CLIMATOLOGICAL DATA FOR NOVEMBER, 1913.

DISTRICT NO. 5, UPPER MISSISSIPPI VALLEY.

GEO. M. CHAPPEL, District Editor.

GENERAL SUMMARY.

November, 1913, in the Upper Mississippi Valley, was a month of rather remarkable character. The great outstanding feature was the month's mildness. Considering the district as a whole, only one November (that of 1899) in the 44 years' history of the Weather Bureau has been milder; but in some central sections the current month surpassed all previous Novembers for warmth. Other marked features of the month were the light snowfall and the great amount of damp, foggy weather.

The latter half of the month was remarkably mild, being probably the warmest period of such length at that season of the year on record in this district. By the close lawns and pastures as far north as Wisconsin were green as in the spring; moreover, some trees and shrubs were budding, and dandelions blooming. In North Dakota the month was especially pleasant, being regarded by many as the most agreeable November experienced since the State was settled. There fall plowing progressed with little interruption, and the soil that had frozen in October thawed, enabling thousands of bushels of potatoes to be harvested without much loss.

Storms of severity did not occur save in one or two instances, and in those the territory affected was not large. The great wind and snow storm that visited the Lake Region from the 7th to 10th affected but a small part of this district, viz, some of the Indiana area and extreme northeastern Wisconsin; the resulting snowfall amounted in some cases to from half a foot to a foot in depth. In the Indiana area this storm was the cause either directly or indirectly of three deaths.

To some extent the pleasant features of the month had their drawbacks. Colds and bronchial affections were reported to be more numerous than usual; merchants complained that business was injured and shippers of perishable goods experienced much difficulty. On the other hand, cement workers, builders, painters, etc., profited greatly from the favorable conditions.

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

Parts of States within district 5.	Temperature.				Precipitation.					
	Mean.	Departure.	Highest.	Lowest.	Average.	Departure.	Greatest total.	Least total.	Average snowfall.	Average number of days with precipitation.
North Dakota	33.5	+8.5	77	1	0.18	−0.40	0.68	T.	1.1	2
Minnesota	36.9	+8.4	69	−6	0.65	−0.34	2.07	0.04	0.7	4
South Dakota	37.9	+8.0	65	10	1.17	+0.41	1.17	1.17	1.0	3
Wisconsin	38.7	+6.0	70	4	1.53	−0.04	2.84	0.52	0.6	6
Iowa	44.1	+8.6	76	10	1.11	−0.39	2.42	0.24	0.3	7
Missouri	49.9	+7.0	77	15	3.05	+0.91	4.08	0.93	T.	8
Indiana	44.9	+4.9	71	10	2.75	−0.32	3.36	2.02	6.9	12
Illinois	47.6	+7.2	80	11	2.75	+0.04	5.52	0.76	0.1	8

TEMPERATURE.

The mean temperature for the district was 41.2°, or 7.9° higher than the normal. As has already been stated, of all Novembers in the history of the Weather Bureau, November, 1899, alone had a higher average temperature than the current month in this district. But the November of four years ago (1909) was somewhat warmer than that of the present year over much of the southern half of the district. Over an area in Iowa and southern Wisconsin, however, the current November was without exception the warmest month of that name on record. At Des Moines, Iowa, the mean temperature was 46.6°, or 0.8° higher than the mean of November, 1899, which was the warmest previous November at that station.

Over the entire district the average daily excess of mean temperature exceeded 7°, being greatest in North Dakota and elsewhere near the western boundary of the district, where it slightly exceeded 10°.

The first half of the month while milder than usual was not markedly so, the temperature averaging only a degree or two higher than the normal. But the latter half was a period of remarkable warmth for the time of year. The temperature was far above the normal almost every day, the daily departures being as much as +30° at some stations. At Des Moines, Iowa, this half of the month averaged 18° warmer than usual. The warmest weather of the month occurred on and about the 20th when the daytime temperatures were in the seventies as far north as northern Iowa. The highest temperature reported was 80° at two stations in southern Illinois. No records for high temperatures were broken at stations long established, but in some cases the record was almost equaled. Over much of the district the lowest temperatures of the month occurred on the 10th or 11th, but in parts of North Dakota and Minnesota the 14th was the coldest day. At many stations the month's lowest temperature was not so low as in October. The temperature fell to zero or below at only one station in the district, Itasca State Park, Minn., where a minimum of −6° occurred on the 14th. The fluctuations in temperature were unusually slight during the six closing days of the month, owing to dense cloudiness, high humidity, and little wind.

PRECIPITATION.

The average precipitation for the district was 1.45 inches, or 0.19 inch less than the normal. In the southern third of the district there was an excess of moisture, but this, as a rule, was not large. Over the remainder of the district, except in limited areas, the month's precipitation was deficient. In general the amounts increased from north to south, being lightest in North Dakota and heaviest in Missouri. Mexico, in the latter State, reported the grestest amount, 4.08 inches, while 4 stations in North Dakota had only traces. In North Dakota the precipitation of the month was much scattered in point

of time of occurrence, and there was an average of but 2 rainy days. On the other hand, in the Indiana area the average number of rainy days was 12, and after the 6th there were but 2 or 3 consecutive days at a time of fair weather.

Snowfall.—The month was notable for its light snowfall, the average for the district being only half an inch. The Lake region storm heretofore mentioned caused heavy falls in parts of the Indiana area and in extreme northeastern Wisconsin, but elsewhere in the district amounts of 1 inch or more were rare. Many stations in all parts of the district had no snowfall whatever. At Des Moines, Iowa, this was the first November of record without some snow. The greatest monthly snowfall was 12 inches, at South Bend, Ind.

RIVERS.

The rivers and streams of the district were either low for the season or near the normal stages, and the fluctuations through the month were slight. At the close no ice appeared in any of the streams, even in those of the far north.

MISCELLANEOUS.

The prevailing winds of the month were southerly or southwesterly over much of the district, and the movement was somewhat less than usual. The highest velocity was 52 miles an hour at St. Paul, Minn., on the 7th. The amount of sunshine was below the normal, except in North Dakota. The average number of clear days was 11, partly cloudy 7, and cloudy 12.

Thunderstorms occurred at some stations on the 7th and 21st in connection with the storms of those dates.

ERRATA.

Report for October, 1913. Mondovi, Wis.: Total precipitation published 2.96 should be 3.06. Springfield, Ill.: Number of days with 0.01 or more precipitation published 10 should be 12.

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

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.		Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
North Dakota.																				
Amenia	Cass	954	17	34.2	+ 7.9	65	17	9	14†	35	0.25	− 0.25	0.20	2.5	2	13	7	10	nw.	C. E. Wood.
Bottineau	Bottineau	1,638	21	30.4	+ 8.2	61	5	5	14	44	0.15	− 0.45	0.08	.....	4	7	13	10	se.	H. F. Steinmeir.
Bowbells	Burke	1,950	1	31.4	.....	60	3	5	14	45	0.30	.....	0.13	.....	4	19	0	11	.....	G. H. Phelps.
Cando	Towner	1,488	12	31.2[b]	+ 6.0	60[b]	17	3[b]	15	43[b]	0.35	− 0.15	0.25	.....	2	.....	.....	.....	.....	E. T. Judd.
Crosby	Divide	.....	6	32.6‡	.....	57‡	5	11‡	1	42‡	0.18	.....	0.13	2.0	2	.....	.....	.....	.....	H. C. Kaschau.
Devils Lake	Ramsey	1,482	8	32.6	+10.0	59	5	10	14	32	0.17	− 0.54	0.14	0	4	10	12	8	s.	U. S. Weather Bureau.
Donnybrook	Ward	1,760	14	32.7	+ 4.7	62[b]	16	4[b]	14	38	0.68	+ 0.05	0.35	1.5	3	.....	.....	.....	sw.	C. J. Devore.
Dunseith	Rolette	.....	17	30.6	+ 5.6	58	5	1	14	40	0.17	− 0.18	0.08	0.5	3	13	7	10	nw.	C. E. Goodsell.
Eckman (near)	McHenry	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. Yenny.
Fessenden	Wells	1,610	1	33.4	.....	65	5	5	14	43	0.08	.....	0.05	0.5	2	20	9	1	nw.	G. T. Seymour.
Forman	Sargent	1,249	21	38.0	+10.8	77	6	6	14	36	0.02	− 0.49	0.02	0.2	1	18	2	10	nw.	A. Maltby.
Grafton	Walsh	827	21	33.0	+10.5	62	17	2	14	40	0.07	− 0.57	0.05	0.3	3	14	6	10	sw.	A. R. T. Wylie.
Granville	McHenry	1,504	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. A. Christianson.
Hannah	Cavalier	1,568	8	31.2	.....	60	5	2	14	34	T.	.....	T.	T.	0	.....	.....	.....	.....	J. Moffatt.
Hansboro	Towner	.....	5	32.0	.....	59	5	7	14	41	0.21	.....	0.17	.....	2	17	9	4	nw.	Geo. Dale.
Hillsboro	Traill	901	7	34.6	.....	63	17	9	14	36	0.30	.....	0.30	3.0	1	17	7	6	nw.	F. E. Mayall.
Lakota	Nelson	1,579	12	31.8	+ 9.4	62	5	4	14	35	0.27	− 0.51	0.25	0.5	2	10	14	6	sw.	C. R. Pettes.
Langdon	Cavalier	1,615	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Woolner.
Larimore	Grand Forks	1,134	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. M. Freeman.
Lisbon	Ransom	1,091	9	34.6	+ 5.0	56	4	6	14	34	0.22	− 0.44	0.20	2.0	2	7	14	9	nw.	W. S. Adams.
McKinney	Renville	1,640	19	32.6	+ 9.4	67	5	4	14	48	T.	− 0.67	T.	0	0	11	14	5	se.	N. P. Swenson.
McLeod	Ransom	1,075	1	34.8	.....	61	17	11	23	35	0.10	.....	0.05	1.0	2	9	16	5	e.	Martin Reinholt.
Manfred	Wells	1,605	10	34.8	+ 7.4	61	5†	5	13	35	0.18	− 0.58	0.15	T.	3	14	7	9	nw.	P. B. Anderson.
Mayville	Traill	975	17	38.6	+10.8	64	18	7	14	37	0.16	− 0.51	0.12	1.0	4	19	5	6	.....	W. C. Gould.
Milnor	Sargent	1,097	1	.....	.....	.....	.....	.....	.....	.....	0.10	.....	0.10	1.2	1	8	10	12	s.	Hj. Edman.
Minot	Ward	1,557	17	35.2	+ 6.4	66	16	6	14	44	0.19	− 0.44	0.12	.....	3	24	0	6	w.	Louise Bates.
Minto	Walsh	820	20	33.4	+ 8.9	58	5	5	14	34	T.	− 0.56	T.	T.	0	14	5	11	s.	S. S. Marsh.
Oriska	Barnes	1,270	8	34.5	.....	63	17	8	14	31	0.15	.....	0.10	2.0	2	5	16	9	sw.	J. J. Taylor.
Park River	Walsh	998	9	33.9	.....	64	5	8	10	36	0.07	.....	0.04	0.4	2	12	12	6	nw.	G. M. Hargrave.
Pembina	Pembina	789	39	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. W. Shumaker.
Power	Richland	1,020	21	35.8	+ 9.8	62	17	5	14	34	0.36	− 0.28	0.19	4.0	2	18	3	9	se.	J. A. Power.
Towner	McHenry	1,482	11	33.6	+12.5	60	5†	3	14	37	T.	− 0.50	T.	0	0	19	6	5	s.	B. Bagley.
University	Grand Forks	830	21	33.0	+ 7.7	62	17	6	14	33	0.45	− 0.28	0.17	1.5	6	8	11	11	se.	U. S. Weather Bureau.
Wahpeton	Richland	962	19	35.7	+ 8.9	62	7	9	14	35	0.22	− 0.45	0.20	2.2	2	15	4	11	nw.	Fred E. Smith.
Walhalla	Pembina	966	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ivanhoe Lee.
Westhope	Bottineau	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. A. Schwader.
Willow City	....do	1,471	21	31.2	+10.4	61	5	2	14	44	0.16	− 0.25	0.16	T.	1	13	10	7	w.	M. A. Ostby.
Minnesota.																				
Albert Lea	Freeborn	1,229	22	40.4	+ 8.9	63	20	13	10	32	0.40	− 1.08	0.30	T.	2	10	15	5	se.	Edward Carey.
Alexandria	Douglas	1,391	19	36.2	+ 8.4	61	6	12	10	38	1.17	+ 0.45	0.75	1.2	12	15	6	9	nw.	P. O. Unumb.
Angus	Polk	870	11	32.9	+ 7.1	60	17	4	14	35	0.30	− 0.24	0.08	0.5	6	11	10	9	s.	John Nadvornik.
Bagley	Clearwater	.....	7	32.4	.....	65	17	3	14	36	0.04	.....	0.02	0.7	2	10	10	10	sw.	Jens Nelson.
Baudette	Beltrami	1,084	3	33.1	.....	58	17	6	10	38	0.40	.....	0.15	0.5	6	12	6	12	nw.	J. A. Gjelhaug.
Beardsley	Bigstone	1,090	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. L. Fitzgerald.
Bemidji	Beltrami	1,400	9	.....	.....	.....	.....	.....	.....	.....	0.14	.....	0.07	.....	4	.....	.....	.....	.....	C. W. Warfield.
Bird Island	Renville	1,039	23	39.3	+ 9.2	63	5†	14	10	38	0.31	− 0.52	0.17	T.	4	10	9	11	nw.	Dr. F. L. Puffer.
Brainerd	Crow Wing	1,215	7	36.4	.....	64	17	9	10	34	0.25	.....	0.21	0	3	10	6	14	e.	Theodore Miller.
Caledonia	Houston	1,179	20	40.0	+ 7.3	62	19	15	10†	32	2.07	+ 0.43	0.63	T.	5	11	1	18	sw.	W. D. Belden.
Campbell	Wilkin	975	7	34.5	.....	60	6	10	10†	35	0.11	.....	0.06	2.5	3	13	3	14	se.	J. T. Neiseas.
Cass Lake	Cass	1,300	6	.....	.....	.....	.....	.....	.....	.....	0.29	.....	0.19	0	2	.....	.....	.....	.....	C. W. Burns.
Chatfield	Fillmore	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.82	.....	0.33	T.	5	16	4	10	sw.	G. A. Haven.
Collegeville	Stearns	1,242	20	37.7	+ 6.8	60	5	10	10	30	0.57	− 0.26	0.33	0	4	15	5	10	sw.	F. Tembreull.
Crookston	Polk	863	24	33.8	+ 8.6	59	17	9	14	29	0.24	− 0.46	0.20	2.0	2	11	7	12	s.	A. G. Andersen.
Detroit	Becker	1,364	17	32.6	+ 6.6	58	2	4	14	38	0.19	− 0.53	0.19	3.0	1	16	3	11	se.	G. W. Peoples.
Fairmont (near)	Martin	1,240	26	39.8	+ 8.6	63	20	14	10	30	0.85	− 0.42	0.21	1.0	7	8	10	12	s.	W. F. Wherland.
Faribault	Rice	1,003	15	41.1	+ 7.7	64	21	11	11†	34	0.18	− 0.89	0.06	T.	4	11	13	6	w.	C. F. Hyde.
Farmington	Dakota	902	25	39.4	+ 8.7	67	21	10	10	32	0.74	− 0.53	0.32	0.5	8	13	4	13	sw.	E. D. Akin.
Fergus Falls	Ottertail	1,210	21	36.2	+ 8.3	57	6	14	10	26	0.23	− 0.57	0.12	1.9	6	11	9	10	se.	C. E. Kissinger.
Fort Ripley	Crow Wing	1,136	5	33.2	.....	59	5†	5	14	37	0.08	− 0.62	0.03	T.	3	17	0	13	s.	J. J. Tucker.
Fosston	Polk	1,289	3	31.4	.....	55	17	6	10†	28	0.56	.....	0.50	2.5	4	19	7	4	nw.	O. N. Hem.
Glencoe	McLeod	1,000	16	39.8	+ 8.0	61	5†	13	10	33	0.85	− 0.11	0.50	1.0	3	17	10	3	nw.	L. V. Koos.
Grand Meadow	Mower	1,338	25	40.7	+10.1	62	6†	10	10	33	1.53	+ 0.13	0.63	0	7	16	4	10	se.	C. F. Greening.
Gull Lake Dam	Cass	1,215	2	36.2	.....	64	17	13	11	33	0.84	.....	0.42	T.	4	12	6	12	nw.	U. S. Engineer Corps.
Hallock	Kittson	815	14	32.0	+ 6.5	60	17	5	10	39	0.20	− 0.42	0.10	1.5	3	19	0	11	s.	D. A. Robertson.
Halstad	Norman	870	7	31.8	.....	63	17	7	9†	37	0.23	.....	0.23	2.0	1	16	4	10	s.	A. G. Holstrom.
Hinckley	Pine	1,050	8	37.2	.....	65[a]	20	8[a]	10	33[a]	0.99	.....	0.35	0	6	6	7	17	ne.	W. R. Newman.
International Falls	Koochiching	1,112	10	33.6	+11.3	55	2†	4	10	35	1.14	− 0.21	0.56	.....	6	13	7	10	w.	J. T. Jaeger.
Itasca State Park	Clearwater	1,500	2	33.2	.....	66	17	− 6	14	36	0.09	.....	0.05	0	2	17	4	9	s.	J. A. Stillwell.
Lake Crystal	Blue Earth	990	5	40.4	.....	62	21	10	1	33	1.47	.....	0.70	1.0	5	11	7	12	s.	W. P. Cobb.
Leech Lake Dam	Cass	1,301	25	34.1	+ 8.5	64	17	11	14	33	1.55	+ 0.51	1.20	1.0	6	13	7	10	s.	U. S. Engineer Corps.
Little Falls	Morrison	1,115	4	36.5	.....	59	5	9	10	29	0.33	.....	0.30	0	2	14	6	10	se.	Wm. Batters.
Little Fork	Koochiching	.....	3	32.7	.....	58	17	0	10	40	0.77	.....	0.20	3.5	5	11	9	10	.....	O. C. Olson.
Long Prairie	Todd	1,299	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Sheets.
Lynd	Lyon	1,175	20	38.8	+ 7.7	65	5	10	14	45	0.91	+ 0.04	0.75	1.0	3	14	4	12	sw.	J. W. Rouse.
Mankato	Blue Earth	758	15	.....	.....	.....	.....	.....	.....	.....	0.70	− 0.44	0.24	0.2	9	16	2	12	sw.	C. G. Staley.
Mapleplain	Hennepin	1,023	17	38.4	+ 8.0	65	21	11	10	28	1.26	− 0.03	0.65	0.6	7	13	3	14	se.	G. W. Richards.
Milaca	Millelacs	1,072	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. H. Foss.
Milan	Chippewa	955	19	38.8	+ 9.7	64	6	13	10	37	0.81	− 0.10	0.45	1.0	4	12	7	11	nw.	O. K. Opjorden.
Minneapolis	Hennepin	918	22	40.2	+ 7.5	64	21	13	10	25	0.48	− 0.70	0.14	0.6	9	10	9	11	s.	U. S. Weather Bureau.
Montevideo	Chippewa	900	23	40.8	+10.2	67	17	12	14	37	0.60	− 0.26	0.40	1.0	6	12	10	8	nw.	L. G. Moyer.
Moorhead	Clay	935	32	34.7	+10.2	60	17	7	14	33	0.18	− 0.80	0.08	1.6	5	12	8	10	se.	U. S. Weather Bureau.
Moose Lake	Carlton	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	S. Swanson.
Mora	Kanabec	1,001	8	37.1	.....	63	21	9	10	33	1.06	.....	0.36	T.	10	11	8	11	sw.	Hans Peterson.
Morris	Stevens	1,170	28	37.2	+ 9.0	60	6	12	14	30	0.86	+ 0.19	0.76	1.0	2	18	6	6	s.	D. T. Wheaton.
New London	Kandiyohi	1,215	19	40.8	+11.1	59	6	12	10	27	0.60	− 0.22	0.32	0	3	11	8	11	se.	Harold Swenson.
New Richland	Waseca	1,180	19	41.2	+ 8.9	61	21	13	10†	32	0.11	− 1.42	0.04	T.	3	12	10	8	sw.	N. O. Tyrholm.
New Ulm	Brown	791	33	40.4	+ 8.7	68	7	13	1	38	0.52	− 0.56	0.25	0.2	3	2	10	18	s.	A. L. Henle.
Osakis	Douglas	1,343	5	36.2	.....	58	5†	11	10	30	0.85	.....	0.48	0.2	5	13	4	13	s.	J. B. Johnson.
Park Rapids	Hubbard	1,426	23	32.6	+ 7.2	66	17	9	10†	33	0.34	− 0.65	0.11	1.2	5	11	6	13	s.	Dr. P. A. Walling.
Pierz	Morrison	.....	.....	36.5	.....	60	5†	9	10	32	0.91	.....	0.50	T.	3	12	5	13	w.	Dr. E. H. Kerkhoff.
Pine River Dam	Crow Wing	1,251	26	37.4	+10.6	68	17	8	10	35	1.03	+ 0.07	0.84	1.0	3	15	4	11	s.	U. S. Engineer Corps.
Pokegama Falls	Itasca	1,280	26	34.5	+ 9.8	67	17	4	10	38	0.87	− 0.32	0.66	0.2	6	16	1	13	sw.	Do.
Redlake	Beltrami	1,152	5	34.5	.....	55	5	9	14	33	0.14	.....	0.14	1.2	1	5	11	14	s.	A. C. Goddard.

