 1.0	74	29	24	1†	38	3.64	+ 0.16	1.45	1.0	10	17	3	10	se.	R. Monroe McKenzie.
Fayette	Fayette	1,003	21	44.6	− 1.9	77	17	5	7	42	2.75	− 0.27	1.04	12.5	8				se.	R. Z. Latimer.
Forest City	Winnebago	1,226	17	42.9	− 3.6	82	17	11	1	48	2.22	− 0.15	0.70	4.0	10	12	6	12	w.	J. A. Peters.
Fort Dodge	Webster	1,126	11	45.6	− 1.8	77	17†	13	7	37	1.59	− 1.58	0.60	6.5	9	12	3	15	se.	J. F. Monk.
Fort Madison	Lee	516	62								3.32	+ 0.14	1.33		8	5	11	14	s.	Miss L. A. McCready.
Gilman	Marshall	1,052	12								3.00	− 0.64	1.22		9					J. L. Wylie.
Grand Meadow	Clayton	1,180	20	44.4	− 2.4	73	17	10	7	40	2.29	− 0.68	0.80	12.0	8	8	10	12	se.	F. L. Williams.
Greene	Butler		13																	J. L. Cole.
Grinnell	Poweshiek	1,023	19	47.5	− 2.8	79	17	21	7	42	4.45	+ 1.07	1.51	1.5	11	14	3	13	nw.	D. W. Brainard.
Grundy Center	Grundy	976	20	45.8	− 1.6	78	17	10	7	42	2.73	− 0.32	0.60	5.5	9	15	0	15	se.	J. B. Calderwood.
Guthrie Center	Guthrie	1,077	16	47.9	− 1.4	76	17	22	9	40	2.84	+ 0.10	0.63	T.	12	11	9	10	nw.	D. G. Beardsley.
Hampton	Franklin	1,155	21	45.6	− 1.7	80	17	12	7	43	4.00	+ 0.72	1.21	11.5	13	6	12	12	se.	E. C. Grenelle.
Humboldt	Humboldt	1,095	23	46.6	− 1.7	78	17	15	7	40	1.79	− 0.82	0.45	5.6	9	18	2	10	se.	Henry S. Wells.
Independence	Buchanan	921	47	45.6	− 3.8	75	17	14	7	40	2.43	+ 0.05	0.50	2.0	9	15	3	12	nw.	R. E. Dudley.
Indianola	Warren	969	20	49.3	− 1.4	76	17	25	1	35	2.59	− 0.81	1.00	T.	8				e.	Prof. J. L. Tilton.
Iowa City	Johnson	683	51	46.1	− 2.4	75	17	19	1	40	3.02	− 0.12	1.00	3.0	12	16	2	12	se.	Prof. A. G. Smith.
Iowa Falls	Hardin	1,170	18	43.0	− 3.7	77	17	3	7	43	2.94	+ 0.06	1.00	10.5	9	16	3	11	nw.	J. B. Parmelee.
Jefferson	Greene		12	48.2		78	29	17	7	42	2.20	− 0.40	0.85	2.1	4	9	11	10	se.	M. E. Hall.
Keokuk	Lee	547	40	50.7	− 1.3	73	29	27	7	31	4.13	+ 0.77	1.20	0	11	12	6	12	ne.	U. S. Weather Bureau.
Keosauqua	Van Buren	644	19	48.6	− 3.0	79	17†	22	7	48	2.87	− 0.82	0.80	1.0	9	5	13	12		J. H. Landes.
Knoxville	Marion	920	16	49.6	− 1.6	77	17	25	1	38	2.47	− 0.78	0.57	2.0	8				ne.	Casey & Bellville.
Lacona	Warren		12								1.75	− 1.21	0.78		11	7	20	3		J. B. Alter.
Le Claire	Scott	576	11								4.41	+ 2.04	1.13	3.4	14					Miss M. T. Disney.
Marshalltown	Marshall	947	19	46.4	− 2.4	77	17	21	1	41	3.39	+ 0.49	1.00		13	15	3	12	se.	Ralph B. Reasoner.
Mason City	Cerro Gordo	1,132	14	43.8	− 3.9	77	17	12	7	44	1.76	− 0.89	0.45	5.0	8	12	6	12	se.	J. S. Mills.
Mount Pleasant	Henry	729	30	48.7	− 2.4	75	29	25	1†	37	3.74	+ 0.53	0.72	1.0	12	15	6	9	se.	J. W. Edwards.
Muscatine	Muscatine		51								3.45	+ 0.04	0.94	4.0	12					William Molis.
New Hampton	Chickasaw	1,169	14	44.2	− 2.7	77	29	5	7	43	3.18	+ 1.23	1.23	7.5	9	15	4	11	e.	A. F. Kemman.
Newton	Jasper	944	23																	Hon. J. P. Beatty.
Northwood	Worth	1,232	15																	Chas. H. Dwelle.
Olin	Jones	760	13	47.0	+ 0.1	75	17	18	1	45	3.04	+ 0.76	1.18	4.0	10	15	10	5		M. H. Crissman.
Osage	Mitchell	1,184	24	45.4	0.0	79	30	11	7	42	2.04	− 0.41	0.65	6.4	6	9	8	13	nw.	Dr. A. D. Bundy.
Oskaloosa	Mahaska	843	35	48.8	− 1.2	77	17	22	7	43	3.14	+ 0.41	0.83	0.8	7	15	1	14	se.	Joseph Boyd.
Ottumwa	Wapello	649	16	49.3	− 2.7	80	17	25	2†	38	2.80	− 0.35	1.60	0.5	5	14	7	9		Chester Potter.
Pella	Marion	877	9	47.4		77	17	21	7	46	2.25	− 0.27	0.50	T.	13	17	3	10	nw.	J. H. Ver Steeg.
Perry	Dallas	975	10	47.4	+ 0.1	77	17	22	1†	42	2.86	− 0.07	0.70	0.5	10	10	10	10	se.	Ed. S. Gray.
Plover	Pocahontas	1,426	15	45.6	− 1.0	77	16	9	7	42	3.71	+ 1.61	1.30	6.0	8	18	7	5	nw.	J. S. Smith.
Pocahontas	do.	1,248	7	45.4		77	29	14	7	39	2.93		0.63	5.2	11	13	8	9	s.	F. E. Hronek.
Ridgeway	Winneshiek	1,215	13	45.9	− 1.7	75	17	10	7	40	4.35	+ 2.01	1.78	12.3	10	13	5	12	.	Arthur Betts.
Rockwell City	Calhoun		15	46.2	− 0.8	76	29	15	7	33	4.15	+ 1.39	0.75	6.0	8	16	5	9		C. M. Randall.
Sac City	Sac	1,278	35	47.0	− 0.7	76	17	15	7	39	3.64	+ 0.58	0.78	4.5	11					E. N. Baily.
St. Charles	Madison	1,070	10	48.2	− 2.4	77	17	23	7†	37	2.14	− 1.38	0.80		11	14	8	8	nw.	R. D. Minard.
Sigourney	Keokuk	877	15	46.8	− 4.4	74	26	21	1	35	2.59	− 0.58	0.75	2.0	9	1	23	6	e.	J. T. Parker.
Stockport	Van Buren	745	9	48.0		77	29	21	7	44	2.88		0.77	1.0	10	11	7	12	e.	C. L. Beswick.
Storm Lake	Buena Vista	1,440	22	45.6	+ 0.2	73	29	18	7	33	3.90	+ 1.56	1.43	6.0	11	10	9	11	se.	Prof. Warren Ingold.
Stuart	Guthrie	1,216	12																	J. P. Fox.
Tipton	Cedar	807	12	48.4	− 0.5	72	17	24	1	32	4.78	+ 1.54	1.25	3.5	12	14	8	8	ne.	F. K. Gregg.
Toledo	Tama	856	17	46.6	− 3.0	77	17	18	1	42	2.79	− 0.02	0.70	T.	9	16	6	8	se.	I. F. Giger.
Wapello	Louisa	588	13	49.0	− 2.4	72	17†	24	1	34	3.35	+ 0.76	1.06	2.0	8	14	8	8	se.	G. W. Schofield.
Washington	Washington	769	29	49.4	− 1.1	74	17	24	1	33	4.49	+ 1.83	1.45	2.0	8	6	18	6	se.	F. Sherman.
Waterloo	Black Hawk	862	28	44.4	− 2.6	76	17	13	7	42	2.27	− 0.06	0.60	6.3	11	15	2	13	se.	Ralph B. Slippy.
Waukee	Dallas	1,039	8	46.8	− 1.6	75	17	20	7	39	5.22	+ 2.02	2.35	0	14	15	7	8	ne.	Samuel F. Foft.
Waverly	Bremer	948	15	44.8	− 2.2	77	17	5	7	42	3.37	+ 0.68	0.85		9	14	3	13	ne.	Earl C. Moore.
Webster City	Hamilton		6	46.5	− 0.5	80	17	7	7	50	4.38	+ 1.93	2.00	9.0	6	14	5	11	nw.	C. D. Carpenter.
West Bend	Palo Alto	1,197	18	45.4	− 0.9	77	17	14	7	39	5.29	+ 2.57	1.82	7.6	10	12	9	9	s.	Phil. Dorweiler.
Whitten	Hardin	1,036	14	45.2	− 2.2	77	17	13	7	42	2.30	+ 0.16	0.72	3.5	8	12	9	9	se.	Dr. F. P. Butler.
Winterset	Madison	1,129	20	49.1	− 1.3	76	29	23	9	37	6.04	− 2.32	2.70	T.	9	8	10	12	nw.	Dr. Robt. S. Cooper.
Missouri.																				
Gorin	Scotland	700	23								4.72	+ 0.65	1.59	0	8	2	13	15	ne.	J. W. Pulliam.
Hannibal	Marion	534	19	51.4	− 2.2	76	12	31	7	36	3.56	+ 0.31	0.78	0	12	8	9	13	e.	U. S. Weather Bureau.
Louisiana	Pike	500	33	51.2	− 2.2	77	12†	27	7	37	5.03	+ 2.02	1.53	0	11	13	6	11	se.	J. T. Farrell.
Mexico§§	Audrain	797	33	51.3	− 3.0	84	29	28	1†	38	4.63	+ 1.14	0.84	0	12	11	4	15	se.	J. F. Llewellyn.
Steffenville	Lewis	576	18	51.0	− 1.6	76	29	29	1	36	5.08	+ 1.50	1.10	0	13	9	12	9	e.	Frank Hall.
Sublett	Adair	1,000	31	49.1	− 2.6	79	29	23	8	40	3.42	− 0.12	1.00	0	7	7	13	10	ne.	Lewis Spriggs.
Vandalia	Audrain	776		52.2		88	29	28	1†	37	5.79		1.45	0	7	15	5	10	se.	C. B. Ellis.
Warrenton§§	Warren	865	22	52.2		78	17	29	1†	36	7.04	+ 3.15	3.15	T.	12	7	7	16	s.	Dr. J. H. Frick.
Indiana.																				
Collegeville	Jasper		12	48.0	− 0.8	74	29	20	1	38	5.57	+ 2.07	0.95	2.0	14	6	9	15	nw.	Otto Miller.
Knox	Starke	716	6	47.8		72	26†	23	2†	34	5.55		1.94	6.3	13	10	7	13	n.	W. R. R. Tatman.
Laporte	Laporte	810	15	46.4	− 0.2	73	26†	24	1†	37	4.41	+ 1.80	1.23	3.0	14	11	12	7	nw.	Wm. M. Walton, jr.
Plymouth	Marshall	790	8	46.3		70	26†	24	2	36	4.58		0.98	6.1	14	8	11	11	s.	J. W. Siders.

