CLIMATOLOGICAL DATA FOR MARCH, 1913.

DISTRICT NO 5, UPPER MISSISSIPPI VALLEY.

GEO. M. CHAPPEL, District Editor.

Destructive wind and ice storms, damaging floods, and record-breaking low temperatures contributed to make the month a memorable one. As a whole, the weather was cold, wet, and windy; it was one of the windiest months on record. The most notable event, perhaps, was the occurrence of a series of destructive windstorms on the night of the 23d, in connection with the Omaha tornado. There is little, if any, evidence of tornadic action in the fifth climatological district, however, the winds being straight line squalls accompanying thunderstorms. No lives are known to have been lost in the Iowa area, but the property loss in the whole State is estimated by insurance companies at $1,000,000. The section director of Illinois comments on this storm in that State under another heading. Severe windstorms prevailed also on the 13th–14th and 20th–21st in connection with marked cyclonic disturbances that passed over the district on those dates. The barometric pressure was unusually low in the storm of the 13th–14th, the sea-level reading at Des Moines, Iowa, at 7 a. m., on the 14th, being 28.98 inches, or next to the lowest on record. This storm was attended by heavy precipitation in southeastern Minnesota and southern Wisconsin, which resulted in damaging floods in those sections. The storm of the 20th–21st was most severe over the northern third of Illinois, high winds and an "ice storm" causing considerable loss to electric services. Immediately following the windstorm of the 23d was a four-day period of almost continuously heavy rainfall over the southeastern end of the district, more than 7 inches falling over the wettest area. As a result a rapid rise occurred in all the streams and rivers of that section, and disastrous floods ensued. A more detailed account of these floods appears elsewhere. A cold wave of great severity for the time of year swept over the district at the beginning of the month, the temperature falling to the lowest point on record for March over much of the Iowa area and in northern Illinois. The unfavorable conditions throughout the district retarded all kinds of outdoor work, and vegetation had made little progress at the close of the month. Good drying weather obtained during the last three or four days, however.

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	15.3	−6.1	61	−31	0.67	−0.21	2.75	0.10	6.2	6
Minnesota	20.4	−4.2	65	−38	1.21	+0.05	3.48	0.10	8.5	8
South Dakota	22.8	−6.2	64	−22	1.37	+0.62	0.92	0.42	5.2	6
Wisconsin	24.9	−2.7	68	−39	2.84	+1.10	5.59	1.00	10.2	10
Iowa	31.7	−1.9	78	−20	2.71	+0.68	5.88	0.80	5.8	10
Missouri	38.1	−3.5	76	−12	3.92	+1.34	6.24	1.52	4.2	8
Indiana	35.2	−3.7	71	− 5	5.27	+1.48	6.32	3.11	10.1	14
Illinois	36.3	−2.5	78	−12	4.88	+1.85	9.68	1.42	6.2	11

TEMPERATURE.

The month was colder than usual throughout the district, but over the southern half of it the average temperature was not more than 2° lower than the normal. The deficiency was greatest in the extreme north, where it amounted to about 6° a day, the month there being the coldest March since 1899, and one of the three or four coldest in the last 40 years. The lowest mean temperature, 9.2°, occurred at Hannah, N. Dak., and three other stations in that State reported a mean of 10°. Only in extreme southern Illinois was the average temperature above 40°, Cairo, Ill., with a mean of 46.6°, being the warmest point in the district. The variations in temperature from day to day were among the most pronounced of record for March.

The most interesting event was the cold wave at the beginning of the month. Not only did it cause the coldest weather of the entire winter at some stations, but all previous records for low temperatures in March were broken over much of the Iowa territory and part of Illinois. A minimum temperature of −12° occurred as far south as Sublett, Mo., and the line of −20° extended southward into Iowa. In a remarkable rise in temperature this cold wave was quickly superseded by seasonable conditions. A second cold spell of note followed within a few days; it was attended by the lowest temperature of the month in the district, −39° being reported on the 7th from Long Lake, Wis. This cold spell was not of such widespread character as was its predecessor, being confined largely to the northeast. No unseasonably high temperatures occurred, and there was no warm spell of a general character. The highest monthly temperature at the various stations was recorded mostly on the 8th, 12th, 19th, 23d, or 28th–31st. The highest temperature was 78° at several stations in Illinois on the 23d or 24th, and at one station in Iowa on the 30th.

PRECIPITATION.

An excess of precipitation was almost general, save in the extreme north. In southern Illinois, where the heaviest falls occurred, upward of 8 inches were reported from half a dozen stations, Ewing, near the border of the fourth climatological district, having 9.68 inches. The average for the entire district was 2.80 inches, or 0.92 inch greater than the normal. The least amount was 0.10 inch, at Wahpeton, N. Dak., and Pierz, Minn.

Precipitation was of frequent occurrence in all parts of the district, the only dry period of note covering the last five days of the month. The sunshiny weather at that time was of great benefit to the flooded districts. Three precipitation periods outrank any others of the month, namely, those of the 13th–14th, 20th–21st, and 23d–26th. The latter was the most important, the resulting rainfall causing disastrous floods that are referred to elsewhere. At Ewing, Ill., the precipitation for this period was 7.40 inches, and more than 5 inches fell over a large area in southern Illinois.

Snowfall.—A measurable amount of snowfall was reported from every station in the district except two, Keokuk, Iowa, and Macon, Mo.; at those stations only

traces occurred. The heaviest fall was 30 inches at New Richmond, Wis., and the heaviest State average was 10.2 inches for the same State. In that State the snow covering was of considerable depth at the beginning of the month, but at the close this condition existed only in the extreme northern counties; in Vilas County the amounts ranged from 8 to 16 inches.

MISCELLANEOUS.

The sunshine was deficient in all parts of the district, but the departures from normal were not large. The average number of clear days was 10; partly cloudy, 9; cloudy, 12. Northwesterly winds prevailed, except over the southeast, where they were southwesterly. The wind movement was among the greatest on record for any month. At Des Moines, Iowa, it was the windiest month since March, 1902. The highest velocity reported was 60 miles an hour from the northeast on the 14th, at Minneapolis, Minn.

Cairo, Ill., and its vicinity was visited by a hailstorm of unusual severity on the 25th; considerable damage was done to windows and hotbeds. The hailstones were of large size; one that fell on the window ledge of the local office of the Weather Bureau measured $\frac{11}{16}$ of an inch in diameter across its widest part and about ½ an inch across its narrowest part. Many hailstones apparently as large as the one measured were noted.

RIVERS.