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

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Sky. Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
Minnesota—Continued.																				
Red Lake Falls	Red Lake	1,001	----	37.8	.....	65	5	6	14	48	0.10	.....	0.10	1.0	1	16	4	10	nw.	E. G. Buse.
Red Wing	Goodhue	680	17	.....	.....	.....	.....	.....	.....	.....	0.92	− 0.72	0.50	T.	8	11	2	17	sw.	Louis Back.
Reeds Landing	Wabasha	661	17	.....	.....	.....	.....	.....	.....	.....	0.67	− 0.71	0.30	0	6	11	0	19	se.	John Deschneau.
Rochester	Olmstead	991	8	40.4	.....	65	21	12	10†	33	0.72	.....	0.46	0	6	13	4	13	s.	Mary P. Leslie.
Roseau	Roseau	1,040	3	32.0	.....	52	17	1	10	30	0.08	.....	0.08	0.8	1	10	13	7	se.	M. J. Hegland.
St. Charles	Winona	850	22	40.9	+ 9.6	63	21	12	10	31	1.14	− 0.11	0.43	0	5	13	4	13	se.	S. W. Gleason.
St. Cloud	Sherburne	1,020	36	38.6	+ 9.2	61	5†	12	10	27	1.23	+ 0.19	0.58	T.	5	12	3	15	se.	State Reformatory.
St. Paul	Ramsey	940	42	40.0	+ 9.1	64	21	14	10	28	0.56	− 0.74	0.20	0.3	8	7	9	14	s.	U. S. Weather Bureau.
St. Peter	Nicollet	825	18	39.5	+ 6.5	65	21	11	1†	38	1.40	+ 0.36	0.60	0	3	18	2	10	se.	State Hospital.
Sandy Lake Dam	Aitkin	1,234	20	34.8	+ 7.7	56	5	9	14	25	0.60	− 0.57	0.35	T.	4	8	12	10	w.	U. S. Engineer Corps.
State Sanatorium	Cass	1,336	5	34.1	.....	64	17†	8	10	46	0.69	.....	0.56	T.	4	13	5	12	sw.	Dr. G. W. Beach.
Stillwater	Washington	694	7	.....	.....	.....	.....	.....	.....	.....	0.77	.....	0.30	T.	4	15	0	15	s.	Oscar Ostrom.
Taylors Falls	Chisago	759	6	39.8	.....	62	21	12	11	30	1.01	.....	0.60	0.5	4	12	8	10	nw.	Minneapolis Gen. Elec. Co.
Thief River Falls	Pennington	1,137	2	33.8	.....	60a	17†	3	14	41a	.....	.....	.....	.....	.....	15	1	14	.....	E. W. Lown.
Tracy	Lyon	1,403	----	41.2	.....	64	6	13	10	38	0.72	.....	0.36	1.5	3	12	12	6	s.	A. H. Rowland.
Warren	Marshall	859	1	35.4	.....	69	17	6	14	35	0.20	.....	0.20	2.0	1	0	20	10	.....	P. H. Holm.
Warroad	Roseau	1,069	3	33.4	.....	58	17	1	14	38	0.31	.....	0.10	0.5	4	18	3	9	s.	G. A. Sawyer.
Windom	Cottonwood	1,336	5	39.6	.....	61	5	13	14	41	0.40	.....	0.13	1.0	4	1	20	9	sw.	W. A. Peterson.
Winnebago	Faribault	1,100	15	41.2	+ 6.9	68	21	15	10	30	0.57	− 0.70	0.22	T.	3	18	4	8	se.	H. H. Haight.
Winnibigoshish	Itasca	1,300	25	32.5	+ 6.5	60	6	0	10	35	0.96	− 0.12	0.86	T.	5	16	2	12	w.	U. S. Engineer Corps.
Winona	Winona	700	17	42.3	+ 8.8	64	6†	15	10†	30	0.91	− 0.49	0.41	T.	6	15	7	8	sw.	P. C. Myers.
Winton	St. Louis	.....	----	34.7	.....	60	18	0	10	31	0.50	.....	0.50	T.	1	8	7	15	nw.	A. E. Johnson.
Worthington	Nobles	1,593	18	36.6	+ 5.3	56	5	12	10	31	0.50	− 0.58	0.30	2.0	3	14	2	14	s.	M. P. Mann.
Zumbrota	Goodhue	917	17	40.9	+ 9.0	66	19	11	10†	37	0.92	.....	0.46	0	6	16	5	9	sw.	W. C. Rowell.
South Dakota.																				
Milbank	Grant	1,148	22	37.9	+ 8.0	65	2†	10	14	38	1.17	+ 0.41	0.95	1.0	3	16	2	12	nw.	Miss Mary Patridge.
Wisconsin.																				
Antigo	Langlade	1,489	19	36.8	+ 6.0	58	21	12	11	28	0.52	.....	0.30	0	3	12	0	18	sw.	Elton C. Larzelere.
Baraboo	Sauk	854	0	.....	.....	.....	.....	.....	.....	.....	1.48	.....	0.95	T.	7	5e	8e	12e	sw.	E. J. Curry.
Barron	Barron	1,115	22	37.1	+ 8.0	61	21	8	10	31	1.40	+ 0.09	0.45	T.	5	10	10	10	se.	Wm. A. Kent.
Beloit	Rock	750	47	43.6	+ 6.9	69	21	17	11	31	2.00	+ 0.03	0.62	T.	7	15	4	11	s.	Smith Observatory.
Big St. Germain Dam	Vilas	1,590	3	36.2	.....	59	17	9	15	35	1.86	.....	0.70	1.5	7	8	10	12	s.	Fred Hessen.
Brodhead	Green	812	15	42.8	+ 5.8	70	21	14	11	34	2.14	+ 0.18	0.90	T.	5	13	5	12	sw.	Hector D. Kirkpatrick.
Burnett	Dodge	880	9	40.2a	.....	66a	21	15a	11	25a	1.65	.....	1.10	2.0	6	9a	8a	12a	sw.	George W. Smith.
Cottage Grove	Dane	888	2	.....	.....	.....	.....	.....	.....	.....	1.62	.....	1.23	0.1	6	12	8	10	sw.	John E. Mellish.
Darlington	Lafayette	867	7	41.2	.....	68	20†	12	11	37	2.25	.....	1.40	0	3	13	5	12	sw.	Sever P. Nelson.
Deerskin Dam	Forest	1,685	3	35.4	.....	59	21	8	15	36	1.93	.....	0.95	4.0	7	8	6	16	w.	Wm. E. O'Neal.
Delavan	Walworth	920	22	42.1	+ 8.6	70	21	14	11	30	2.66	+ 0.67	1.06	0.5	6	9	4	17	sw.	Elwood S. Austin.
Dodgeville	Iowa	1,220	13	40.4	+ 6.3	67	20†	13	10	38	0.91	− 0.94	0.81	0	2	11	3	16	sw.	H. W. Jones.
Downing	Dunn	983	11	38.3	+ 8.5	66	26	10	11	36	0.90	− 0.39	0.50	0	3	8	3	19	se.	Eugene F. Stoddard.
Eau Claire	Eau Claire	800	22	39.8	+ 8.0	63	21	10	10	36	1.16	− 0.43	0.45	T.	6	11	9	10	w.	Robert D. Whitford.
Glen Flora	Rusk	1,475	1	36.4	.....	60	21	9	11	29	1.62	.....	0.61	1.0	4	9	6	15	nw.	G. A. Durgin.
Grand Rapids	Wood	980	14	38.8	+ 6.9	60	22	11	11	34	1.84	+ 0.23	1.03	T.	15	9	9	12	sw.	Geo. T. Nixon.
Grantsburg	Burnett	1,095	22	38.2	+ 8.0	65	21	9	10	30	0.55	− 0.86	0.34	0	2	17	4	9	s.	Chester Ahlstrom.
Hancock	Waushara	1,091	21	40.0	+ 7.3	64	21	13	11	27	1.20	− 0.21	0.55	T.	7	9	7	14	sw.	Frederick B. Hamilton.
Hatfield	Jackson	973	19	38.0	+ 6.3	63	21	8	11	41	2.84	+ 1.28	0.70	0	7	3	16	11	sw.	Wis.Ry.,Light & Powder Co.
Hayward	Sawyer	1,107	22	36.3	+ 7.4	63	17	10	10†	42	1.02	− 0.42	.....	0	2	8	14	8	w.	G. H. McElroy.
Hillsboro	Vernon	1,000	22	38.8	+ 6.5	65	21	10	11	35	1.77	+ 0.18	0.75	T.	8	11	9	10	sw.	Emil. V. Wernick.
Koepenick	Langlade	1,683	22	38.2	+ 7.5	63	22	14	11†	38	1.10	− 0.99	0.40	3.0	6	.....	.....	.....	sw.	Edward S. Kopenick.
La Crosse	La Crosse	714	41	41.6	+ 7.8	65	21	16	10	28	1.93	+ 0.41	0.59	T.	9	6	8	16	s.	U. S. Weather Bureau.
Lake Mills	Jefferson	897	22	41.6	+ 7.2	69	21	17	11	29	2.77	+ 0.62	1.68	0.5	10	9	6	15	sw.	S. Newton Dexter Smith.
Lancaster	Grant	1,070	22	41.3e	+ 7.6	67e	20	14e	11	31e	1.55	− 0.17	0.80	0	5	7e	9e	11e	w.	Edward Pollock.
Long Lake	Oneida	1,592	5	35.3	.....	57	12†	4	15	39	1.40	.....	0.34	3.5	11	10	6	14	se.	Louis Frank.
Madison	Dane	974	44	41.9	+ 7.7	67	21	18	11	28	1.73	− 0.07	0.99	T.	8	8	8	14	sw.	U. S. Weather Bureau.
Marshfield	Wood	1,276	0	37.2b	.....	60b	21	12a	11	32b	1.33	.....	0.41	T.	8	1	10	19	nw.	Agr. Exper. Station.
Mather	Juneau	962	9	37.0	.....	61	19	11	11	34	1.61	.....	0.82	0	7	12	3	15	e.	Frank Evans.
Mauston	do	882	17	40.4	+ 6.2	65	19†	15	11	28	2.30	+ 0.70	1.75	1.0	5	8	10	12	sw.	Eugene L. Hitchcock.
Meadow Valley	do	974	22	39.3	+ 7.4	63	21	11	11	39	1.24	− 0.35	0.76	T.	5	4	15	11	sw.	Charles H. Johnson.
Medford	Taylor	1,420	24	37.2	+ 7.4	59	21	11	11	30	2.08	+ 0.55	0.68	0	4	11	11	8	s.	Wm. Zeit.
Merrill	Lincoln	1,267	7	35.0	.....	61	21	7	10	38	1.13	.....	0.30	T.	11	11	2	17	se.	O. F. Lueck.
Minocqua	Oneida	1,604	9	36.5	.....	60	17	12	10†	32	2.19	.....	0.63	T.	9	4	21	5	sw.	Benjamin W. Applebee.
Mondovi	Buffalo	738	5	40.4	.....	64	21	12	10	32	1.17	.....	0.45	0	13	14	2	14	nw.	Dr. Chas. Hebard.
Mount Horeb	Dane	1,226	9	40.6	.....	67	21	12	11	29	1.65	.....	0.90	0.2	5	17	3	10	s.	W. M. Lewis.
Muscoda	Grant	666	4	40.4	.....	67	21	13	11†	40	1.26	.....	0.86	0	5	17	0	13	sw.	Wm. Hessler.
Neillsville	Clark	996	23	38.2a	+ 7.2	62	20	12	11†	39	1.60	− 0.05	0.58	0	5	.....	.....	.....	nw.	Wm. Heaslett.
New Richmond	St. Croix	990	8	38.3	.....	65	21	9	10	32	0.77	.....	0.28	T.	4	10	11	9	sw.	Franc A. R. Van Meter.
Osceola	Polk	806	22	38.2	+ 8.7	65	21	11	10†	35	0.60	− 0.69	0.30	T.	4	11	9	10	s.	Charles W. Staples.
Park Falls	Price	1,492	22	34.8	.....	59	17†	8	11†	40	1.54	.....	0.53	1.0	8	11	0	19	s.	Flambeau Paper Co.
Portage	Columbia	809	24	42.6	+ 7.1	66	21	18	11	34	1.69	+ 0.13	1.10	0.5	9	14	0	16	sw.	James H. Martin.
Port Edwards	Wood	969	3	40.2	.....	63	2	11	11	43	1.02	.....	0.92	T.	2	14	5	11	sw.	Nekoosa-Edwards Paper Co.
Prairie du Chien	Crawford	628	22	42.5	+ 6.6	68	6	16	11	43	1.42	− 0.08	0.82	0	3	13	0	17	s.	James A. Gillis.
Prairie du Sac	Sauk	750	5	41.4	.....	68	21	14	11	33	2.05	.....	1.07	0.2	8	12	5	13	sw.	Wis. River Power Co.
Prentice	Price	1,551	15	36.2	+ 5.7	60	21†	6	11	30	2.16	+ 0.48	0.52	1.2	10	8	4	18	s.	Joseph G. Lash.
Reedsburg	Sauk	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	James Mulady.
Rest Lake	Vilas	1,600	0	36.0	.....	60	17	8	11	34	1.25	.....	0.60	0	3	9	0	21	s.	A. F. Miller.
Rhinelander	Oneida	1,550	7	36.8	.....	58	21	9	11	31	1.23	.....	0.48	1.5	8	14	1	15	sw.	Rhinelander Power Co.
Shullsburg	Lafayette	1,019	7	41.3	.....	67	20	12	11	35	1.77	.....	0.83	0	5	10	4	16	sw.	Harrison B. Chamberlain.
Solon Springs	Douglas	1,083	7	35.8	.....	63	17	8	11	34	1.35	.....	0.50	0.5	5	12	5	13	sw.	John M. Sayles.
Spooner	Washburn	1,104	19	36.9	+ 7.2	61	21	8	10	28	0.77	− 0.60	0.22	1.0	7	14	10	6	.....	Horace A. Bresee.
Stanley	Chippewa	1,082	9	37.7	.....	64	21	15	15	32	1.36	.....	0.52	0	5	16	4	10	se.	W. Humphrey Scott.
Stevens Point	Portage	1,113	20	37.8	+ 5.1	63	21	12	11	35	1.30	− 0.31	0.80	T.	2	2	9	19	sw.	Postmaster.
Sugar Camp Dam	Oneida	1,582	3	.....	.....	.....	.....	.....	.....	.....	1.02	.....	0.45	T.	3	13	10	7	sw.	C. W. Cheever.
Tomahawk	do	1,451	0	37.6	.....	60	1	12	11	38	1.15	.....	0.50	0.5	5	15	0	15	s.	Victor Extrom.
Trout Lake	Vilas	1,400	1	37.4	.....	60	21	8	11	36	1.00	.....	0.70	0	4	8	9	13	w.	F. B. Moody.
Twin Lakes Dam	do	1,625	3	.....	.....	.....	.....	.....	.....	.....	1.13	.....	0.43	7.0	5	15	0	15	w.	Albert D. Hansen.
Valley Junction	Monroe	930	21	39.2	+ 6.6	63	21	10	10	42	1.95	+ 0.26	0.65	T.	6	12	6	12	sw.	V. F. Gray.
Viroqua	Vernon	1,412	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. E. Butt.
Vudesare	Vilas	1,700	5	36.6	.....	56	5†	6	11†	34	2.01	.....	0.54	6.0	6	13	12	5	w.	Louis L. Thomas.
Watertown	Jefferson	824	22	40.5	+ 6.7	67	21	16	11	29	1.89	− 0.05	1.20	0.5	10	12	7	11	sw.	Charles J. Salick.
Waukesha	Waukesha	864	22	41.0	+ 5.3	70	21	15	11	30	1.90	+ 0.01	1.53	1.0	7	9	11	10	sw.	Carroll College.
Wausau	Marathon	1,212	18	35.5	+ 3.5	62	21	14	11	30	0.88	− 0.80	0.24	0	10	12	1	17	se.	A. A. Babcock, jr.
Weyerhaeuser	Rusk	1,297	11	36.3	+ 6.7	61	21	10	10†	34	1.66	.....	0.56	0.5	7	9	9	12	sw.	Miss Etta Stiles.
Whitehall	Trempealeau	675	22	40.5	+ 7.3	64	21	11	11	38	1.40	+ 0.09	0.40	0	6	11	8	11	s.	Hans J. Haugh.