TABLE 1.—*Climatological data for April, 1911. District No. 5*—Continued.

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 direction of wind.	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.		
Illinois.																				
Aledo	Mercer	738	11	47.8	− 1.8	71	17†	21	1	34	3.29	+ 0.41	1.13	4.0	10	10	9	11	nw.	Wm. B. Frew.
Alexander	Morgan	670	18	50.5	− 2.3	73	26	26	1†	36	4.21	+ 1.38	1.13	0	13	9	7	14	ne.	Geo. H. Hall.
Antioch	Lake	861	10	43.6	− 1.1	68	27	17	1	33	5.57	.....	2.20	2.5	8	14	4	12	e.	J. C. James.
Astoria	Fulton	650	12	49.4	− 1.0	74	17	26	1	39	3.75	+ 0.23	0.75	0.5	13	13	6	11	nw.	Ed V. Bohl.
Aurora	Kane	687	32	46.0	− 1.9	72	26	22	1	37	2.23	− 0.74	0.60	2.5	11	3	12	15	ne.	W. Holden.
Bement	Piatt	700	4	50.1	.....	73	13†	23	1	34	5.59	.....	1.14	0.5	16	12	5	13	s.	Rev. C. S. Adams.
Bloomington	McLean	840	20	49.2	− 2.3	74	26	22	1	36	2.71	− 1.02	0.68	2.0	12	9	6	15	nw.	Prof. H. N. Pearce.
Cairo	Alexander	359	33	57.9	− 0.4	81	6	35	1	36	5.77	+ 2.20	1.69	0	13	3	10	17	s.	U. S. Weather Bureau.
Carbondale	Jackson	412	6	56.8	.....	80	17	29	10	40	10.59	.....	2.95	0	11	15	2	13	sw.	State Normal University.
Carlinville	Macoupin	663	21	52.6	− 1.3	75	17	28	7	38	4.93	+ 0.95	1.30	0	14	17	3	10	s.	W. T. Eddy.
Clinton	Dewitt	727	1	49.3	.....	72	26	23	1	32	4.04	.....	1.10	1.5	15	12	6	12	se.	J. F. Ziegler.
Coatsburg	Adams	753	19	50.0	− 2.3	74	12†	27	7	35	4.67	+ 0.92	1.11	0	10	16	4	10	se.	Dr. J. R. Lambert.
Cobden	Union	656	28	57.2	+ 0.4	79	6	32	1†	31	12.07	+ 7.51	3.60	0	10	9	7	14	s.	John Buck.
Dakota	Stephenson	929	6	44.6	.....	70	27	18	1	38	3.51	.....	1.10	0.6	12	13	6	11	e.	Rev. G. W. Kerstetter.
Decatur	Macon	685	20	49.9	− 2.2	74	26	25	1	33	5.11	+ 1.97	1.10	0	12	12	6	12	se.	Prof. J. H. Coonradt.
Dixon	Lee	725	21	46.8	− 1.8	72	26	20	1	40	3.73	+ 0.95	0.99	2.0	12	14	7	9	.....	H. U. Bardwell.
Du Quoin	Perry	459	23	55.6	− 0.5	78	17	30	1	35	8.52	+ 4.61	2.83	0	9	13	9	8	se.	G. H. Knetzger.
Dwight	Livingston	600	18	47.0	− 2.4	73	26	21	1	40	4.58	+ 1.78	1.50	3.0	12	5	9	16	se.	Ed O. Welch.
Elgin	Kane	716	4	46.4	.....	71	26	20	1	35	4.29	.....	1.04	1.0	9	2	21	7	ne.	Elgin Observatory.
Galva	Henry	842	19	47.2	− 2.3	72	26†	19	1	35	3.57	+ 0.56	0.84	6.0	11	13	0	17	ne.	Prof. F. U. White.
Greenville	Bond	635	33	53.0	− 1.9	77	26	28	1	32	5.18	+ 1.06	1.20	0	10	11	6	13	sw.	M. S. Oudyn.
Griggsville	Pike	650	26	51.4	− 2.6	73	12†	27	7	30	4.57	+ 0.93	1.28	0	10	13	8	9	se.	Geo. F. Kneeland.
Havana	Mason	475	19	51.9	− 1.1	78	26	28	1†	35	3.47	+ 0.18	0.72	T.	11	6	18	6	ne.	F. and C. Borgelt.
Henry	Marshall	500	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. F. A. Powell.
Hillsboro	Montgomery	675	17	51.2	− 1.8	72	12†	29	7	32	4.95	+ 1.39	0.90	0	11	13	0	17	s.	Ira L. Woodward.
Joliet	Will	541	20	45.7	− 2.9	70	26†	22	1	36	4.45	+ 1.76	1.16	2.2	12	12	5	13	se.	F. M. Muhlig.
Kishwaukee	Winnebago	730	23	45.8	− 1.8	72	26	20	1	40	5.17	+ 1.93	1.64	3.0	13	12	8	10	se.	Geo. Stevens.
La Grange	Cook	657	19	46.2	− 1.4	74	26	22	1	42	3.40	+ 0.62	0.78	3.6	10	13	2	15	s.	Prof. F. E. Sanford.
La Harpe	Hancock	698	33	49.2	− 2.0	79	17	23	1	44	2.94	− 0.59	1.19	T.	8	15	5	10	se.	Geo. E. Campbell.
Lanark	Carroll	883	22	44.8	− 2.7	72	27	18	1	43	4.48	+ 1.24	2.01	2.1	12	16	5	9	se.	M. N. Wertz.
La Salle	Lasalle	536	33	47.5	− 2.3	72	26	23	1	34	3.37	+ 0.27	0.81	4.0	12	10	4	16	ne.	U. S. Weather Bureau.
Lincoln	Logan	482	23	49.6	− 2.4	74	26†	24	1†	36	3.76	+ 0.84	1.08	0.1	12	10	7	13	s.	Prof. C. S. Oglevee.
Martinton	Iroquois	633	24	47.6	− 1.7	75	26	21	1	39	4.12	+ 0.90	0.65	2.0	14	13	3	14	w.	Jos. H. Peltier.
Mascoutah	St. Clair	425	21	55.5	+ 1.4	79	17†	28	1	39	6.41	+ 2.14	2.08	0	10	13	7	10	se.	Geo. Henrich.
Minonk	Woodford	745	18	47.6[b]	− 2.5	76	26	20	1[d]	39[d]	3.39	+ 0.55	0.58	4.0	9	6	12	12	se.	O. M. Davison.
Monmouth	Warren	784	19	48.4	− 2.5	75	17	22	1	39	4.12	+ 1.00	1.05	3.0	13	13	4	13	w.	Hugh R. Moffet.
Morrison	Whiteside	685	17	46.6	− 2.5	70	26	19	1	39	4.12	+ 0.75	0.97	3.3	12	13	4	13	s.	S. A. Maxwell.
Morrisonville	Christian	638	12	50.8	− 0.8	73	26	26	1	36	5.79	+ 2.30	1.28	0	14	15	6	9	se.	J. D. Lewis.
Mount Vernon	Jefferson	511	17	54.4	+ 0.1	82	30	29	1†	35	6.25	+ 2.63	2.00	0	11	10	4	16	n.	Theo. P. Stelle.
Oregon	Ogle	702	2	45.1	.....	70	17†	19	1	40	6.48	.....	1.95	6.0	9	6	5	19	ne.	Samuel Ray.
Ottawa	Lasalle	500	25	48.2	− 2.3	75	26	22	1	41	3.91	+ 0.97	1.00	2.5	11	9	3	18	ne.	Miss M. M. Harris.
Pana	Christian	692	25	51.4	− 1.8	74	26	28	1†	31	5.14	+ 1.37	0.90	T.	14	17	3	10	se.	C. W. Sibley.
Peoria	Peoria	609	33	48.2	− 2.7	72	29	22	1	35	2.69	− 0.59	0.63	4.0	11	8	8	14	se.	U. S. Weather Bureau.
Pontiac	Livingston	546	9	48.6	.....	74	26†	23	1	37	3.70	.....	0.92	3.0	11	7	7	16	e.	Geo. Butterworth.
Riley	McHenry	956	52	44.3[e]	− 1.5	69	27	18	1	33[e]	3.83	+ 1.13	1.50	2.7	11	4	11	15	nw.	John West James.
Rockford	Winnebago	763	19	46.0	− 2.0	70	26	22	1	31	5.57	+ 2.39	2.53	.....	15	16	1	13	.....	Hosmer C. Porter.
Rushville	Schuyler	670	20	50.4	− 2.4	73	17	26	7	31	3.66	− 0.35	0.87	T.	9	14	5	11	se.	H. F. Dyson.
St. Charles	Kane	700	16	45.8	− 1.8	71	26	20	1	38	3.99	+ 0.90	0.95	3.0	13	10	12	8	se.	Dr. Wm. H. Bishop.
St. Peter	Fayette	.....	9	54.2	.....	75	17	39	1	33	5.40	.....	1.11	0	13	9	8	13	se.	M. L. Lansford.
Sparta	Randolph	538	25	54.6	− 1.1	77	17	30	1	30	7.98	+ 3.87	2.57	0	13	13	7	10	e.	Jas. A. Caldwell.
Springfield	Sangamon	644	33	51.4	− 0.6	73	13	29	7	29	4.40	+ 1.09	0.98	T.	13	8	8	14	se.	U. S. Weather Bureau.
Streator	Lasalle	620	18	48.2	− 1.5	76	26	23	1†	42	3.50	+ 0.58	0.75	4.0	11	18	6	6	sw.	Edw. F. Sweetser.
Sullivan	Moultrie	530	11	51.2	0.0	76	13†	26	1	37	6.24	+ 1.95	2.03	0	12	10	9	11	se.	C. A. Corbin.
Sycamore	Dekalb	855	31	45.6	− 1.4	78	26	20	1	45	3.21	− 0.12	0.80	4.0	12	12	3	15	se.	Miss E. J. Davis.
Walnut	Bureau	717	20	48.8[e]	− 2.2	74[e]	26	20[e]	1	36[e]	3.66	+ 0.78	1.60	2.5	10	11	6	13	se.	O. C. Nussle.
White Hall	Greene	573	3	51.2	.....	76	17	26	1†	41	3.97	.....	0.98	0	11	12	5	13	se.	Dr. R. A. Pritchett.
Windsor	Shelby	681	12	51.5	− 0.2	74	13†	27	1†	39	4.50	+ 1.17	0.96	0	13	5	11	14	nw.	Herbert Rose.
Winnebago	Winnebago	900	24	45.6	− 2.1	71	27	18	1	37	5.42	+ 2.02	1.60	5.0	13	14	3	13	e.	Frank Osborn.
Yorkville	Kendall	594	24	47.0	− 0.3	74	26	21	1	41	4.31	+ 1.36	1.00	4.0	13	11	5	14	w.	Herman A. Grimwood.
Zion	Carroll	938	17	45.9	− 2.2	72	27	19	1	39	6.37	+ 3.56	2.02	6.0	8	14	4	12	w.	Robt. F. Gillogly.