But little of moment occurred in the streams of the far north, normal stages prevailing. The floods in southeastern Minnesota and southwestern Wisconsin have already been referred to. The ice in the Mississippi at Dubuque, Iowa, began breaking up on the 11th, and on the 13th, about 10 p. m., it moved out without damage. The crest of a rise in the Mississippi passed Davenport, Iowa, at 6 p. m. of the 27th, when a stage of 12.9 feet was reached; this is 2.1 feet below the flood stage. No damage of any consequence resulted from the high water in the Davenport river district. At Keokuk, Iowa, the Mississippi was within 2 feet of flood stage at the close of the month.

Commenting on flood conditions in Illinois, Clarence J. Root, section director, states: Heavy rains fell over the district on the 20th–21st, and almost continuously from the 23d to the 26th. During the latter period the rainfall exceeded 4 inches over that part of the fifth climatological district lying east and south of Springfield. At most of the stations the amounts exceeded 5 inches, and at three of them more than 7 inches fell. As a result of these unusual rains the creeks and smaller rivers soon became raging torrents. Many of the smaller streams began to recede after the 26th and the medium-sized rivers after the 28th, but the Illinois River and the Mississippi below the mouth of the Illinois continued to rise until after the close of the month. The floods in many of the smaller streams were the worst in years, if not in the history of this section. Record stages were reported at Clinton on Salt Creek, Oreg., on Rock River, and in all the smaller streams in the counties lying east of St. Louis, Mo. In other sections the water was higher than in many years.

The Fox River at Aurora was within 7 inches of the highest mark ever reached, but no damage resulted at that point. In the creeks and smaller rivers bridges, trestles, and tracks were washed out or covered with water, and railroad traffic was greatly interfered with. Lowlands were inundated, residents were forced to seek shelter on high ground, and the property loss will be heavy. The situation at Cairo at the close of the month was critical. The official at that point will report at the termination of the flood.

Kaskaskia (Okaw) River: The levee at Vandalia broke on the 25th, and newspapers reported 60,000 acres under water. At Carlyle the river rose until the 28th and then fell steadily. It did not reach the 1908 stage by 16 inches.

Sangamon River: On the 26th this stream was rising at the rate of 2 inches an hour and bottoms were flooded. During the night of the 26th–27th the water rose 22 inches, and on the 27th residents living near the river were leaving their homes. The Springfield waterworks was entirely surrounded by water, but a waterproof wall gave ample protection to the plant. The crest of the flood near Springfield was reached at 6 p. m. on the 27th. The Chicago, Peoria, & St. Louis Railroad abandoned service between Springfield and Havana for several days on account of the loss of the bridge at Kilbourne and the insecurity of the Springfield bridge, and for nearly a week on the Jacksonville branch where the Sangamon River bridge was out. At Petersburg, Menard County, on the the 28th the river inundated parts of the city to a depth of several feet. Families and property were removed to points of safety. According to press reports more than 100 families were forced to abandon their homes in the eastern end of the city.

By M. L. Fuller, Local Forecaster.—The Illinois River before the city was practically clear of ice by the 10th, though some remained farther up in Peoria Lake. Navigation opened on the 15th. The river was high from the 24th to the end of the month, reaching a stage of 22.3 feet at Peoria, which is the highest but one that has been attained since the local records began in May, 1882. The only higher stage recorded in that period was 23 feet in March, 1904.

Some damage was done by the high water to boat yards, cottages, club houses, etc., along the shores of Peoria Lake; and to ice houses, warehouse basements, factory plants, etc., along the river front of the city. The damage to cottages and boat houses, boats, etc., along the lake shore has been estimated at $20,000; that in the factory district of the city, including expense entailed in moving stocks of goods, is estimated at $15,000 to $20,000. The terminal railway suffered to the extent of about $2,500, along its tracks between Peoria and Pekin; and the Peoria & Pekin Union Railway about $8,000 to $10,000, along the same section of the river, but on the opposite side. Bottom lands all along the river are flooded, but not much more extensively than by the usual spring high water and without especial damage so far as reported. Drainage districts, protected by dikes, appear to have escaped damage through careful watching and strengthening of embankments. A slightly higher rise would have overcome all precautions and submerged several districts, it is said. (It was reported that one small district, the Hennepin, of 2,500 acres, was flooded, but no verification has been received. The Illinois Traction Interurban) lines estimate their total damage at about $25,000; but this figure includes the lines extending to Springfield, Ill., and St. Louis, Mo., and may be partly duplicated in the other reports. Wagon roads and bridges along the river in Peoria and Tazewell Counties are damaged probably $2,500.

By S. P. Peterson, Observer.—The river was over flood stage (18 feet) on all but one day of the month. On the

21st the stage was 20.1 feet, and the river rose steadily until the 29th, when a crest stage of 28 feet was reached. Since then the flood has been gradually receding, but the stage of the river is still high, being 25.8 feet to-day—April 5. All bottom lands in this vicinity are under water. The cellars of many stores and warehouses are flooded, but most of the goods contained in these were saved, on account of the timely warnings issued by the Weather Bureau. The high water has interfered with the operations of several manufactories. During the crest stage, the roadbed of the Interurban Railway was flooded in places to a depth of a few inches. The total damage done in this vicinity will amount to several thousand dollars.

TORNADO IN SOUTHERN ILLINOIS.

By Prof. F. H. COLYER, Cooperative Observer, Carbondale, Ill.

On the evening of March 24 a tornado occurred in the vicinity of Makanda, Ill. The storm began about 7.10 p. m., 2½ miles west of Makanda, and moved almost directly northeast, the destructive part extending over a track about 25 miles long. The end of the destructive path was reached at 7.30 p. m., thus the forward movement of the storm was at the rate of 75 miles an hour. Although it was dark, many persons saw a well developed funnel cloud, because of the almost continuous lightning. Those who live near the edge of the storm's path say the funnel cloud was well marked, and that it rose and fell, as well as pitched from side to side, as it proceeded. For several hours preceding the storm's approach the clouds at Carbondale, Ill., showed rather remarkable conditions. Some moved from the southwest, others from the northwest, and still others from various directions. The temperature fluctuated rapidly, warm southwest winds at a temperature of 75° being replaced quickly by cold puffs from the northwest. Several of these periods occurred in the afternoon of the day of the storm.

On the north side of the storm's path trees were blown down so as to lie to the southeast, except where they were carried bodily into the whirl and dropped on its outer edge. On the south side they were generally thrown to the northeast. In the path of the greatest destruction the trees were thrown in all directions.

The width of the destructive path varied. At the point where an Illinois Central freight train was struck, 21 cars were blown out of a train of 41 cars. The engine and tender were left on the track at one end, and 20 cars at the other end. Ten of the 21 cars blown off the track were almost completely destroyed. The damage to this train is estimated at about $17,500. The damage to farmers who were in the track of the storm was about $30,000. Thirty-nine farmers sustained the loss of either the house or barn, or both.