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

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Sky. Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
Iowa.																				
Albia	Monroe	959	15	46.2	+ 7.5	74	20	17	1†	48	0.55	− 1.22	0.45	0	2	6	9	15	e.	J. I. Chenoweth.
Algona	Kossuth	1,213	39	42.2	+ 9.4	67	20	15	10	30	0.52	− 0.76	0.25	1.0	4	11	7	12	nw.	Dr. F. T. Seeley.
Alta	Buena Vista	1,513	22	41.2	+ 8.7	68	20	16	10	32	0.50	− 0.73	0.14	1.0	7	10	8	12	nw.	David E. Hadden.
Amana	Iowa	721	37	44.6	+10.8	71	20	15	11	32	0.80	− 0.93	0.51	0	8	11	7	12	s.	C. Schadt.
Ames	Story	926	37	46.2[g]	+12.1	75	20	15	11	39[g]									s.	Iowa State College.
Baxter	Jasper	998	13	44.8	+ 7.5	74	20	14	11	33	0.78	− 0.55	0.26	0.2	10	14	8	8	sw.	W. R. Vandike.
Belle Plaine	Benton	886	23	43.5	+ 8.6	71	20	11	11	32	0.92	− 0.80	0.40	0	5	9	7	14	se.	O. C. Burrows.
Belmond	Wright	1,184	3	42.2	.....	69	20	15	10†	32	0.94	.....	0.25	2.0	10	6	14	10	s.	Geo. P. Hardwick.
Bloomfield	Davis	881	6	48.2	.....	74	19	14	1	41	1.40	.....	0.80	0	7	15	5	10	sw.	Albert Power.
Bonaparte	Van Buren	.....	22	47.7	+ 9.2	76	20	16	11	37	0.86	− 0.94	0.50	0	6	.....	.....	.....	.....	B. R. Vale.
Boone	Boone	1,134	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. F. Henning.
Britt	Hancock	1,236	16	41.1	+ 7.5	68	20	16	11	33	0.60	− 0.51	0.20	0.8	8	10	8	12	s.	L. M. Goodman.
Buckingham	Tama	.....	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. S. Guynn.
Burlington	Des Moines	544	17	46.8	+ 7.1	76	21	16	11	57	0.89	− 0.89	0.24	0	11	15	4	11	s.	Max. E. Poppe, jr.
Carroll	Carroll	1,265	23	43.2	+ 9.0	71	20	17	1	41	0.95	− 0.18	0.43	0	4	14	0	16	sw.	Mrs. Jos. J. Wolfe.
Cedar Rapids	Linn	733	31	44.4	+ 8.5	71	20	18	11†	43	0.53	− 0.87	0.29	0	2	15	0	15	s.	R. S. Toogood.
Charles City	Floyd	1,015	23	41.6	+ 8.6	66	20	15	10	31	1.01	− 0.38	0.40	0.4	9	8	10	12	s.	U. S. Weather Bureau.
Clear Lake	Cerro Gordo	1,241	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Oscar Stevens.
Clinton	Clinton	593	46	44.5	+ 8.8	72	20†	15	11	33	2.38	+ 0.54	0.75	0.3	6	12	4	14	sw.	W. E. Henning.
Columbus Junction	Louisa	595	12	46.8	+ 7.8	75	20	17	10†	35	0.85	− 0.66	0.68	0	4	14	7	9	s.	J. B. Johnston.
Davenport	Scott	580	42	46.4	+ 8.9	73	20	20	10	32	1.26	− 0.50	1.14	T.	9	9	5	16	sw.	U. S. Weather Bureau.
Decorah	Winneshiek	875	20	43.3	+ 9.8	65	19†	14	10	31	2.14	+ 0.59	0.70	0	7	.....	.....	.....	.....	F. H. Baker.
Delaware	Delaware	1,083	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Nettie E. Bell.
Des Moines	Polk	861	35	46.6	+ 9.8	73	20	20	11	31	1.03	− 0.45	0.45	0	10	8	8	14	sw.	U. S. Weather Bureau.
Dubuque	Dubuque	639	40	44.2	+ 8.2	70	20	19	10	27	1.23	− 0.58	0.56	T.	8	8	7	15	s.	Do.
Earlham	Madison	.....	11	44.0	+ 6.2	73	20	19	11	37	1.54	+ 0.20	0.91	0	5	12	5	13	sw.	George Phillips.
Elkader	Clayton	727	34	38.8	+ 5.6	66	20	12	11	32	1.69	+ 0.04	0.48	1.0	8	14	7	9	se.	Chas. Reinecke.
Elma	Howard	1,182	3	39.8	.....	64	21	10	11	30	1.41	.....	0.40	1.0	11	13	6	11	se.	H. A. Moore.
Estherville	Emmet	1,298	18	41.9	+10.6	60	2†	14	10	34	0.85	− 0.39	0.30	2.0	6	9	15	6	se.	A. O. Peterson.
Fairfield	Jefferson	780	29	47.4	+10.5	76	20	16	11	40	0.76	− 1.52	0.32	0	8	16	3	11	s.	R. M. KcKenzie.
Fayette	Fayette	1,003	23	41.6	+ 8.7	68	20	13	11	32	1.29	− 0.33	0.46	2.0	8	11	6	13	sw.	R. Z. Latimer.
Forest City	Winnebago	1,226	19	40.8	+ 8.4	69	20†	14	10†	35	0.67	− 0.56	0.22	0	5	12	6	12	s.	J. A. Peters.
Fort Dodge	Webster	1,126	13	43.9	+ 8.7	70	20	18	10	31	0.77	− 0.45	0.16	1.0	7	.....	.....	.....	sw.	J. F. Monk.
Fort Madison	Lee	516	64	.....	.....	.....	.....	.....	.....	.....	1.94	− 0.20	0.85	0	4	8	4	18	sw.	Miss L. A. McCready.
Gilman	Marshall	1,052	14	.....	.....	.....	.....	.....	.....	.....	1.17	− 0.23	0.46	0	5	.....	.....	.....	.....	J. L. Wylie.
Grand Meadow	Clayton	1,180	22	41.8	+ 8.8	66	20	13	10	27	2.42	+ 0.86	1.00	1.0	11	10	7	13	sw.	F. L. Williams.
Grinnell	Poweshiek	1,023	21	45.7	+ 9.7	72	20	16	11	33	1.30	− 0.33	0.65	0	8	13	5	12	w.	D. W. Brainard.
Grundy Center	Grundy	976	22	44.4	+10.4	70	20	16	11	28	1.64	+ 0.42	0.46	0	7	13	4	13	s.	J. B. Calderwood.
Guthrie Center	Guthrie	1,077	18	45.3	+ 8.0	71	20	17	11	34	0.95	− 0.20	0.55	0	9	16	1	13	nw.	D. G. Beardsley.
Hampton	Franklin	1,155	23	43.6	+10.2	69	20	16	10	30	1.20	− 0.36	0.33	0.5	8	7	12	11	nw.	E. C. Grenelle.
Humboldt	Humboldt	1,095	25	42.3	+ 8.3	70	20	15	23	35	0.81	− 0.56	0.15	0	10	.....	.....	.....	s.	J. P. Peterson.
Independence	Buchanan	921	49	42.7	+10.1	69	20	13	11	32	2.31	+ 0.99	0.90	T.	10	14	4	12	nw.	R. E. Dudley.
Indianola	Warren	969	22	46.2	+ 7.9	72	20	20	10†	29	1.08	− 0.34	0.50	0	6	8	7	15	sw.	Prof. J. L. Tilton.
Iowa City	Johnson	683	53	43.5	+ 7.8	74	20	14	11†	54	0.46	− 1.80	0.12	0	6	11	4	15	sw.	Prof. A. G. Smith.
Iowa Falls	Hardin	1,170	20	42.0	+ 8.9	70	20	15	11	31	0.75	− 0.50	0.18	0.5	6	13	4	13	sw.	J. B. Parmelee.
Jefferson	Greene	1,052	14	44.2	.....	73	20	16	11	37	0.93	− 0.38	0.51	T.	7	11	4	15	se.	Ora M. Hall.
Keokuk	Lee	614	42	49.4	+10.0	74	20	20	11	33	2.22	+ 0.37	0.76	0	11	8	8	14	s.	U. S. Weather Bureau.
Keosauqua	Van Buren	644	21	45.6	+ 6.7	75	20	15	11†	54	0.24	− 1.26	0.16	0	4	10	8	12	.....	J. H. Landes.
Knoxville	Marion	920	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Casey and Belville.
Lacona	Warren	.....	14	.....	.....	.....	.....	.....	.....	.....	1.92	+ 0.45	1.10	0	10	5	17	8	.....	J. B. Alter.
Lansing	Allamakee	632	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Chas. R. Serene.
Le Claire	Scott	576	13	.....	.....	.....	.....	.....	.....	.....	0.52	− 0.95	0.30	0.4	6	.....	.....	.....	.....	Miss M. T. Disney.
Marshalltown	Marshall	947	21	43.4	+ 7.4	73	20	11	11	50	0.82	− 0.47	0.42	T.	9	12	2	16	sw.	Jacob Eige.
Mason City	Cerro Gordo	1,132	16	41.5	+ 8.7	64	6	14	11	34	0.79	− 0.85	0.42	0	3	9	14	7	nw.	Dr. Roy Desart.
Monroe	Jasper	922	1	45.6	.....	72	20	16	11	36	0.88	.....	0.56	T.	3	11	6	13	s.	J. A. Dibel.
Mount Pleasant	Henry	729	32	47.0	+ 9.6	76	20	17	11	34	0.78	− 0.78	0.41	0	7	11	6	13	sw.	J. W. Edwards.
Muscatine	Muscatine	554	53	.....	.....	.....	.....	.....	.....	.....	0.24	− 2.06	0.07	.....	7	.....	.....	.....	.....	William Molis.
New Hampton	Chickasaw	1,169	16	41.4	+ 6.7	65	20	13	10	28	1.47	+ 0.07	0.64	T.	8	16	3	11	s.	A. F. Kemman.
Nora Springs	Floyd	1,064	.....	44.6	.....	70	19	15	10†	32	2.12	.....	0.69	2.0	12	14	5	11	s.	Arthur Betts.
Northwood	Worth	1,122	17	39.2	+ 6.2	63	20	13	10†	33	0.53	− 0.95	0.25	0.5	10	14	4	12	sw.	Chas. H. Dwelle.
Olin	Jones	760	15	44.7	+ 7.9	72	20	14	11	33	1.10	− 0.14	0.65	0	2	12	10	8	nw.	Dr. F. W. Port.
Osage	Mitchell	1,184	26	41.8	+10.9	65	20	14	10†	32	1.44	+ 0.01	0.50	0	8	13	5	12	s.	Lester Coonradt.
Oskaloosa	Mahaska	843	37	45.4	+ 8.4	73	20	15	11	31	0.51	− 0.98	0.33	0	5	15	15	0	sw.	Joseph Boyd.
Ottumwa	Wapello	649	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Chester Potter.
Pella	Marion	877	11	46.6	+ 9.3	74	20	16	11	38	1.43	0.00	1.05	0	3	17	0	13	s.	J. H. Ver Steeg.
Perry	Dallas	975	12	45.7	+ 7.9	74	20	15	11	39	1.05	− 0.40	0.39	0	10	13	7	10	sw.	S. J. Brumfield.
Pocahontas	Pocahontas	1,248	9	42.0	.....	68	20	15	10	34	0.82	.....	0.38	1.2	9	11	5	14	s.	F. E. Hronek.
Rockwell City	Calhoun	.....	17	41.4	+ 6.4	69	23	21	9	43	1.60	+ 0.50	1.10	0	2	18	4	8	.....	C. M. Randall.
Sac City	Sac	1,278	37	41.2	+ 7.7	64	20†	17	10	24	0.98	− 0.13	0.20	0	8	8	1	21	sw.	E. N. Baily.
Saint Charles	Madison	1,070	12	46.8	+ 5.7	76	20	19	10†	38	1.58	− 0.15	0.78	0	12	13	5	12	nw.	R. D. Minard.
Sigourney	Keokuk	877	17	46.0	+ 7.1	68	18†	15	11	34	0.66	− 0.89	0.38	0	4	5	15	10	s.	J. T. Parker.
Stockport	Van Buren	745	11	47.0	.....	75	20	14	11	36	0.88	− 0.63	0.50	0	7	12	5	13	s.	C. L. Beswick.
Storm Lake	Buena Vista	1,440	24	43.2	+ 7.1	63	20†	16	10	36	0.59	− 0.43	0.15	0	6	14	5	12	s.	Geo. H. Fracker.
Tipton	Cedar	807	14	45.2	+ 8.4	70	20	19	10†	28	1.42	− 0.40	0.62	0	4	12	10	8	s.	F. K. Gregg.
Toledo	Tama	856	19	45.4	+ 9.0	70	20	13	11	34	1.35	− 0.16	0.75	0	4	15	4	11	sw.	I. F. Giger.
Washington	Washington	769	31	46.8	+10.6	75	20	16	11	36	0.41	− 1.00	0.26	0	5	8	9	13	sw.	Wm. A. Cook.
Waterloo	Black Hawk	862	30	43.2	+ 7.5	69	20	16	10†	37	1.20	− 0.25	0.50	0	7	16	1	13	se.	Ralph B. Slippy.
Waukee	Dallas	1,039	10	.....	.....	.....	.....	.....	.....	.....	0.93	− 0.56	0.47	0	.....	.....	.....	.....	.....	Samuel F. Foff.
Waverly	Bremer	948	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Earl G. Moore.
Webster City	Hamilton	.....	8	43.8	.....	70	20	15	11	36	0.87	.....	0.26	2.0	5	6	3	21	nw.	C. D. Carpenter.
West Bend	Palo Alto	1,197	20	41.8	+ 9.3	67	20	15	10	31	0.64	− 0.70	0.22	0.9	7	11	7	12	s.	Phil Dorweiler.
Whitten	Hardin	1,036	16	46.0[d]	+10.7	71[d]	20	16[d]	10†	38[d]	1.89	+ 0.76	0.88	0	3	.....	.....	.....	nw.	Dr. F. P. Butler.
Winterset	Madison	1,129	22	45.8	+ 9.0	72	20	20	10†	29	2.24	+ 0.95	0.95	0	9	11	5	14	s.	Dr. R. S. Cooper.
Missouri.																				
Gorin	Scotland	700	27	.....	.....	.....	.....	.....	.....	.....	0.93	− 1.07	0.32	0	7	5	7	18	sw.	J. W. Pulliam.
Hannibal	Marion	534	22	50.6	+10.1	76	21	21	11	30	3.24	+ 1.29	1.94	T.	9	9	8	13	sw.	U. S. Weather Bureau.
Louisiana	Pike	500	36	48.8	+ 5.4	77	21	15	1†	44	3.90	+ 1.66	1.50	0	8	15[a]	6[a]	8[a]	w.	J. T. Farrell.
Macon	Macon	881	1	50.8	.....	76	20	20	11	35	2.46	.....	0.95	0	7	10	5	15	sw.	John A. Cook.
Mexico	Audrain	797	36	48.6	+ 5.8	76	19†	19	11	53	4.08	+ 1.64	1.55	T.	10	11	2	17	s.	J. F. Llewellyn.
Palmyra	Marion	652	2	49.8	.....	73	20†	19	11	35	3.31	.....	1.76	0	9	9	8	13	s.	W. B. Markell.
Steffenville	Lewis	576	21	50.6	+ 7.6	77	20	17	11	36	2.65	+ 0.80	1.25	0	5	12	9	9	s.	Frank Hall.
Sublett	Adair	1,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Lewis Spriggs.
Vandalia	Audrain	776	3	51.1	.....	77	20	23	11	43	3.00	.....	2.36	0	5	10	4	16	n.	C. B. Ellis.
Warrenton	Warren	865	24	49.0	+ 6.3	76	21	21	11†	53	3.85	+ 1.16	1.38	0	9	8	5	17	s.	Prof. J. H. Frick.