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 the observed readings.
† Also on other dates.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for April, 1911. District No. 5, State of North Dakota.*

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	
North Dakota.																																
Amenia	Red			0.40		0.40			0.05			0.20	T.	1.10	T.	T.												T.			0.05	2.20
Bottineau	Mouse			T.	0.04	.21	T.		T.			.12	T.	.04	0.12	0.02																0.55
Cando	Sheyenne													.26	.52																	0.78
Crosby	Mouse	0.08	T.	T.	T.	.17	0.13					T.		T.														0.25		T.		0.63
Devils Lake	Sheyenne			.16	.08	.18		0.12			0.08	.12	0.81	.44	T.																	1.99
Donnybrook	Mouse	T.		.10	T.			T.				.01		.01	.02																	0.14
Dunseith	do					.02		T.				.05		.30	T.																	0.37
Forman	Sheyenne			.10	.05	.20						.10	1.85	T.																0.15		2.45
Grafton	Red			.02	.24	.26						.08	.43	1.04																		2.07
Granville	Mouse	T.	T.	.01	.02	.04	.01	.01				.09	.05	.08																		0.31
Hannah	Pembina			.10	.10	.20						.52	.60	.60																	T.	2.12
Hansboro	Red				.10	.16						.40	.13	.25																		1.04
Hillsboro	do			.30	.20	.30		.10				.19	.33	1.30	T.															.12	T.	2.84
Lakota	Sheyenne			.06	.20							.16	1.00	1.00	.02																T.	2.44
Langdon	Pembina			T.			.11					.21	.19	.74	.63	T.																1.88
Larimore	Red				.03	.60		.15				.07	.03	1.60																		2.48
Lisbon	Sheyenne		0.25	.37	T.	.35		.07				T.	.16	1.28		T.												.03		.17		2.68
McKinney	Mouse		.20		T.	T.	T.					T.		.10	T.											T.	T.					0.30
Manfred	Sheyenne	T.		.10	.20	.20	.10				.30			.50	T.																	1.40
Mayville	Red				.42	.17		.10				.18	.35	1.40																.17		2.79
Minot	Mouse	T.	.06	.10	T.	.03		T.	.01				T.	.05	.05																	0.30
Minto	Red			.08		.35						.06	1.53	.13																		2.15
Oriska	Sheyenne			.20	.28			.01				.10	.80	.78																.50	.06	2.73
Park River	Red				.18	.10						.11	.23	.91																		1.53
Pembina	do					.40	.10					.04	.10	1.40	1.10																	3.14
Power	Sheyenne				.46			.10				1.26																				1.82
Pratt	Mouse	T.	T.	T.	T.	T.		T.				T.	T.	T.																		T.
Towner	do				T.	.20		T.			.15		.15	.20	T.																	0.70
University	Red			.10	.28	T.		T.				.15	.68	1.51																.10		2.82
Willow City	Mouse			T.	.10							.20	.11	.30																		0.71
Minnesota.																																
Albert Lea	Mississippi		.30		.15	.22		T.	.10			.20	T.	.90					0.15	0.15							0.02				.20	2.29
Alexandria ‖	do		.05	.04	T.	.41			.32			.15	.13	.40	T.	.03				.07								.18	T.	T.		1.78
Angus	Red			.05		.40		T.				.18	*	1.20																		1.83
Bagley	do			.03	.29	.03		.14				.26	.36	.10																T.		1.21
Beaulieu	do			T.	.18	.04		.04				.40	.10	.40	.10				T.								T.					1.26
Bird Island	Minnesota		.42		.21	.17			.32			.23	.58	.35						T.							T.		T.	.16	.14	2.58
Caledonia ‖	Mississippi			.20	T.		.40		.05				.20	.11						T.		T.						T.	0.13	T.		1.09
Campbell ‖	Red		.05	.10		.30			.30			.36	.20	.40	T.	T.											T.	T.				1.71
Cass Lake ‖	Mississippi					.25			.20		T.		T.	1.10	T.				T.										T.	T.		1.55
Collegeville	do		.02		.20	.22		.20				.05	.27	.37					.22										T.			1.55
Crookston ‖	Red			T.	.03	.48	.10		.04			.07	.16	1.10	.15	T.															.12	2.25
Detroit ‖	do			T.	.05	.25	T.		.10			.14	.40	.60	.05	.05				T.								T.		.07	T.	1.71
Fairmont (near)	Minnesota		.20		.09		.30	.45				.30	.35	1.35					.17	.05							.04				1.00	4.30
Faribault	Mississippi		.06		.14	.09	.09		.13			.39	.09	.88				0.32		.04							.02	.10	.01	T.	.11	2.47
Farmington	do		.10		.10	.12			.15			.49	.04	.50	T.				.24								.04				.11	1.89
Fergus Falls	Red		T.	.10	.20	.13		.25	.07			.06	.31	.09	.01	.02			.02	.01										.14	T.	2.01
Fort Ripley ‖	Mississippi			T.	T.	.26			.30		T.	T.	.04	.60		T.				.43												1.63
Fosston	Red			.04	.17	.29		.11				.27	.10	.23	.08				.01												.06	1.36
Fram	do	T.	T.	T.	.10	.10	T.					.45	.13	1.00	.03				T.													1.81
Glencoe	Mississippi		.40		.15	.10			.20			.28	.70																		.14	1.97
Grand Meadow	do		.14	T.	.30	.21	.27		T.			.43	.11	.42					.42	.03							T.				.11	2.44
Gull Lake Dam	do					.50			.50			.18	.33	.46	T.					.28									T.			2.19
Hallock	Red			T.	.01	.25						.40	.65	1.50																		2.81
Halstad ‖	do			.32		.83							.20	1.13	.08															T.	.31	2.87
Hinckley	St. Croix					.41			.55				.44						.63	.44											.20	2.67
International Falls	Rainy				.30	.30	T.				T.	.22	.28	.10					T.													1.20
Lake Crystal	Minnesota		.05		T.			.20	.35			.41	.07	.91					.16													2.15
Leech Lake Dam	Mississippi					.49	T.		.13			.15	.07	.31	T.				.15	.14												1.44
Little Fork	Rainy					.15						.15	.14		.14																	0.58
Long Prairie	Mississippi		T.	T.	.50			.43				.42	.60		T.																	1.95
Lynd	Minnesota		.20		.26	.15		.20				.25	.70															T.	T.		.62	2.38
Mankato ‖	do		.20			.15	T.		.30				.40	.94						.15												2.14
Milaca	Mississippi	T.			.36				.41			.26	.30	.35	T.				.30	.38									T.			2.36
Milan	Minnesota		.50		.50		.07	T.	.06			.50	.50															.55				2.80
Minneapolis	Mississippi		.10		.35	.09		.25	.13		T.	.55	.40	T.	T.	.01			.41	.05		T.					.13		T.		.08	2.55
Montevideo ‖	Minnesota		.35		.04	.40			.25			T.	.23	.59						T.							T.	T.				1.86
Moorhead	Red		.04	.08	.36	T.		.07				.26	.94	.08	.02				.04										T.	.06		1.95
Mora	St. Croix		T.		.04	.38			.60			.30	.28	.48	T.				.32	.40												2.80
Morris	Minnesota		.20		.30	.10		.20				.50	.50		T.	T.														.03		1.83
New London	Mississippi		.67				T.	.31				.23	.54				.02															1.77
New Richland	Minnesota		.19		.13		.07	T.	.06			.06	.23		T.				.12	T.							.16		T.		.18	1.20
New Ulm ‖	do		.40	.20	T.	.21	T.		.20			.10	.31	1.30					.06	.10											T.	2.88
Osakis	Mississippi		T.	.03	.45			.32				.35	.31	.21	.01	.03			.25	.03								.04				2.03
Park Rapids ‖	do			.08	T.	.45	T.		.10			.05	.20	.45	.02	T.				.04		T.								.18		1.57
Pine River Dam	do			T.	T.	.46			.25			.10	.28	.53	T.				.15	.20												1.97
Pokegama Falls	do			.01		.44	T.		.16			.10	.11	.22	T.				.14	.18									T.	.15		1.51
Red Lake	Red			T.		.32	T.					.12	.30	T.	.06																.10	.90
Red Wing ‖	Mississippi		.04	.04	T.	.28	.06		.10				.42	.60		.02			T.	.50		.02						T.			.02	2.10
Redwood Falls	Minnesota		.60		.05	.05		.30				.11	.58	.48																	.40	2.57
Reeds Landing ‖	Mississippi		.03	.01		.14	.06		.02	T.			.06	.04						.18									.01	.02	.21	.78
Rochester ‖	do		.05			.08	.05		T.				.60	.47						.61									T.			1.86
Roseau	Red				.12	.18						.14	.43	.90																		1.77
St. Charles ‖	Mississippi		.20		.04	.12	.20		T.				.28	.37						.30												1.51
St. Cloud	do		.02	T.	.06	.28		T.	.24			.30	.25	.76	T.	T.				.28									T.			2.19
St. Paul	do		.08		.22	.10		.20	.05			.50	.32		T.	.04			.50	.10		.02					.01		T.		.08	2.22
St. Peter	Minnesota		.25		.07	.12		.14				.52	.05	.82					.13												.08	2.18
Sandy Lake Dam	Mississippi					.32	T.		.24			.13	.18	.17	T.				.22	.28												1.54
State Sanatorium	do			.01		.37			.20			.12	.25	.34					.02	.15										.07		1.53
Stillwater ‖	St. Croix		.04		.07	.14			.17				.62	.34		T.				.48	T.							.04		T.		1.90
Warroad	Rainy			T.	T.	.10						.04	.15	.71																		1.00
West Concord	Mississippi		.60	.05	.10		.30		.20			T.	T.	1.00	T.				.21	T.							T.				T.	2.46
Winnebago ‖	Minnesota		.20	.10	T.	.15	.22		.15			.02	.25	1.20					.04	.12	.02											2.47
Winnibigoshish	Mississippi			T.		.41			.15			.04	.10	.22	.01				.08	.15										.01		1.17
Worthington ‖	Des Moines			.20	T.	.12	.15		.15				.05	.70																		1.37
South Dakota.																																
Milbank	Minnesota		.58	.07	.03							.77	.17	.43						.07												2.12