Three persons were killed, and 10 injured. A number of persons escaped by going to basements or by crouching down by iron bedsteads, trunks, etc.

STORMS IN ILLINOIS—MARCH, 1913.

By C. J. ROOT, Section Director.

Severe local storms were reported on the 13th in La Salle County and at a number of places in west-central Illinois. Considerable damage from wind and lightning resulted to buildings and electrical equipment. Charles Gilpin, a farmer living near Jacksonville, was killed by a falling tree.

An ice and wind storm on the night of the 20th–21st in the northern third of the State caused considerable damage to electrical services. Poles and wires were down in many sections, and wire service was poor for almost a week.

In the late evening of March 23 and early morning of the 24th severe windstorms visited many sections of the northern end of the State, the affected area extending from the Mississippi River to Lake Michigan. Similar storms were reported in Fulton and Christian Counties. While these storms were severe and destructive, there is little evidence of tornadic action. The losses were principally to barns, outbuildings, haystacks, fences, trees, and wires and poles, but damage to houses and substantial structures was reported in a number of places. At Des Plaines, near Chicago, two trainmen were killed when a chimney fell onto the caboose of a freight train passing through the town. At Erie a young woman was killed in the collapse of a house.

STORM OF MARCH 23, 1913, AT DAVENPORT, IOWA.

By J. M. SHERIER, Local Forecaster.

At 11.30 p. m. of March 23, 1913, this section was visited by the most destructive windstorm of recent years. The barometer, which had been falling steadily during the preceding 36 hours, reached its lowest point, 29.43 inches, reduced to sea level, at midnight of the 23d–24th. The temperature had risen from 34° at 7 a. m. to 66° at 11 p. m., and the conditions were oppressive during the evening and before 11.25 p. m., notwithstanding the fact that the wind increased after sunset and frequently exceeded a rate of 30 miles per hour after 7.30 p. m. Clouds had covered the sky until nearly 8 p. m., with rain from during night (a. m.) to 1.25 p. m., and a light thunderstorm from 4.44 p. m. to 7.23 p. m. Partly cloudy weather prevailed from 8 p. m. to 9 p. m., after which time it was again generally cloudy. At 10 p. m. heavy stratus clouds were observed coming from the southwest, which overspread all except the southern third of the sky by the time the opposite horizon had been reached. In addition to their progressive motion from the southwest, there was a tumultuous movement on the part of the swiftly moving fracto-stratus clouds that suggested the wave motion of a large body of water. Until 10.45 p. m. a remarkably even border was maintained along the southern edge of the field of lower clouds, beyond which only occasional fracto-cumulus clouds were seen to go.

South of this border, and especially in the vicinity of the moon, the light cirro-stratus clouds had a greenish-yellow color, resembling that of cheese. Shortly after 11 p. m. the sky became entirely overcast, but there was at no time any formation that indicated the presence of a vortex, though the pitching motion, already mentioned, was particularly marked between 11.30 p. m. and midnight. At 11.25 p. m. the wind suddenly increased in force, reaching an extreme velocity of 60 miles per hour 5 minutes later and maintaining an average velocity of 48 miles per hour from 11.26 p. m. to 11.31 p. m., after which time the rate of movement decreased. A second furious squall began at 12.05 a. m. of the 24th and lasted until 12.30 a. m., with an extreme velocity of 42 miles per hour at 12.07 a. m. When the wind was highest it appeared to come in a rapid succession of gusts and to have an unusual upward force, causing in houses of ordinary construction a vibration similar to that imparted to a vessel by the motion of its screw. At the time of the highest velocity the wind was fairly steady from the southwest and was at all times from some point in the quadrant from south to west. All wreckage, so far as observations extend, was carried to the eastward of its original position.