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

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Sky. Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
Indiana.																				
Collegeville	Jasper	.....	14	45.6	+ 4.6	71	22	10	10	38	2.31	− 0.19	0.45	T.	9	11	2	17	sw.	John Zeller.
Knox	Starke	716	8	45.1	.....	69	21	12	11	35	3.25	.....	0.78	9.1	13	11	3	16	s.	W. R. R. Tatman.
Laporte	Laporte	810	17	43.8[b]	+ 4.1	69[b]	21	19[b]	12	37[b]	2.02	− 0.76	0.80	5.0	10	.....	.....	.....	.....	Wm. M. Walton, jr.
Plymouth	Marshall	790	8	44.4	.....	68	21	16	11	34	3.36	.....	0.81	8.4	14	10	6	14	sw.	J. W. Siders.
South Bend	St. Joseph	726	20	45.6	+ 6.0	70	21	20	11	30	2.80	− 0.02	0.77	12.0	14	8	8	14	sw.	Henry H. Swaim.
Illinois.																				
Aledo	Mercer	738	13	47.2	+ 8.5	73	20†	17	11	36	1.24	− 0.67	1.02	0	8	11	7	12	s.	William B. Frew.
Alexander	Morgan	670	20	49.6	+ 7.0	75	21	17	11	36	3.60	+ 1.47	1.69	T.	10	6	7	17	sw.	George H. Hall.
Antioch	Lake	861	12	43.0	+ 5.2	69	21	17	11	36	1.62	− 0.49	0.52	T.	4	10	6	14	sw.	J. C. James.
Astoria	Fulton	650	14	48.4	+ 7.3	75	21	17	11	37	2.75	+ 0.78	0.78	T.	8	10	7	13	s.	Edward V. Bohl.
Aurora	Kane	678	34	45.4	+ 7.8	71	21	15	11	38	1.74	− 0.68	0.80	T.	8	19	4	7	s.	Miss Alice M. Holden.
Bement	Piatt	685	6	.....	.....	.....	.....	.....	.....	.....	3.97	.....	1.25	T.	10	12	9	9	.....	J. W. B. Stewart.
Bloomington	McLean	840	22	48.0	+ 7.1	74	21	16	11	35	2.69	+ 0.10	1.09	T.	9	11	4	15	s.	Prof. H. N. Pearce.
Cairo	Alexander	359	41	54.1	+ 7.2	77	22	27	11	32	3.14	− 0.88	0.98	0	10	8	5	17	s.	U. S. Weather Bureau.
Camp Point	Adams	732	0	.....	.....	.....	.....	.....	.....	.....	2.28	.....	0.91	0	7	8	14	8	se.	Capt. D. M. Morris.
Carbondale	Jackson	445	8	53.2	.....	77	22	19	1	43	3.44	.....	0.60	T.	12	10	8	12	sw.	State Normal University.
Carlinville	Macoupin	663	23	50.2	+ 7.2	76	21	16	11	34	4.02	+ 1.39	1.76	0	9	10	9	11	sw.	Dr. J. D. Conley.
Carlyle	Clinton	470	28	.....	.....	.....	.....	.....	.....	.....	5.52	+ 2.20	1.50	T.	9	.....	.....	.....	.....	Hervey O. Jones.
Chester	Randolph	380	21	.....	.....	.....	.....	.....	.....	.....	3.39	+ 0.30	0.95	0	10	.....	.....	.....	.....	Charles S. Gollon.
Clinton	De Witt	727	3	47.9	.....	73	21	16	11	34	3.15	.....	0.68	T.	12	9	10	11	sw.	J. F. Ziegler.
Cobden	Union	656	30	54.9	+ 7.7	80	19†	21	11	38	3.47	− 0.67	1.00	0	9	14	2	14	s.	John Buck Co.
Dakota	Stephenson	929	8	42.8	.....	70	21	11	11	35	1.66	.....	0.55	T.	5	8	7	15	sw.	Elmer G. Smith.
Decatur	Macon	685	22	47.9	+ 6.3	74	21	14	11	50	3.68	+ 1.12	1.58	T.	11	11	7	12	sw.	Prof. J. H. Coonradt.
Dixon	Lee	725	23	43.1	+ 6.2	73	21	16	11†	49	0.76	− 0.94	0.35	0	4	.....	.....	.....	.....	H. U. Bardwell.
Du Quoin	Perry	459	25	52.4	+ 6.8	78	22	22	1†	41	3.24	+ 0.41	1.11	T.	8	15	6	9	sw.	G. H. Knetzer.
Dwight	Livingston	600	20	46.9	+ 7.1	72	21	14	11	38	2.06	− 0.44	0.72	T.	10	11	5	14	s.	Edward O. Welch.
East St. Louis	St. Clair	481	2	.....	.....	.....	.....	.....	.....	.....	3.50	.....	1.30	0	9	.....	.....	.....	.....	W. McK. Brown.
Edwardsville	Madison	554	14	.....	.....	.....	.....	.....	.....	.....	4.21	+ 1.01	1.94	0	8	.....	.....	.....	.....	W. H. Morgan.
Elgin	Kane	716	6	45.4	.....	71	21	17	11	36	1.49	.....	0.52	T.	7	6	8	16	sw.	Elgin Observatory.
Ewing	Franklin	449	1	.....	.....	.....	.....	.....	.....	.....	3.35	.....	1.20	T.	10	.....	.....	.....	.....	U. of Illinois Exp. Station.
Fairview	Fulton	733	2	.....	.....	.....	.....	.....	.....	.....	2.45	.....	0.74	T.	10	.....	.....	.....	.....	Abram Wilson.
Galva	Henry	842	21	46.4	+ 8.3	74	21	15	11	37	1.74	− 0.09	0.79	0.3	7	15	3	12	s.	Prof. F. U. White.
Grafton	Jersey	422	20	.....	.....	.....	.....	.....	.....	.....	3.52	+ 1.07	1.50	0	9	.....	.....	.....	.....	R. C. Goodrich.
Greenville	Bond	635	35	51.0[a]	+ 8.2	75[a]	20†	20[a]	11	36[a]	5.48	+ 2.10	1.43	T.	9	12	5	13	w.	H. W. Reidemann.
Griggsville	Pike	650	28	50.7[d]	+ 8.4	76[d]	21	21[c]	11	37[d]	.....	.....	.....	.....	.....	8	10	12	s.	George F. Kneeland.
Havana	Mason	475	21	48.7	+ 6.4	75	21	15	11	37	2.99	+ 0.86	0.75	T.	6	13	5	12	s.	L. L. Eutener.
Henry	Marshall	500	25	47.2	+ 8.1	75	21	15	11	36	2.09	− 0.27	0.67	T.	9	15	3	12	sw.	Dr. F. A. Powell.
Hillsboro	Montgomery	676	19	51.8[f]	+ 7.6	74[f]	21†	19[f]	11	30[f]	4.59	+ 1.91	1.24	0	8	.....	.....	.....	s	Sam Little.
Joliet	Will	609	22	45.1	+ 6.1	73	21	15	11	36	1.18	− 1.04	0.60	0.3	8	15	4	11	sw.	F. M. Muhlig.
Kishwaukee	Winnebago	730	25	44.2	+ 6.9	71	21	16	11	33	1.96	− 0.27	0.54	T.	10	12	3	15	sw.	George Stevens.
La Grange	Cook	657	21	44.2	+ 5.7	73	21	16	11	35	1.71	− 0.58	0.59	T.	7	10	9	11	sw.	Prof. F. E. Sanford.
La Harpe	Hancock	698	34	48.4	+ 8.2	76	20	14	11	38	2.43	+ 0.46	1.08	0	6	11	8	11	sw.	George E. Campbell.
Lanark	Carroll	883	24	43.6	+ 7.3	70	20†	11	11	34	1.32	− 0.67	0.52	1.0	6	16	3	11	sw.	M. N. Wertz.
La Salle	Lasalle	536	8	45.2	+ 7.4	74	21	18	11	48	1.32	− 1.32	0.40	0	5	9	9	12	nw.	H. A. Sohn.
Lincoln	Logan	575	25	48.4	+ 7.0	76	21	13	11	38	3.44	+ 1.11	1.08	T.	9	10	8	12	s.	Prof. C. S. Oglesby.
Macomb	McDonough	700	9	.....	.....	.....	.....	.....	.....	.....	2.71	.....	1.18	0	7	.....	.....	.....	.....	State Normal University.
Manteno	Kankakee	711	2	.....	.....	.....	.....	.....	.....	.....	2.47	.....	0.84	0	11	17	3	10	s.	C. B. Schmeltzer.
Martinton	Iroquois	632	26	46.6	+ 6.8	71	21	13	11	37	2.40	− 0.03	0.53	0	9	9	4	17	sw.	Joseph H. Peltier.
Mascoutah	St. Clair	425	23	52.3	+ 7.6	77	22	20	1†	39	3.90	+ 0.68	1.45	0	9	8	12	10	se.	Dr. Robert L. Lischer.
Minonk	Woodford	745	20	46.9	+ 7.0	73	20†	12	11	40	2.12	+ 0.16	0.56	T.	12	12	4	14	sw.	John C. Danforth.
Monmouth	Warren	784	21	47.4[a]	+ 7.1	74[a]	20	15[a]	11	40[b]	2.06	+ 0.20	1.04	0	8	13	0	17	s.	Dr. J. C. Hutchison.
Morris	Grundy	518	2	46.4	.....	73	21	14	11	37	2.09	.....	0.79	0	9	14	3	13	sw.	E. G. Cryder.
Morrison	Whiteside	685	19	44.8	+ 6.4	72	21	14	11	36	1.54	− 0.34	0.54	0	4	11	7	12	sw.	S. A. Maxwell.
Morrisonville	Christian	626	14	49.3	+ 6.1	73	21	17	11	36	4.21	+ 1.98	1.94	T.	9	11	7	12	s.	J. D. Lowis.
Mount Vernon	Jefferson	511	19	49.4	+ 4.0	76	19†	20	11†	48	3.84	+ 0.89	0.83	0	9	10	9	11	s.	Theodore P. Stelle.
Nashville	Washington	503	13	.....	.....	.....	.....	.....	.....	.....	3.98	+ 1.09	1.32	0	11	.....	.....	.....	.....	Harry E. Gewe.
Oregon	Ogle	702	4	.....	.....	.....	.....	.....	.....	.....	2.37	.....	0.80	0	6	11	6	13	s.	Samuel Ray.
Ottawa	La Salle	500	27	46.4	+ 7.0	77	19	17	11	36	1.80	− 0.55	0.86	0	7	11	0	19	sw.	Miss Maude M. Harris.
Pana	Christian	695	27	49.2	+ 7.0	73	21	17	11	33	4.40	+ 0.82	1.93	T.	7	8	7	15	s.	Julius Keefer.
Pawpaw	Lee	930	1	.....	.....	.....	.....	.....	.....	.....	1.78	.....	0.92	0.2	5	.....	.....	.....	.....	A. C. McBride.
Peoria	Peoria	609	57	47.2	+ 9.7	74	21	16	11	33	2.77	+ 0.13	0.81	T.	14	12	5	13	s.	U. S. Weather Bureau.
Pontiac	Livingston	546	11	47.9	+ 6.4	74	21	16	11	36	1.58	− 0.43	0.52	T.	10	8	10	12	sw.	George Butterworth.
Quincy	Adams	481	7	49.2	.....	75	21	22	11	48	1.94	.....	0.89	0	8	.....	.....	.....	.....	Fred J. Brinkoetter.
Riley	McHenry	956	54	43.6	+ 8.9	70	21	14	11	33	1.73	− 0.26	0.45	0.2	10	8	7	15	sw.	John West James.
Roberts	Ford	774	2	.....	.....	.....	.....	.....	.....	.....	2.29	.....	0.90	T.	8	9	9	12	sw.	R. E. Bradbury.
Rockford	Winnebago	763	21	44.6	+ 8.5	73	21	16	11	33	1.52	− 0.89	0.41	T.	9	13	6	11	.....	Dr. John R. Porter.
Rushville	Schuyler	670	22	49.6	+ 8.8	75	21	19	11	37	3.35	+ 1.21	1.30	0	7	2	9	19	s.	H. F. Dyson.
St. Charles	Kane	700	18	45.4	+ 7.1	72	21	16	11	35	1.63	− 0.76	0.65	T.	7	10	9	11	sw.	Dr. William R. Bishop.
St. Peter	Fayette	500	11	49.9	+ 5.9	75	20†	19	11	34	5.07	+ 2.66	1.50	T.	9	7	9	14	sw.	M. L. Lansford.
Sparta	Randolph	538	27	52.4[d]	+ 7.3	80[d]	22	21[c]	11	36[d]	2.86	− 0.49	0.88	T.	12	15	4	11	s.	W. F. Clendenin.
Springfield	Sangamon	644	33	49.2	+ 8.5	75	21	23	11	32	4.49	+ 1.83	1.70	T.	13	9	7	14	s.	U. S. Weather Bureau.