TABLE 2.—*Daily precipitation for April, 1911. District No. 5*—Continued.

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	Total.
Wisconsin.																																
Antigo	Wisconsin				T.	T.	T.						T.	.54															T.		T.	0.54
Barron	Chippewa	.20			.12				.05			.08		.18					.20	.23										T.	.21	1.27
Beloit	Rock		.40		1.00	.03							.55							1.24	.06	.14								.98		4.40
Big St. Germain Dam	Wisconsin				T.	.55			.15						T.	.05				.22									T.	.11	T.	1.08
Brodhead	Rock		.50		.37	.30	.27		T.			T.		.91					T.	1.28		.05							T.	1.08	.03	4.79
Burnett	do	T.	.03		*	.26	.46						T.	.25		.05		T.	T.	.55	.11	.02							.02	.07	T.	1.82
Cottage Grove	do	.10	.01	.08	.25	.11	.28		T.					.53	T.	T.			.30	.80	.11	.10					T.	T.	.20	.15	T.	3.02
Darlington	do		.20	T.	T.	.20	.50		T.					.60						.90									T.	.60		3.00
Deerskin Dam	Wisconsin					.32										T.				.10							.10				T.	0.52
Delavan	Rock		.04		1.00		.32					.09	.35	.33					T.	.39	.06	.05							.02	.74	T.	3.39
Downing	Chippewa											T.							T.	.50											T.	0.50
Eau Claire	do		T.		.02	.19	.02		.14			T.	.05		T.	T.			.27	.20								T.	.02		T.	0.91
Grand Rapids ‖	Wisconsin	.01			*	.38	.36	.03					T.	.03			.08			.30	.07	T.							.01	.01		1.28
Grantsburg	St. Croix					.40			.70			T.	.35						T.	.82									T.			2.27
Hancock	Wisconsin				*	*	.40						T.	.35		T.			T.	.40	T.								T.		.08	1.23
Hatfield	Black		T.		.60	.43	.28		.07				.11	.12						.50		T.							T.			2.11
Hayward	St. Croix				T.				.10			T.			T.				*	.47										.03	.13	0.73
Hillsboro	Wisconsin		.10		.40		.60		T.				T.	.33	T.	T.			.65	.27	T.	T.							.12		.53	3.00
Koepenick	do				.10	.10										.20			.50	.50												1.40
Lac du Flambeau	Chippewa					.60			.05				T.							.63										.25	.28	1.81
La Crosse	Mississippi		.11		.26	.02	.36		.02			.03	.13		T.				.08	.01		T.							T.		.18	1.20
Lake Mills	Rock		.16		.21	.06	.50						.03	.62					.02	.94	T.	.04							.07	.27	.03	2.95
Lancaster	Mississippi		.24		.17	.53	.60							.99					.40	.08										.38		3.52
Long Lake	Wisconsin					.43			.01							.05				.09									T.	.01	T.	0.59
Madison	Rock		.10		.17	.15	.44		T.			.04	.22	.26	T.	T.			.13	.63	.01	.04						T.	.05	.18	.02	2.44
Mauston	do						.80													.55									.05		.75	2.15
Meadow Valley	do		T.		.20		.28		.03					.07					.20	.50	.06								.02		.15	1.51
Medford	Black															T.			.60										.15			0.75
Minocqua	do					.35								.15						.65										.20	.04	1.39
Mondovi	Mississippi		T.		.06	.12	.05		.10				.10	.05	T.	.02			.27	.23		.12						T.	T.		.02	1.14
Mount Horeb	Rock		.35		.20	.13	.45		T.				T.	.50					.13	1.50	T.	T.							.13	.37	T.	3.66
Muscoda ‖	Wisconsin			.38	T.	.34	.38	.06	T.	.08			T.	.72			T.			.50	.12		T.						T.	T.	.12	2.70
Neillsville	Black					.56	.22		T.											.80									.08			1.66
New Richmond	St. Croix		.10	.20	.20				.20			1.10							.30	.20									T.	T.	.05	2.35
Osceola ‖	do				.20	.22			T.			.45	.16						.34												T.	1.37
Park Falls	Chippewa					.40						T.		T.	T.	.05				.23		.03							T.	.01	.05	0.77
Portage	Wisconsin		.10		.35	.56	.07		T.			.05	.48						.20	.44		.06						T.	T.			2.31
Port Edwards	do				.07	.22	.60						T.	T.		.05				.35	T.	.02							.04	.03		1.38
Prairie du Chien ‖	Mississippi			.20	T.	.19	.64	.15		T.			.08	.26						.52	.02								T.		T.	2.06
Prentice	Chippewa					.52								.24		.41				.61	.11								.13			2.02
Rhinelander	Wisconsin					.45			T.							.11				.42		.08							T.	.12		1.18
Sauk City	do		.20		.11	*	.60		T.									*	*	1.05									T.	.10		2.06
Shullsburg	Mississippi		.21		.18	.30	.34		.04				.07	.63					.21										.10	.49		2.57
Solon Springs	St. Croix				*	.30			.10			.10		.20	.10					.60		.10							T.		.10	1.60
Spooner	do					.20		.04			.12			T.						*	.47								T.		.03	0.86
Stevens Point	Wisconsin				T.	T.	.20													.50	T.								.07	T.		0.77
Sugar Camp Dam	do	.10	.14																												T.	0.24
Twin Lakes Dam	do					.38														.12									T.		T.	0.50
Valley Junction	do		.06		.17	.28	.70		.03				.23	.19	T.	.04			.13	.73		.07							.17	T.	.29	3.09
Viroqua	Mississippi		.18		.10	.17	.60		.02				.04	.02		T.			.23	.25		.04							.04		.22	1.91
Vudesare	Wisconsin			T.	.36										T.					T.	T.										T.	0.36
Watertown ‖	Rock		*	.10	.12	.25	.30	.30					.08	.58	.09		T.			.20	.28		.08		T.				T.	.08	.15	2.61
Waukesha	Fox		.08			.65	.20						.02	.16						.82	.10	.11							.01	.93		3.08
Wausau	Wisconsin					.22	.09							T.		T.				.26		.07							.05	.07		0.76
Weyerhaeuser	Chippewa				.02	.25			.08			T.	.13		T.	.07			T.	.30									T.	.02	.25	1.12
Whitehall	Mississippi		T.		T.	.50	.20		.10				T.						*	1.20											T.	2.00
Iowa.																																
Albia ‖	Des Moines		T.	.30	1.00	.20	T.						.15	.50					.07	.09									.03	.35	.25	2.94
Algona	do		.09		.20		.45	.06	.06			.30	.71	.85					.10								T.				.17	2.99
Alta ‖	Raccoon	.03	T.			.24	.74		.04			.15	.24	1.54					.09	.15								.15	.01		.04	3.42
Amana	Iowa		.36		.39	.20	.22					.18	.09	1.12					.23	.04	T.	T.						T.	.09	1.11		4.03
Ames	Skunk		.23	T.	.05		.55					.22	.77	.04					.10	.19							.03	.04	.02	1.15	.26	3.65
Baxter	do		.25		.14	.02	.43					.25	.25	.34					.21	.04							.01	T.	.06	.88	.12	3.00
Belle Plaine	Iowa		.22	T.	.25	.06	.53					.06	.45						.37	.08									.03	1.49	.01	3.55
Belmond	do		.23	T.	.12	*	.43	.04	.04			.21		.41					.14	.02							.07	.02	T.	.45	.02	2.20
Bonaparte	Des Moines		.38		.57	.51						.10		.53					.06									.04	.08	.30	.39	2.96
Boone ‖	do	T.	.15			.12	.95	T.				.07	.20	.38					.05	.15								.02	.02	.44	.02	2.57
Britt	Iowa		.16		.10	T.	.50	.10	.02		T.	.13	.08	.71					.13	.02							.05	.01			.08	2.09
Buckingham	Cedar		.11		.05		.42					.26	.40						.54											.64		2.42
Burlington ‖	Mississippi			.25	.40	1.16			T.				.14	.58	.08					.10									.28	.47	.75	4.21
Carroll ‖	Raccoon			T.	.01	.72					.31	.69	.05						.07								.21		.02		.94	3.02
Cedar Rapids ‖	Cedar	T.	T.	.32	.20	.56	.15	T.		T.			.36	1.10					.09	.35									.07	.93	.96	5.09
Charles City	do		.26	.01	.11		.60					.23	.77						.24								.02	.01	.02		.52	2.79
Clear Lake	do		.10				.40	.10				.15	.10	.40					.20													1.45
Clinton	Mississippi		.31	.40	.90		.08	.08				.04		.93					.13	.20									.21	1.00	1.05	5.33
Columbus Junction	Iowa		.42		.95	.30	.02		T.			.20		.80					.02	.12								T.	.20	.50	T.	3.53
Davenport	Mississippi		.54	.01	.93	.03	.06		.01			.19	.82	.08					.04	.07	.01							.11	.04	.38	.31	3.63
Decorah	do		.45		.11	.73						.56							.26	.08									T.			2.19
Delaware	do		.40		.18	.30	.32						.30	.57					.61	.05									.08	.67		3.48
Des Moines	Des Moines		.26	T.	.17	.02	.23				.13	.25	.60						.10								T.	.01	.17	1.38	.91	4.23
Dubuque	Mississippi		.48	T.	.33	.07	.21		.01			.02	.27	T.					.11	.02		T.						.01	.04	.74	.86	3.17
Earlham	Raccoon		T.		.15		.25					.48	.56						.20	.02							T.			1.46	1.60	4.72
Elkader	Mississippi		.24		.45	T.	.83		T.			T.	.20	.25					.70	.03									.03	.16	.03	2.92
Elma	Wapsipinicon		.15	.10	.03		.28					.27	.05	.60					.22	.05							T.	.01	.05		.05	1.86
Estherville ‖	Des Moines		.20	T.	T.	.15	.10		.15			T.	.32	1.50					T.	.20								.10	T.	T.		2.72
Fairfield	Skunk		.38		.67	.38						.02		1.45					.09									.03	.09	.34	.19	3.64
Fayette	Mississippi		.38		.10		1.04		T.			.38	.15						.46	.14								T.	.10			2.75
Forest City ‖	Cedar		.25		T.	.17	.40	.15				T.	.25	.70					.16	.04							.05				.05	2.22
Fort Dodge ‖	Des Moines		.05		T.	T.	.60			T.		.10	.20	.18					T.	.20								T.	.08	.06		1.59
Fort Madison	Mississippi		.45		1.33							.15	.60						.14	T.								T.	.10	.15	.45	3.32
Gilman	Iowa		.20	.50		.10	.05					.35		.30					.20	.08							T.		T.		1.22	3.00
Grand Meadow	Mississippi		.40		.20		.80						.37	.12					.31	.06									.03		T.	2.29
Grinnell	Iowa		.15		1.00		.35					.42	.15	.13					.25	.15							T.	T.	.04	1.51	.30	4.45
Grundy Center	Cedar		.15		.24		.40					.60	.08	.57					.26									T.	.04	.39		2.73
Guthrie Center	Raccoon		T.	.01	.13		.61					.63	.31	.04					.02	.11							.05	T.	.01	.63	.29	2.84
Hampton	Cedar	.25		.02		.90	.05					.32	.50	.12					.28							T.	.05	.05	.04	.21	1.21	4.00
Humboldt	Des Moines		.11				.45		.02			.37		.13	.42				.18								.09	.02				1.79
Independence	Wapsipinicon		.20			.25						.32	.28	.27					.50	.06									.05	.50		2.43
Indianola	Des Moines		.06		.29	T.	.19					.65	.20	.03					.17	T.							T.	T.	T.	1.00	T.	2.59
Iowa City ‖	Iowa			.31	.60	.15	.10	.02					.30	.24						.13		.01							.10	1.00	.06	3.02

TABLE 2.—*Daily precipitation for April, 1911. District No. 5*—Continued.

