Climatological Data for November, 1910.
DISTRICT No. 5, UPPER MISSISSIPPI VALLEY.

GEORGE M. CHAPPEL, District Editor.

GENERAL SUMMARY.

There was a marked contrast between the weather in November, 1909, and November, 1910. Last year both the temperature and precipitation were above the normal and the snowfall was much more than the average, especially north of central Iowa. The heavy rains caused high stages in all streams and in Iowa many of the streams were out of their banks, flooding the bottom lands, which was unprecedented for that season of the year. This year, both the temperature and precipitation were below the normal, the precipitation being especially light, and the weather was on the whole, very pleasant and favorable for all outdoor operations. Although there was an excess of cloudiness, there was less than the usual number of stormy days.

TEMPERATURE.

The temperature was below the normal at every station in the district, except Forman and Pembina, N. Dak. The deficiency was due, however, to uniformly low maximum, rather than to unusually low minimum temperatures. In fact the minimum temperatures were above the normal over the larger part of the district, and while there were several days during the month on which moderately low temperatures prevailed, the first general cold wave of the season did not occur until the last day of the month. The 1st, 6th to the 9th, and the 22d to the 25th were the warmest days of the month, and the 29th and 30th, the coldest.

The monthly mean temperature for the district, as shown by the records of 291 stations, was 30.2°, which is 3.7° below the normal. The highest monthly mean was 45.4° at Cobden, Ill., and the lowest monthly mean, 18° at Bottineau, N. Dak. The highest temperature reported was 78° at Cobden, Ill., on the 27th, and the lowest −23° at Cando, N. Dak., on the 29th.

PRECIPITATION.

The precipitation was below the normal at all stations in the district, except at 7 in North Dakota, 5 in Wisconsin, and 3 in Illinois. The average departure for the various States ranged from −0.01 inch in North Dakota to −1.74 inches in Missouri. The greatest precipitation occurred in Indiana and Wisconsin, and the least in northeastern South Dakota and Iowa, 5 stations in the latter State reporting only a trace for the entire month. While the precipitation was fairly well distributed throughout the month, the daily amounts were generally small and not sufficient to be of material value in relieving the droughty conditions or increasing the water supply which is abnormally low. The amount of snowfall was much below the average for November. Over the southern portion of the district there was no snow, and many stations in the central portion reported only a trace. Over the northern States the greater portion of the precipitation was in the form of snow; the average amounts for the various States ranged from 3.9 inches in Minnesota to 5 inches in North Dakota and 5.4 inches in Wisconsin.

The average precipitation for the district, as shown by the records of 302 stations, was 0.70 inch, which is 0.95 inch below the normal. The greatest amount, 4.65 inches, occurred at Windsor, Ill., and the least, a trace, at Carroll, Forest City, Sac City, Stuart, and Whitten, Iowa, and Sublett, Mo. The greatest amount in 24 consecutive hours, 4.30 inches, occurred at Windsor, Ill., on the 27th. The average depth of unmelted snowfall was 2.6 inches; the greatest amount was 18.0 inches at Koepenick, Wis. At 32 stations, mainly over the southern half of the district, no snow fell. At the end of the month there were from 2 to 10 inches of snow remaining on the ground in Minnesota and the ground was covered by a thin coating of snow during the latter half of the month in Wisconsin. The average number of days with measurable precipitation was 4.

SUNSHINE AND CLOUDINESS.

The average number of clear days was 10; partly cloudy, 8; cloudy, 12. The duration of sunshine was considerably below the normal.

WIND.

Northwest winds prevailed, the highest velocity reported being 39 miles per hour from the northwest at St. Paul, Minn., on the 30th.

MISCELLANEOUS.

The dry weather was exceptionally favorable for harvesting corn and the crop was practically all in cribs at the end of the month.

The droughty conditions were, however, very damaging to the water supply. Many of the smaller streams are dry, and railroads and stock feeders in many localities are experiencing considerable trouble in securing sufficient water for their needs. Press dispatches indicate that some of the reservoirs along the line of the Burlington road in Iowa are dry or nearly so, and many trains have been carrying two tenders with which to supply water for the engines; one being entirely inadequate where such great distances have to be covered between water stations. The Iowa Central has also experienced considerable trouble, especially over the southeastern divisions of the road. Engines are barely able to make terminal points for water, as the supply at the usual points along the line has been exhausted.

Thunderstorms were quite general in Illinois on the 27th, but the only damage reported occurred at Aurora, where the main factory building of the boiler works was set on fire by lightning. The fire loss was estimated at $12,000.

RIVERS.

The stages of all rivers in the district remained low and showed but little change during the month. The Red River of the North, at Moorhead, Minn., is lower than it has been for many years. The thickness of ice at the wide places was about 8 inches, but it is still unfrozen at the narrow places. The stage of the Mississippi River and its tributaries in Minnesota, continues extremely low. In Wisconsin the small streams froze over about the 18th and there was floating ice in the larger rivers after that date, and the stages of all streams continued low with very little change during the month.

The rivers in the Dubuque River district changed very little during the month, and continued at low stages. The highest stage at Dubuque was 1 foot on the first 20 days of the month; the lowest was 0.8 foot on the 24th. The Mississippi River at Prairie Du Chien ranged from 0.7 to 0.9 foot. The Wisconsin River at Portage averaged slightly above 2 feet. The Mississippi River at Prairie du Chien froze over on the 30th. At Dubuque there was shore or floating ice after the 20th. The Wisconsin River froze over at Muscoda on the 18th and at Grand Rapids on the 30th.—*J. H. Spencer, Local Forecaster.*

The Mississippi River, south of Davenport, remained low and nearly stationary.

DRAINAGE AND ENGINEERING NOTES.

The field work in connection with the survey of the Des Moines River by the United States Army Engineers, under the supervision of Mr. A. O. Rowse, assistant engineer, was completed on November 27. During the month of November topography was taken on both sides of the river, covering area subject to overflow, from 2 miles below Bentonsport to 2 miles below St. Francisville, a distance of 28 miles. Topography was taken in the vicinity of the river from 2 miles below St. Francisville to the mouth of the river, and a strip of topography about one-half mile wide was taken, leaving the Des Moines on the south side about 2 miles below St. Francisville, and entering the Mississippi about 1½ miles below the mouth of the Des Moines. Soundings and probings of the river bottom and levels to determine water slope were taken from 2 miles below Bentonsport to the mouth of the river, a distance of about 39 miles. About 31 miles of topography were platted.

The board of supervisors of Carroll County, Iowa, at a special meeting recently established drainage district No. 23, and authorized the construction of a drainage ditch, which will be more than 25 miles in length, with several miles of laterals. The ditch will run from the head of what is known as Storm Creek, in Kniest Township, and within a few miles of the Sac County line, and winding in a southeasterly course to a point near Grant and Pleasant Valley township lines, where it empties into the middle fork of the Raccoon River.