Streator	La Salle	626	20	45.4	+ 5.2	75	21	15	11	53	2.30	− 0.01	0.51	T.	10	9	4	17	sw.	Miss Lora Sweetser.
Sullivan	Moultrie	530	13	49.0	+ 6.1	75	21	16	11	35	4.86	+ 2.16	1.95	T.	9	9	12	9	sw.	C. A. Corbin.
Sycamore	Dekalb	850	33	45.2	+ 8.8	72	21	13	10	40	1.23	− 1.11	0.49	0	8	.....	.....	.....	.....	George Valentine.
Tiskilwa	Bureau	798	29	.....	.....	.....	.....	.....	.....	.....	2.40	− 0.15	1.28	0.5	5	.....	.....	.....	.....	F. I. Smucker.
Walnut	do	717	22	46.2	+ 7.1	73	21	14	11	35	1.76	− 0.17	0.92	T.	7	13	7	10	sw.	O. C. Nussle.
Warsaw	Hancock	501	15	.....	.....	.....	.....	.....	.....	.....	1.78	− 0.62	0.92	0	6	.....	.....	.....	.....	W. R. Kirkbride.
Waterloo	Monroe	719	2	.....	.....	.....	.....	.....	.....	.....	2.55	.....	1.24	0	9	.....	.....	.....	.....	Prof. James E. Raibourn.
White Hall	Greene	573	5	47.4	.....	74	22	20	1	45	4.74	.....	1.80	0	11	16	4	10	ne.	Frank Dillman.
Windsor	Shelby	681	14	48.9	+ 6.7	74	22	15	11	36	4.28	+ 1.30	1.80	T.	8	9	6	15	s.	Herbert Rose.
Winnebago	Winnebago	900	26	43.5	+ 7.1	71	21	15	11	36	1.90	− 0.24	0.66	1.5	8	13	2	15	sw.	Frank Osborn.
Yorkville	Kendall	584	26	45.0	+ 8.3	71	21	13	11	36	1.58	− 0.79	0.76	0	8	12	6	12	s.	Herman A. Grimwood.

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

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

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			T.										T.	.05									.20								0.25
Bottineau ‖	Mouse							.08					.01							.04			.02							T.		0.15
Bowbells ‖	do				.10								.13	.02						.05												0.30
Cando	Sheyenne	.10																		.25												0.35
Crosby	Mouse						T.					.05							T.			.13										0.18
Devils Lake	Sheyenne		T.				.01												.14			.01							.01			0.17
Donnybrook	Mouse						.18					T.							.35			.15										0.68
Dunseith	do						.07						.02						.08			T.								T.		0.17
Eckman (near)	do																															
Fessenden ‖	James													T.						.03			.05									0.08
Forman	Sheyenne																						.02									0.02
Grafton ‖	Red						.01													T.		.01		.05					T.	T.		0.07
Granville	Mouse																															
Hannah	Pembina												T.						T.			T.										T.
Hansboro	Red						.17												.04													0.21
Hillsboro	do			T.															T.				.30						T.			0.30
Lakota	Sheyenne																		.25				.02					T.				0.27
Langdon ‖	Pembina																															
Larimore ‖	Red																															
Lisbon ‖	Sheyenne													.02		.20						T.										0.22
McKinney	Mouse											T.																				T.
McLeod	Sheyenne													T.		.05							.05									0.10
Manfred	do		.02									T.						.15			.01	T.										0.18
Mayville	Red								.01										.01				.12							.02		0.16
Milnor	do															.10					T.		T.						T.			0.10
Minot ‖	Mouse			T.				.03						.04						.12												0.19
Minto	Red		T.				T.												T.				T.									T.
Oriska	Sheyenne																.05					.10					T.	T.	T.			0.15
Park River	Red						T.									T.			T.			T.	.04					T.	.03			0.07
Pembina ‖	do																															
Power	Sheyenne	T.						T.						T.		.17							.19					T.				0.36
Towner	Mouse						T.												T.													T.
University	Red		.17				T.	T.								T.			.11		.02	.02	.06						.07	T.		0.45
Wahpeton ‖	do													T.		.20							.02									0.22
Walhalla	Pembina																															
Westhope	Mouse																															
Willow City	do						.16												T.			T.										0.16
Minnesota.																																
Albert Lea	Mississippi							T.													T.		.10						.30			0.40
Alexandria ‖	do			.11			.02	.06								.04				.02		.75	.08				.02	.02	.01	.03	.01	1.17
Angus	Red			.07			.02												0.6			.02	.05							.08		0.30
Bagley	do			T.				.02		T.													.02									0.04
Baudette	Rainy			.04				.06		T.				T.						.09		.01	.05							.15		0.40
Beardsley	Minnesota																															
Bemidji ‖	Mississippi			.01														.02												.07	.04	0.14
Bird Island	Minnesota							.17								T.						.09	T.				.03		.02			0.31
Brainerd	Mississippi							T.														.21					.01	T.	T.	.03		0.25
Caledonia ‖	do							T.	T.		.45					T.				.63		.22	.41				T.	T.	T.	.36		2.07
Campbell ‖	Red						T.							T.		.01								.04						.06		0.11
Cass Lake ‖	Mississippi																						.19							.10		0.29
Chatfield	do							.03								T.				.18		.24					.04	T.		.33		0.82
Collegeville	do			T.				.12														.33	.08				.04					0.57
Crookston ‖	Red			T.				T.	T.	T.										.04		T.		.20								0.24
Detroit ‖	do							T.						T.			T.							.19						T.		0.19
Fairmont (near)	Minnesota							.21								.10	.06		T.			.12					T.	T.	.09	.13	.14	0.85
Faribault	Mississippi							T.								T.			T.	T.	T.	.06					.04	.02		.06		0.18
Farmington	do			.05				.32								.02			T.	.02	T.	.18	T.				.05	.05	T.	.05		0.74
Fergus Falls	Red						T.	T.						.03		.04						.02	.12	.01					.01	T.		0.23
Fort Ripley ‖	Mississippi							T.								T.				T.		.02	.03	.03					T.	T.		0.08
Fosston	Red							T.						T.					.01			.02	.50							.03		0.56
Glencoe	Mississippi							.50								.10						.25										0.85
Grand Meadow	do							.18	.03										.07	.23	T.	.63				T.	.03	T.	T.	.36	T.	1.53
Gull Lake Dam	do							T.		T.						T.						.35	.42	T.			.02			.05		0.84
Hallock	Red						.05												.05				.10						T.			0.20
Halstad ‖	do																						.23									0.23
Hinckley	St. Croix			.06				.33	.02													.35							.21	.02		0.99
International Falls	Rainy							.56												.10		.19	.05					T.		.23	.01	1.14
Itasca State Park	Mississippi																					.05								.04		0.09
Lake Crystal	Minnesota							.46								.10						.70							.10	.11		1.47
Leech Lake Dam	Mississippi							.03												.03		1.20	.20				T.		.01	.08		1.55
Little Falls	do																					.30	.03									0.33
Littlefork	Rainy							.15												.13		.20	.09							.20		0.77
Long Prairie	Mississippi																															
Lynd	Minnesota															.08						.75	.08									0.91
Mankato ‖	do							.03	.21							.06	.03					.19					.02	.03		.05	.08	0.70
Mapleplain	Mississippi			.15				.65						T.		.06				.01	T.	.22	T.				.15	T.	T.	.02	T.	1.26
Milaca	do																															
Milan	Minnesota							.11								.10				.15		.45					T.					0.81
Minneapolis	Mississippi			.04				.06					T.	T.		.05			.01	T.		.14	T.				.07	.01	.07	.03		0.48
Montevideo ‖	Minnesota							.10						T.		.02	.02			.40	.04						.02	T.				0.60
Moose Lake	St. Croix																															
Moorhead	Red						.01			T.				.04		.04						.01	.08							T.		0.18
Mora	St. Croix			.08				.35	.02							T.						.15	.36				.02	.04	.01	.02	.01	1.06
Morris	Minnesota			T.			T.	T.								.10						.76					T.					0.86
New London	Mississippi							.08														.32	.20			T.	T.	T.	T.	T.	T.	0.60
New Richland	Minnesota							.04								T.		T.	T.		T.	.03				T.	.04		T.			0.11
New Ulm	do							.24								.03			T.	T.		.25					T.					0.52
Ossakis	Mississippi			T.				T.		.11						.05					T.	.48	.03	T.						.18		0.85
Park Rapids ‖	do													.02						.01		.11		.10						.10		0.34
Pierz	do		.31					.10								T.						.50										0.91
Pine River Dam	do							T.								T.						.84	.14						T.	.05		1.03
Pokegama Falls	do			.02				T.												.01		.66	.01						.02	.15		0.87
Redlake	Red																					T.	.14					T.	T.	T.	T.	0.14
Red Lake Falls ‖	do																						.10									0.10
Red Wing ‖	Mississippi		.02	T.					.20								T.					.26	.24	.02			.03	.03		.12	T.	0.92
Reeds Landing ‖	do								.20													.24	.06				.04			.07	.06	0.67
Rochester ‖	do								.03											T.		.46					.05	.06		.10	.02	0.72
Roseau	Red							T.												T.	T.		.08							T.		0.08
St. Charles	Mississippi							.16												.13		.36					.06			.43		1.14