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	Total.
Iowa—Continued.																																
Iowa Falls ‖	Iowa		T.	.25	T.	.14	1.00	T.	T.				.33	.82					T.	.25	T.							.04	.02	T.	.09	2.94
Jefferson	Raccoon		T.				.85					.54															.29			.52	T.	2.20
Keokuk	Mississippi		1.20	.33	.79							.08	.77						.06	.02								.10	.08	.26	.44	4.13
Keosauqua ‖	Des Moines		T.	.48	.30	.80	T.					.15		.47					T.	.07									.18	.17	.25	2.87
Knoxville	do		.30	T.	.57		T.					.22	T.	.28					.32	.10							T.	T.		.45	.23	2.47
Lacona	do		.09	.08	.78			.10				.10					.02		.01		.02						.01			.21	.33	1.75
Le Claire ‖	Mississippi	T.		.30	.70	1.13	.04	.05		.05			.11	.90	T.					.11	.10	.09							.30	.35	.18	4.41
Marshalltown ‖	Iowa	T.	.12	.09	.04	.09	.61	.01	T.				.37	.58					.11	.19	T.							T.	.10	1.00	.08	3.39
Mason City	Cedar				.28	T.	.45	.05				.27	.30						.26								.05		T.		.10	1.76
Mount Pleasant	Skunk		.41	T.	.72	.54	T.					.23	.02	.67					.06	.02								.07	.14	.51	.35	3.74
Muscatine ‖	Mississippi	T.	T.	.52	.54	.94	.02	.02					.20	.50	.01					.20									.07	.42	.01	3.45
New Hampton	Wapsipinicon		.15				.60	1.23				.28	.08	.55					.13	.11									T.	T.	.05	3.18
Olin	do		.40		.48	.15	.17						.28	.29					T.	.02									.06	1.18	.01	3.04
Osage	Cedar		.35		T.	.15	.50					.15		.50					.39								T.	T.			T.	2.04
Oskaloosa	Des Moines		.20	.58								.30	.75						.10									T.	T.	.38	.83	3.14
Ottumwa	do		.40		1.60		T.					.18	.42						T.									T.		T.	.20	2.80
Pella	do		.32	.10	.50	.03	.01					.17	.05	.26					.27	.05							T.	T.	.03	.41	.05	2.25
Perry	Raccoon		T.		.21	.02	.70					.58	.23	.20					.10								.04			.48	.30	2.86
Plover	Des Moines		T.	T.	.10		.60	T.				.67	1.30	.40				.12	T.								.12		T.		.40	3.71
Pocahontas	do		.13		.12	.01	.47	T.				.63	.55	.28					.06	.20							.06				.42	2.93
Ridgeway	Mississippi		.20	T.	.13	.08	1.70		.03			.46	.46		T.				.36										.06		.87	4.35
Rockwell City	Raccoon	T.			.50	.60					.75	.60	.45	.50					.65									.10		T.		4.15
Sac City	do		T.		.20	.05	.30					.72	.15	.27					.50	.02							.18			.47	.78	3.64
St. Charles	Des Moines			.01	.28	.01	.10					.20	.28						.24								T.	.01	.06	.80	.15	2.14
Sigourney	Skunk		.48		.75		.14					.13		.60				.10										T.	.09	.25	.05	2.59
Stockport	do		.30	T.	.27	.77	T.					.14	T.	.51					.10	T.								.02	.12	.37	.28	2.88
Storm Lake	Raccoon	.02	T.	T.	.18	.02	.38	.05			T.	.40	1.15	.28					.58	T.							.14			T.	.70	3.90
Tipton	Cedar		.34		.48	.20	.12					.12	.23	.63					.06	.03								T.	.16	1.25	1.16	4.78
Toledo	Iowa		.35		.08	.02	.50					.25		.30					.39	.20									T.	.70		2.79
Wapello	do	.48	.20		1.06	.17	T.						.14	.58															.06	.66		3.35
Washington	Skunk		.45	1.45								.27		.60	.02														.18	.42	1.10	4.49
Waterloo ‖	Cedar	T.	.02	.01	T.	.12	.60	.03	T.				.20	.40					T.	.36	T.							T.	.05	.08	.40	2.27
Waukee	Raccoon		.05	T.	.16	.01	.35					.38	.80	.04					.16	.01							.06	.03	.04	.78	2.35	5.22
Waverly	Cedar		.65		.10	.11	.85					.20	.50						.20	.05										.65		3.37
Webster City	Des Moines		T.	T.	T.	2.00	.90					.23	.80						.13	T.							T.		T.	.26	T.	4.30
West Bend	do		.06	.02	.20		.60	.10				.72	1.82						.22								.05				1.50	5.29
Whitten	Iowa		.30				.05					.25	.05	.60					.30	.03							T.	T.		.72	T.	2.34
Winterset	Des Moines		T.	T.	.34		.23					.34	.50	.11					.19								T.	.07		2.70	1.56	6.08
Missouri.																																
Gorin	Mississippi		.38		1.25							.08	1.59							.30								.38		.17	.57	4.72
Hannibal	do		.23	.69	.31	T.						.04	.33	.28					.37	.07	T.							.30	.04	.41	.49	3.56
Louisiana	do		.20	.35	1.53	.03						.10		.60					.67									.33	.18	.54	.50	5.03
Mexico ‖	do	.01		.42	.84	.64							.07		.13				.78	.29	.01							T.	.38	.43	.63	4.63
Steffenville	do		.30	.55	1.10	.60						.05	.15	.50					.07	.06								.15	.25	.30	1.00	5.08
Sublett	do		.25	.25	1.00									.50					T.									T.	.20	.22	1.00	3.42
Vandalia	do				1.45							1.44			T.				.92	.23								.32	.43	1.00		5.79
Warrenton ‖	do	T.		.19	.32	.53							.17	.10	.39				.64	.09								.06	.60	.80	3.15	7.04
Indiana.																																
Collegeville	Iroquois	T.	.15	T.	.95	.04	T.						.30	.70	.87					.73	.20	.16	.07					.55	.08	.23	.54	5.57
Knox	Kankakee		.37		.73	.04	.03						.36	.70	.62					1.76	.18	.16							.32	.11	.17	5.55