TABLE 1.—*Climatological data for November, 1910. 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, .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	12	24.2	− 1.2	47a	22	0	30	37a	0.30	− 0.38	0.25	2.5	2	9	7	14	nw.	C. E. Wood.
Bottineau	Bottineau	1,638	14	18.0	− 4.4	56	8	− 14	29	41	0.69	+ 0.08	0.28	14.5	6	5	5	20	nw.	J. A. Kemp.
Cando	Towner	1,488	8	19.4	− 8.1	55	8†	− 23	29	63	0.98	+ 0.43	0.48	.....	3	14	12	4	w.	G. Bennett.
Crosby	Williams	.....	3	22.0	.....	54	8	− 11	30	32	0.92	.....	0.54	11.2	4	10	4	16	nw.	H. C. Kaschau.
Devils Lake	Ramsey	1,482	4	20.7	− 1.9	54	8	− 6	29	35	0.55	− 0.16	0.30	5.3	6	5	9	16	nw.	U. S. Weather Bureau.
Donnybrook	Ward	1,760	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. J. De Vore.
Dunseith	Rolette	.....	12	19.7	− 5.0	53	8	− 15	29	45	0.50	+ 0.24	0.20	5.0	3	14	10	6	w.	L. H. Trowbridge.
Edmore	Ramsey	1,524	4	19.9	.....	58	8	− 12	29	38	0.05	.....	0.05	T.	1	16	11	3	w.	H. R. Aslakson.
Forman	Sargent	1,249	15	29.0	+ 2.8	56	6	5	11	46	0.20	− 0.32	0.20	2.0	1	16	3	11	nw.	A. Maltby.
Grafton	Walsh	827	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. La Moure.
Granville	McHenry	1,504	3	21.4	.....	61	8	− 12	29†	36	0.52	.....	0.30	7.0	4	5	13	12	nw.	W. A. Christiansen.
Hannah	Cavalier	1,568	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Moffatt.
Hansboro	Towner	.....	2	19.3	.....	57	8	− 10	28	47	0.79	.....	0.46	6.3	4	11	6	13	nw.	Geo Dale.
Hillsboro	Traill	901	4	23.8	.....	45	23	0	29†	33	0.62	.....	0.30	3.4	5	4	11	15	nw.	M. H. Norman.
Lakota	Nelson	1,519	3	20.2	.....	50	8	− 7a	29	36a	0.39	.....	0.16	8.0	5	7	18	5	nw.	C. R. Pettes.
Langdon	Cavalier	1,615	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Woolner.
Larimore	Grand Forks	1,134	14	21.1	− 3.7	40a	7†	− 2	29	34a	0.90	+ 0.59	0.75	4.0	2	7	2	21	w.	Reuben Gray.
Lisbon	Ransom	1,091	5	29.0	.....	55a	6†	4	30	47a	0.35	.....	0.25	1.0	2	7	7	16	w.	H. K. Adams.
McKinney	Ward	1,640	15	20.2	− 2.7	60	8	− 7	28	52a	1.50	+ 0.86	1.00	15.0	3	6	14	10	nw.	N. P. Swenson.
Manfred	Wells	1,605	8	23.0	.....	58	6†	− 5	30	46	0.40	.....	0.20	4.0	3	6	14	10	nw.	P. B. Anderson.
Mayville	Traill	975	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	N. C. McDonald.
Minot	Ward	1,557	11	23.2	− 7.8	64	8	− 6	28	47	0.87	+ 0.14	0.40	8.0	4	13	0	17	w.	Wm. J. Farris.
Minto	Walsh	820	16	22.4c	− 1.7	44	8†	− 2	29	31c	0.34	− 0.27	0.18	T.	3	3	11	16	n.	S. S. Marsh.
Oriska	Barnes	1,270	4	24.5	.....	51	6	1	29	42a	0.30	.....	0.13	1.7	2	3	18	9	nw.	W. E. Williams.
Park River	Walsh	998	6	22.1	.....	47	8	− 3	28	32	0.60	.....	0.30	5.0	5	.....	.....	.....	n.	A. Heyward.
Pembina	Pembina	789	11	26.1	+ 0.3	60	1	− 10	29	30	0.35	− 0.34	0.20	2.5	3	15	4	11	w.	C. W. Shumaker.
Power	Richland	1,020	17	23.8	− 2.1	48	7	− 2	30	39	0.02	− 0.56	0.02	0.2	1	9	3	18	w.	J. A. Power.
Pratt	McHenry	.....	5	21.6	.....	61	11	− 14	29	52	0.60	.....	0.60	6.0	1	13	5	12	nw.	C. H. Butts.
Towner	do	.....	.....	19.8	.....	60	8	− 12	29	44	0.30	.....	0.20	3.0	2	8	12	10	nw.	Belle Bagley.
University	Grand Forks	830	18	21.9	− 3.7	44	8	− 4	29	34	0.87	+ 0.11	0.65	7.0	4	6	7	17	nw.	W. R. Holgate.
Wahpeton	Richland	962	18	22.0	− 6.2	44	23	− 3	30	35	0.02	− 0.51	0.02	0.2	1	11	5	14	nw.	E. G. Burch.
Walhalla	Pembina	966	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. H. Lee.
Westhope	Bottineau	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. W. Clark.
Willow City	do	1,471	16	19.4	− 1.3	64	3	− 21	30	45	0.30	− 0.16	0.20	3.0	2	7	14	9	nw.	M. A. Ostby.
Minnesota.																				
Albert Lea	Freeborn	1,229	20	28.4	− 3.4	48	23	8	30	24	0.40	− 1.22	0.25	1.0	2	5	12	13	nw.	Edward Carey.
Alexandria	Douglas	1,391	16	23.7	− 4.6	46	23	1	30	32	0.38	− 0.36	0.20	2.6	4	9	3	18	nw.	P. O. Unumb.
Angus	Polk	870	8	20.1	.....	43	8	− 11	30	33	0.45	.....	0.35	4.5	3	3	10	17	n.	John Nadvornik.
Bagley	Clearwater	.....	4	20.5	.....	41	22	− 13	29	33	0.87	.....	0.30	12.0	5	1	12	17	nw.	Jens Nelson.
Baudette	Beltrami	1,084	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Franz W. Schmidt.
Beardsley	Bigstone	1,090	17	26.2	− 2.6	49	23	− 1	30	26	0.37	− 0.38	0.30	1.0	3	2	10	18	nw.	Roy A. Smith.
Beaulieu	Mahnomen	1,200	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Elizabeth S. Cooper.
Bird Island	Renville	1,039	20	27.2	− 3.3	48	1†	4	30	35	0.35	− 0.53	0.31	0.4	2	5	5	20	nw.	Dr. F. L. Puffer.
Caledonia	Houston	1,179	17	27.7	− 5.6	49	7	12	30	31b	0.44	− 1.35	0.43	2.4	2	9	3	18	nw.	W. D. Belden.
Campbell	Wilkin	984	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. T. Nelsess.
Cass Lake	Cass	1,300	4	.....	.....	.....	.....	.....	.....	.....	1.30	.....	0.75	9.0	4	.....	.....	.....	.....	C. W. Burns.
Collegeville	Stearns	1,282	17	28.2	− 3.0	46	24	5	30	23	0.23	− 0.65	0.13	0.9	3	15	1	14	nw.	Fridolin Tembreul.
Crookston	Polk	863	20	23.0	− 2.4	41	8	0	30	26	0.45	− 0.25	0.35	4.5	2	8	7	15	n.	A. G. Anderson.
Detroit	Becker	1,364	14	21.6	− 5.2	48	8	− 2	28†	37	0.65	− 0.08	0.26	5.2	4	4	13	13	ne.	George W. Peoples.
Fairmont (near)	Martin	1,240	23	28.4	− 2.9	50	4	8	30	29	0.33	− 1.03	0.12	2.6	4	7	18	5	nw.	W. F. Wherland.
Faribault	Rice	1,003	13	27.8	− 6.1	52	1	10	6†	27	0.57	− 0.54	0.19	4.7	5	7	5	18	nw.	Dr. A. R. T. Wylie.
Farmington	Dakota	902	22	28.1	− 2.8	50	1	9	30	27	0.50	− 0.85	0.20	3.5	5	8	7	15	nw.	D. F. Akin.
Fergus Falls	Ottertail	1,210	18	24.7	− 3.5	44	23	1	30	26	0.36	− 0.45	0.10	2.5	10	7	9	14	nw.	Chas. E. Kissenger.
Fort Ripley	Crow Wing	1,136	4	23.8	.....	48	24	− 4	12	38	0.11	− 0.64	0.10	1.6	2	14	0	16	nw.	J. J. Tucker.
Fosston	Polk	1,289	1	20.6	.....	42	8	− 7	30	31	0.74	.....	0.28	0.4	5	2	10	18	nw.	O. N. Hem.
Fram	Marshall	.....	.....	20.6	.....	43	1	− 10	29†	33	0.42	.....	0.20	4.2	3	2	15	13	w.	A. W. Clark.
Glencoe	McLeod	1,000	14	28.5	− 3.7	55	1	7	30	30	0.20	− 0.89	0.15	0.5	2	11	13	6	nw.	C. G. Selvig.
Grand Meadow	Mower	1,338	23	28.4	− 2.3	50	24	8	30	33	0.44	− 0.96	0.18	4.8	4	8	10	12	nw.	C. F. Greening.
Hallock	Kittson	815	11	19.6	− 6.9	43	8	− 10	29	32	0.42	− 0.24	0.12	3.0	5	16	0	14	n.	D. A. Robertson.
Halstad	Norman	870	4	20.4	.....	44	8	− 2	29	29	0.40	.....	0.40	4.0	1	18	5	7	nw.	Aaron G. Holstrom.
Hinckley	Pine	1,050	5	26.2	.....	49	1	4	29	27	1.12	.....	0.75	4.0	2	2	7	21	nw.	W. R. Newman.
International Falls	Koochiching	1,112	2	22.5	.....	49	11	2	30	32	1.45	.....	0.40	14.5	6	5	18	7	w.	Rees Roe.
Kelliher	Beltrami	.....	3	22.0	.....	46	23	− 8	29	26	0.52	.....	0.26	5.3	4	0	14	16	nw.	A. Gilmour.
Lake Crystal	Blue Earth	.....	3	28.9	.....	49	23	8	6†	38	0.23	.....	0.10	1.5	3	14	2	14	nw.	W. P. Cobb.
Leech Lake Dam	Cass	1,301	22	21.3	− 4.6	44	1	− 4	29	25	0.89	− 0.18	0.23	8.7	7	0	12	18	nw.	Hans Olson.
Little Fork	Koochiching	.....	.....	19.0	.....	42	23	− 6	30	33	1.29	.....	0.50	12.9	4	13	2	15	.....	O. C. Olson.
Long Prairie	Todd	1,299	18	22.8	− 5.2	47	23	1	5†	40	0.15	− 0.84	0.15	1.5	1	9	7	14	nw.	R. M. Sheets.
Lynd (2)	Lyon	1,175	18	29.2	− 2.2	55	8	7	17	41	0.40	− 0.58	0.32	1.0	2	10	6	11	n.	J. W. Rouse.
Mankato	Blue Earth	747	11	.....	.....	.....	.....	.....	.....	.....	0.36	− 0.95	0.17	.....	3	11	7	12	sw.	Sadie H. Blake.
Mapleplain	Hennepin	1,023	18	27.4	− 3.2	50	4	7	30	27	0.55	− 0.79	0.25	4.0	8	10	3	17	nw.	G. W. Richards.
Milaca	Millelacs	1,072	13	26.2	− 5.6	57	24	3	30	32	0.42	− 0.89	0.19	4.5	3	5	11	14	nw.	C. H. Foss.
Milan	Chippewa	955	16	26.8	− 2.7	50	8	4	30	33	0.62	− 0.33	0.27	2.0	4	5	14	11	nw.	O. K. Opjorden.
Minneapolis	Hennepin	918	19	27.8	− 4.8	50	4	8	30	21	0.59	− 0.59	0.16	3.9	8	9	5	16	nw.	U. S. Weather Bureau.
Montevideo	Chippewa	900	20	28.0	− 2.8	50	24	5	30	29	0.34	− 0.52	0.19	0.9	4	8	7	15	nw.	Lloyd G. Moyer.
Moorhead	Clay	935	29	24.0	− 0.4	44	8	2	30	33	0.49	− 0.49	0.26	3.8	4	6	9	15	nw.	U. S. Weather Bureau.
Mora	Kanabec	.....	5	26.4	.....	47	1†	6	6†	30	0.59	.....	0.16	4.2	9	13	6	11	nw.	Hans Peterson.
Morris	Stevens	1,170	25	26.0	− 2.4	47	23	3	30	28	0.20	− 0.49	0.08	4.5	4	13	4	13	nw.	D. T. Wheaton.
New London	Kandiyohi	1,215	16	23.4	− 6.8	48	4	− 2	30	40	0.22	− 0.69	0.15	1.0	3	4	15	11	nw.	Harold Swenson.
New Richland	Waseca	1,180	16	29.0	− 3.7	53	1	8	30	28	0.46	.....	0.40	2.0	2	10	12	8	nw.	N. O. Tyrholm.
New Ulm	Brown	791	30	27.4	− 4.5	51	23	7	30	32	0.30	− 0.85	0.10	1.8	5	9	0	21	nw.	Andrew J. Eckstein.
Osakis	Douglas	1,343	3	24.8	.....	45	23	1	30	33	0.22	.....	0.18	2.0	2	5	4	21	nw.	J. B. Johnson.
Park Rapids	Hubbard	1,426	20	21.6	− 4.2	42	1†	0	30	27	0.80	− 0.22	0.28	5.2	8	8	2	20	nw.	Dr. P. A. Walling.
Pine River Dam	Crow Wing	1,251	23	23.8	− 3.3	48	1	0	29	30	0.05	− 1.00	0.05	1.0	1	8	14	8	n.	Neil McKay.
Pokegama Falls	Itaska	1,280	23	22.4	− 2.4	42	1	− 10	29	27	0.89	− 0.37	0.38	9.5	5	3	8	19	nw.	Arthur L. Mampel.
Red Lake	Beltrami	1,152	2	22.2	.....	44	22	− 9	28	25	1.08	.....	0.36	9.5	6	5	10	15	w.	A. C. Goddard.
Red Wing	Goodhue	680	14	.....	.....	.....	.....	.....	.....	.....	0.80	− 0.96	0.26	5.8	8	9	4	17	nw.	Louis Bach.
Redwood Falls	Redwood	1,050	3	29.0	.....	53	1	6	30	32	0.58	− 0.41	0.38	1.0	4	15	8	7	nw.	N. B. Anderson.
Reeds Landing	Wabasha	681	15	.....	.....	.....	.....	.....	.....	.....	0.44	− 1.05	0.28	2.7	5	7	4	19	nw.	John Deschneau.
Rochester	Olmsted	991	6	26.9	.....	48	7†	9	6	33	0.20	.....	0.20	2.0	1	10	2	18	n.	S. R. Case.
Roseau	Roseau	1,040	3	20.3	.....	44	8	− 19	29	36	0.70	.....	0.28	6.0	8	7	8	15	nw.	A. Waag.
St. Charles	Winona	850	19	26.4	− 5.3	48	7	9	6†	34	0.34	− 0.95	0.21	2.8	3	10	6	14	se.	S. W. Gleason.
St. Cloud	Sherburne	1,020	32	25.0	− 4.7	50	24	5	30	39	0.31	− 0.80	0.20	3.5	3	4	10	16	nw.	Jos. H. Capser.
St. Paul	Ramsey	837	39	28.1	− 2.8	47	23	8	30	19	0.48	− 0.82	0.14	4.0	7	7	10	13	nw.	U. S. Weather Bureau.
St. Peter	Nicollet	825	17	30.8	− 2.6	59	4	10	12†	29	0.09	− 1.11	0.06	0.7	2	11	6	13	nw.	Chas. C. Cavanaugh.
Sandy Lake Dam	Aitkin	1,234	17	24.6	− 2.8	49	1	− 2	29	25	0.34	− 0.97	0.19	5.9	4	5	14	11	nw.	U. S. Engineer Corps
State Sanatorium	Cass	.....	3	22.2	.....	44	23	− 2	29†	26	0.77	.....	0.26	7.0	6	11	6	13	n.	Walter J. Marclaey.
Stillwater	Washington	694	5	.....	.....	.....	.....	.....	.....	.....	0.37	.....	0.16	4.5	6	13	1	16	nw.	Oscar Ostrom.
Taylors Falls	Chisago	759	3	28.1	.....	55	1	3	30	30	0.29	.....	0.21	5.0	2	6	8	16	nw.	Mpls. Gen. Elec. Co.