TABLE 2.—*Daily precipitation for November, 1913. 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.
Minnesota—Contd.																																
St. Cloud	Mississippi							.58		T.				T.		T.				T.	T.	.22	.26				.05	T.	T.	.12	T.	1.23
St. Paul	do			.04				.16								.02			T.		T.	.20	T.				.06	.01	.04	.03		0.56
St. Peter	Minnesota							.60													.50						T.			.30		1.40
Sandy Lake Dam	Mississippi							T.												.06		.35	.05				T.		T.	.14		0.60
State Sanatorium	do							T.												.03		.56	T.				T.		.05	.05		0.69
Stillwater ‖	St. Croix							.30	T.								T.					.25		.02			T.			.20	T.	0.77
Taylors Falls	do			T.				.60								T.						.24					T.	.07		.10		1.01
Thief River Falls ‖	Red																															
Tracy	Minnesota							.36								.14						.22	T.				T.					0.72
Warren	Red																				T.		.20									0.20
Warroad	Rainy													T.					.10			.05	.07							.09		0.31
Windom	Des Moines							.13								.10						.12							.05			0.40
Winnebago ‖	Minnesota			T.				T.	.22		T.					T.	T.					.13		T.					T.	.22		0.57
Winnibigoshish	Mississippi			.02			.01	.01												T.		.86	T.							T.	.06	0.96
Winona	do		T.					.07	.06										T.	.13	T.	.41	T.				.03		T.	.21	T.	0.91
Winton	Rainy				T.			T.															T.							.50	T.	0.50
Worthington ‖	Des Moines							.30								.13						.07										0.50
Zumbrota	Mississippi							.18													T.	.46	T.				.05	.03	.03	.17		0.92
South Dakota.																																
Milbank ‖	Minnesota							T.	T.					.07		.15						.95					T.	T.				1.1
Wisconsin.																																
Antigo ‖	Wisconsin						T.		.30											.02			.20					T.	T.	T.	T.	0.48
Baraboo	do						T.	T.	.08							T.			.12	.95		.08					.12	.04		.14		1.52
Barron	Chippewa			.24				.33	T.							T.						.45					.21			.17		1.40
Beloit	Rock			T.				T.	.50					T.					.10	.62		T.					.04	.03	T.	.28	.43	2.00
Big St. Germain Dam	Wisconsin			.11			T.	.41	T.	T.	.15									T.		.70	T.	.08				T.		.35	.06	1.86
Brodhead	Rock								.35					T.		T.				.90						T.	T.		.17	.27	.45	2.14
Burnett	do		T.	T.			T.	.02	.20							T.		T.	*	1.10	T.	T.				.07	T.	.10	T.	.16	T.	1.65
Cottage Grove	do								.02										.04	1.19		.09							T.	.16	.12	1.62
Darlington	do																			1.40										.25	.60	2.25
Deerskin Dam	Wisconsin			.07			T.	.21	.40	T.	.10									.10		.95	T.	T.						T.	.10	1.93
Delavan	Rock								.31		T.			T.		.07				1.06	T.		T.			T.		.63	.19		.40	2.66
Dodgeville ‖	do																				.81	.10						T.				0.91
Downing	Chippewa							.20								T.				T.	T.	.50	T.				T.	.20	T.	T.	T.	0.90
Eau Claire	do		T.	T.				.18						T.		T.				.06	T.	.37					.06	.04		.45		1.16
Glen Flora	Chippewa							.46														.61						.15		.40		1.62
Grand Rapids ‖	Wisconsin	T.	.03	.01	.01	T.	T.	.09	.08	T.									.02	1.03	.12	.13	.10	T.	T.	.02	T.	.08	.04	.05	.03	1.84
Grantsburg	St. Croix							.34														.21	T.	T.			T.			T.		0.55
Hancock	Wisconsin		.10					.05	T.									.05		.55	T.	.20					T.	.10	T.	.15	T.	1.20
Hatfield	Black		.20					.20											T.	.38		.44					T.	.50		.42	.70	2.84
Hayward	St. Croix								*													1.02										1.02
Hillsboro	Wisconsin		T.	T.			T.	*	.13		T.					T.			*	.75	T.	.37				T.	T.	.10	T.	.27	.15	1.77
Koepenick	do							.40	.20													.20	.10				.10			.10		1.10
La Crosse	Mississippi		T.				T.	.05		T.						T.		T.	.45	.13	T.	.59	T.			.01	.09		.02	.52	.07	1.93
Lake Mills	Rock							.02	.09		T.								.22	1.68			.12				.02	.06	.02	.03	.51	2.77
Lancaster	Mississippi																			.80		.12					.05			.13	.45	1.55
Long Lake	Wisconsin			.07			.02	.27	.26		.02									.08		.34	.09		.02			T.		.05	.18	1.40
Madison	Rock		T.	T.			T.	.01	.11		T.					T.			.99	T.		.02				T.	.02	.01	T.	.11	.46	1.73
Marshfield	Wisconsin		T.	T.			T.	.11	.01											.39	.03	.28						.09	.01	.41		1.33
Mather ‖	do		.15					T.	T.											.82		.09	.12				T.	T.	.11	.30	.02	1.61
Mauston	do								.10											1.75		.20					.10			.15		2.30
Meadow Valley	do								T.										.76			.18					.05	.05	T.	.20	T.	1.24
Medford ‖	Black			T.	T.				.45		T.											.40								.55	.68	2.08
Merrill	Wisconsin		.07	.09	.02			.08	.21	T.	T.											.30	.11	.05				.06		.04	.10	1.13
Minocqua	do			.22			.06	.43	.10										.06			.53		.13				T.		.63	.03	2.19
Mondovi	Mississippi	.01					.01	.12	.04				.01			T.				.03	.01	.39	.01				.04	.02		.45	.03	1.17
Mount Horeb	Rock								.02							T.			.16	.90										.17	.40	1.65
Muscoda ‖	Wisconsin							T.	.13											.86		.05					T.			.15	.07	1.26
Neillsville	Black		.12					.30													.50								.58	.10		1.60
New Richmond	St. Croix			.27				.28	T.												T.	.14					.08			T.		0.77
Osceola	Wisconsin			.05				.30					T.			T.						.20					.05	T.	T.	T.	T.	0.60
Park Falls ‖	Chippewa			.10				T.	.53	.03	.05	T.							T.	T.		.22	.10	.09	T.			T.		T.	.42	1.54
Portage	Wisconsin			.03			T.		.12	.03						T.		T.	T.	1.10	T.		.03			T.	.05	.08		.05	.20	1.69
Port Edwards	do							T.			T.									.92		.10				T.	T.	T.	T.	T.	T.	1.02
Prairie du Chien ‖	Mississippi								.08											.82		T.					T.	T.		.52		1.42
Prairie du Sac	Wisconsin		.07						.12										.28	1.07		.03				T.	T.		.03	.23	.22	2.05
Prentice ‖	Chippewa			.07	.02			.03	.52	T.		.06							T.	T.	.02	.40	.45					.11	T.	T.	.48	2.16
Reedsburg	Wisconsin																															
Rest Lake	do	T.							.60												T.	.59	T.	.06				T.				1.25
Rhinelander	do			.05					.48		.01										.08		.36					.14		.06	.05	1.23
Shullsburg	Mississippi								.15											.83		.11					T.	T.	T.	.12	.56	1.77
Solon Springs	St. Croix		T.	.30				T.													T.	.50	.30	T.			.05	T.	.20	T.		1.35
Spooner	do			.18				.22												.10		.13		.03	T.		.07			.04		0.77
Stanley	Chippewa		T.					.15	.10												T.	.52					T.	.14		.45		1.36
Stevens Point	Wisconsin		T.				T.	T.												.80		.50					T.	T.	T.	T.	T.	1.30
Sugar Camp Dam	do			T.			T.	.22	T.		T.									T.		.45	T.					T.		.35		1.02
Tomahawk	do							T.			.05											.50	.10							.30	.20	1.15
Trout Lake	do			.09					.20																		.01			.70		1.00
Twin Lakes Dam	do		T.				T.	.20	.30	.10	.10										T.	T.	.43					T.			T.	1.13
Valley Junction	do	.20						.30												.65		.20								.40	.20	1.95
Viroqua	Mississippi																															
Vudesare	Wisconsin			T.				.50	.47	.07	.07											.54		T.						.36	T.	2.01
Watertown ‖	Rock		.03					.09	.12	T.									.05	1.20							.12	.06	.02	.05	.15	1.89
Waukesha	Fox							.02	.10											1.53	.02							.06		.13	.04	1.90
Wausau	Wisconsin			.06	T.			.03	.15											.20		.05	.24		T.		.02	.03	.03	T.	.07	0.88
Weyerhaeuser	Chippewa			.07				.34		T.				T.		T.				.10		.56	T.				.12	T.	T.	.46	.01	1.66
Whitehall	Mississippi							.20												.30		.40	.10				.10	T.	T.	.30		1.40
Iowa.																																
Albia ‖	Des Moines						.45									.10																0.55
Algona	do															.05						.25	T.				T.	.17		.05		0.52
Alta ‖	Raccoon							T.	.13							.09						.14	.02				.01			.10	.01	0.50
Amana	Iowa							.06	.01					T.				T.	.01			.02				T.	.03	.07		.09	.51	0.80
Ames	Skunk																					.60				.02	.02	T.	T.	.05		
Baxter	do							.02						T.		.01			.03		.01	.20	.01			.04	.03			.17	.26	0.78
Belle Plaine	Iowa													T.				T.	T.	.08	T.	.03					T.	.08	T.	.33	.40	0.92
Belmond	do		T.					.09								.25			.23	T.	T.	.02				.09	.06	.04	.02	.05	.09	0.94