Laporte	do	.09	.21		.51	.20	.01						.22	1.23	.20					1.10	.20	.05	T.						.14	.21	.04	4.41
Plymouth	do		.67	.03	.87	.10	.02						.28	.41	.50					.98	.07	.09	T.						.26	.09	.21	4.58
Illinois.																																
Aledo	Mississippi		.40		.58	.28			T.			.05	.23	1.13					.05	.05								T.	.14	.38		3.29
Alexander	Illinois		.49	.39	.42	.38						.14	.04	1.13					.25	.10								.23	.22	.10	.32	4.21
Antioch	do		.60		.63	.72	.17						T	.60						.55									.10	2.20		5.57
Astoria	do		.40	.53	.50	.07			T.			.07	.10	.75					.05	.06								.35	.10	.52	.25	3.75
Aurora	do		.25		.14	.22	.06		T.				.06	.54					*	.51		.11							.14	.20		2.23
Bement	Mississippi		.50	.26	1.14	.10						.31	.09	1.05	.51				.30	.06		.05	.01					.19	.62	.17	.23	5.59
Bloomington	Illinois		.30	.23	.28	.04						.15	.18	.39						.34	.09	T.						T.	.68	.02	.01	2.71
Cairo	Mississippi			.18	.59			.34	T.			.15	.09	1.07	.61				.18	.41							T.	.28	.12	.54	1.21	5.77
Carbondale	do			T.	.51	22		.02				.15	T.	2.48	2.95				T.	.36								.25	.12	.99	2.54	10.59
Carlinville	Illinois		.39	.44	.21		.21					.13	.02	.58	.25				.31	.12								.41	.42	.44	1.00	4.93
Carlyle	Mississippi		.40	.20		.70						1.40	1.20	.40					.60										.90	.60	1.45	7.85
Chester ‖	do			.12	.26	.04							.16	1.90	.68				T.	.08								.22	.32		2.26	6.04
Clinton	Illinois		.30	.33	.29	.05						.10	.24	1.10	.39				.07	.20	T.	.01						.17	.59	.03	.17	4.04
Coatsburg	Mississippi		.65	.82	.48							.05		1.11					.02	.06								.08	T.	.90	.50	4.67
Cobden	do				.98	T.		.36				.21		3.60	3.25				T.	.81								.33	.21	.07	2.25	12.07
Dakota	do		.06		.15	.51	.20		.02				.03	.30					.02	.87	T.	.02	T.						.23	1.10	T.	3.51
Decatur ‖	Illinois			1.10	.20	.51	.34					T.	.32	.22	1.08				.20	.06		T.						T.	.49	.05	.54	5.11
Dixon ‖	Mississippi	T.		.14	.27	.93	.07		T.	.03			.07	.35	.13					.39	.60		T.						.20	T.	.55	3.73
Du Quoin	do			T.	.88			.01				.19		2.83						.31									.35	.05	2.55	1.35	8.52
Dwight	Illinois		.26	.04	.58	.08	T.		T.			T.	.11	1.46	.04				T.	1.00		.10						T.	.56	.09	.26	4.58
East St. Louis ‖	Mississippi			.30	.04	.40							.30	.75	1.06				.14	.30								.10	.58	.06	2.68	6.71
Edwardsville	do		.08	.33	.40							.26		1.00	.34				.67	.04								.48	.27	1.53	1.18	6.58
Elgin	Illinois		.10	.50	.83									1.04						.48		.20							.08	.18	.88	4.27
Galva ‖	do	T.		.53	.39	.82	T.	T.		T.			.14	.70	.17					.21	.11								.26	.13	.11	3.57
Grafton ‖	Mississippi	.14		.37	.21								.18	.22	.84				.40	.24								.12	.14	.14	1.77	4.77
Greenville	do		T.	.30	.40							.20	.06	.76					1.03									.35	.23	.65	1.20	5.18
Griggsville	Illinois		.49	.43	.69							.18	T.	1.28					.39	T.								.25	.21	.17	.48	4.59
Havana	do		.50	.25	.72	.08						.07	.10	.69					.05	T.									.40	.46	.15	3.47
Hillsboro ‖	Mississippi			.10	.65	.55							.20	.45	.55				.05	.55									.85	.10	.90	4.95
Joliet	Illinois		.24	.05	.81				T.			.01		.86					.20	1.16	.13	.02						T.	.34	.22	.41	4.45
Kishwaukee	Mississippi		.19		.24	.87	.10		.01				.08	.78					.01	.84		.06							.33	1.64	.02	5.17
La Grange	Illinois		.28		.60	.35	.05						.08	.78					T.	.55		.09							.39	.23	T.	3.40
La Harpe	do		.31	T.	1.19							.13	T.	.41					T.	.19		T.						T.	.19	.20	.32	2.94
Lanark	Mississippi		.10		.20	.51	.18		.11			T.		.57					.10	.50	T.	.02						T.	.15	2.01	.03	4.48
La Salle	Illinois		.56	.11	.77		T.		T.			.17	.04	.43					T.	.25	.01	T.						.06	.28	.29	.40	3.37
Lincoln	Illinois		.36	.31	.52	.08						.10	.37	1.08					T.	.29		.02						.08	.45	T.	.20	3.76
Loami	do		.40	.25	.35	.20						.10	.25	.85	.05				.30	.06		T.						.30	.33	T.	.52	3.96
Martinton ‖	do		.20	.65	.17							.18	.40	.48					.05	.34	.11	.06						.42	.20	.47	.39	4.12
Mascoutah	Mississippi		T.	.11	.21	.09						.29	.06	1.62														.40	.25	2.08	1.30	6.41
Minonk	Illinois		.40	.04	.45	.33						T.	.15	.40					T.	.58		T.						T.		.51	.53	3.39
Monmouth	Mississippi		.30	.50	1.05	.52			T.			.07	.15	.58					.02	.01	.02							T.	.01	.49	.40	4.12
Morrison	do		.25		.37	.97	.05		.06			T.	.08	.95					.05	.53								T.	.16	.64	.01	4.12
Morrisonville	Illinois		.34	1.28	.43	.26						.16	.05	1.14	.22				.20	.05	T.							.27	.39	.31	.69	5.79
Mount Vernon ‖	Mississippi			.15	.68	.35	T.	.04					.21	1.02	.91				.02	.55								T.	.32	T.	2.00	6.25