TABLE 1.—*Climatological data for November, 1910. 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, .01 inch or more.	Sky. Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
***Minnesota*—Continued.**																				
Warroad	Roseau	1,069	1	20.2	.....	41	8	− 18	29	33	0.78	.....	0.23	8.5	5	6	3	21	nw.	John H. Sawyer.
West Concord	Dodge	1,232	1	27.2	.....	48	1	9	30	25	0.30	.....	0.20	3.0	2	11	12	7	nw.	H. H. Orcutt.
Willow River	Pine	1,046	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. A. Brandt.
Windom	Cottonwood	1,336	4	30.5	.....	55	1	7	30	38	0.11	.....	0.11	0.5	1	6	16	8	nw.	Taber C. Richmond.
Winnebago	Faribault	1,100	11	29.8	− 5.4	52	4	9	17	34	0.19	− 1.29	0.10	1.0	2	6	5	19	nw.	H. H. Haight.
Winnibigoshish	Itasca	1,300	22	23.0	− 3.1	44	23	− 3	29†	23	1.07	− 0.02	0.35	10.2	7	2	9	19	nw.	John Duncan.
Winona	Winona	700	15	30.2	− 3.6	48	7†	13	30	22	0.44	− 1.08	0.33	1.5	5	11	6	13	w.	Perry C. Meyrs.
Worthington	Nobles	979	15	28.7	− 3.1	54	8	7	11†	36	0.08	− 1.19	0.06	1.1	2	13	8	9	nw.	Milton P. Mann.
Zumbrota	Goodhue	917	15	28.1	− 4.3	51	1	9	3†	27	0.15	.....	0.13	1.2	2	11	11	8	nw.	. . C. Rowell.
South Dakota.																				
Milbank	Grant	1,148	18	26.9	− 3.5	55	8	5	30	36	0.28	− 0.46	0.18	1.7	3	11	2	17	nw.	I. T. Patridge.
Wisconsin.																				
Antigo	Langlade	1,489	16	26.6	− 4.8	45	1	14	3	25	0.44	.....	0.15	4.5	7	6	2	23	w.	Elton C. Larzelere.
Barron	Barron	1,115	18	24.6	− 1.3	44	24	4	5	24	1.40	+ 0.02	0.50	9.5	7	4	13	13	nw.	Wm. A. Kent.
Beloit	Rock	750	23	34.8	− 2.1	60	9	17	30	31	2.00	+ 0.09	0.95	T.	5	14	0	16	w.	Smith Observatory.
Big St. Germain Dam §	Vilas	1,590	1	25.8	.....	46	1	9	24	37	1.71	.....	0.50	8.2	7	5	1	24	nw.	Oscar Brehmer.
Brodhead	Green	812	12	31.6	− 6.3	55	7	14	6	32	1.59	− 0.22	1.05	0.6	6	13	7	10	nw.	Hecktore D. Kirkpatrick.
Burnett	Dodge	880	6	28.7	.....	50	9	9	6	29	2.27	.....	1.50	7.5	8	4	6	20	nw.	Geo. W. Smith.
Darlington	Lafayette	867	5	29.9	.....	59	1	14	30	35	.....	.....	.....	.....	.....	20	2	8	nw.	S. P. Nelson.
Deerskin Dam §	Forest	1,625	1	25.4	.....	43	1	6	24	34	0.85	.....	0.30	5.8	6	2	8	20	w.	Wm. E. O'Neal.
Delavan	Walworth	920	17	30.6	− 3.0	62	9	15	6	35	1.96	+ 0.11	0.72	1.5	8	8	4	18	nw.	Elwood S. Austin.
Dodgeville	Iowa	1,116	11	29.6	− 5.3	60	1	12	5	42	1.38	− 0.52	0.92	2.5	4	13	2	15	nw.	Geo. W. Butler.
Downing	Dunn	983	8	25.6	.....	50	24	− 1	6	30	0.75	.....	0.40	7.5	4	2	0	28	w.	Eugene F. Stoddard.
Eau Claire	Eau Claire	800	19	28.3	− 3.8	55	1	9	30	23	0.69	− 0.98	0.24	8.1	6	4	9	17	nw.	Robert D. Whitford.
Grand Rapids	Wood	1,021	11	26.8	− 5.9	48	1	11	3	27	0.46	− 1.22	0.13	4.0	7	3	6	21	w.	Willis B. Raymond.
Grantsburg	Burnett	1,095	19	26.6	− 4.2	47	1	4	6	30	0.72	− 0.72	0.30	7.2	4	8	5	17	nw.	Theodore Olsen.
Hancock	Waushara	1,091	18	28.0	− 5.0	51	1	12	3	25	1.10	− 0.30	0.50	6.0	5	3	8	19	nw.	Frederick B. Hamilton.
Hatfield	Jackson	973	15	28.6	− 3.8	55	1	10	30	29	1.36	− 0.25	0.50	6.0	6	3	7	20	nw.	Walter S. Woods.
Hayward	Sawyer	1,197	19	24.8[h]	− 4.4	46	1	10	5[h]	25[h]	0.50	− 1.04	0.30	5.0	2	1[h]	4[h]	17[h]	w.	William E. Swain.
Hillsboro	Vernon	1,000	19	26.8	− 6.0	50	7	6	3	30	0.80	− 0.83	0.35	4.5	4	11	9	10	e.	Emil V. Wernick.
Koepenick	Langlade	1,683	20	24.6	− 6.8	50	1	10	3	30	2.10	+ 0.12	0.40	18.0	10	0	21	9	nw.	Edward S. Koepenick.
Lac du Flambeau §	Vilas	.....	.....	27.4[g]	.....	45	5	16	6	24[g]	.....	.....	.....	.....	.....	0[g]	3[g]	20[g]	n.	W. J. Lovett.
La Crosse	La Crosse	714	38	29.8	− 4.0	52	7	14	30	24	0.46	− 1.06	0.36	1.7	5	7	7	16	nw.	U. S. Weather Bureau.
Lake Mills	Jefferson	897	19	29.6	− 5.1	56	9	13	30	28	1.39	− 0.72	0.68	2.4	9	4	13	13	nw.	S. Newton Dexter Smith.
Lancaster	Grant	1,070	20	29.5	− 4.4	55	7	11	6	34	1.14	− 0.62	0.88	2.5	5	8	12	10	w.	Edward Pollock.
Long Lake	Oneida	1,592	2	25.0	.....	40	1	5	24	35	1.10	.....	0.52	9.6	13	0	4	26	nw.	Louie Frank.
Madison	Dane	974	32	30.0	− 4.2	52	9	15	30	25	1.59	− 0.21	0.88	2.7	10	8	7	15	nw.	U. S. Weather Bureau.
Mather	Juneau	962	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Frank Evans.
Mauston	do	882	14	29.2	− 5.5	53	1	8	3	27	1.20	− 0.44	0.55	5.0	3	11	7	12	nw.	Eugene L. Hitchcock.
Meadow Valley	do	974	19	27.6	− 4.7	49	1	7	3	28	0.62	− 0.91	0.38	7.0	4	1	14	15	nw.	Charles H. Johnson.
Medford	Taylor	1,420	19	26.0	− 4.2	48	1	10	17	25	0.60	− 0.97	0.20	6.0	5	3	9	18	w.	William Zeit.
Merrill	Lincoln	1,267	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Frank M. McElroy.
Minocqua	Vilas	1,604	6	24.6	.....	50	24	8	20	39	0.98	.....	0.32	4.5	7	0	2	28	nw.	Benjamin W. Applebee.
Mondovi	Buffalo	738	2	28.2	.....	50	1	9	6	23	0.57	.....	0.27	7.0	5	12	3	15	nw.	Dr. Charles Hebard.
Mount Horeb	Dane	1,226	6	29.4	.....	54	7	9	6	30	1.35	.....	0.60	5.0	8	9	15	6	nw.	W. M. Lewis.
Muscoda	Grant	666	1	30.4	.....	50	6	15	6	35	1.52	.....	0.80	1.2	5	6	10	14	w.	Henry Eckstein.
Neillsville	Clark	996	21	27.0	− 4.3	47	9	10	30	27	0.90	− 0.84	0.35	3.5	5	7	0	23	nw.	William Heaslett.
New Richmond	St. Croix	990	5	26.9	.....	47	1	6	6	31	1.19	.....	0.50	8.0	5	2	15	13	nw.	Frank A. R. Van Meter.
Osceola	Polk	806	19	26.4	− 3.3	49	23	5	6	36	0.37	− 1.02	0.30	4.0	3	9	3	18	n.	Charles W. Staples.
Park Falls §	Price	1,492	18	24.4	.....	47	24	10	25	36	0.39	.....	0.20	3.5	4	10	14	6	nw.	Flambeau Paper Co.
Portage	Columbia	809	14	.....	.....	.....	.....	.....	.....	.....	1.55	+ 0.01	1.15	.....	2	.....	.....	.....	.....	James Clear.
Prairie du Chien	Crawford	690	23	29.6	− 6.8	56	7	14	6	40	0.46	− 1.11	0.26	T.	3	13	4	13	nw.	Jas. A. Gillis.
Prentice	Price	1,551	12	23.6	− 8.1	48	1	4	29	37	1.54	− 0.21	0.42	12.2	8	0	3	27	nw.	Joseph G. Lash.
Rhinelander	Oneida	1,550	4	25.7	.....	45	1	13	3	24	1.11	.....	0.34	10.9	10	2	5	23	nw.	John Lind.
Sauk City	Sauk	758	2	30.0	.....	53	7	14	3	39	.....	.....	.....	.....	.....	7	5	18	.....	Killen Derleth.
Shullsburg	Lafayette	1,019	4	29.6	.....	57	9	10	6	27	0.76	.....	0.34	1.8	5	10	6	14	nw.	Harrison B. Chamberlin.
Solon Springs	Douglas	1,083	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John M. Sayles.
Spooner	Washburn	1,104	15	25.6	− 4.7	42	1	5	29	20	0.39	− 1.14	0.24	4.5	2	12	10	8	w.	Horace A. Bresee.
Stanley	Chippewa	1,082	6	26.8	.....	52	1	8	30	23	0.55	.....	0.26	4.2	5	4	5	21	nw.	W. Humphrey Scott.
Stevens Point	Portage	1,113	17	27.4[c]	− 5.3	49	1	7	3	32[c]	0.82	− 0.90	0.62	2.0	4	5	6	19	nw.	Garry E. Culver.
Sugar Camp Dam §	Oneida	1,582	1	.....	.....	.....	.....	.....	.....	.....	0.93	.....	0.15	9.2	15	.....	.....	.....	nw.	Robert Hayes.
Twin Lakes Dam §	Vilas	1,625	1	.....	.....	.....	.....	.....	.....	.....	1.10	.....	0.30	10.0	7	1	10	19	n.	Albert D. Hansen.
Valley Junction	Monroe	930	18	28.5	− 4.5	52	1	4	3	30	1.35	− 0.29	0.31	7.0	7	5	4	21	nw.	Frederick Muermann.
Viroqua	Vernon	1,412	19	29.2	− 3.8	55	1	12	30	24	0.44	− 1.23	0.22	2.0	5	9	6	15	nw.	Henry E. Rogers.
Vudesare	Vilas	1,600	2	24.2	.....	41	1	10	24	29	0.89	.....	0.25	11.5	8	2	6	22	nw.	Louis L. Thomas.
Watertown	Jefferson	824	19	30.4	− 3.6	53	9	15	30	22	3.15	+ 1.35	1.42	2.5	11	8	9	13	nw.	Charles J. Salick.
Waukesha	Waukesha	864	14	31.4	− 4.8	56	9	16	30	28	2.87	+ 1.11	1.70	2.2	8	2	23	5	nw.	Carroll College.
Wausau	Marathon	1,212	17	28.4	− 3.9	57	1	12	3	27	1.41	− 0.29	0.35	3.0	9	3	16	11	nw.	George H. Halder.
Weyerhauser	Rusk	1,297	3	25.3	.....	47	1	5	30	31	1.03	.....	0.20	10.4	9	1	11	18	nw.	Miss Etta Stiles.
Whitehall	Trempealeau	675	18	25.8	− 8.1	50	8	− 1	6	39	0.30	− 1.09	0.30	3.0	1	15	0	15	nw.	Hans J. Haugh.
Iowa.																				
Albia §	Monroe	959	12	34.3	− 4.4	66	7	13	30	41	0.52	− 1.25	0.47	0.5	2	13	6	11	nw.	J. I. Chenoweth.
Algona §	Kossuth	1,213	36	30.6	− 2.2	53	7	10	30	32	0.29	− 0.99	0.17	1.5	2	16	10	4	nw.	Dr. F. T. Seeley.
Alta	Buena Vista	1,513	19	31.6	− 0.9	60	7	9	30	34	0.23	− 1.00	0.15	0.5	5	8	17	5	nw.	David E. Hadden.
Amana	Iowa	721	34	32.1	− 1.7	58	9	13	30	31	0.59	− 1.14	0.34	0.5	6	13	10	7	nw.	C. Schadt.
Ames	Story	926	34	33.6	− 0.5	60	7	12	17†	34	0.12	− 1.07	0.12	T.	1	10	14	6	n.	Iowa State College.
Baxter §	Jasper	998	10	33.5	− 3.8	61	7	11	29	36	0.68	− 0.65	0.45	T.	4	12	10	8	nw.	W. R. Vandike.
Belle Plaine	Benton	828	20	31.9	− 3.0	60	7	12	3†	34	0.67	− 1.05	0.42	3.5	4	12	8	10	nw.	S. P. Van Dike.
Belmond	Wright	.....	.....	30.1	.....	54	7	9	30	30	0.33	.....	0.16	1.9	3	1	23	6	nw.	Geo. P. Hardwick.
Bloomfield §	Davis	.....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. R. Davis.
Bonaparte §	Van Buren	.....	19	35.6	− 2.9	68	7	11	3	34	0.53	− 1.27	0.30	1.0	2	.....	.....	.....	.....	B. R. Vale.
Boone	Boone	1,134	5	33.0	.....	62	7	12	30	37	0.38	.....	0.38	T.	1	.....	.....	.....	.....	Carl Fritz Henning.
Britt §	Hancock	1,236	13	29.8	− 3.8	52	7	9	29†	33	0.15	− 0.96	0.09	0.9	2	11	15	4	nw.	L. M. Goodman.
Buckingham	Tama	.....	10	.....	.....	.....	.....	.....	.....	.....	0.39	.....	0.17	1.8	4	.....	.....	.....	.....	W. A. Daniel.
Burlington	Des Moines	544	14	35.0	− 4.7	70	7	12	30	47	0.97	− 0.81	0.50	0.5	4	19	0	11	nw.	Max E. Poppe, jr.
Carroll	Carroll	1,265	20	31.0	− 1.2	62	6	6	30	39	T.	− 1.13	T.	0.0	0	12	10	8	nw.	Mrs. Jos. J. Wolfe.
Cedar Rapids	Linn	733	28	31.4	− 4.5	59	9	16	30	37	0.49	− 0.91	0.28	0.8	3	18	0	12	nw.	W. J. Greene.
Charles City	Floyd	1,015	19	29.2	− 3.8	52	7	10	30	26	0.29	− 1.10	0.19	1.8	2	5	9	16	nw.	U. S. Weather Bureau.
Clear Lake §	Cerro Gordo	1,241	12	31.4	− 2.7	55	7	8	30	35	0.20	− 0.87	0.20	2.0	1	11	1	18	n.	Oscar Stevens.
Clinton	Clinton	593	43	33.2	− 2.5	65	9	15	22	32	0.58	− 1.26	0.11	T.	7	5	11	14	nw.	Luke Roberts.
Columbus Junction §	Louisa	595	9	34.6	.....	62	9	11	3	32	0.43	.....	0.20	0.2	4	18	6	6	nw.	J. B. Johnston.
Davenport	Scott	580	39	33.8	− 3.7	63	9	14	30	29	0.22	− 1.54	0.07	T.	4	14	4	12	nw.	U. S. Weather Bureau.
Decorah	Winneshiek	875	17	29.4	− 4.1	51	7	9	3	31	0.26	− 1.29	0.24	0.0	2	.....	.....	.....	.....	F. H. Baker.
Delaware	Delaware	1,083	19	30.4	− 2.4	57	9†	12	30	26	0.65	− 0.92	0.23	2.8	6	12	11	7	nw.	William Ball.
Des Moines	Polk	861	32	35.4	− 1.4	62	7	15	30	36	0.53	− 0.95	0.42	0.4	5	7	14	9	nw.	U. S. Weather Bureau.
De Soto §	Dallas	866	10	35.6	− 3.1	65	7	13	3†	41	0.56	− 0.66	0.56	T.	1	.....	.....	.....	nw.	R. D. Minard.
Dubuque	Dubuque	639	37	32.4	− 3.6	59	9	16	30	29	0.53	− 1.28	0.22	1.7	7	11	7	12	nw.	U. S. Weather Bureau.
Earlham	Madison	.....	8	35.1	.....	65	7†	12	16†	37	0.52	.....	0.44	T.	2	13	4	13	nw.	George Phillips.