TABLE 1.—*Climatological data for March, 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	21.6	− 1.9	56	30	− 11	22	41	0.90	+ 0.26	0.30	9.0	8	14	12	5	nw.	C. E. Wood.
Bottineau	Bottineau	1,638	21	9.8	− 7.9	48	31	− 31	2	60	0.78	− 0.13	0.15	.....	11	6	10	15	nw.	H. F. Steinmeir.
Bowbells	Burke	1,958	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. H. Phelps.
Cando	Towner	1,488	12	12.2	− 9.6	58	30	− 28	2	56	0.72	− 0.04	0.20	.....	6	25	1	5	n.	E. T. Judd.
Crosby	Divide	.....	6	17.4	.....	52	31	− 22	1	46	0.38	.....	0.16	2.2	4	14	9	8	nw.	H. C. Kashau.
Devils Lake	Ramsey	1,482	8	13.2	− 5.3	48	31	− 19	1	47	0.54	− 0.47	0.12	5.7	9	9	9	13	w.	U. S. Weather Bureau.
Donnybrook	Ward	1,760	14	15.6	− 7.7	51	31	− 20	1	49	0.70	− 0.19	0.30	7.0	5	11	2	18	nw.	C. J. De Vore.
Dunseith	Rolette	.....	17	10.9	− 7.9	47[a]	31	− 29[b]	2	58[b]	0.30	− 0.68	0.12	2.6	5	.....	.....	.....	nw.	C. E. Goodsell.
Eckman	Bottineau	.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Geo. Yenny.
Edmore	Ramsey	1,524	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	M. M. Van Osdell.
Fessenden	Wells	1,610	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. T. Seymour.
Forman	Sargent	1,249	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. Maltby.
Grafton	Walsh	827	21	12.4	− 6.8	45	29	− 25	2	48	0.80	+ 0.06	0.19	10.0	10	12	7	12	nw.	A. R. T. Wylie.
Granville	McHenry	1,504	6	16.2	.....	51	31	− 18	1	50	0.74	.....	0.30	7.0	7	14	5	12	nw.	W. A. Christianson.
Hannah	Cavalier	1,568	8	9.2	.....	46	9	− 31	2	55	0.90	.....	0.30	9.0	5	18	2	11	nw.	J. Moffatt.
Hansboro	Towner	.....	5	10.0	.....	43	31	− 27	2	52	0.28	.....	0.06	3.0	8	18	7	6	nw.	Geo. Dale.
Hillsboro	Traill	901	7	18.1	.....	53	31	− 20	2	40	2.75	.....	0.60	26.5	12	9	13	9	nw.	F. E. Mayall.
Lakota	Nelson	1,579	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. R. Pettes.
Langdon	Cavalier	1,615	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. Woolner.
Larimore	Grand Forks	1,134	18	13.5	− 7.7	50	31	− 25	2	52	1.03	.....	0.43	.....	13	10	16	5	nw.	J. M. Freeman.
Lisbon	Ransom	1,091	9	21.5	− 6.2	57	31	− 24	2	58	0.20	− 0.48	0.10	2.0	3	9	10	12	nw.	W. S. Adams.
McKinney	Renville	1,640	19	16.4	− 2.4	52	31	− 20	1†	53	0.45	− 0.39	0.30	4.5	2	2	19	10	nw.	N. P. Swenson.
McLeod	Ransom	.....	1	19.6	.....	55	31	− 26	2	59	0.25	.....	0.10	2.5	4	8	15	8	nw.	Martin Reinholt.
Manfred	Wells	1,605	10	16.7	− 7.5	48	31	− 20	2	55	0.79	+ 0.06	0.15	6.2	8	11	9	11	nw.	P. B. Anderson.
Mayville	Traill	975	17	18.0	− 5.2	53	31	− 13	1	40	0.78	+ 0.10	0.50	9.0	8	10	7	14	nw.	W. C. Gould.
Milnor	Sargent	1,097	1	.....	.....	.....	.....	.....	.....	.....	0.40	.....	0.20	7.0	2	6	9	16	nw.	H. J. Edman.
Minot	Ward	1,557	17	16.9	− 4.3	46	28	− 16	1	47	0.56	− 0.19	0.20	5.6	7	21	1	9	nw.	Louise Bates.
Minto	Walsh	820	20	15.4	− 5.7	53[b]	31	− 23[c]	2	46[c]	0.74	− 0.16	0.20	.....	7	10	8	13	nw.	S. S. Marsh.
Oriska	Barnes	1,270	8	19.8	.....	55	31	− 20	2	52	0.63	.....	0.33	3.0	3	10	11	10	nw.	J. J. Taylor.
Park River	Walsh	998	9	14.6	.....	49	31	− 23	2	49	0.35	.....	0.12	.....	8	12	9	10	nw.	P. J. Prochaska.
Pembina	Pembina	789	39	10.0	− 6.1	42	30	− 28	6	45	0.59	− 0.36	0.22	1.5	6	11	8	12	n.	C. W. Shumaker.
Power	Richland	1,020	21	17.4	− 6.2	56	31	− 25	2	57	0.80	+ 0.09	0.30	6.5	8	6	7	18	nw.	J. A. Power.
Towner	McHenry	.....	11	16.0	.....	51	31	− 20	2	53	0.48	− 0.53	0.30	4.5	5	14	4	13	nw.	B. Bagley.
University	Grand Forks	830	21	15.9	− 6.9	51	31	− 23	2	43	0.80	+ 0.07	0.30	7.4	8	14	5	12	nw.	U. S. Weather Bureau.
Wahpeton	Richland	962	19	21.7	− 5.1	61	13	− 23	1	45	0.10	− 0.86	0.10	1.0	1	10	3	18	nw.	Fred E. Smith.
Walhalla	Pembina	966	6	12.7	.....	48	31	− 25	2	48	1.20	.....	0.40	12.0	4	19	7	5	n.	Ivanhoe Lee.
Westhope	Bottineau	.....	7	14.5	.....	52	31	− 24	1	56	0.15	.....	0.10	1.5	2	12	12	7	nw.	W. A. Meddaugh.
Willow City	do	1,471	21	13.1	− 5.0	51	31	− 24	2	56	0.55	− 0.15	0.20	5.5	5	6	17	8	nw.	M. A. Ostby.
Minnesota.																				
Albert Lea	Freeborn	1,229	22	26.6	− 2.8	58	28	− 17	2	42	1.00	− 0.30	0.70	T.	4	8	15	8	nw.	Edward Carey.
Alexandria	Douglas	1,391	19	21.7	− 2.2	56	8†	− 21	2	46	0.42	− 0.59	0.07	6.1	12	6	7	18	nw.	P. O. Unumb.
Angus	Polk	870	11	13.7	− 8.2	50	31	− 28	2	45	0.53	− 0.06	0.15	5.9	9	6	11	14	n.	John Nadvornik.
Bagley	Clearwater	.....	7	12.3	.....	46	28	− 37	1	54	2.77	.....	0.50	22.0	9	9	11	11	ne.	Jens Nelson.
Baudette	Beltrami	1,084	3	13.4	.....	47	30†	− 33	7	56	0.63	.....	0.30	13.6	7	13	11	7	w.	J. A. Gjelhaug.
Beardsley	Bigstone	1,090	17	23.4	− 3.8	63	8	− 20	2	53	0.82	− 0.44	0.25	6.0	6	5	16	10	nw.	G. L. Fitzgerald.
Bemidji	Beltrami	1,400	9	.....	.....	.....	.....	.....	.....	.....	1.12	.....	0.32	.....	10	.....	.....	.....	.....	C. W. Warfield
Bird Island	Renville	1,039	23	25.8	− 2.3	60	8	− 23	2	45	0.77	− 0.17	0.43	6.2	10	8	7	16	nw.	Dr. F. L. Puffer.
Brainerd	Crow Wing	1,215	7	.....	.....	.....	.....	.....	.....	.....	0.45	.....	0.10	.....	7	13	4	14	n.	Theodore Miller.