TABLE 2.—*Daily precipitation for April, 1911. 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	
Illinois—Continued.																																
Oregon	Mississippi	....	.60	....	.45	1.00	.15	....	....	....	....	....	.10	.48	....	....	....	....	T.	1.30	....	T.	....	....	....	....	....	....	.45	1.95	....	6.48
Ottawa	Illinois	....	.35	....	.60	1.00	.03	....	T.	....	....	....	.21	.62	....	....	....	....	.02	.22	....	....	....	....	....	....	....	....	.50	.26	.10	3.91
Pana	Mississippi	....	.25	.78	.50	.21	....	....	....	....	....	.08	.11	.50	.45	....	....	....	.38	.01	....	T.	....	....	....	....	....	.42	.36	.19	.90	5.14
Peoria	Illinois	....	.57	.31	.54	....	....	....	T.	....	....	.19	....	.40	....	....	....	....	.04	.01	....	T.	....	....	....	....	....	.16	.22	.15	.10	2.69
Pontiac	do	....	.30	.30	.66	.10	....	....	T.	....	....	T.	.20	.92	.13	....	....	....	....	.34	....	....	....	....	....	....	....	T.	.62	.03	.10	3.70
Riley	Mississippi	....	.33	....	.38	.38	.18	....	T.	....	....	....	.07	.40	.03	....	....	....	*	.29	....	.21	....	....	....	....	....	....	.06	1.50	....	3.83
Rockford ‖	do	T.	....	.15	.08	.85	.14	.14	....	T.	....	....	.08	.26	.17	....	....	....	....	.58	.30	.04	.06	....	....	....	....	....	.10	.09	2.53	5.57
Rushville	Illinois	....	.87	.40	.42	....	....	....	....	....	....	.72	....	....	....	....	....	.08	.04	....	....	....	....	....	....	....	....	T.	.18	.68	.27	3.66
St. Charles	do	T.	.30	T.	.55	.56	.14	....	.02	....	....	....	.10	.95	.02	....	....	....	T.	.75	....	.06	....	....	....	....	....	....	.20	.24	.10	3.99
St. Peter	Mississippi	....	.20	.34	.52	....	....	....	....	....	....	.18	.10	.85	.26	....	....	....	.40	.45	T.	T.	....	....	....	....	....	.30	.28	.90	.62	5.40
Sparta	do	....	....	.02	.35	.02	....	T.	....	....	....	.25	.02	1.31	.36	....	....	....	.16	.45	....	....	....	....	....	....	....	.41	.33	1.73	2.57	7.98
Springfield	Illinois	....	.75	.46	.47	....	T.	....	T.	....	....	.26	.04	.94	....	....	....	....	.26	.19	T.	.01	....	....	....	....	....	.34	.30	.08	.30	4.40
Streator ‖	do	T.	....	.36	.51	.56	....	....	....	....	....	....	T.	.34	.27	....	....	....	....	.06	.75	.06	T.	....	....	....	....	....	.36	.16	.07	3.50
Sullivan	Mississippi	....	.68	.51	.72	....	....	....	....	....	....	.24	.26	1.30	.73	....	....	....	.25	.20	....	T.	....	....	....	....	....	.53	.27	....	.55	6.24
Sycamore ‖	do	....	....	.45	.45	.60	.10	.05	....	....	....	....	....	.45	.35	....	....	....	....	.05	T.	.07	....	....	....	....	....	....	.11	.10	.43	3.21
Tiskilwa	Illinois	....	.50	.75	....	....	.27	....	....	....	....	.06	.98	....	....	....	....	....	....	.27	....	....	....	....	....	....	....	....	.25	.36	....	3.44
Walnut	Mississippi	....	.23	T.	.51	1.09	....	....	....	....	....	T.	.11	.89	....	....	....	....	.01	.43	....	....	....	....	....	....	....	T.	.17	.21	.01	3.66
Warsaw ‖	do	....	.85	.60	.82	....	....	....	....	....	....	.03	.91	....	....	....	....	....	.02	.04	....	....	....	....	....	....	....	T.	....	.78	.51	4.56
White Hall	do	....	.45	.46	.52	.20	....	....	....	....	....	.12	....	.51	T.	....	....	....	.41	....	....	....	....	....	....	....	....	.34	.16	.29	.51	3.97
Windsor	do	....	.33	.34	.50	....	....	....	....	....	....	.12	.10	.96	.43	....	....	....	.28	.18	....	T.	....	....	....	....	....	.25	.30	.06	.65	4.50
Winnebago	do	....	.40	....	.60	.40	.25	....	.08	....	....	....	.04	.53	....	....	....	....	.05	.05	....	.10	....	....	....	....	....	....	.32	1.55	.05	5.42
Yorkville	Illinois	....	.45	....	.50	.50	.50	....	.01	....	....	....	.20	1.00	....	....	....	....	....	.20	.15	.10	....	....	....	....	....	....	.20	.30	.20	4.31
Zion	Mississippi	....	.40	....	1.31	1.22	....	....	....	....	....	....	1.00	....	....	....	....	....	.20	....	T.	.20	....	....	....	....	....	....	T.	2.02	.02	6.37

* 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 3.—*Maximum and minimum temperatures for April, 1911. District No. 5, Upper Mississippi Valley.*

Date.	North Dakota.										Minnesota.																	
	Bottineau.§§		Devils Lake.		Lisbon.§§		Minot.§§		Pembina.§§		Collegeville.		Crookston.§§		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....	32	8	30	16	38	8	31	14	30	8	38	14	30	9	39	11	44	10	34	10	42	13	33	3	37	15	32	−1
2....	27	11	32	12	33	8	29	15	22	10	34	20	36	11	29	22	30	18	39	24	32	20	36	18	32	24	38	7
3....	29	13	31	20	33	23	29	16	32	15	33	22	33	25	33	25	32	25	32	25	35	26	32	19	34	26	34	19
4....	33	18	29	26	34	26	33	19	33	20	31	28	35	27	34	29	33	29	32	27	34	27	38	26	34	29	39	26
5....	25	22	31	16	39	24	25	23	32	26	35	25	35	29	33	23	39	25	36	19	39	28	34	18	34	28	37	23
6....	30	5	29	11	34	12	34	15	28	8	34	18	30	15	34	24	36	16	32	14	38	23	32	9	32	24	32	11
7....	36	8	31	14	44	10	37	24	42	16	39	18	32	12	36	9	38	20	36	12	44	20	38	3	42	22	39	10
8....	50	15	47	17	42	10	48	20	42	18	41	30	38	10	35	26	39	26	40	18	45	25	40	28	39	32	44	27
9....	61	18	59	30	65	14	65	23	53	20	51	28	52	10	47	28	59	28	34	27	56	26	49	12	51	31	49	20
10....	67	32	65	35	70	37	69	39	62	36	59	35	62	37	57	31	67	35	64	40	64	25	60	35	59	36	59	32
11....	65	36	63	39	66	42	66	35	44	40	57	41	47	42	56	35	45	38	49	43	48	40	54	40	55	42	55	41
12....	50	26	44	32	55	40	52	28	44	30	47	44	54	40	49	42	50	39	48	38	50	42	47	43	51	45	49	42
13....	32	21	32	20	40	27	38	21	34	32	58	31	33	30	52	37	45	31	40	28	49	34	46	30	49	31	46	28
14....	35	16	34	18	48	26	45	19	33	18	50	28	38	27	53	27	54	28	44	27	56	29	42	27	53	31	40	25
15....	56	20	51	25	57	27	63	31	51	22	48	28	48	25	50	28	50	29	52	23	54	30	45	27	48	30	41	24
16....	70	25	65	29	78	28	74	29	54	28	63	32	62	29	61	30	72	30	70	32	67	30	59	22	61	35	60	25
17....	68	29	65	35	75	29	71	34	62	35	78	40	72	35	75	31	82	35	80	32	80	37	76	31	78	38	75	38
18....	59	36	54	35	64	45	61	31	51	38	68	45	55	38	55	44	62	41	54	43	60	43	69	42	62	48	70	42
19....	60	30	55	32	67	36	59	24	59	28	60	42	58	35	52	40	69	42	62	36	61	47	69	39	52	44	65	39
20....	69	36	68	36	72	34	71	42	66	32	64	41	64	38	61	37	70	36	68	36	67	46	59	39	64	41	60	37
21....	63	34	59	33	65	33	68	31	64	30	60	40	58	33	60	39	66	39	63	34	64	46	59	34	57	42	60	34
22....	65	37	60	34	65	24	68	29	65	34	56	32	69	35	58	27	63	32	62	34	64	31	60	23	58	34	59	27
23....	66	35	62	34	62	27	69	27	69	31	60	35	62	35	60	29	65	30	67	30	66	30	62	24	59	39	67	29
24....	69	38	67	35	60	28	70	33	67	34	64	38	67	36	64	28	67	30	70	30	68	32	66	25	65	40	68	33
25....	62	39	59	38	60	29	57	38	58	31	64	43	67	39	63	29	66	39	68	39	68	36	66	27	63	41	65	37
26....	75	41	72	42	67	26	78	43	64	41	67	49	70	47	68	37	66	47	70	49	71	39	68	48	68	49	63	48
27....	84	45	82	48	72	38	87	47	84	46	75	53	82	49	74	47	81	50	84	52	79	51	77	51	75	54	75	50
28....	69	49	78	47	78	50	72	53	78	50	71	52	72	52	66	52	73	53	76	48	68	54	69	54	60	54	73	47
29....	54	38	51	28	37	47	57	38	50	37	72	48	50	46	72	54	77	46	54	37	78	51	68	50	72	55	65	51
30....	41	23	39	24	47	28	44	21	42	18	63	37	40	28	63	44	54	39	42	28	54	54	58	35	59	36	57	33
Mns..	53.4	26.8	51.5	28.7	56.2	27.9	55.7	28.7	50.5	27.7	54.7	34.6	51.7	30.8	53.0	32.2	56.5	32.9	54.1	31.3	56.7	34.5	53.7	29.4	53.4	36.5	53.9	30.1