TABLE 1.—*Climatological data for November, 1910. 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, .01 inch or more.	Sky. Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
Iowa—Continued.																				
Elkader	Clayton	727	31	37.2	+ 4.0	64	25	20	30	35	0.66	− 0.99	0.27	1.0	3	14	8	8	.....	Chas. Reinecke.
Elma	Howard	.....	1	28.8	.....	50	1†	9	29†	27	0.22	.....	0.10	2.5	3	6	15	9	nw.	H. A. Moore.
Estherville	Emmet	1,298	15	28.0	− 3.3	53	8	9	30	31	0.10	− 1.14	0.08	1.0	2	23	0	7	nw.	A. O. Peterson.
Fairfield	Jefferson	.....	26	34.9	− 2.0	63	9	14	3†	32	0.48	− 1.80	0.23	0.2	5	.....	.....	.....	nw.	R. Monroe McKenzie.
Fayette §	Fayette	1,003	20	29.4	− 3.5	54	7	11	3†	29	0.28	− 1.34	0.18	1.8	2	17	4	9	nw.	R. Z. Latimer.
Forest City §	Winnebago	1,226	16	28.4	− 4.0	50	7†	12	12†	31	T.	− 1.23	T.	T.	0	6	11	13	w.	J. A. Peters.
Fort Dodge	Webster	1,126	10	31.6	− 3.6	59	7	11	30	33	0.16	− 1.06	0.16	T.	1	17	1	12	nw.	J. F. Monk.
Fort Madison	Lee	516	61	.....	.....	.....	.....	.....	.....	.....	0.70	− 1.44	0.30	0.0	3	12	9	9	w.	Miss L. A. McCready.
Gilman	Marshall	1,052	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. L. Wylie.
Grand Meadow	Clayton	1,180	19	29.3	− 3.7	55	7	10	30	30	0.35	− 1.21	0.12	2.0	5	9	9	12	nw.	F. L. Williams.
Greene	Butler	.....	12	30.6	− 5.3	56	1	10	30	30	0.17	− 0.98	0.11	1.5	2	3	13	14	nw.	J. L. Cole.
Grinnell	Poweshiek	1,023	18	34.6	− 1.4	61	7	13	30	31	0.98	− 0.65	0.45	2.0	6	13	11	6	w.	D. W. Brainard.
Grundy Center §	Grundy	976	19	32.4	− 1.6	57	7	12	30	28	0.07	− 1.15	0.05	0.0	2	17	0	13	nw.	J. B. Calderwood.
Guthrie Center §	Guthrie	1,077	15	34.9	− 2.4	63	7	11	3†	37	0.35	− 0.80	0.24	T.	3	16	6	8	nw.	D. G. Beardsley.
Hampton	Franklin	1,155	20	31.6	− 1.8	55	7	10	30	33	0.31	− 1.25	0.18	0.5	2	6	13	11	nw.	E. C. Grenello.
Humboldt	Humboldt	1,095	22	32.6	− 1.4	56	1	10	29	35	0.29	− 1.08	0.13	T.	3	15	13	2	nw.	Henry S. Wells.
Independence §	Buchanan	921	46	31.2	− 1.4	57	1	11	22	37	0.05	− 1.27	0.05	0.5	1	15	8	7	nw.	George Donohoe.
Indianola	Warren	969	19	36.4	− 1.9	67	9	15	30	36	0.47	− 0.95	0.35	0.6	3	18	5	7	nw.	John L. Tilton.
Iowa City	Johnson	683	50	31.5	− 4.2	58	7	9	30	37	0.69	− 1.57	0.20	T.	6	14	4	13	nw.	Prof. A. E. Smith.
Iowa Falls	Hardin	1,170	17	29.8	− 3.3	56	7	10	29	34	0.31	− 0.94	0.20	3.1	3	16	1	13	nw.	J. B. Parmelee.
Jefferson §	Greene	.....	11	34.2	.....	62	7	5	3	43	0.05	− 1.26	0.05	0.0	1	9	14	7	nw.	G. W. Jackson.
Keokuk	Lee	547	39	37.6	− 1.8	68	7	18	30	34	0.23	− 1.62	0.19	0.0	3	9	12	9	nw.	U. S. Weather Bureau.
Keosauqua §	Van Buren	644	18	35.2	− 3.7	69	7	12	3†	48	0.60	− 0.90	0.27	T.	4	6	12	12	.....	J. H. Landes.
Knoxville §	Marion	920	15	36.0	.....	63	7	15	30	32	0.63	.....	0.40	2.0	2	15	6	9	nw.	Casey & Belville.
Lacona	Warren	.....	11	.....	.....	.....	.....	.....	.....	.....	0.81	− 0.66	0.56	3.0	3	7	18	5	.....	J. B. Alter.
Le Claire	Scott	576	10	.....	.....	.....	.....	.....	.....	.....	0.48	− 0.99	0.16	T.	9	.....	.....	.....	.....	Miss M. T. Disney.
Marshalltown §	Marshall	947	18	32.4	− 3.6	63	7	10	17	41	0.70	− 0.59	0.28	T.	6	11	8	11	nw.	Ralph B. Reasoner.
Mason City §	Cerro Gordo	1,132	13	29.3	− 3.5	50	1†	10	16†	26	0.25	− 1.39	0.15	T.	2	9	14	7	nw.	J. S. Mills.
Mount Pleasant §	Henry	729	29	35.0	− 2.4	64	9	15	30	38	0.59	− 0.97	0.23	1.0	6	13	7	10	nw.	J. W. Edwards.
Muscatine	Muscatine	.....	50	.....	.....	.....	.....	.....	.....	.....	0.42	− 1.88	0.20	T.	5	.....	.....	.....	.....	William Molis.
New Hampton §	Chickasaw	1,169	13	29.6	− 5.1	50	1†	9	30	27	0.22	− 1.18	0.12	1.0	2	9	12	9	nw.	A. F. Kemman.
Newton §	Jasper	944	22	35.5	+ 0.7	62	1	14	30	30	0.36	− 1.29	0.19	2.0	2	13	11	6	nw.	J. P. Beatty.
Northwood §	Worth	1,222	14	29.2	− 4.0	51	9	8	30	29	0.33	− 1.15	0.20	3.3	3	10	12	8	nw.	Chas. H. Dwelle.
Olin §	Jones	760	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. M. Miles.
Osage	Mitchell	1,184	23	30.1	− 0.8	52	7†	10	30	30	0.29	− 1.14	0.17	3.0	2	9	8	13	nw.	A. D. Bundy.
Oskaloosa §	Mahaska	843	34	34.8	− 2.2	62	7	11	3	35	0.43	− 1.06	0.15	0.5	4	16	3	11	nw.	Joseph Boyd.
Ottumwa	Wapello	649	15	38.0	− 1.5	68	7	12	28	33	0.18	− 1.42	0.18	T.	1	17	4	9	nw.	W. J. Mesmer.
Pella	Marion	877	8	34.8	.....	63	7	11	3	36	0.49	.....	0.38	0.8	5	21	0	9	nw.	John H. Ver Steeg.
Perry §	Dallas	975	9	34.4	− 3.4	61	7	12	30	44	0.32	− 1.13	0.32	0.0	1	13	11	6	nw.	Ed. S. Gray.
Plover	Pocahontas	1,426	14	31.8	− 2.5	67	1	8	29	35	0.20	− 1.42	0.20	T.	1	17	11	2	nw.	J. S. Smith.
Pocahontas §	do.	1,248	6	31.8	.....	55	7	10	30	32	0.11	.....	0.05	0.5	3	15	9	6	nw.	F. E. Hronek.
Ridgeway §	Winneshiek	1,215	12	31.0	− 6.2	57	7†	10	30	33	0.63	− 1.19	0.54	3.8	6	10	12	8	nw.	Arthur Betts.
Rockwell City §	Calhoun	.....	14	35.0	0.0	60	1†	12	12†	39	0.20	− 0.90	0.20	T.	1	18	8	4	.....	C. M. Randall.
Sac City	Sac	1,278	34	33.4	− 0.1	60	7	12	30	34	T.	− 1.11	T.	T.	0	13	9	8	nw.	E. N. Bally.
St. Charles §	Madison	1,070	9	37.1	.....	69	7	14	30	38	0.60	.....	0.42	3.0	4	16	7	7	nw.	R. D. Minard.
Sigourney §	Keokuk	877	14	34.8	− 4.1	60	1†	12	11	33	0.52	− 1.03	0.29	0.5	5	3	18	9	nw.	J. T. Parker.
Stockport §	Van Buren	.....	8	34.6	.....	66	7	8	3	38	0.54	.....	0.26	0.5	5	16	5	9	nw.	C. L. Beswick.
Storm Lake	Buena Vista	1,440	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. B. Fracker.
Stuart	Guthrie	1,216	11	33.6	− 2.4	64	7	11	29	40	T.	− 0.92	T.	T.	0	6	20	4	nw.	J. P. Fox.
Tipton §	Cedar	807	11	34.0	− 2.8	59	9	14	30	27	0.77	− 1.05	0.35	2.0	5	.....	.....	.....	nw.	F. K. Gregg.
Toledo §	Tama	856	16	32.4	− 4.0	58	7	12	3†	32	0.50	− 1.01	0.25	3.0	3	14	7	9	nw.	I. F. Giger.
Wapello §	Louisa	588	12	35.4	− 5.8	62	9	17	30	29	0.38	− 1.02	0.16	T.	4	17	5	8	nw.	G. W. Schofield.
Washington	Washington	769	28	34.2	− 2.0	62	9	14	30	31	0.41	− 1.00	0.23	0.0	4	11	12	7	nw.	Wm. A. Cook.
Waterloo	Black Hawk	862	27	32.7	− 3.0	59	7	12	30	32	0.44	− 1.01	0.17	2.5	5	13	10	7	nw.	M. L. Newton.
Waukee	Dallas	1,039	7	34.6	.....	62	7	12	29	36	0.55	.....	0.52	0.5	4	18	6	6	nw.	Samuel F. Pott.
Waverly §	Bremer	948	14	31.6	− 3.5	59	1	10	30	30	0.13	− 1.27	0.13	0.0	1	19	4	7	nw.	H. S. Hoover.
Webster City §	Hamilton	.....	5	33.0	.....	58	7	10	29	31	0.17	.....	0.17	T.	1	13	10	7	nw.	C. D. Carpenter.
West Bend §	Palo Alto	1,197	17	30.6	− 1.9	54	7†	9	29	33	0.19	− 1.15	0.12	0.6	3	10	13	7	.....	Joseph Dorweiler.
Whitten §	Hardin	1,036	13	31.6	− 3.7	57	7	9	3†	33	T.	− 1.13	T.	T.	0	10	12	8	nw.	F. P. Butler.
Winterset §	Madison	1,129	19	35.3	− 1.5	64	7	14	30	34	0.26	− 1.03	0.26	0.5	1	5	17	8	nw.	Robert S. Cooper
Missouri.																				
Gorin	Scotland	700	24	.....	.....	.....	.....	.....	.....	.....	0.41	− 1.75	0.30	0.0	2	7	12	11	nw.	J. W. Pulliam.
Hannibal	Marion	534	18	38.0	− 2.5	71	9	18	17	38	0.13	− 1.82	0.07	T.	3	10	11	9	nw.	U. S. Weather Bureau.
Louisiana	Pike	500	32	37.6	− 6.5	74	9	12	17	45	1.07	− 1.17	0.70	T.	4	18	5	7	ne.	J. T. Farrell.
Mexico	Audrain	797	32	39.2	− 3.7	75	9	16	17	42	0.22	− 2.22	0.13	T.	3	15	6	9	nw.	J. F. Llewellyn.
Steffenville	Lewis	576	17	39.1	− 4.5	70	7	15	16†	38	0.85	− 1.36	0.50	T.	3	11	9	10	nw.	Frank Hall.
Sublett	Adair	1,000	30	38.2	− 2.6	69	7†	11	29	43	T.	− 1.84	T.	0.0	0	14	9	7	nw.	Lewis Spriggs.
Warrenton	Warren	865	20	39.0	− 3.8	68	1	19	30	37	0.79	− 2.00	0.45	T.	4	9	9	12	n.	Dr. J. H. Frick.
Indiana.																				
Collegeville	Jasper	.....	11	35.8	− 5.2	68	9	11	19	37	1.19	− 1.31	0.40	T.	7	8	8	14	w.	Prof. L. C. Klosterman.
Knox	Starke	716	5	35.7	.....	67	9	19	6†	34	1.32	.....	0.32	3.2	11	6	13	11	n. w.	W. R. R. Taisman.
Laporte	Laporte	810	14	35.6	− 4.1	64	9	20	21	31	1.50	− 1.28	0.35	4.0	11	5	8	17	n. w.	Wm. M. Walton, jr.
Plymouth	Marshall	790	7	34.9	.....	63	9	20	20	28	1.21	.....	0.35	1.0	11	7	8	15	w.	J. W. Siders.
Illinois.																				
Aledo	Mercer	738	10	34.4	− 3.7	64	9	15	30	34	0.42	− 1.45	0.16	0.5	5	11	10	9	n. w.	Wm. B. Frew.
Alexander	Morgan	670	17	37.8	− 4.7	73	9	14	12	38	1.14	− 0.92	0.98	T.	4	12	8	10	n. w.	George H. Hall.
Antioch	Lake	861	9	32.6	.....	62	9	17	30	32	2.00	.....	2.00	T.	1	8	11	11	n. w.	J. C. James, jr.
Astoria	Fulton	650	11	36.2	− 4.6	71	9	15	12	43	1.67	− 0.19	1.35	T.	3	13	9	8	n. w.	Ed. V. Bohl.
Aurora	Kane	687	31	33.3	− 4.1	66	9	17	6	35	1.44	− 1.00	1.20	T.	6	8	9	13	s. w.	W. Holden.
Bement	Piatt	700	3	38.4	.....	71	9	16	22	41	1.91	.....	1.70	0.0	3	14	11	5	n. w.	Rev. C. S. Adams.
Benton	Franklin	598	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. H. Stamper.
Bloomington	McLean	840	19	36.8	− 4.0	70	9	17[a]	30	34[a]	0.64	− 1.90	0.59	T.	2	10	7	13	n. w.	Prof. H. N. Pearce.
Cairo	Alexander	359	33	45.2	− 1.7	74	27	27	30	34	0.55	− 3.47	0.37	T.	4	14	5	11	n. w.	U. S. Weather Bureau.
Carbondale	Jackson	412	.....	43.0	.....	77	27	18	18	42	0.25	.....	0.09	0.0	4	17	7	6	n. w.	State Normal University.
Carlinville	Macoupin	663	20	39.4	− 3.4	74	9	16	7	42	0.44	− 2.14	0.39	0.0	2	16	8	6	n. w.	R. O. Purviance.
Clinton	Dewitt	727	.....	37.6	.....	70	9	15	12	40	1.89	.....	1.70	0.0	4	13	11	6	n. w.	J. F. Ziegler.
Coatsburg	Adams	763	18	37.0	− 4.3	66	9	17	30	33	0.05	− 1.99	0.05	T.	1	17	3	10	n. w.	Dr. J. R. Lambert.
Cobden	Union	656	27	45.4	− 1.7	78	27	22	3	42	0.26	− 3.96	0.16	0.0	3	15	5	10	n.	John Buck
Dakota	Stephenson	929	5	30.4	.....	53	1†	11	6	25	1.37	.....	0.75	2.0	6	8	11	11	w.	Rev. G. W. Kerstetter.
Decatur	Macon	685	19	36.9	− 4.6	70	9	17	12	43	2.84	+ 0.34	2.67	0.0	3	18	7	5	n. w.	Prof. J. H. Coonradt.
Dixon	Lee	725	20	32.2	− 4.6	66	9	15	22	43	0.85	− 0.74	0.52	0.0	7	16	10	4	.....	H. V. Bardwell.
Duquoin	Perry	459	22	43.2	− 2.2	75	26	20	18	39	0.31	− 2.57	0.14	0.0	3	18	8	4	s. w.	G. H. Knetzger.
Dwight	Livingston	600	17	35.6	− 3.9	69	9	16	22	37	0.26	− 2.28	0.06	T.	6	9	9	12	n. w.	Ed. O. Welch.
Elgin §	Kane	716	3	34.4[e]	.....	58[i]	1	18	6	31[j]	1.15	.....	0.90	T.	5	0	21	9	n. w.	Elgin Observatory.
Galva	Henry	842	18	33.6	− 4.3	66	9	15	12†	42	0.32	− 1.48	0.12	0.5	5	15	4	11	n. w.	Prof. F. U. White.
Greenville	Bond	635	32	39.6	− 3.1	70	9	20	12†	33	0.32	− 3.04	0.30	0.0	2	14	7	9	n. w.	M. S. Oudyn.
Griggsville	Pike	650	25	39.0[b]	− 3.0	77	9	17[c]	30	52[c]	1.36	− 0.84	1.24	0.0	2	9	9	12	n. w.	Geo. F. Kneeland.
Halfway	Williamson	569	14	43.2	− 4.5	73	27	21	12†	35	0.40	− 2.16	0.18	0.0	3	15	4	11	n. w.	E. L. Hearn.