Caledonia	Houston	1,179	20	27.4	− 2.8	56	19	− 15	2	45	3.48	+ 1.68	1.05	7.6	15	6	7	18	s.	W. D. Belden.
Campbell	Wilkin	984	7	20.0	.....	58	8	− 21	2	52	0.78	.....	0.22	7.0	6	8	3	20	nw.	J. T. Neisess.
Cass Lake	Cass	1,300	6	.....	.....	.....	.....	.....	.....	.....	1.85	.....	0.41	22.0	10	.....	.....	.....	.....	C. W. Burns.
Collegeville	Stearns	1,282	20	23.7	− 5.0	54	30	− 25	2	41	0.43	− 0.63	0.13	3.3	7	14	3	14	nw.	F. Tembreull.
Crookston	Polk	863	24	14.0	− 7.3	51	31	− 20	2	40	1.15	+ 0.06	0.45	15.2	8	15	3	13	n.	A. G. Andersen.
Detroit	Becker	1,364	17	13.2	− 8.9	52	31	− 31	2	57	1.01	+ 0.16	0.40	11.0	7	15	3	13	n.	G. W. Peoples.
Ely	St. Louis	.....	1	15.4	.....	48	29	− 29	2	44	1.40	.....	0.46	22.6	8	15	8	8	nw.	Iver Wisted.
Fairmont (near)	Martin	1,240	26	26.9	− 1.9	57	12	− 19	2	50	1.70	+ 0.30	0.75	3.5	6	10	11	10	nw.	W. F. Wherland.
Faribault	Rice	1,003	15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. A. B. Moulton.
Farmington	Dakota	902	25	26.0	− 2.4	65	30	− 22	2	44	2.12	+ 0.33	0.80	11.0	9	8	8	15	s.	E. D. Akin.
Fergus Falls	Ottertail	1,210	21	21.8	− 4.0	52	29†	− 18	2	38	1.32	+ 0.35	0.34	8.8	14	10	11	10	nw.	C. E. Kissinger.
Fort Ripley	Crow Wing	1,136	5	19.4	.....	56	31	− 30	2	43	0.25	− 0.62	0.10	2.1	5	10	0	21	s.	J. J. Tucker.
Fosston	Polk	1,289	3	12.4	.....	47	31	− 30	2	42	1.11	.....	0.22	12.7	10	11	10	10	nw.	O. N. Hem.
Glencoe	McLeod	1,000	16	26.6	− 2.6	57	9†	− 22	2	38	0.71	− 0.08	0.40	8.0	4	16	12	3	nw.	L. V. Koos.
Grand Meadow	Mower	1,338	25	27.0	− 1.0	55	29†	− 20	2	40	2.50	+ 0.76	1.27	4.5	7	9	11	11	s.	C. F. Greening.
Gull Lake Dam	Cass	1,215	2	19.0	.....	51	31	− 30	2	44	0.47	.....	0.11	1.9	8	7	9	15	nw.	U. S. Engineer Corps.
Hallock	Kittson	815	14	10.6	− 9.4	48	31	− 29	2	46	1.07	− 0.09	0.50	9.7	7	15	2	14	n.	D. A. Robertson.
Halstad	Norman	870	7	12.2	.....	50	31	− 22	2	45	0.97	.....	0.50	3.5	5	16	3	12	nw.	A. G. Holstrom.
Hinckley	Pine	1,050	8	21.5	.....	53[a]	29†	− 25[a]	2	41[a]	0.45	.....	0.40	4.0	2	6[a]	12[a]	12[a]	n.	W. R. Newman.
International Falls	Koochiching	1,112	10	15.6	− 2.6	48	30	− 30	2	51	1.03	− 0.28	0.30	13.7	6	10	9	12	w.	C. Ardies.
Itasca State Park	Clearwater	1,500	2	14.6	.....	49	29†	− 33	2	51	0.81	.....	0.38	8.0	4	16	5	10	s.	J. A. Stillwell.
Lake Crystal	Blue Earth	.....	5	25.4	.....	57	30	− 20	1	49	1.35	.....	0.50	9.5	6	1	28	2	s.	E. D. Baker.
Leech Lake Dam	Cass	1,301	25	15.2	− 6.1	47	29†	− 31	2	47	1.71	+ 0.46	0.33	15.6	15	6	10	15	e.	U. S. Engineer Corps.
Little Falls	Morrison	.....	4	21.8	.....	58	30	− 24	2	51	.....	.....	.....	.....	.....	15	5	11	s.	Wm. Batters.
Littlefork	Koochiching	.....	3	12.0	.....	48	28†	− 38	7	63	0.45	.....	0.16	8.5	6	13	5	13	.....	O. C. Olson.
Long Prairie	Todd	1,299	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. L. Sheets.
Lynd	Lyon	1,175	20	25.5	− 3.2	62	8	− 22	2	57	0.39	− 0.71	0.35	3.5	2	12	10	9	nw.	J. W. Rouse.
Mankato	Blue Earth	758	15	.....	.....	.....	.....	.....	.....	.....	1.85	+ 0.94	0.78	1.3	10	13	4	14	nw.	C. G. Staley.
Milaca	Millelacs	1,072	14	24.2[g]	− 2.4	55	30†	.....	.....	36[g]	.....	.....	.....	.....	.....	4[g]	13[g]	7[g]	nw.	C. H. Foss.
Milan	Chippewa	955	19	23.4	− 4.5	60	8	− 23	2	50	0.80	− 0.53	0.20	5.0	7	11	5	15	nw.	O. K. Opjorden.
Minneapolis	Hennepin	918	22	25.7	− 3.8	58	12	− 17	2	48	1.65	0.00	0.55	11.6	15	4	12	15	nw.	U. S. Weather Bureau.
Montevideo	Chippewa	900	23	23.8	− 3.9	61	8	− 21	2	41	0.60	− 0.63	0.35	2.9	6	8	8	15	nw.	L. G. Moyer.
Moorhead	Clay	935	32	19.0	− 2.4	55	31	− 21	2	47	0.93	− 0.21	0.20	6.9	17	14	5	12	nw.	U. S. Weather Bureau.
Mora	Kanabec	.....	8	21.4	.....	54	30†	− 26	2	45	1.10	.....	0.20	6.9	11	9	15	7	nw.	Hans Peterson.
Morris	Stevens	1,170	28	22.5	− 3.2	56	8†	− 19	2	40	0.71	− 0.22	0.20	4.1	8	14	8	9	nw.	D. T. Wheaton.
New London	Kandiyohi	1,215	19	21.2	− 5.7	56	8†	− 22	2	40	0.68	− 0.50	0.22	4.2	7	9	17	5	nw.	Harold Swenson.
New Richland	Waseca	1,180	19	28.4	− 2.6	58	12	.....	.....	35[d]	1.01	+ 0.14	0.38	2.2	8	8	16	7	nw.	N. O. Tyrholm.
New Ulm	Brown	791	33	25.7	− 2.5	60	13	− 20	2	47	1.02	− 0.49	0.30	7.0	8	2	11	18	s.	A. L. Henle.
Osakis	Douglas	1,343	5	21.1	.....	55	8	− 24	2	38	0.73	.....	0.20	9.0	8	5	8	18	nw.	J. B. Johnson.
Park Rapids	Hubbard	1,246	23	14.9	− 6.9	51	31	− 29	2	52	1.58	+ 0.57	0.50	10.1	14	9	5	17	ne.	Dr. P. A. Walling.
Pierz	Morrison	.....	.....	23.2	.....	57[a]	30	− 25[a]	2	35[a]	0.10	.....	0.10	1.0	1	11[a]	4[a]	15[a]	nw.	E. H. Kerkhoff.
Pine River Dam	Crow Wing	1,251	26	16.2	− 6.2	50	31	− 35	2	52	0.71	− 0.43	0.45	4.5	6	11	7	13	nw.	U. S. Engineer Corps.
Pokegama Falls	Itasca	1,280	26	14.0	− 7.0	47	8†	− 37	2	52	1.85	+ 0.51	0.54	17.4	14	12	6	13	n.	Do.
Redlake	Beltrami	1,152	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. C. Goddard.
Red Lake Falls	Red Lake	.....	.....	19.4	.....	60	31	− 25	2	50	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. G. Buse.
Red Wing	Goodhue	680	17	.....	.....	.....	.....	.....	.....	.....	2.68	+ 1.30	0.96	10.0	16	9	1	21	sw.	Louis Back.