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

Stations.	Watershed.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Iowa—Continued.																																
Bloomfield	Mississippi								.06						.17							.04					.05	.06	.22		.80	1.40
Bonaparte	Des Moines								.02							.20	T.		.03							T.	.08		.03		.50	0.86
Boone ‖	do																															
Britt	Iowa							.20								.08			.08	.05			.13			T.	.04	.01	T.	.01	T.	0.60
Burlington ‖	Mississippi													.24		.23	.03		.03	T.	.01	T.	.07				.11	.03	.04	.07	.03	0.89
Carroll ‖	Raccoon														.18						.13				T.				.21		.43	0.95
Cedar Rapids ‖	Cedar								T.										T.	T.		T.					T.	T.		.29	.24	0.53
Charles City	do							.03							.04				.20			.40				.04	.04		.04	.06	.16	1.01
Clear Lake	do																															
Clinton	Mississippi							T.	.30						.03			T.	.73	.39						T.	T.		T.	.18	.75	2.38
Columbus Junction	Iowa							.02	T.							.10			T.	T.	T.					T.	T.	T.	T.	.05	.68	0.85
Davenport	Mississippi							.07	.07				T.	T.		T.		T.	.05	.01			T.			T.	.01	.01	.01	.01	1.02	1.26
Decorah	do							.05	.07							T.			.15	.64		.70			T.	T.	T.		T.	.38	.15	2.14
Delaware	do																															
Des Moines	Des Moines						T.	.03						T.	.01			.01	.02		T.	.12				.05	.01	T.	.04	.29	.45	1.03
Dubuque	Mississippi						T.	.15	T.					.01				T.	.23	.20		.03				T.	.02	T.	T.	.03	.56	1.23
Earlham	Raccoon							.07	.01													.19								.36	.91	1.54
Elkader	Mississippi							.30								.06				.30	T.	.15				T.	.05	.05		.48	.30	1.69
Elma	Wapsipinicon							.10								.05			.07	.20	.02	.33				.05		.12	.02	.40	.05	1.41
Estherville ‖	Des Moines							.25	.05							.05						.30	T.					.05	T.	.15		0.85
Fairfield	Skunk							.08								.18		T.	.04	.03						T.	.03	.03	.05	T.	.32	0.76
Fayette	Mississippi							.14								.14			.46			.15				.02			.01	.10	.27	1.29
Forest City ‖	Cedar							.20											.22		.15		T.				T.		.05	.05		0.67
Fort Dodge ‖	Des Moines								.15							.10			.08	T.		.16				.11	.05	.12	T.	T.	T.	0.77
Fort Madison	Mississippi												T.			T.							.85				.12		.27		.70	1.94
Gilman	Iowa							.09						T.					T.			.12							.08	.42	.46	1.17
Grand Meadow	Mississippi								.30							.10		.05	1.00	.07		.15				.02	.03	.02		.57	.11	2.42
Grinnell	Iowa							.04										T.	.05	.02	T.	.07	T.				.07	.04	T.	.65	.36	1.30
Grundy Center	Cedar							.46											.05			.13				T.	T.	.10	.10	.42	.38	1.64
Guthrie Center	Raccoon							.05						.01				T.	T.			.12				.09	.05	.01	.01	.06	.55	0.95
Hampton	Cedar							.10							.05				.13		.33					.07	.04		.15		.33	1.20
Humboldt	Des Moines							.12										.05	.08			.15				.08	.08	.03	.03	.10	.09	0.81
Independence	Wapsipinicon						T.	.05	.15							T.		T.	.35	.15	T.		.08			T.	.06	.02	.07	.90	.48	2.31
Indianola	Des Moines							.05							T.	.02						T.	T.			.03	.03	T.		.45	.50	1.08
Iowa City ‖	Iowa								.07							T.			T.	.10							.03	.07	.12	T.	.07	0.46
Iowa Falls ‖	do								.18							.05				.09		.17					.09	T.	T.	.17	T.	0.75
Jefferson	Raccoon							T.		T.			T.	T.		.07		T.	T.	T.		.16				.08	.03		.05	.03	.51	0.93
Keokuk	Mississippi							T.					.18	.01	.08	.15		T.		T.			.76			.08	.02	.09	.35	.04	.46	2.22
Keosauqua ‖	Des Moines								T.						T.	.16			T.								.02	.03			.03	0.24
Knoxville	do																															
Lacona	do							.18									.02	.03				.05				.01	.02	.03	.09	.39	1.10	1.92
Lansing	Mississippi																															
La Claire ‖	do								.29	.01					T.				T.	.05				.01			T.	T.		.09	.07	0.52
Marshalltown ‖	Iowa								.08							T.			T.	.04		.12				.01	.05	.03	.01	.42	.06	0.82
Mason City	Cedar																		.25			.42									.12	0.79
Monroe	Skunk							.03								T.		T.	T.				T.			T.	T.	T.	T.	.56	.29	0.88
Mount Pleasant	do							T.	.03				T.	T.		.17			.06								.05		.03	.03	.41	0.78
Muscatine ‖	Mississippi								.03							.02			.02	.07							T.	.04		.02	.04	0.24
New Hampton	Wapsipinicon							T.								T.		T.	.24	.08	T.	.14				T.	.05	.01	.05	.30	.10	1.47
Nora Springs	Cedar							.05								.32		.04	.41		.01	.69				.05	.11	.04	.17	.05	.18	2.12
Northwood	do							.03								.05		T.	.02	.05	.25	T.				T.	.02	.05	.02	.03	.01	0.53
Olin	Wapsipinicon							T.							T.			T.				T.					T.	T.	T.	.45	.65	1.10
Osage	Cedar							.11								.08			.21	.08		.50					.22		.05	.19		1.44
Oskaloosa	Des Moines							.02							.05						.02					T.			.09		.38	0.51
Ottumwa	do																															
Pella	do							.01							T.			T.	T.			T.				T.	T.		T.	1.05	.37	1.43
Perry	Raccoon							.05						T.					.01	T.	.01	.13				.10	.06	.01	.03	.26	.39	1.05
Pocahontas	do															.12			.02	.01	.02	.38				.03	.02			.18	.04	0.82
Rockwell City	do			T.													T.					1.10									.50	1.60
Sac City	do			T.				.13								.16		T.	.06	.03	.02					T.	.12		.06	.20	.20	0.98
St. Charles	Des Moines							.05	.01						.02			T.		.01	.01	.20				.04	.02	.01	.03	.40	.78	1.58
Sigourney	Skunk							T.											T.	.12	T.	T.					T.		.13	.03	.38	0.66
Stockport	Storm Lake							T.	.05							.17		T.	.04							T.	.04	.05	.03		.50	0.88
Storm Lake	Raccoon							.15								.06	T.		.02			.15				T.				.12	.09	0.59
Tipton	Cedar													T.					.27	.31							T.	T.	.22	T.	.62	1.42
Toledo	Iowa							.10												.05										.75	.45	1.35
Washington	Skunk							.08							.03												.01			.03	.26	0.41
Waterloo ‖	Cedar								.10							T.				.55		.07					.01	.07		.35	.05	1.20
Waukee	Raccoon														.10															.36	.47	0.93
Waverly	Cedar																															
Webster City	Des Moines							.19								.20			T.			.26				.09	T.	T.	T.	T.	.13	0.87
West Bend	do							.07								.09			.03			.22				.04			.14	.05		0.64
Whitten	Iowa							T.						T.					T.			.38				T.				.63	.88	1.89
Winterset	Des Moines							.08					T.	T	T.			.01	.03	T.		.13	T.			.06	T.	.02	.03	.95	.93	2.24
Missouri.																																
Gorin	Mississippi								.03				.08		.05	.09							.08						.28		.32	0.93
Hannibal	do							T.			T.			.16	1.37	.64		T.		.02			.24			.10	T.	.03	.20	T.	.48	3.24
Louisiana	do													T.	1.05	1.50	.08	T.	.07	.10			.45				.23		T.	T.	.42	3.90
Macon	do														.25	.95	.01	T.								T.	.09		.60	.01	.55	2.46
Mexico ‖	do								.18					T.	1.30	1.55	.06		.02	T.	T.			.57		.04		.12	.06	.18	4.06
Palmyra	do														1.76	.05	.02			.04			.89				.08	.02		.19	.26	3.31
Steffenville	do	T.						T.						T.	T.	1.25		T.		T.			.40				.20		.50		.30	2.65
Sublett	do																															
Vandalia	do															2.36				T.			.38						T.		.26	3.00
Warrenton ‖	do								.05						1.38	1.38	.05							.32			.27		.04	.24	.12	3.85
Indiana.																																
Collegeville	Iroquois								.23	T.				.45		.23	.10			.30	T.		T.				.13	T.	.10	.45	.32	2.31
Knox	Kankakee			T.				.45	.15	.48	.30			.35	T.	.05	T.		T.	.22	.05		.12				.21	.01	T.	.45	.41	3.25
Laporte	do								.20	.40	.05							.05	.03		.04		.80				.10			.30	.05	2.02
Plymouth	do			T.				.29	.28	.67	.19			.39		.06	.04		.02	.21	.05		.03				.07	T.		.81	.25	3.36
South Bend	do							.06	.21	.77	.38			.15	.05	.01			.04	.07	.05		.32	T.			.11			.31	.27	2.80
Illinois.																																
Aledo	Mississippi							T.	.07					T.		.03			.03							T.	.01	.03	.02	.03	1.02	1.24
Alexander	Illinois							.05	.01					T.	.62	1.69	.08	T.		T.			.12			T.	.25		.10	.12	.56	3.60
Antioch	do								.16										.52				T.					T.	T.	.43	.51	1.62

TABLE 2.—*Daily precipitation for November, 1913. 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.
Illinois—Continued.																																
Astoria	Illinois							T.	.08					T.	T.	.63		T.		.05			.45			T.	.25	T.	.25	.26	.78	2.75
Aurora	do								.08						.02	T.			.05			T.	.21				.10	T.	.05	.43	.80	1.74
Bement	Mississippi								.07	T.	T.			.05	.60	1.25	.08			.33						T.	.16		.21	.38	.84	3.97
Bloomington	Illinois							T.	.22					.06	.09	.42			T.				.07			T.	.32		.24	.18	1.09	2.69
Cairo	Mississippi							.33						.29	.03	.74	.24						.24					.26	.36	.02	.63	3.14
Camp Point	do							.06						.02	T.	.91		T.		T.			.35		T.	.07		T.	.30	T.	.57	2.28
Carbondale	do			T.				.32	T.		T.			.09	.55	.54	.39						.27	.02		.01	T.	.28	.25	.12	.60	3.44
Carlinville	Illinois							.07						T.	.85	1.76	.02						.07				.57		.01	.33	.34	4.02
Carlyle	Mississippi							T.	T.					1.50	1.15	.25							.65			.10	.35		.03	.73	.76	5.52
Chester‖	do								.22						.06	.72	.56						.02	.22			.06	.28		.95	.30	3.39
Clinton	Illinois			T.				.03	.14	T.	T.			.01	.41	.68	.06		T.	.09			.01			T.	.17		.57	.30	.68	3.15
Cobden	Mississippi							.68							.05	.40	1.00										.30	.12	.20	.30	.42	3.47
Dakota	do							T.	.39					T.		T.		T.	T.	.55							.06	T.	T.	.18	.48	1.66
Decatur‖	Illinois			T.					.15	T.	T.			.05	.72	1.58				.10	.04		.02				.25		.27	.33	.17	3.68
Dixon‖	Mississippi								.26						T.	T.			T.	.05			T.					T.		.35	.10	.76
Du Quoin	do							.42			T.				1.11	.53	T.						.12			T.	.02	T.	.26	.21	.57	3.24
Dwight	Illinois							T.	.12	T.				.15	T.	.04	.05		T.	.06	T.		.56				.07		.06	.23	.72	2.06
East St. Louis	Mississippi		T.												1.30	.13	.20	T.					.18			.05	.11	T.	.85	.39	.29	3.50
Edwardsville	do														1.94	.35	.20						.13				.50		.38	.26	.45	4.21
Elgin	Illinois								.35		T.				.02				.02				.03				T.		.10	.45	.52	1.49
Ewing	Mississippi			T.				.38	T.						.28		1.20	.28				T.	T.	.18		T.	.08	.20	.20	.19	.36	3.35
Fairview	Illinois								.13				T.	.09	.06	.08	T.		T.	.01	T.		.72				.11		.23	.28	.74	2.45
Galva	do								.30					T.		T.		T.	.05				.05			T.	.07	T.	.13	.35	.79	1.74
Grafton‖	Mississippi								.33						.28	1.50	.11							.20			.44		.12	.29	.25	3.52
Greenville	do							T.	T.					T.	1.43	1.05	.14				T.		.21			.01	.72	T.	.53	.43	.96	5.48
Griggsville	Illinois																															
Havana	do							T.	T.					T.		.68		T.		T.			.65			.06			.60	.25	.75	2.99
Henry	do								.20					.18		.04			.03	T.			.20			T.	.16		.23	.38	.67	2.09
Hillsboro	Mississippi			T.					.02						1.10	1.24	.04			T.			T.				.56	.13		.37	1.13	4.59
Joliet	Illinois							T.	.07	T.	T.		T.					.04	T.	T.			.12			.02	.02		.04	.27	.60	1.18
Kishwaukee	Mississippi								.38						.02				.03	.45	T.		.05			T.	.04	.02	.05	.38	.54	1.96
La Grange	Illinois										T.				.05				.03	T.			.16				.16	T.	.31	.41	.59	1.71
La Harpe	do												T.	.04	T.	.15			T.				.58			T.	.10	T.	.48	T.	1.08	2.43
Lanark	Mississippi							T.	.15					T.	.01			T.	.05	.52						T.	T.			.17	.42	1.32
La Salle‖	Illinois								.15					T.	T.				T.				T.	.68			T.	T.	.06	.40	.03	1.32
Lincoln	Illinois							.05	.20					T.	.25	.65	.08		T.	.12			T.				.30		.55	.16	1.08	3.44
Macomb	do												.09		T.	.45			T.	T.			.39				.17	T.	.32	.11	1.18	2.71
Manteno	do							.03	.17					.20		.04			.07	.04			.84				.11		.14	.16	.67	2.47
Martinton	do							T.	.10				.55	.05	.10			T.		.19			.30				.18		T.	.40	.53	2.40
Mascoutah	Mississippi							.03							1.45	.10	.20						.65			T.	.36		.16	.60	.35	3.90
Minonk	Illinois								.14					.23	.01	.14	.04			.09			.48				.12	.02	.04	.25	.56	2.12
Monmouth	Mississippi								.10										.05				.26			T.	.42	.02	.11	.06	1.04	2.06
Morris	Illinois							T.	.13					.04		.08			.14	T.	T.		.31				.10		.20	.30	.79	2.09
Morrison	Mississippi								.37						T.				T.	.42			T.			T.			T.	.21	.54	1.54
Morrisonville	Illinois			T.				.01	T.					T.	.47	1.94	.02	T.		T.	T.		.08				.45		.06	.31	.87	4.21
Mount Vernon‖	Mississippi								.23						.60	.83	.50						.25			.51	.16			.41	.35	3.84
Nashville	do			T.				.32						T.	1.32	.19	.18		T.	T.			.31	.06		.29		.11	.10	.60	.50	3.98
Oregon	do								.30										.50	.80			T.			T.		T.	.15	.12	.50	2.37
Ottawa	Illinois															.03				.09			.20				.12		.10	.40	.86	1.80
Pana	Mississippi			T.				T.	T.					T.	.32	1.93	T.			.02			T.			T.	.38		.25	.31	1.19	4.40
Paw Paw	Illinois								.26					T.	T.				.04	T.						T.	T.		.06	.50	.92	1.78
Peoria	do							.08	.16				.21	.06	T.	.09		.02		.10			.40			.06	.16	.01	.31	.30	.81	2.77
Pontiac	do							T.	.13					.10	.09	.10	T.			.10			.19				.16		.05	.14	.52	1.58
Quincy‖	Mississippi								.05						T.	.89	.03			T.	T.		.49	.14			.16		.13	.05		1.94
Riley	do								.31		T.				.04				.03	.37			.08				.03	.01	*	.45	.41	1.75
Roberts	Illinois							T.	T.	T.	T.			T.	.14	.22				.22	T.		.02				.24		.24	.31	.90	2.29
Rockford	Mississippi								.30					T.	T.				.02	.39			.03			T.	.05	.05	.03	.26	.39	1.52
Rushville	Illinois							.12						T.	T.	.73		T.		.06			.82			T.	.16		.16		1.30	3.35
St. Charles	do								.13	T.	T.				.04	T.			T.	.05			.15			T.	T.	T.	.06	.55	.65	1.63
St. Peter	Mississippi			T.			.06		T.						1.50	1.17	.21						.60	.10		T.	.44		T.	.48	.51	5.07
Sparta	do			T.				.04			T.			T.	.88	.28	.22	.02		T.			.18	.04		.02		.10	.07	.75	.26	2.86
Springfield	Illinois							.07	.05					.54	.66	1.08		T.		.01			.02			.07	.20	.02	.78	.24	.75	4.49
Streator‖	do								.17	T.				.21		.04	T.		T.		.02		.33	.47			.05	T.	.51	.44	.06	2.30
Sullivan	Mississippi							.03	T.		T.				.64	1.95				.24			.04				.30		.46	.29	.91	4.86
Sycamore	do								.05						.03				T.	.08	T.	T.	.03			T.	T.	.01	.13	.41	.49	1.23
Tiskilwa	Illinois								.45				T.	T.		T.		T.	T.	T.			.10			T.	T.	T.	.24	.33	1.28	2.40
Walnut	Mississippi								.31					T.		T.			.01	T.			.02				.01		.08	.41	.92	1.76
Warsaw‖	do								T.					.05									.02				.07		.08	.26	.40	1.78
Waterloo	do							.02							1.24	.08	.16						.37			.01	T.	T.	.01	.36	.30	2.55
White Hall	Illinois							.06						.04	1.40	1.80	.06			.04			.10			T.	.36		.02	.40	.46	4.74
Windsor	Mississippi			T.				T.	.05						.38	1.80				.20	T.		T.				.30		.35	.35	.85	4.28
Winnebago	do								.35					.03					.06	.60			.10						.02	.32	.42	1.90
Yorkville	Illinois								.04					.01		.01			.01				.21				T.	T.	.04	.50	.76	1.58