TABLE 1.—*Climatological data for November, 1910. District No. 5*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .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.		
Illinois—Continued.																				
Havana	Mason	475	18	39.2[b]	− 3.0	70	9	18[d]	30	40[d]	1.19	− 0.93	0.86	0.0	3	10	16	4	w.	F. & C. Borgelt.
Henry	Marshall	500	22	35.6	− 3.1	67	9	13	12†	40	0.54	− 1.83	0.34	0.0	5	13	9	8	n. w.	Dr. F. A. Powell.
Hillsboro	Montgomery	675	16	40.2	− 4.0	73	9	18	12†	38	1.05	− 1.56	1.05	0.0	1	15	0	15	n. w.	Ira L. Woodward.
Joliet	Will	541	19	33.7	− 5.3	67	9	14	19	38	0.62	− 1.65	0.14	0.3	8	14	2	14	n. w.	F. M. Muhlig.
Kishwaukee	Winnebago	730	22	32.8	− 4.3	67	9	15	6	33	1.14	− 1.06	0.55	2.0	6	8	10	12	n. w.	Geo. Stevens.
La Grange	Cook	657	18	34.2	− 4.1	68	9	18	6†	31	1.73	− 0.60	1.12	1.0	5	8	7	15	n. w.	Prof. F. E. Sanford.
La Harpe	Hancock	698	31	34.9	− 4.8	65	9	11	3	33	0.11	− 1.85	0.11	T.	1	12	8	10	n. w.	Jno. S. Campbell.
Lanark	Carroll	883	21	31.0	− 5.1	63	9	10	22	37	0.71	− 1.23	0.25	1.5	7	18	7	5	n. w.	M. N. Wertz.
La Salle	La Salle	536	33	34.5	− 3.3	65	9	18	30	32	0.77	− 1.87	0.53	T.	8	12	5	13	w.	U. S. Weather Bureau.
Lincoln	Logan	482	22	36.8	− 4.5	70	9	10	12	39	1.12	− 1.19	0.82	T.	3	12	12	6	n. w.	Prof. C. S. Oglevee.
Martinton	Iroquois	633	23	35.6	− 4.1	70	9	14	19	40	0.26	− 2.20	0.10	0.2	4	9	11	10	n.	Jos. H. Peltier.
Mascoutah	St. Clair	425	20	42.0	− 2.5	75	9	19	17†	46	0.17	− 3.12	0.12	0.0	2	5	‖16	9	n. w.	Geo. Henrich.
Minonk	Woodford	745	17	36.2	− 3.5	70	9	16	22†	46	0.33	− 1.61	0.18	T.	3	10	14	6	n. w.	O. M. Davison.
Monmouth	Warren	784	18	35.3	− 3.8	65	7†	15	30	38	0.48	− 1.30	0.21	0.5	5	14	8	8	n. w.	Hugh R. Moffet.
Morrison	Whiteside	685	16	33.8	− 4.4	67	9	13	22	37	0.91	− 0.82	0.37	T.	7	12	11	7	n. w.	S. A. Maxwell.
Morrisonville	Christian	638	11	38.1	− 5.1	72	9	14	12	41	1.66	− 0.39	1.55	0.0	2	14	10	6	n. w.	J. D. Lowis.
Mount Vernon	Jefferson	511	16	42.2	− 3.5	74	9	19	17†	44	1.83	− 1.11	1.83	0.0	1	17	4	9	n.	Theo. P. Stelle.
Oregon	Ogle	702	1	33.0	.....	65	9	15	21	32	1.21	.....	1.20	T.	2	5	6	19	w.	Samuel Ray.
Ottawa	La Salle	500	24	35.4	− 3.8	65	9	17	22	36	0.74	− 1.63	0.52	T.	4	7	3	20	n. w.	Miss M. M. Harris.
Pana	Christian	692	24	39.2	− 2.8	70	9	17	12	38	1.96	− 1.69	1.82	0.0	2	14	2	14	nw.	C. W. Sibley.
Peoria	Peoria	609	33	35.3	− 2.2	68	9	15	12	36	0.79	− 1.85	0.63	T.	6	11	12	7	nw.	U. S. Weather Bureau.
Pontiac	Livingston	546	8	36.5	.....	70	9	18	12†	36	0.82	.....	0.38	T.	6	9	7	14	w.	Geo. Butterworth.
Riley	McHenry	956	51	31.8[g]	− 2.7	65	9	16	6	30[g]	1.27	− 0.69	0.72	0.2	7	5	7	18	nw.	John West James.
Rockford	Winnebago	763	18	32.0	− 4.9	63	9	12	30	34	1.44	− 0.97	0.84	1.0	8	15	2	13	.....	Hosmer C. Porter.
Rushville	Schuyler	670	19	37.8	− 2.7	73	10	16	12	42	0.59	− 1.49	0.51	T.	3	7	11	12	sw.	H. F. Dyson.
St. Charles	Kane	700	15	33.6	− 4.4	65	9	16	6	36	1.41	− 0.96	0.92	0.5	10	10	11	9	nw.	Dr. Wm. H. Bishop.
St. Peter	Fayette	.....	.....	39.1	.....	68	7	18	12†	40	0.45	.....	0.45	T.	1	14	9	7	nw.	M. L. Lansford.
Sparta	Randolph	538	24	42.2	− 2.8	73	7†	19	17†	38	1.19	− 2.31	1.16	0.0	2	17	9	4	nw.	Jas. A. Caldwell.
Springfield	Sangamon	644	33	38.0	− 2.7	71	9	19	30	34	1.57	− 1.09	1.45	T.	4	12	7	11	nw.	U. S. Weather Bureau.
Streator	La Salle	626	17	34.2	− 5.6	68	9	16	22	44[b]	0.43	− 1.84	0.14	T.	5	11	9	10	sw.	Edw. F. Sweetser.
Sullivan	Moultrie	530	10	38.8	− 4.2	73	9	16	12	40	3.48	+ 0.94	3.15	0.0	3	12	13	5	nw.	C. A. Corbin.
Sycamore	De Kalb	855	30	32.6	− 3.5	65	9	16	6	36	1.10	− 1.27	0.50	T.	3	13	6	11	nw.	Miss E. J. Davis.
Tiskilwa	Bureau	798	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. I. Smucker.
Walnut	.....do	717	19	34.7	− 4.2	67	9	17	30	31	0.60	− 1.23	0.33	T.	7	11	12	7	nw.	O. C. Nussle.
White Hall	Greene	573	2	37.4	.....	74	9	13	17	43	0.69	.....	0.50	T.	4	12	9	9	nw.	Dr. R. A. Pritchett.
Windsor	Shelby	681	11	39.2	− 2.7	73	9	16	17	40	4.65	+ 1.64	4.30	0.0	5	6	12	12	nw.	Herbert Rose.
Winnebago	Winnebago	900	23	32.1	− 4.1	66	9	15	6†	36	1.90	− 1.19	0.93	3.0	7	13	9	8	nw.	Frank Osborn.
Yorkville	Kendall	584	23	33.0	− 3.3	65	9	17	13†	36	1.05	− 1.34	0.70	T.	8	10	5	15	w.	Herman A. Grimwood.
Zion	Carroll	938	16	31.5	− 5.1	63	9	13	22	32	0.75	− 1.01	0.40	4.0	2	18	3	9	w.	Robt. F. Gillogly.