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

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing 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.		
***Minnesota*—Continued.**																				
Redwood Falls	Redwood	1,050	6	28.0	.....	62	12	− 21	2	52	0.46	− 0.24	0.40	3.5	3	11	9	11	nw.	Hockett Bros.
Reeds Landing	Wabasha	681	17	.....	.....	.....	.....	.....	.....	.....	2.04	− 0.97	1.20	7.7	12	7	0	24	nw.	John Deschneau.
Rochester	Olmstead	991	8	25.4	.....	57	29	− 20	1	51	1.39	.....	0.60	.....	3	13	6	12	nw.	Mary P. Leslie.
Roseau	Roseau	1,040	3	10.0	.....	45	30†	− 37	2	54	0.69	.....	0.30	9.0	6	17	9	5	sw.	M. J. Hegland.
St. Charles	Winona	850	22	27.0	− 2.0	55	12†	− 20	2	39	2.78	+ 1.44	1.35	11.5	7	11	8	12	se.	S. W. Gleason.
St. Cloud	Sherburne	1,020	26	25.0	− 2.1	58	30	− 24	2	36	0.48	− 0.85	0.14	5.2	10	7	10	14	nw.	State Reformatory.
St. Paul	Ramsey	940	42	26.0	− 2.2	59	12	− 18	2	44	1.74	+ 0.14	0.54	10.4	12	5	16	10	nw.	U. S. Weather Bureau.
St. Peter	Nicollet	825	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	State Hospital.
Sandy Lake Dam	Aitkin	1,234	20	16.2	− 7.3	50	31	− 31	2	49	1.23	+ 0.01	0.39	10.4	8	7	15	9	ne.	U. S. Engineer Corps.
State Sanatorium	Cass	.....	5	16.9	.....	48	31	− 30	2	33	0.74	.....	0.20	8.1	9	12	2	17	sw.	Dr. G. W. Beach.
Stillwater	Washington	694	7	.....	.....	.....	.....	.....	.....	.....	2.25	.....	0.73	14.0	7	18	4	9	n.	Oscar Ostrom.
Taylors Falls	Chisago	759	6	24.2	.....	56	31	− 25	2	46	1.41	.....	0.44	12.1	6	13	8	10	nw.	Minneapolis Gen. Elec. Co.
Thief River Falls	Pennington	1,137	2	12.3	.....	50	31	− 20	6	45	1.25	.....	0.22	17.0	6	17	0	14	n.	E. W. Lown.
Warren	Marshall	859	1	14.7	.....	52	31	− 26	2	44	.....	.....	.....	.....	.....	1	17	13	.....	P. H. Holm.
Warroad	Roseau	1,069	3	11.8	.....	47	31	− 36	2	57	1.15	.....	0.52	15.5	5	21	3	7	ne.	G. A. Sawyer.
Winnebago	Faribault	1,100	15	26.6	− 5.0	60	12	− 19	2	52	1.54	+ 0.35	0.70	1.5	7	15	11	5	nw.	H. H. Haight.
Winnibigoshish	Itasca	1,300	25	15.2	− 6.6	45	28†	− 28	2	47	1.80	+ 0.64	0.35	20.0	13	9	8	14	s.	U. S. Engineer Corps.
Winona	Winona	700	17	29.7	− 2.2	60	12	− 16	2	36	2.94	+ 1.48	1.48	7.3	12	10	7	14	nw.	P. C. Myers.
Worthington	Nobles	1,593	18	24.7	− 4.7	57	31	− 20	2	49	0.77	− 0.57	0.27	6.3	8	14	4	13	nw.	M. P. Mann.
Zumbrota	Goodhue	917	17	26.8	− 3.4	57	12	− 19	2	32	1.65	.....	0.78	1.2	9	8	16	7	nw.	W. C. Rowell.
South Dakota.																				
Milbank	Grant	1,148	22	21.4	− 6.2	64	29†	− 22	2	61	1.83	+ 0.62	0.92	6.5	8	10	5	16	nw.	Mary E. Patridge.
Sisseton	Roberts	1,202	7	24.2	.....	55[a]	29†	− 5	19	35[a]	0.91	.....	0.42	3.8	5	15	0	16	nw.	George Gray.
Wisconsin.																				
Antigo	Langlade	1,489	19	23.6	− 2.9	54	19	− 20	7	42	2.37	.....	0.90	6.7	9	17	0	14	w.	Elton C. Larzelere.
Barron	Barron	1,115	22	21.4	− 4.1	50	30	− 24	7	42	2.87	+ 1.24	1.05	14.2	12	10	13	8	nw.	Wm. A. Kent.
Beloit	Rock	750	47	31.4	− 2.8	63	19	− 10	2	43	3.43	+ 1.22	1.30	5.0	12	9	6	16	n.	Smith Observatory.
Big St. Germain Dam	Vilas	1,590	3	19.8	.....	48	19†	− 30	7	54	2.48	.....	0.80	15.0	13	8	16	7	sw.	Fred Hessen.
Brodhead	Green	812	15	31.2	− 3.3	68	30	− 10	2	31	3.00	+ 0.47	0.80	15.0	9	10	13	8	sw.	Hector D. Kirkpatrick.
Burnett	Dodge	880	9	27.7	.....	61	30	− 13	7	35	2.45	.....	1.22	6.8	5	3	13	15	nw.	George W. Smith.
Cornell	Chippewa	993	1	.....	.....	.....	.....	.....	.....	.....	2.21	.....	0.84	.....	11	17	8	6	nw.	Brunet Falls Mfg. Co.
Cottage Grove	Dane	888	2	.....	.....	.....	.....	.....	.....	.....	2.48	.....	0.76	7.6	16	7	17	7	sw.	John E. Mellish.
Darlington	Lafayette	867	7	30.0	.....	61	30	− 12	2	35	2.55	.....	1.00	5.0	6	11	3	17	w.	F. J. O'Neill
Deerskin Dam	Forest	1,685	3	17.4	.....	52	19	− 34	7	59	2.80	.....	0.70	23.0	7	13	9	9	w.	Wm. E. O'Neal.
Delavan	Walworth	920	22	30.2	− 1.3	60	19†	− 9	2	32	2.67	+ 0.82	1.02	6.0	11	9	8	14	s.	Elwood S. Austin.
Dodgeville	Iowa	1,220	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Thomas Gibbon.
Downing	Dunn	983	11	22.5	− 4.9	52	30†	− 24	1	43	2.20	+ 0.54	0.60	21.0	8	1	0	30	sw.	Eugene F. Stoddard.
Eau Claire	Eau Claire	800	22	26.0	− 2.7	57	18	− 20	2	39	3.15	+ 1.11	1.24	11.2	15	4	16	11	n.	Robert D. Whitford.
Glen Flora	Rusk	1,475	1	20.6	.....	56	12	− 32	7	50	2.43	.....	1.10	11.5	7	10	15	6	sw.	G. A. Durgin.
Grand Rapids	Wood	1,021	14	25.6	− 4.0	60	30	− 22	7	42	3.59	+ 2.00	0.92	5.8	9	8	6	17	sw.	Geo. T. Nixom.
Grantsburg	Burnett	1,095	22	22.9[a]	− 3.3	57[a]	30†	− 27[a]	4	53[a]	1.00	− 0.75	0.50	10.0	4	.....	.....	.....	n.	Chester Ahlstrom.
Hancock	Waushara	1,091	21	27.5	− 1.9	61	30	− 19	7	39	3.87	+ 2.09	2.00	9.0	9	5	11	15	sw.	Frederick B. Hamilton.
Hatfield	Jackson	919	19	25.0	− 3.4	61	18	− 28	7	48	2.86	+ 1.57	1.75	7.2	4	4	9	18	nw.	Walter S. Woods.
Hayward	Sawyer	1,107	22	18.7	− 5.7	50	29	− 30	7†	55	2.05	+ 0.32	0.40	20.0	9	17	0	14	s.	A. E. Johnson.