Date.	Wisconsin.														Iowa.													
	Delavan.		Eau Claire.		La Crosse.		Madison.		Mauston.		Spooner.		Wausau.		Algonar.		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....	40	17	36	14	38	19	36	21	36	31	30	4	29	9	43	15	41	22	40	18	42	23	42	26	41	24	46	29
2....	33	22	36	25	31	25	29	24	37	23	36	19	32	18	37	27	33	22	34	26	35	29	38	30	31	25	42	32
3....	35	25	35	24	38	27	37	25	42	23	35	19	36	18	33	25	35	28	34	26	35	31	34	30	35	28	35	33
4....	34	30	37	31	34	31	35	30	60	30	34	29	35	28	33	29	36	30	33	32	36	32	36	32	35	33	38	34
5....	38	30	37	31	36	32	37	32	62	31	34	27	35	30	38	28	41	33	35	31	44	34	52	33	38	33	48	36
6....	39	30	38	27	38	27	34	24	41	30	33	30	36	29	36	22	36	28	35	18	42	29	41	30	37	28	47	35
7....	41	21	45	20	42	20	35	21	40	12	40	9	39	18	40	14	46	25	38	8	48	27	49	26	44	23	50	27
8....	45	27	40	30	41	31	37	29	38	28	50	25	40	29	37	27	43	25	37	31	46	32	42	35	41	32	53	35
9....	53	24	55	22	52	35	51	31	50	23	57	35	49	23	51	20	54	30	51	28	54	36	55	28	53	30	54	32
10....	56	32	60	31	60	36	54	32	55	30	60	38	54	35	59	36	60	30	57	36	57	36	62	39	56	37	59	37
11....	63	37	61	36	60	40	61	38	60	32	53	44	58	35	51	40	61	37	57	39	62	39	54	44	61	40	55	42
12....	56	44	56	46	57	48	55	44	55	42	50	35	57	34	55	44	60	40	55	44	63	47	60	47	59	47	73	47
13....	62	49	55	41	57	40	58	43	57	50	49	35	60	34	55	34	56	45	52	35	57	42	57	39	59	44	65	47
14....	59	33	55	31	55	33	52	33	50	32	45	26	54	31	55	28	55	33	55	30	55	34	58	33	54	34	53	37
15....	56	31	48	32	50	33	47	32	48	30	57	28	49	21	56	30	55	34	52	32	56	36	59	34	51	33	59	37
16....	56	32	58	31	59	35	54	37	56	32	58	35	50	23	69	33	65	34	63	32	66	38	71	36	61	36	70	39
17....	62	26	71	39	73	32	65	36	70	26	51	45	65	28	77	35	75	36	76	34	71	41	75	42	70	35	73	45
18....	68	42	69	45	62	52	64	48	63	50	60	32	69	45	65	48	55	40	53	48	59	53	60	51	61	53	66	52
19....	56	48	57	48	57	49	53	42	55	45	75	35	63	46	58	42	59	43	54	39	58	47	60	43	58	49	57	48
20....	65	42	63	37	65	40	65	40	56	34	51	41	61	34	67	42	69	43	65	41	69	46	69	49	67	44	68	52
21....	58	35	60	38	58	40	53	40	54	35	53	35	58	38	66	38	67	44	63	38	68	43	72	44	61	42	72	50
22....	58	31	63	28	59	32	52	35	58	35	60	35	55	29	59	30	58	36	58	33	56	37	58	40	56	38	66	40
23....	55	30	61	31	58	34	51	35	56	38	58	30	55	29	64	30	61	37	60	30	58	39	63	39	56	36	59	38
24....	58	27	68	30	65	32	56	36	67	32	65	38	62	30	64	34	60	35	60	31	59	37	60	40	58	35	60	39
25....	64	29	68	35	65	34	61	39	68	35	67	36	65	33	65	34	64	37	60	34	64	44	62	39	62	37	64	43
26....	69	40	69	35	67	42	67	42	70	40	68	44	64	42	68	42	72	40	66	46	70	45	62	47	69	47	71	47
27....	72	51	76	36	75	56	70	51	75	50	77	48	74	49	72	49	70	46	70	53	66	53	67	52	70	54	68	49
28....	59	52	70	55	62	56	58	52	64	54	65	50	72	52	67	52	65	53	63	53	64	55	70	53	61	54	71	55
29....	60	52	72	55	71	55	60	50	75	52	70	52	61	51	75	53	65	55	73	52	71	53	72	58	62	54	73	59
30....	68	46	65	41	68	40	67	40	80	52	58	36	65	47	69	45	66	53	67	40	66	52	68	50	65	48	72	59
Mns..	54.6	34.5	56.0	34.2	55.1	36.9	51.8	36.1	56.6	35.2	53.3	32.8	53.4	32.3	56.1	34.2	56.1	36.5	53.9	34.6	56.6	39.7	57.6	39.6	54.4	38.4	59.6	41.8

TABLE 3.—*Maximum and minimum temperatures for April, 1911. District No. 5*—Continued.

Date.	Hannibal, Mo.		Laporte, 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	47	32	34	24	52	35	50	28	41	23	42	22	52	29	43	22	46	30	40	18
2	44	35	33	24	71	41	50	34	34	29	37	27	62	33	38	31	45	32	30	23
3	38	35	36	26	80	59	54	37	35	31	34	31	62	40	35	32	41	34	34	27
4	44	38	46	31	73	60	67	42	38	33	37	32	74	42	40	34	62	39	34	32
5	50	37	55	35	62	53	55	40	43	35	44	34	57	45	44	36	48	38	39	33
6	57	34	56	33	81	45	71	41	44	30	47	34	75	45	51	29	63	34	39	30
7	49	31	40	28	45	40	47	32	46	28	51	24	46	32	48	25	49	29	45	24
8	55	35	43	28	55	42	55	36	44	30	54	30	53	29	48	30	49	35	45	27
9	55	32	56	30	55	38	57	31	53	34	57	27	56	32	53	29	54	34	56	28
10	60	39	57	29	62	41	62	36	58	35	62	34	65	34	59	37	58	36	56	30
11	58	44	63	38	56	48	55	47	63	43	61	39	55	36	60	45	57	45	65	38
12	76	47	60	47	72	52	70	48	62	48	65	44	72	49	66	47	72	48	59	45
13	65	47	68	53	71	58	70	54	67	45	64	49	73	52	68	46	73	50	64	49
14	53	39	60	40	61	47	57	40	54	37	55	34	59	47	52	37	53	42	53	33
15	61	38	52	35	63	46	64	37	55	37	60	32	65	40	57	33	62	39	54	31
16	70	34	55	32	72	46	68	37	63	37	70	35	72	37	65	34	68	42	64	32
17	75	44	62	30	75	51	75	43	68	34	75	36	78	45	70	35	72	43	68	31
18	62	51	62	38	63	54	62	50	64	48	60	53	59	52	59	52	60	51	68	47
19	59	51	55	50	72	56	64	52	56	51	57	47	67	54	57	48	60	51	58	50
20	67	51	59	39	67	54	72	52	67	44	72	44	70	53	68	45	69	51	67	46
21	72	49	55	41	71	54	73	51	64	42	73	42	72	49	67	42	70	46	59	40
22	58	42	51	35	59	49	62	39	55	36	60	33	60	40	57	38	57	39	56	32
23	58	40	55	33	58	47	62	37	55	34	61	32	60	37	57	32	58	36	56	31
24	58	41	57	33	59	47	64	38	58	32	63	30	66	38	60	35	60	37	60	30
25	63	38	64	35	66	48	68	40	65	36	68	38	68	40	65	40	65	40	67	32
26	73	49	73	36	71	56	77	48	72	40	72	40	76	46	72	46	73	46	70	42
27	60	52	73	49	62	53	58	52	68	52	65	46	62	54	61	52	57	53	71	48
28	73	56	62	52	71	56	68	55	63	54	65	54	73	49	64	54	66	55	60	52
29	74	60	70	55	78	60	65	58	71	51	70	54	76	52	72	56	71	59	60	50
30	73	57	66	49	75	62	68	58	63	51	72	56	82	61	70	57	70	61	60	50
Means	60.2	42.6	55.9	36.9	65.9	49.9	63.0	43.1	56.3	38.7	59.1	37.8	65.6	43.1	57.5	39.2	60.3	42.5	55.2	36.0

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
§ Data are from standard instruments not supplied by the U. S. Weather Bureau.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.