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
* Precipitation included in that of the next measurement.
** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
‡ Separate dates of falls not recorded.
§ 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.
‖ Estimated by observer.
¶ 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 2.—*Daily precipitation for November, 1910. District No. 5, upper Mississippi Valley.*

Stations.	River basins.	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									.05									T.	.25													0.30
Bottineau	Mouse	.05	T.							.02				.03				T.	T.		.23		T.				.08	.28					0.69
Cando	Sheyenne																.30			.20							.48						0.98
Crosby	Mouse	.02			T.					T.	T.	T.	T.	T.	T.					.15	.13					T.	.54	.08	T.				0.92
Devils Lake	Sheyenne	.05		T.	T.	T.			.11			T.	T.		T.			T.		.24	.06	T.	T			.07	.02						0.55
Donnybrook	Mouse																																
Dunseith	do			T.	T.	T.							T.							.20	.10						.20					0.50
Edmore	Sheyenne	T.			T.					.05			T.								T.	T.				T.	T.						0.05
Forman	do	T.	T.																		.20												0.20
Grafton	Red																																
Granville	Mouse	T.								.02			.01							.30		T.				.19							0.52
Hannah	Pembina																																
Hansboro	Red	T.										T.		T.						*	.23		.10				.46						0.79
Hillsboro	do	.02							.26					.01						.30	.03												0.62
Lakota	Sheyenne	.05			T.					.03				T.	T.			T.		.16	.12	T.	.03			T.							0.39
Langdon	Pembina																																
Larimore	Red									.15											.75												0.90
Lisbon	Sheyenne		T.							.25					T.				T.		T.	.10	T.										0.35
McKinney	Mouse	.10							T.		T.			T.						.40							1.00						1.50
Manfred	Sheyenne	T.							.10				T.	T.						.20	.10					T.							0.40
Mayville	Red																																
Minot	Mouse		T.							.12			T.	T.							.40		T.				.30	.05					0.87
Minto	Red	T.							.18											.08		T.	T.				.08						0.34
Oreska	Sheyenne	T.							.02		T.									.05	.10	.13											0.30
Park River	Red													.09						.05	.06		.10				.03						0.33
Pembina	do									.10											.05	.20											0.35
Power	Sheyenne											T.	T.	T.							.02												0.02
Pratt	Mouse																		.60														0.60
Towner	do								T.											.10	.20												0.30
University	Red	T.	T.							.17										*	.65							.05	T.	T.	T.		0.87
Wahpeton	do	T.							T.	‡				.02						T.	T.												0.02
Wolhalla	Pembina																																
Westhope	Mouse																																
Willow City	do	T.							T.				T.							.20			T.					.10					0.30
Minnesota.																																	
Albert Lea	Mississippi	.25			.15										T.						T.		T.										0.40
Alexandria	do	T.	T.	T.	.10					.06					.20						T.	.02	T.										0.38
Angus	Red	T.								T.	T.			.05	.05					.35													0.45
Bagley	do		T.		.15									.30					.23	.15		.04											0.87
Baudette	Rainy																																
Beardsley	Minnesota	.30												.03							.04		T.										0.37
Beaulieu	Red																																
Bird Island	Minnesota	T.	T.		T.							T.			.04						T.		.31										0.35
Caledonia ‖	Mississippi	.43													T.							T.						.01					0.44
Campbell ‖	Red																																
Cass Lake ‖	Mississippi				.15					T.	T.				.75						.15			.25									1.30
Collegeville	do	.13													.08						.02												0.23
Crookston ‖	Red		T.							T.					.10						.35		T.										0.45
Detroit ‖	do		T.	T.	.03	T.				T.	.26	T.	T.	.20	T.	T.		T.			.16	T.	T.	T.				T.					0.65
Fairmont (near)	Minnesota	.10			.12									.06							.05												0.33
Faribault	Mississippi	.14			.19										.19						.01		.04										0.57
Farmington	do	.20	T.	T.	.11										.11						.02		.06					T.					0.50
Fergus Falls	Red	.04	T.		.01					.06		.01		.10	.07	.01				.03	.02		T.	.01								T.	0.36
Fort Ripley ‖	Mississippi	T.	T.	T.	.01					T.	T.	T.			.10					T.		T.											0.11
Fosston	Red									.22	.05				.28						.15			.04									0.74
Fram	do								.02						.20							.10	.10										0.42
Glencoe	Mississippi	T.													.05						T.	T.	.15										0.20
Grand Meadow	do	.18	.03		.16										.07		T.				T.		T.					T.				T.	0.44
Hallock	Red									T.				.10						.05	.05		.12				.10						0.42
Halstad	do		T.							T.					T.						.40												0.40
Hinckley	St. Croix			.37											.75								T.										1.12
International Falls	Rainy		T.		.30	.05			T.	T.	T.			.20	.20						.30	T.	.40					T.	T.	T.			1.45
Kelliher	Red		T.		.10	T.				.01	T.				.26						.10	T.	.05						T.		T.		0.52
Lake Crystal	Minnesota	.10			T.										.05						T.		.08										0.23
Leech Lake Dam	Mississippi		T.		.12					.20					.17					.01	.13	T.	.03	.23					T.				0.89
Little Fork	Rainy				.10	T.									.21						.48		.50										1.29
Long Prairie	Mississippi														.15						T.	T.											0.15
Lynd (2)	Minnesota	.08	T.												T.	T.							.32										0.40
Mankato ‖	do	.17			.13	.06									T.						T.	T.		T.									0.36
Mapleplain	Mississippi	.05	.01		.02					T.	T.			.05	.20						.07		.12	.03				T.				T.	0.55
Milaca	do	.19			.14					T.											.09		T.										0.42
Milan	Minnesota	.27	T.											.10	.10								.15										0.62
Minneapolis	Mississippi	.12	.02		.16					T.		T.		.06	.09						.07		.04	.03				T.					0.59
Montevideo ‖	Minnesota		.08									T.				.06				T.		.01	T.	.19									0.34
Mooshead	Red									.26		T.		.01		T.				.20	.02		T.										0.49
Mora	St. Croix	.15			.16					.01					.09						.08	.05	.02	.02				.01					0.59
Morris	Minnesota	T.			.05					.04				.08							.03		T.										0.20
New London	Mississippi	.02												T.	.15								.05										0.22
New Richland	Minnesota	.06	T.		.40										T.						T.		T.				T.						0.46
New Ulm ‖	do	.05	T.												.10						.03	.02	T.	.10									0.30
Osakis	Mississippi		T.		T.										.18						T.		.04	T.									0.22
Park Rapids ‖	do		.01		.08					.28		T.			.20						.14	.02	.01	.06									0.80
Pine River Dam	do		T.	T.											.05						T.	T.		T.									0.05
Pokegama Falls	do	T.			.14					.06					.16						.15			.38								T.	0.89
Red Lake	Red				.34	T.				.08					.36					.20	.08	.02											1.08
Red Wing ‖	Mississippi	.10	.18		.04	.26									.12	.02						.02	T.	.06	T.								0.80
Redwood Falls	Minnesota	.05	.05		T.										.10								.38										0.58
Reeds Landing ‖	Mississippi	.02	.28			.08									.04	T.						.02	T.										0.44
Rochester ‖	do	T.	.20		T.										T.													T.					0.20
Roseau	Red		T.		.03	.02			T.	.07					.28						.10		.13				.03	.04					0.70
St. Charles ‖	Mississippi	T.	.21			.07									.06								T.					T.					0.34
St. Cloud	do	T.			T.				T.						.20						.05		T.	.06									0.31
St. Paul	do	.14	T.		.14					T.				.04	.08		T.				.03	T.	.03	.02				T.					0.48
St. Peter	Minnesota				.06									.03								T.	T.					T.					0.09
Sandy Lake Dam	Mississippi				.09					.03					.03									.19									0.34
State Sanatorium	do		T.		.08					.17					.08						.26		.09	.09									0.77
Stillwater ‖	St. Croix	.01	.01		.02										.16						.03	T.	.14										0.37
Taylors Falls	do		T.		.21										.08								T.										0.29
Warroad	Rainy		T.		.23	T.			.03					.22							.14						.16						0.78
West Concord	Mississippi	.20													.10								T.										0.30
Willow River	St. Croix																																
Windom	Des Moines	.11										T.			T.						T.		T.							T.			0.11
Winnebago ‖	Minnesota	.10	.09		T.	T.							T.		T.			T.		T.	T.	T.	T.					T.					0.19
Winnibigoshish	Mississippi				.09					.21	T.				.19						.13		.08	.35			.02	T.					1.07

TABLE 2.—*Daily precipitation for November, 1910. District No. 5*—Continued.

Stations.	River basins.	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	
Minnesota—Continued.																																	
Winona	Mississippi	.33	.03		.01					T.					.05		T.				T.	.02						T.			T.	0.44
Worthington ‖	Des Moines	.06	T.		T.										T.						.02											0.08
Zumbrota	Mississippi	.13			.02										T.	T.							T.					T.				0.15
South Dakota.																																	
Milbank ‖	Minnesota	.07	T.												.18								T.	.03								0.28
Wisconsin.																																	
Antigo	Wisconsin	.10	T.		.05	T.			T.						.15						.05	T.	.05	.02	T.			T.			.02	0.44
Barron	Chippewa	.10	.05		.25	.50									.30						.10		.10									1.40
Beloit	Rock	.10	T.		.30																.40				.25			.95			T.	2.00
Big St. Germain Dam	Wisconsin	T.	T.		.42	T.	T.		T.	T.	T.	.50	.20		.26	T.		T.			T.	T.	T.	.11				.14	T.	T.	.08	1.71
Brodhead	Rock	.20	.05	.01						T.					T.							T.		.15	.07			1.05			T.	1.59
Burnett	do	*	.39		T.	.13					T.				.16						T.	.04		.02	.03			1.50	T.		T.	2.27
Darlington	do																															
Deerskin Dam	Wisconsin	.30	T.		T.	T.		T.	T.	T.	T.	.07			.20						T.		T.	.16				T.		.09	.03	0.85
Delavan	Rock	.19	T.		.72						T.				T.						.08	T.		.08	.11		.44	.31			.03	1.96
Dodgeville ‖	do									.20					T.							.05						.92	.21			1.38
Downing	Chippewa	.10	T.		.40										.20	.05					T.		T.	T.				T.			T.	0.75
Eau Claire	do	.24	.14		.07										.15						T.	.04	.05	T.				T.				0.69
Grand Rapids ‖	Wisconsin	T.	.11	.02		T.				T.					.13	.04						.09		T.	.06	T.		T.	.01			0.46
Grantsburg	St. Croix	.02			.30										.20						T.	.20	T.									0.72
Hancock	Wisconsin	.20	T.		T.										.20							.10		.10				.50			T.	1.10
Hatfield	Black	.50	.21							T.				.30							.15	.10						.10				1.36
Hayward	St. Croix		T.		.20					T.					.30						T.		T.									0.50
Hillsboro	Wisconsin	.35	T.		T.					T.		T.			.20				T.		.05	T.					T.	.20			T.	0.80
Koepenick	do	.40			.40	T.	.10		T.						.20						.10	T.	.10	.10	.10			.30		T.	.30	2.10
Lac du Flambeau	Chippewa	T.			.02		T.							.40									.05									
La Crosse	Mississippi	.36	.01		T.					T.		T.			.02	T.	T.		T.		.06	T.	T.					.01			T.	0.46
Lake Mills	Rock	.38	.01		.01	.08					T.				.06							.06		.04	.07			.68	T.		T.	1.39
Lancaster	Mississippi	.10			.10						.03										.03							.88				1.14
Long Lake	Wisconsin	.52	T.	.01	.06	T.						.03	.04		.14						.03	.04	.02	.09				.05	.02	T.	.05	1.10
Madison	Rock	.27	.04		.23	T.				T.					.01	T.	T.	T.	T.		.04	T.		.06	.05		.18	.70		T.	.01	1.59
Mather ‖	Wisconsin																															
Mauston	do	*	.50												.15						T.							.55				1.20
Meadow Valley	do	.38	.07		T.										.14						.03											0.62
Medford	Black	.10		.20	T.										.15						.05	.10										0.60
Merrill	Wisconsin																															
Minocqua	do	.32			.08	T.			T.		T.	.03	T.		.15								.20					.15	T.	T.	.05	0.98
Mondovi	Mississippi	.27	.07		.10										.12						T.	T.	.01					T.				0.57
Mount Horeb	Rock	.25	.05	T.	T.										.08		T.				.10			.06	.11			.60		.10	T.	1.35
Muscoda ‖	Wisconsin		.30	T.		.26					T.				.04	T.						T.	T.		.12			.80				1.52
Neillsville	Black	.35	.15											.25								.10						.05				0.90
New Richmond	St. Croix	.02			.30					T.				T.	.50						.30		.07									1.19
Osceola ‖	do	T.			.30										.04						.03		T.	T.								0.37
Park Falls	Chippewa	T.	T.		.20	.10				T.	T.				.05				T.		T.	.04	T.	T.								0.39
Portage	Wisconsin		.40																						T.			T.	1.15			1.55
Prairie du Chien ‖	Mississippi		.26	T.		.04					T.											T.			T.			.16				0.46
Prentice	Chippewa	.41	.12		.18	.11									.42						.12	T.	.07	.11	T.			T.			T.	1.54
Rhinelander	Wisconsin	.13	T.		.07	T.						.05			.19						.07	.08	.03	.10				.05			.34	1.11
Sauk City	do																															
Shullsburg	Mississippi	.34				.20																.03			.05			.14				0.76
Solon Springs	St. Croix																															
Spooner	do				.15										.24						T.	T.	T.									0.39
Stanley	Chippewa	T.	.26		.04	T.									.15							.07	.03		T.							0.55
Stevens Point	Wisconsin	.62			T.										.05						.10							T.			.05	0.82
Sugar Camp Dam	do	.02	T.		.04	.05	.02	T.		T.		.04	.01	.15	.14	.10					.10	.04	.10	.04				.04	T.	T.	.04	0.93
Twin Lakes Dam	do	.15			.30	T.	.05			T.	T.	.13			.14						T.		T.	.15				T.		T.	.18	1.10
Valley Junction	do	.13	.25		.08				T.						.31		T.				.13	.09		.07	T.			.29			T.	1.35
Viroqua	Mississippi	.22	T.		.06	T.				T.	T.				.01						.05		T.		T.			.10			T.	0.44
Vudesare	Wisconsin	.25	.05		.08	T.	T.	T.	T.	T.	.05	.17	T.		.10	T.					T.	T.	T.	.15				T.	T.	.04	T.	0.89
Watertown ‖	Rock		.22			.10					.21				.05					T.		.18	.05	.12	.09	.09		1.42	.62			3.15
Waukesha	Fox	.35				.18									.12						.14	.05		.15	.18			1.70			T.	2.87
Wausau	Wisconsin	.27	.13		.12	T.				T.		T.			.12						.10	.07	.35	T.	.24			.01			T.	1.41
Weyerhaeuser	Chippewa	.20	.10	.10	.20										.16					.04		.05	.16	T.				.02				1.03
Whitehall	Mississippi	T.	T.		T.										.30						T.	T.					T.				T.	0.30
Iowa.																																	
Albia ‖	Des Moines					.05					T.											.47										0.52
Algona	do	.17			.12																T.											0.29
Alta ‖	Raccoon	.03	.02		.08	.07										T.					.03											0.23
Amana	Iowa	.02			.34					.08											.03				.06			.06				0.59
Ames	Skunk	T.			.12																						T.		T.			0.12
Baxter	do	T.			.45						.10										.05				.08							0.68
Belle Plaine	Iowa	.05			.42					.10															.10			T.				0.67
Belmond	do	.16			.06					T.					T.	T.	T.		T.		.11						T.				T.	0.33
Bloomfield	Mississippi																															
Bonaparte	Des Moines				.23																.30				T.							0.53
Boone ‖	do					.38					T.										T.				T.							0.38
Britt	Iowa	.09			.06																T.											0.15
Buckingham	Cedar	.10			.17					.07											T.				.05							0.39
Burlington ‖	Mississippi					.05																.50			.12			.30				0.97
Carroll ‖	Raccoon				T.																											T.
Cedar Rapids ‖	Cedar		.12			.28					.09								T.			T.			T.			T.	T.			0.49
Charles City	do	.19			.10																											0.29
Clear Lake	do	.20																														0.20
Clinton	Mississippi	.06			.11					.11											.10			.05	.10		T.	.05				0.58
Columbus Junction	Iowa				.20	.05															.12				.06			T.				0.43
Davenport	Mississippi	T.	T.		.06					T.							T.				.07		T.	T.	.05		T.	.04				0.22
Decorah	do	.24			.02																							T.			T.	0.26
Delaware	do	.10			.23						.05										.03				.05			.19				0.65
Des Moines	Des Moines	.01			.42					.05							T.	T.			.04				.01		T.	T.				0.53
De Soto	Raccoon	T.			.56	T.				T.	T.										T.											0.56
Dubuque	Mississippi	.12	T.		.07	T.				.04					T.						.05				.03		.02	.20				0.53
Earlham	Raccoon	T.			.44						.08										T.											0.52
Elkader	Mississippi	.24			.15					T.					T.						T.							.27				0.66
Elma	Wapsipinicon	.10			.09							T.	.03				T.				T.							T.			T.	0.22
Estherville ‖	Des Moines	.08	T.		.02											T.																0.10
Fairfield	Skunk				.22	.01					.03										.20				.02		T.	T.				0.48
Fayette	Mississippi	.18	T.		.10					T.					T.																	0.28
Forest City	Cedar				T.																T.											T.
Fort Dodge	Des Moines	T.	T.			.16																						T.				0.16
Fort Madison	Mississippi				.30																.28						.12					0.70
Gilman	Iowa																															
Grand Meadow	Mississippi	.06			.12					.06											.05							.06				0.35