Hillsboro	Vernon	1,000	22	26.6	− 2.7	58	30	− 22	1	42	4.11	+ 2.07	2.28	6.0	8	9	17	5	sw.	Emil V. Wernick.
Koepenick	Langlade	1,683	22	23.1	− 2.9	58	19	− 26	7	48	3.10	+ 1.24	1.00	9.0	12	0	26	5	sw.	Edward S. Koepenick.
La Crosse	La Crosse	714	41	29.6	− 1.3	60	29	− 14	2	34	3.93	+ 2.28	2.07	5.1	12	2	10	19	s.	U. S. Weather Bureau.
Lake Mills	Jefferson	897	22	29.8	− 2.3	60	30†	− 9	2	33	2.73	+ 0.55	0.83	8.6	16	9	13	9	s.	S. Newton Dexter Smith.
Lancaster	Grant	1,070	22	31.1[e]	− 0.1	58[d]	19†	− 14[e]	2	31[e]	2.88	+ 1.13	1.25	5.5	6	3[c]	8[c]	17[c]	w.	Edward Pollock.
Long Lake	Oneida	1,592	5	17.8	.....	50	19	− 39	7	58	2.27	.....	0.66	9.5	16	10	11	10	nw.	Louis Frank.
Madison	Dane	974	44	29.6	− 0.5	60	19	− 13	2	32	2.41	− 0.20	0.84	6.9	12	4	13	14	sw.	U. S. Weather Bureau.
Marshfield	Wood	1,276	0	26.2[e]	.....	59[d]	30	− 20[e]	7†	41[e]	3.30	.....	1.99	4.1	10	8[c]	9[c]	11[c]	s.	Agr. Exper. Station.
Mather	Juneau	962	9	23.3	.....	59	30	− 27	7	69	4.04	.....	1.41	7.0	10	8	4	19	w.	Frank Evans.
Mauston	do	882	17	28.6	− 1.6	61	30	− 18	7	42	3.73	+ 1.70	1.83	4.0	6	8	13	10	nw.	Eugene L. Hitchcock.
Meadow Valley	do	974	22	26.7	− 1.6	61	30	− 25	7	45	3.25	+ 1.82	1.85	8.0	9	2	20	9	sw.	Charles H. Johnson.
Medford	Taylor	1,420	24	22.8	− 3.4	50	30†	− 24	7	49	3.66	+ 2.21	0.86	15.5	11	11	11	9	w.	Wm. Zeit.
Merrill	Lincoln	1,267	7	25.0[d]	.....	55[d]	19	− 26[d]	7	56[d]	3.14	.....	0.94	4.8	11	9	4	18	nw.	O. F. Lueck.
Mincoqua	Oneida	1,604	9	19.6	.....	50	19†	− 32	4	56	2.05	.....	0.85	15.0	13	5	18	8	sw.	Benjamin W. Applebee.
Mondovi	Buffalo	738	5	25.6	.....	58	19	− 22	2	44	2.46	.....	0.92	13.0	14	9	12	10	nw.	Dr. Charles Hebard.
Mount Horeb	Dane	1,226	9	28.0	.....	60	30	− 13	2	36	3.36	.....	0.82	7.5	11	8	4	19	nw.	W. M. Lewis.
Muscoda	Grant	666	4	28.9	.....	60	30†	− 12	2	53	2.95	.....	1.20	5.2	7	11	4	16	nw.	Wm. Hessler.
Neillsville	Clark	996	23	25.4	− 2.4	56	30†	− 26	7	46	4.15	+ 2.01	2.10	9.0	5	.....	.....	.....	nw.	Wm. Heaslett.
New Richmond	St. Croix	990	8	23.4	.....	56	12	− 24	2	41	4.60	.....	2.00	30.0	13	8	11	12	nw.	Franc A. R. Van Meter.
Osceola	Polk	806	22	24.3	− 2.3	55	30†	− 22	2	47	1.01	− 0.89	0.50	10.5	5	4	24	3	s.	Charles W. Staples.
Park Falls	Price	1,492	22	16.8[a]	.....	48[a]	30†	− 28[a]	7	72[a]	3.03	.....	0.93	18.5	14	10[a]	2[a]	18[a]	s.	Flambeau Paper Co.
Portage	Columbia	809	24	29.2	− 1.9	61	30	− 13	7	34	2.97	+ 1.16	1.19	5.8	8	14	2	15	sw.	James H. Martin.
Port Edwards	Wood	969	3	25.4	.....	60	30	− 28	7	50	5.59	.....	1.80	18.0	15	10	8	13	sw.	Nekoosa-Edwards Pa. Co.
Prairie du Chien	Crawford	628	22	30.8	− 2.0	59	30	− 12	2	48	2.62	+ 0.71	1.08	4.0	7	10	8	13	s.	James A. Gillis.
Prairie du Sac	Sauk	750	5	28.8	.....	63	30	− 11	2†	42	2.87	.....	0.93	5.9	10	5	11	15	sw.	Wis. River Power Co.
Prentice	Price	1,551	15	18.3	− 5.9	49	19	− 32	7	50	2.23	+ 0.96	1.00	8.5	14	13	3	15	nw.	Joseph G. Lash.
Rest Lake	Vilas	.....	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	A. F. Miller.
Rhinelander	Oneida	1,550	7	21.6	.....	52	19†	− 27	7	47	2.62	.....	0.72	12.2	12	16	2	13	nw.	Rhinelander Power Co.
Shullsburg	Lafayette	1,019	7	30.2	.....	60	19†	− 12	2	33	2.87	.....	0.66	7.5	10	7	10	14	sw.	Harrison B. Chamberlin.
Solon Springs	Douglas	1,083	7	19.2	.....	51	29	− 31	7†	54	1.60	.....	1.00	14.0	4	11	1	19	sw.	John M. Sayles.
Spooner	Washburn	1,104	19	20.2	− 5.2	50	31	− 26	2	41	1.33	− 0.60	0.29	9.0	8	12	10	9	.....	Horace A. Bresee.
Stanley	Chippewa	1,082	9	21.9	.....	52	19†	− 22	2	40	1.66	.....	0.70	3.5	9	12	8	11	nw.	W. Humphrey Scott.
Stevens Point	Portage	1,113	20	26.9	− 1.5	58	30	− 21	7	43	2.80	+ 1.41	1.20	4.0	3	6	12	13	nw.	Postmaster.
Sugar Camp Dam	Oneida	1,582	3	.....	.....	.....	.....	.....	.....	.....	1.80	.....	0.76	14.5	6	13	5	13	s.	Lyman Haskins.
Tomahawk	do	1,451	0	22.2	.....	52	30†	− 25	7	47	2.54	.....	1.00	8.9	9	16	0	15	s.	Victor Extrom.
Trout Lake	Vilas	1,400	1	18.6	.....	46	12	− 32	4	49	1.04	.....	0.20	8.4	10	5	14	12	sw.	F. B. Moody.
Twin Lakes Dam	do	1,625	3	.....	.....	.....	.....	.....	.....	.....	2.67	.....	1.00	10.8	4	10	9	12	sw.	Albert D. Hansen.
Valley Junction	Monroe	930	21	27.0	− 2.2	63	30	− 22	7	48	3.99	+ 1.98	1.72	8.5	13	9	5	17	e.	Frederick Muermann.
Viroqua	Vernon	1,412	23	29.0	− 1.4	58	31	− 18	2	34	3.94	+ 1.80	2.37	9.0	10	5	10	16	nw.	Henry E. Rogers.
Vudesare	Vilas	1,700	5	16.1	.....	49	19	− 34	7	54	2.69	.....	0.60	20.5	9	8	18	5	sw.	Louis L. Thomas.
Watertown	Jefferson	824	22	28.8	− 2.3	61	30	− 9	7	42	2.28	− 0.06	0.60	11.5	13	7	15	9	s.	Charles J. Salick.
Waukesha	Waukesha	864	22	30.8	− 1.4	61	19	− 8	2	33	3.36	+ 1.19	1.45	11.2	12	3	24	4	sw.	Carroll College.
Wausau	Marathon	1,212	18	25.0	− 2.6	56	30	− 21	7	40	3.33	+ 1.49	1.70	3.5	13	12	7	12	nw.	A. A. Babcock, jr.
Weyerhaeuser	Rusk	1,297	11	21.5	.....	50	31	− 29	7	46	2.29	.....	0.97	14.5	14	8	12	11	ne.	Miss Etta Stiles.
Whitehall	Trempealeau	675	22	26.8	− 3.7	57	29	− 21	1	40	3.20	+ 1.62	1.20	15.0	10	.....	.....	.....	s.	Hans J. Haugh.