* 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 at selected stations for November, 1913. 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	55	17	51	23	52	23	59	15	.....	.....	45	25	45	20	47	24	45	32	50	25	45	13	50	23	51	27	42	15
2	45	22	46	27	54	23	45	21	.....	.....	53	26	52	26	55	34	63	32	55	30	48	21	58	32	58	39	55	20
3	49	21	48	26	56	27	47	25	.....	.....	47	32	45	27	51	40	57	31	49	26	58	27	50	32	49	36	50	34
4	58	18	55	27	48	26	60	28	.....	.....	54	24	51	22	54	24	62	25	55	22	58	24	53	19	51	30	50	20
5	61	23	59	34	47	23	61	30	.....	.....	60	36	53	30	54	29	64	40	56	34	59	31	57	32	59	32	53	35
6	44	24	51	31	50	21	31	34	.....	.....	58	49	49	36	62	42	64	42	53	38	60	35	59	51	60	49	60	38
7	41	29	40	28	40	23	51	32	.....	.....	49	35	40	35	54	34	40	40	41	26	68	42	57	31	53	35	54	26
8	43	19	40	26	38	15	37	19	.....	.....	37	25	35	23	39	27	41	29	38	25	53	28	40	24	38	28	48	20
9	30	17	31	12	45	13	29	21	.....	.....	37	21	29	23	36	18	35	20	32	16	41	21	32	13	35	19	35	15
10	35	13	30	12	46	14	51	18	.....	.....	29	10	27	10	30	10	45	14	29	11	38	15	33	8	32	14	32	0
11	40	13	42	22	43	18	46	20	.....	.....	40	20	42	15	45	12	50	22	43	20	53	15	43	13	44	16	31	8
12	35	25	41	23	43	13	42	30	.....	.....	40	30	45	25	54	28	40	30	43	28	48	22	41	19	47	31	35	18
13	25	15	29	12	36	13	32	20	.....	.....	38	28	34	25	44	21	45	28	33	17	43	20	39	24	42	28	30	15
14	40	5	36	10	40	6	46	6	.....	.....	39	18	32	9	38	19	38	12	34	7	44	18	34	30	35	21	31	11
15	35	9	36	28	36	10	44	15	.....	.....	33	27	44	20	39	27	56	28	34	29	41	18	32	24	37	26	36	12
16	55	24	56	28	52	12	66	25	.....	.....	42	31	53	32	47	29	56	29	52	33	45	29	46	30	48	34	40	18
17	56	29	59	27	40	28	62	41	.....	.....	56	33	59	38	49	32	67	33	60	33	58	30	68	33	61	33	42	16
18	32	23	30	23	46	26	57	28	.....	.....	50	34	36	28	59	46	45	29	37	29	49	34	55	38	47	38	44	18
19	35	23	32	25	50	30	45	27	.....	.....	46	38	38	28	59	45	57	38	42	27	51	33	49	29	51	37	52	25
20	53	24	45	28	50	25	50	25	.....	.....	48	30	50	27	62	45	55	35	51	28	55	34	47	30	60	35	52	22
21	34	25	34	23	49	35	35	30	.....	.....	59	37	46	35	62	44	50	34	49	28	54	38	56	39	64	40	49	23
22	33	12	33	21	49	26	40	20	.....	.....	43	29	34	30	56	37	52	28	32	18	57	35	45	30	45	31	46	22
23	39	15	42	25	52	28	48	20	.....	.....	44	27	40	15	53	27	53	26	42	13	63	32	41	31	49	30	46	24
24	48	13	44	23	47	30	55	17	.....	.....	48	27	43	17	50	27	56	27	46	22	62	35	48	33	52	30	47	22
25	38	22	40	22	45	30	41	25	.....	.....	51	40	42	22	48	35	56	40	42	26	50	26	54	34	50	43	44	26
26	37	23	36	24	43	29	45	20	.....	.....	45	33	40	26	46	42	48	35	40	31	53	31	45	32	44	37	38	21
27	42	24	37	29	50	32	57	19	.....	.....	40	33	42	30	44	38	49	37	45	34	59	41	37	30	42	37	36	30
28	32	17	36	25	47	26	35	16	.....	.....	49	40	40	35	45	40	48	38	49	35	56	42	43	35	46	42	38	26
29	40	20	42	27	50	29	51	18	.....	.....	45	35	44	34	49	45	59	35	46	27	49	35	45	30	47	37	42	34
30	39	20	40	21	51	27	43	18	.....	.....	36	26	35	22	51	40	40	23	41	20	53	31	40	21	37	30	42	38
Mns.	41.6	19.3	41.4	23.7	46.5	22.7	47.7	22.6	.....	.....	45.4	30.0	42.2	25.5	49.4	32.0	51.2	30.4	44.0	25.3	52.4	28.5	46.6	28.3	47.8	32.2	43.3	21.7

Date.	Wisconsin.														Iowa.													
	Eau Claire.		Grantsburg.		Hancock.		La Crosse.		Madison.		Prentice.		Wausau.		Algona.		Cedar Rapids.§§		Charles City.		Davenport.		Des Moines.		Dubuque.		Keokuk.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	51	22	49	24	49	24	49	25	44	25	48	19	48	18	48	24	46	21	47	23	47	26	52	27	47	26	50	28
2	57	28	55	36	52	32	57	36	52	33	48	30	50	24	59	35	59	26	59	35	58	35	60	39	57	35	59	35
3	50	41	49	35	49	43	52	41	52	40	47	37	46	32	51	39	57	37	50	33	55	39	52	36	52	42	58	40
4	49	25	50	20	48	25	50	30	45	32	47	21	45	27	52	27	48	31	50	26	50	32	55	31	49	31	54	32
5	58	22	59	32	53	27	56	28	52	30	50	27	54	24	60	30	55	28	57	26	57	31	62	31	56	29	60	30
6	60	46	59	47	51	37	57	43	56	36	50	40	51	27	62	45	59	33	62	40	62	40	64	46	58	40	69	38
7	58	44	56	37	55	45	55	36	58	42	50	45	50	39	56	37	55	47	55	35	59	39	57	40	57	38	61	44
8	44	26	38	24	48	28	37	28	42	28	47	24	28	27	40	28	39	35	39	28	39	28	43	30	38	29	44	31
9	38	20	34	18	33	28	38	24	35	24	30	18	30	21	38	21	40	26	39	22	40	24	40	26	38	25	43	26
10	31	10	29	9	31	18	27	16	26	18	30	14	24	16	33	15	32	20	30	15	34	20	37	22	29	19	36	20
11	42	13	41	11	40	13	41	16	38	18	36	6	41	14	45	16	43	18	44	16	43	20	49	20	41	19	47	20
12	51	25	48	27	51	29	51	31	58	30	48	26	45	15	50	29	61	18	53	28	69	37	64	34	61	35	72	39
13	44	27	40	28	46	28	47	28	49	34	48	25	43	24	46	29	45	31	47	25	54	34	48	32	46	32	60	38
14	38	17	37	14	39	17	38	24	37	29	41	11	35	18	38	21	44	30	39	23	46	36	46	36	44	31	46	39
15	35	22	37	15	36	25	40	29	38	31	38	13	35	18	40	30	43	30	41	30	42	35	44	36	44	31	41	36
16	49	35	49	31	46	28	50	27	45	29	41	13	44	24	44	31	50	31	50	30	48	32	54	37	48	35	49	40
17	55	27	58	32	49	35	50	37	46	36	51	31	48	28	52	33	55	35	51	33	55	40	56	40	53	40	55	40
18	49	42	49	30	55	39	56	46	58	46	51	37	48	32	59	43	64	41	58	48	65	50	66	56	64	48	72	51
19	54	43	52	38	57	43	64	33	63	47	49	37	50	32	58	45	67	54	63	44	67	58	66	54	66	52	72	61
20	50	33	49	25	55	35	62	37	63	44	47	29	60	32	67	46	71	54	66	41	73	57	73	48	70	50	74	62
21	63	48	65	43	64	45	65	45	67	52	60	41	62	32	63	50	67	55	63	42	71	53	66	50	69	49	73	60
22	59	39	44	35	59	43	47	36	64	40	60	35	41	38	58	36	56	44	50	33	69	42	54	36	62	39	72	46
23	52	26	44	25	50	29	55	28	51	32	47	24	47	27	53	28	55	31	55	28	55	34	58	31	55	33	54	37
24	49	23	49	25	48	30	53	32	50	34	47	25	45	28	51	25	52	32	52	26	56	32	57	30	54	34	57	35
25	51	34	54	37	53	33	52	38	48	35	46	30	51	24	47	39	53	42	48	37	53	41	49	44	50	40	57	43
26	48	34	40	32	48	35	46	39	45	38	40	31	36	35	47	42	50	46	47	42	48	45	51	46	49	44	52	46
27	41	34	40	33	38	33	44	37	42	39	35	30	38	30	49	44	49	45	46	41	51	45	53	48	48	42	60	48
28	46	39	48	39	43	38	48	43	46	40	39	33	42	32	48	45	53	45	47	44	51	46	54	48	48	44	64	51
29	46	41	47	42	45	37	50	45	48	43	41	38	44	37	51	46	57	47	54	46	58	50	59	52	53	47	62	56
30	46	36	47	30	46	42	48	43	49	41	41	33	40	36	49	39	55	52	48	44	57	51	54	49	52	46	61	55
Mns.	48.8	30.7	47.2	29.1	47.9	32.1	49.5	33.7	48.9	34.9	45.1	27.4	44.0	27.0	50.5	33.9	52.7	36.2	50.3	32.8	54.4	38.4	54.8	38.5	51.9	36.5	57.8	40.9

TABLE 3.—*Maximum and minimum temperatures at selected stations for November, 1913. 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	48	22	45	22	48	30	50	23	42	22	48	22	45	22	46	23	44	27	44	22
2	60	36	51	22	57	33	60	30	57	25	59	30	56	22	59	31	58	33	56	30
3	59	45	54	34	66	44	61	41	58	37	64	47	60	40	59	38	61	45	52	42
4	56	32	46	37	62	44	59	35	49	31	54	30	64	33	50	31	53	36	49	26
5	58	29	.....	30	59	38	60	30	57	25	57	25	56	36	56	27	56	33	52	25
6	68	38	63	.....	70	38	68	33	59	30	64	32	66	31	64	33	64	46	61	32
7	60	43	61	30	66	55	69	48	65	35	60	33	67	31	63	38	65	45	60	44
8	45	33	40	39	55	38	58	36	37	34	50	33	47	40	38	31	45	33	46	26
9	44	28	39	30	42	31	38	26	31	29	40	23	36	28	37	25	38	27	34	22
10	37	26	30	22	42	31	35	25	30	22	37	18	35	27	32	17	34	24	31	18
11	48	21	34	20	50	27	48	20	41	18	45	15	46	20	42	16	43	23	41	15
12	74	45	56	19	72	42	70	34	68	20	73	33	70	22	70	37	69	37	63	27
13	65	47	54	30	66	55	72	55	59	38	65	34	69	41	59	44	64	47	52	35
14	48	40	44	40	65	51	62	44	47	34	.....	37	51	47	47	38	47	39	40	30
15	41	39	40	34	63	51	54	42	44	33	48	37	60	46	42	37	43	39	40	33
16	49	40	.....	33	51	43	47	40	49	26	48	35	46	42	49	29	46	38	49	24
17	58	38	55	31	61	40	.....	.....	59	29	52	40	59	36	58	37	58	36	56	34
18	74	56	58	44	70	52	70	34	65	38	65	49	66	36	67	50	69	49	59	45
19	75	61	65	55	74	57	73	58	66	52	67	60	76	53	67	61	72	61	66	58
20	75	64	66	55	76	59	75	60	73	60	74	61	67	58	71	61	72	60	68	54
21	76	61	69	55	74	59	75	58	74	60	73	57	75	58	74	61	75	59	71	52
22	69	48	66	55	77	63	71	61	69	57	70	50	76	45	69	47	70	50	67	44
23	54	38	67	40	66	44	64	42	53	37	53	35	58	35	52	36	50	41	52	29
24	56	33	47	33	58	38	60	33	54	31	55	32	51	35	57	32	53	37	53	29
25	54	47	45	25	57	42	50	38	50	32	51	37	58	42	52	40	59	42	50	32
26	55	46	46	39	66	50	56	43	46	40	50	42	57	46	48	42	52	44	48	41
27	58	50	45	40	63	54	63	50	51	43	55	45	65	48	56	47	60	49	47	42
28	68	54	52	40	62	58	61	55	55	45	57	.....	64	52	58	50	62	53	48	42
29	64	57	56	40	65	59	61	56	58	45	58	50	63	57	59	56	61	56	54	45
30	66	57	60	45	66	52	66	53	59	54	59	55	66	57	62	53	65	51	55	48
Means	58.7	42.5	51.9[b]	35.8[a]	62.3	45.6	60.6[a]	41.5[a]	54.2	36.1	56.9[a]	37.8[a]	59.2	39.5	55.4	38.9	56.8	41.7	52.1	34 9

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