TABLE 2.—*Daily precipitation for November, 1910. District No. 5*—Continued.

Stations.	River basins.	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.																																
Greene	Cedar	.06			.11																T.											0.17
Grinnell	Iowa	.04			.20	.45				.13											.08				.08							0.98
Grundy Center	Cedar									.05															.02		T.					0.07
Guthrie Center	Raccoon	T.			.24					T.	.06				T.				T.		.04				.01							0.35
Hampton	Cedar	.13			.18																											0.31
Humboldt	Des Moines	.13			.10																.06											0.29
Independence	Wapsipinicon	T.			.05																											0.05
Indianola	Des Moines				.35					.04											.08								T.			0.47
Iowa City ‖	Iowa		.03			.20					.10											.10			.11			.15				0.69
Iowa Falls ‖	do	T.	.08	T.		.20					.10					T.		T.		T.	.03							T.				0.31
Jefferson	Raccoon				.05																											0.05
Keokuk	Mississippi				.03																.19				T.			.01				0.23
Keosauqua ‖	Des Moines					.25					.04				T.							.27			T.	T.		.04				0.60
Knoxville	do				.40																.23				T.							0.63
Lacona	do				.56						.10										.15											0.81
Le Claire ‖	Mississippi		.02			.07					.01							T.				.16	T.	.02	.11	.02		.01	.06			0.48
Marshalltown ‖	Iowa		.12			.28					.12											.06			.07			.05				0.70
Mason City	Cedar	.15			.10									T.	T.																	0.25
Mount Pleasant	Skunk				.20	.06					.03				T.		T.				.23				.05			.02				0.59
Muscatine ‖	Mississippi		T.			.20					.02											.10			.08	.02		T.				0.42
New Hampton	Wapsipinicon	.10			.12																T.											0.22
Newton	Skunk				.19																				.17							0.36
Northwood	Cedar	.20			.10										T.						.03										T.	0.33
Olin	Wapsipinicon																															
Osage	Cedar	.17			.12																											0.29
Oskaloosa	Des Moines	T.			.09					.15											.15				.04							0.48
Ottumwa	do				T.					T.	T.										.18			T.								0.18
Pella	do	.02			.38	.02										T.	T.		T.		.05				.02							0.49
Perry	Raccoon				.32																											0.32
Plover	Des Moines				.20										T.																	0.20
Pocahontas	do	05			.04																.02											0.11
Ridgeway	Mississippi	.54	T.		.05					T.					.01		T.		T.	T.	.01		T.	.01				.01				0.63
Rockwell City	Raccoon		T.							.20																						0.20
Sac City	do																				T.											T.
St. Charles	Des Moines	T.			.40	.02					.08										.10											0.60
Sigourney	Skunk				.04	.25					.10										.08							.05				0.52
Stockport	do				.08	.16					T.										.26				.02			.02				0.54
Storm Lake	Raccoon																															
Stuart	do				T.						T.																					T.
Tipton	Cedar				.35					.07											.09				.14			.12				0.77
Toledo	Iowa	.05			.25						T.										T.				.20							0.50
Wapello	do			T.	.12						T.										.16				.05			.05				0.38
Washington	Skunk					.23				.01											.12				.05							0.41
Waterloo ‖	Cedar		.17			.11					.03				T.							.08						.05				0.44
Waukee	Raccoon	.01	T.		.52					.01					T.				T.		T.				.01							0.55
Waverly	Cedar	.13								T.																						0.13
Webster City	Des Moines	T.	T.		.17					T.											T.				T.							0.17
West Bend	Des Moines	.06	T.		.12							T.								.01												0.19
Whitten	Iowa	T.			T.					T.					T.						T.											T.
Winterset	Des Moines				.26						T.										T.											0.26
Missouri.																																
Gorin	Mississippi				.11																.30											0.41
Hannibal	do		T.		.02															T.	.07	T.					.04	T.				0.13
Louisiana	do		T.		.07																.20	.10						.70				1.07
Mexico ‖	do			T.		T.																.13						.07	.02			0.22
Steffenville	do				.50	.05														T.	.30		T.									0.85
Sublett	do					T.															T.						T.					T.
Warrenton ‖	do					.02																.12						.20	.45			0.79
Indiana.																																
Collegeville	Iroquois	.10	.12			.20					.12				T.									T.	.10			.40	.15		T.	1.19
Knox	Kankakee	.04	.02	.11		.12					.27	T.			.02	T.						T.		.02	.12			.20	.32		.08	1.32
Laporte	do	.10	.02	.17		.08					.07	T.			.10	.05								T.	.10			.25	.35		.21	1.50
Plymouth	do	.03	.05			.02					.23	T.			.02	T.	T.		T.			.02		.02	.12			.35	.27	T.	.08	1.21
Illinois.																																
Aledo	Mississippi	T.			.02	.16											T.				.14				.08			.02				0.42
Alexander	Illinois				.08										T.					T.	.05	.03			T.		T.	.98				1.14
Antioch	do																											3.00			T.	2.00
Astoria	do		T.		T.	.20									T.		T.	T.			.12				T.			1.35				1.67
Aurora	do	.02	.02			T.								T.							T.	.05	.03	.12	T.			1.20				1.44
Bement	Mississippi					.19																			.02			1.70				1.91
Benton	do																															
Bloomington	Illinois	T.	T.	T.							T.										.05				T.			.59				0.64
Cairo	Mississippi	T.			.11										T.									.07			.01	.36				0.55
Carbondale	do	.03			.09	.07																						.06				0.25
Carlinville	Illinois					.05																						.39				0.44
Carlyle	Mississippi																											.22				0.22
Chester	do				.13	.01																						12	.02			0.28
Clinton	Illinois	T.				.15															T.	.01		T.	.03			1.70				1.89
Coatsburg	Mississippi				T.															T.	.05							T.				0.05
Cobden	do	.05			.16																							.05				0.26
Dakota	do	.16	T.			.20										T.	T.					.07		.11	.08			.75			T.	1.37
Decatur ‖	Illinois	T.			T.	.13															T.	T.		T.	.04			2.67				2.84
Dixon ‖	Mississippi		.10			.07																.08		.03	.05			.43	.09			0.85
Du Quoin	do	.14			.03																							.14				0.31
Dwight	Illinois	.06				.03					.02				T.							.05		T.	.04			.06			T.	0.26
East St. Louis ‖	Mississippi																					.02						.07	.16			0.25
Edwardsville	do																											.12				0.12
Elgin	Illinois	.06	T.		.05																.04				.10			.90			T.	1.15
Galva ‖	do		T.			.12																.10			.06	T.		.03	.01			0.32
Grafton ‖	Mississippi																					.04						.64				0.68
Greenville	do	T.																			.02							.30				0.32
Griggsville	Illinois					T.															.12							1.24	T.			1.36
Halfway	Mississippi	.18	T.			.11																T.		T.				.11				0.40
Havana	Illinois				.21																.12						.86					1.19
Henry	do	T.				.05					.02										T.	.04			.09			.34				0.54
Hillsboro	Mississippi						T.																					1.05				1.05
Joliet	Illinois	.09	T.		.05						.07				T.		T.	T.	T.		.05			T.	.14		.05	.14			.03	0.62
Kishwaukee	Mississippi	.10	T.			.21									T.						.15			.04	.09			.55			T.	1.14
La Grange	Illinois	.12	T.																			.12		T.	.28			1.12			.09	1.73
La Harpe	do				T.	.11															T.				T.		T.	T.				0.11
Lanark	Mississippi	.15	T.		T.	.15					.02				T.	T.			T.		T.	.01		.05	.08			.25			T.	0.71
La Salle	Illinois	.03	T.		.04					.02	.03				T.		T.	T.			.04			T.	.04		.31	.26			T.	0.77
Lincoln	do	T.				.22															T.	.08		T.	T.			.82				1.12
Loami	do				T.	.19									T.						T.	.08			T.		T.	1.38				1.65

TABLE 2.—*Daily precipitation for November, 1910. District No. 5*—Continued.

Stations.	River basins.	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.																																
Martinton ‖	Illinois	.03			.10					T.											T.						T.	.10			.03	0.26
Mascoutah	Mississippi																				T.						.05	.12				0.17
Minonk	Illinois	.05				T.															T.			T.	.10		T.	.18			T.	0.33
Monmouth	Mississippi	T.			.04	.17															.15				.01		.04					0.48
Morrison	do	.02				.10					T.										.03	.15		.13	.18			.37				0.91
Morrisonville	Illinois	T.				.11																		T.				1.55	T.			1.66
Mount Vernon ‖	Mississippi																							T.					1.83			1.83
Oregon	do	.01				T.															T.			T.	T.			1.20			T.	1.21
Ottawa	Illinois										.13											.02			.07			.52			T.	0.74
Pana	Mississippi					.14					T.											T.						1.82				1.96
Peoria	Illinois	T.	T.		.06	.01				T.	T.						T.		T.		.05			T.	.04		.01	.62				0.79
Pontiac	do	.10				.10					.04											.06		T.	.14			.38				0.82
Riley	Mississippi	.09	T.		.19										T.			T.			.05			.17			.72	.03			.02	1.27
Rockford ‖	do		.10	T.		.16					.02						T.					.12		.07	.13			.26	.58			1.44
Rushville	Illinois				T.										T.						.05						.51	.03				0.59
St. Charles	do	.12	.02			.06					.03				T.				T.		T.	.07		.03	.11			.92	.03		.02	1.41
St. Peter	Mississippi	T.			T.						T.										T.	T.						.45				0.45
Sparta	do	T.			.03																						T.	1.16				1.19
Springfield	Illinois				.09										T.		T.	T.		T.	.03	T.			T.		.88	.57				1.57
Streator ‖	do					.06					T.											.07		T.			.08	.14	.08			0.43
Sullivan	Mississippi	T.				.23					.10														T.			3.15				3.48
Sycamore ‖	do			T.		.20									T.							T.		T.	T.			.40	.50			1.10
Tiskilwa	Illinois																															
Walnut	Mississippi	.03				.02					.04										.10	T.		T.	.08			.33				0.60
Warsaw ‖	do																				.27											0.27
White Hall	Illinois				.08	.01														T.	.10	T.						.50				0.69
Windsor	Mississippi	.04				.19					.10											.02						4.30				4.65
Winnebago	do	.17	T.			.30				.05					T.						T.	.20		.10	.15			.93			T.	1.90
Yorkville	Illinois	.10	T.	T.		.02					.10				T.	T.	T.	T.			T.	.02		.01	.05			.70	.05		T.	1.05
Zion	Mississippi	T.				.40																						.35				0.75

TABLE 3.—*Maximum and minimum temperatures at selected stations for November, 1910. 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....	31	18	32	21	52	20	37	31	60	30	44	30	36	18	47	29	48	32	42	19	45	29	48	26	43	31	42	22
2....	29	15	25	16	38	18	31	17	57	32	42	21	30	20	34	20	40	20	30	19	34	22	34	21	35	23	32	22
3....	29	16	37	20	45	13	43	20	54	26	35	23	36	18	37	11	42	15	41	17	42	15	36	20	36	21	34	21
4....	29	22	31	17	42	21	31	21	49	28	45	30	34	26	34	26	44	30	37	22	45	17	34	22	47	30	38	28
5....	28	7	28	10	48	12	39	12	42	24	38	17	25	16	32	18	35	16	30	12	35	22	30	19	30	19	30	19
6....	50	9	47	12	55	8	60	13	40	19	40	17	35	9	39	12	44	15	42	9	45	13	30	12	35	16	28	13
7....	30	17	32	14	36	21	37	17	43	22	39	27	30	13	49	16	38	33	40	18	44	19	31	14	45	27	29	16
8....	56	18	54	23	35	16	64	21	40	20	42	22	41	16	40	21	46	28	44	21	45	19	37	13	39	24	37	17
9....	29	18	30	19	48	28	30	19	34	18	40	27	29	24	46	32	36	33	38	21	42	23	35	25	42	28	33	24
10....	25	4	24	7	32	23	27	15	38	16	43	20	21	19	36	22	36	19	25	12	37	21	28	17	31	20	25	15
11....	24	2	19	5	26	8	23	5	40	18	29	18	28	16	32	12	25	10	23	12	32	14	33	17	33	20	32	17
12....	30	5	30	19	35	12	31	11	42	21	38	16	33	14	42	11	29	13	32	14	36	12	39	9	36	18	32	14
13....	30	20	31	21	34	18	31	19	38	18	36	23	33	22	42	20	39	20	32	22	38	17	33	23	35	25	32	23
14....	26	21	26	21	38	27	27	22	42	19	37	25	26	25	34	26	29	27	28	23	30	22	33	24	34	28	30	22
15....	32	21	22	18	28	22	32	20	38	18	31	20	22	21	28	22	27	20	23	18	26	15	27	18	28	22	24	17
16....	24	9	30	15	31	21	24	12	32	16	27	17	29	18	26	18	24	18	26	18	24	18	20	16	22	17	30	14
17....	20	8	22	16	34	14	22	11	36	18	28	17	26	19	33	17	28	17	26	21	31	10	21	15	23	17	24	13
18....	26	9	30	13	32	20	36	10	38	20	31	22	25	20	29	19	28	23	26	20	28	16	25	18	26	22	24	17
19....	30	10	26	16	32	18	30	15	32	18	30	21	28	22	34	18	43	22	28	22	43	21	26	20	34	20	25	19
20....	19	10	25	10	33	19	20	15	30	16	35	25	27	20	39	25	34	34	25	16	31	22	30	21	37	24	27	23
21....	32	5	28	11	32	20	41	14	34	18	31	18	30	16	32	15	32	18	24	16	28	19	27	9	26	18	24	15
22....	34	3	38	26	54	18	39	18	32	15	34	18	38	20	37	14	42	25	40	24	38	17	24	7	32	18	30	16
23....	30	12	37	22	51	23	45	25	28	18	45	30	38	23	49	29	38	28	42	25	51	26	44	15	47	30	44	27
24....	21	10	31	16	44	24	34	20	26	16	46	32	27	24	50	32	50	28	33	23	47	28	42	25	46	28	35	15
25....	24	5	22	13	36	18	23	18	28	14	39	23	26	14	45	20	34	20	29	19	49	22	30	21	32	24	30	13
26....	24	8	25	20	47	22	23	17	26	18	37	18	34	20	44	22	33	24	35	26	41	25	33	21	42	28	32	16
27....	13	10	22	−1	33	17	20	8	18	16	34	21	26	20	40	21	31	18	30	13	32	19	32	15	36	26	31	20
28....	4	−12	14	−4	32	4	27	−6	8	0	27	9	16	4	34	15	24	9	23	6	29	12	23	11	29	17	20	5
29....	5	−14	12	−6	32	16	17	−3	4	−10	26	13	18	1	33	10	25	15	22	4	27	12	23	0	27	12	20	−3
30....	4	−9	8	−5	.....	4	13	−1	5	−8	23	5	14	0	22	8	17	5	14	2	17	7	21	4	18	8	11	−3
Mns..	26.3	9.6	27.9	13.5	40.5a	17.5	31.9	14.5	34.5	17.7	35.7	20.8	28.7	17.3	37.3	19.4	34.7	21.2	31.0	17.1	36.4	18.5	31.0	16.6	34.2	22.0	29.5	16.6

Date.	Wisconsin.														Iowa.													
	Delevan.		Eau Claire.		La Crosse.		Madison.		Mauston.		Spooner.		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....	58	32	55	32	44	28	47	29	53	30	42	28	57	31	49	31	46	33	42	29	57	30	49	32	51	31	62	37
2....	35	22	36	27	34	22	34	28	34	25	33	24	38	24	35	20	36	29	34	21	38	26	41	27	35	29	41	28
3....	42	18	32	12	38	17	35	25	35	8	34	28	39	12	41	13	40	19	38	16	42	20	46	19	40	23	45	19
4....	46	24	35	28	40	31	40	28	40	23	35	28	34	26	41	33	40	19	37	29	43	30	41	33	42	30	45	30
5....	37	22	36	20	35	20	34	24	37	22	30	17	34	20	38	19	34	23	34	20	35	27	41	27	34	25	41	30
6....	32	15	31	10	35	15	30	18	30	14	27	7	28	18	44	16	39	18	40	16	42	24	50	25	36	19	53	25
7....	52	20	43	23	52	28	51	26	48	22	32	18	41	20	53	31	55	18	52	26	59	30	62	34	57	28	68	34
8....	40	20	37	21	40	23	40	28	40	25	36	20	38	26	52	20	47	25	44	21	51	28	58	28	45	26	56	31
9....	62	27	43	30	47	33	52	37	47	32	36	28	44	31	49	29	59	26	50	29	63	39	57	30	59	38	64	49
10....	40	27	38	23	37	25	37	27	45	28	31	21	40	25	38	22	39	28	36	21	39	26	42	26	38	28	52	29
11....	33	20	35	22	32	22	31	20	32	22	29	20	32	20	28	13	31	21	30	16	33	20	34	18	32	22	36	20
12....	35	20	38	15	37	16	35	23	37	20	30	11	32	24	39	15	38	18	39	14	42	18	41	24	39	20	42	20
13....	42	17	34	22	38	25	34	24	35	18	32	26	36	28	44	21	43	19	40	23	44	27	46	28	43	25	48	32
14....	34	26	37	28	34	29	34	28	34	28	32	23	35	28	36	26	35	28	33	29	38	30	36	31	37	32	47	31
15....	32	27	31	22	29	23	31	23	34	25	24	19	32	25	28	21	33	30	26	22	33	29	31	26	32	24	35	30
16....	28	22	24	20	23	22	23	20	26	20	23	17	29	23	26	14	26	24	22	19	29	24	27	21	26	22	30	27
17....	24	21	23	17	29	20	26	20	24	18	23	15	25	18	38	12	38	23	39	19	36	23	52	16	36	21	43	23
18....	25	20	25	19	29	21	27	18	25	18	27	21	24	17	28	21	28	23	26	23	34	23	40	24	32	22	40	29
19....	36	21	28	22	31	23	26	21	27	22	27	20	26	19	38	21	33	23	32	21	34	20	43	23	30	21	39	21
20....	46	18	35	24	35	25	42	25	37	20	32	24	36	20	42	29	36	24	40	26	43	28	47	32	39	27	42	29
21....	37	26	34	22	31	24	32	24	34	23	27	21	33	22	37	24	32	26	29	18	33	25	40	24	34	22	38	27
22....	36	16	30	22	34	21	33	22	35	22	39	20	27	22	45	23	44	20	40	17	44	20	55	26	38	18	49	24
23....	42	32	40	28	47	27	44	32	42	23	38	28	35	25	51	26	49	21	50	28	50	36	53	35	49	32	52	39
24....	53	33	46	27	50	34	50	36	48	25	42	24	38	20	51	33	53	35	49	29	55	36	55	39	53	38	61	43
25....	45	27	38	24	35	26	37	23	39	26	35	18	40	20	49	24	45	29	41	21	49	30	54	28	46	32	55	32
26....	45	20	39	26	44	27	40	23	42	22	38	24	35	20	43	31	46	27	45	28	47	29	50	37	44	26	54	37
27....	37	33	37	27	35	26	37	28	38	32	35	24	34	31	40	23	40	29	38	21	47	27	48	25	42	26	52	33
28....	35	20	30	22	33	21	30	24	38	24	27	17	35	22	32	13	33	22	32	16	32	22	34	20	34	25	33	22
29....	25	17	28	12	29	16	28	18	26	16	23	5	27	19	30	12	32	18	30	13	33	19	34	19	30	20	35	18
30....	22	16	22	9	22	14	22	15	31	12	17	5	25	15	22	10	23	16	21	10	27	14	28	15	26	16	30	18
Mns..	38.5	22.6	34.7	21.9	36.0	23.5	35.4	24.6	36.1	22.2	31.2	20.0	34.3	22.4	39.6	21.5	39.1	23.8	37.0	21.4	41.7	26.0	44.5	26.4	39.3	25.6	46.3	28.9

TABLE 3.—*Maximum and minimum temperatures at selected stations for November, 1910. District No. 5*—Continued.

Date.	Hannibal, Mo.		Laporte, Ind.		Illinois. Cairo.		Greenville.		La Salle.		Monmouth.		Mt. 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	66	34	56	42	65	45	64	42	61	29	55	34	69	38	64	29	65	34	59	34
2	44	25	51	27	51	37	48	28	38	27	41	25	57	30	42	23	44	28	39	22
3	45	20	43	21	44	30	46	23	43	24	44	18	41	25	44	18	43	23	41	20
4	43	35	46	24	43	32	47	28	47	29	44	27	50	25	45	29	46	29	45	25
5	44	28	41	34	45	36	45	27	40	25	40	29	50	25	40	26	42	30	37	25
6	56	25	47	36	52	31	52	25	41	22	45	21	56	29	46	20	51	24	33	15
7	67	29	44	24	65	38	66	33	59	29	65	27	68	29	63	27	64	30	54	18
8	60	33	53	22	67	42	56	32	50	27	53	24	60	30	53	24	54	31	44	21
9	71	41	64	36	70	49	70	44	65	41	65	45	74	36	68	44	71	46	66	41
10	46	31	61	34	62	42	60	36	41	29	55	27	49	42	44	27	49	31	47	27
11	40	24	37	28	50	35	42	25	34	23	34	20	44	27	35	20	36	24	33	21
12	43	25	36	31	47	30	42	20	40	20	42	16	47	20	43	15	40	20	39	18
13	46	32	37	30	56	34	47	26	44	24	49	23	49	30	48	23	48	30	41	21
14	45	32	39	28	49	36	48	36	37	34	43	30	51	36	41	33	43	35	36	30
15	34	22	35	30	40	34	37	33	34	27	34	30	41	31	35	29	36	29	33	26
16	30	19	32	27	43	32	34	24	28	25	30	26	44	31	29	25	30	26	27	23
17	41	18	30	23	47	30	37	20	29	23	39	23	44	19	33	23	35	26	26	20
18	49	24	34	24	50	30	49	25	35	23	36	26	54	19	43	25	50	25	27	20
19	41	18	40	25	54	32	41	22	40	21	39	20	56	20	38	21	39	23	35	20
20	44	28	45	24	58	31	53	26	49	23	45	25	55	23	48	24	51	26	47	21
21	48	29	40	20	58	35	46	32	36	23	34	28	54	31	35	24	41	28	38	23
22	52	26	41	25	60	35	49	34	43	19	44	19	63	26	46	17	47	24	37	15
23	57	38	52	33	66	43	60	40	48	37	52	37	65	21	52	38	55	41	46	33
24	63	41	47	29	73	44	65	38	57	35	58	35	68	40	60	37	61	41	55	33
25	57	29	46	32	61	44	57	32	50	31	53	30	65	42	54	29	53	35	47	23
26	55	38	42	27	64	47	55	37	46	29	50	31	73	44	51	32	53	35	43	24
27	60	29	45	34	74	40	65	38	44	34	50	35	68	48	48	32	60	33	40	36
28	35	22	37	32	44	29	38	25	34	25	35	21	54	27	32	24	33	26	36	24
29	35	18	34	25	40	29	38	21	33	21	33	17	40	23	34	19	34	22	31	20
30	31	18	28	22	34	27	30	20	27	18	28	15	32	21	28	17	29	19	25	16
Means	48.3	27.7	42.8	28.3	54.4	35.9	49.6	29.7	42.4	26.6	44.5	26.1	54.7	29.6	44.7	25.8	46.8	29.1	40.2	24.0