TABLE 1.—*Climatological data for March, 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	33.8	− 3.8	65	23	− 14	2	52	1.85	− 0.05	0.70	2.0	7	20	0	11	sw.	J. I. Chenoweth.
Algona	Kossuth	1,213	39	29.0	− 0.6	58	12†	− 18	2	45	2.24	+ 0.68	1.02	6.5	10	10	9	12	nw.	Dr. F. T. Seeley.
Alta	Buena Vista	1,513	22	27.7	− 2.9	61	12	− 17	2	48	1.79	+ 0.13	0.70	5.5	11	10	12	9	nw.	David E. Hadden.
Amana	Iowa	721	37	33.0	+ 0.5	68	30	− 11	2	31	2.93	+ 0.93	0.71	7.6	10	9	12	10	s.	C. Schadt.
Ames	Story	926	37	32.4	− 1.1	64	30	− 14	2	42	3.32	+ 1.91	0.95	1.2	7	12	6	13	nw.	Iowa State College.
Baxter	Jasper	998	13	32.9	− 3.7	70	9	− 15	2	40	3.66	+ 1.45	1.25	5.2	14	10	14	7	sw.	W. R. Vandike.
Belle Plaine	Benton	886	23	33.0	− 0.4	69	30	− 13	2	43	3.15	+ 0.64	1.10	7.6	13	5	12	14	n.	O. C. Burrows.
Belmond	Wright	1,184	3	29.0	.....	60	30	− 20	2	44	2.96	.....	1.48	6.4	17	2	21	8	nw.	Geo. P. Hardwick.
Bloomfield	Davis	881	6	35.6	.....	73	30	− 12	2	42	3.64	.....	0.85	4.9	12	17	4	10	nw.	Albert Power.
Bonaparte	Van Buren	.....	22	35.8	− 2.2	72	30	− 11	2	37	1.86	− 0.69	0.73	3.8	8	.....	.....	.....	.....	B. R. Vale.
Boone	Boone	1,134	8	29.8	.....	63	31	− 15	2	47	1.83	.....	0.75	.....	7	13	4	14	.....	C. F. Henning.
Britt	Hancock	1,236	16	28.2	− 2.9	58	12†	− 20	2	45	2.07	+ 0.57	1.02	3.7	11	7	11	13	s.	L. M. Goodman.
Buckingham	Tama	.....	13	.....	.....	.....	.....	.....	.....	.....	3.23	+ 1.01	1.27	.....	8	10	7	14	nw.	J. S. Guynn.
Burlington	Des Moines	544	17	33.6	− 6.2	71	30	− 4	2	49	1.87	− 0.99	0.50	5.7	12	13	12	6	s.	Max E. Poppe, jr.
Carroll	Carroll	1,265	23	28.8	− 3.9	62	18	− 15	2	46	1.91	− 0.13	0.99	4.0	6	15	9	7	nw.	Mrs. Jos. J. Wolfe.
Cedar Rapids	Linn	733	31	31.0	− 2.6	67	30	− 9	2†	51	2.91	+ 0.87	0.80	11.1	10	11	6	14	nw.	R. S. Toogood.
Charles City	Floyd	1,015	22	28.6	+ 0.2	58	18	− 16	2	45	3.91	+ 1.99	2.21	14.5	13	4	6	1	nw.	U. S. Weather Bureau.
Clear Lake	Cerro Gordo	1,241	15	29.6	− 2.1	60	12†	− 16	2	40	1.32	− 0.27	0.50	11.5	10	19	0	12	nw.	Oscar Stevens.
Clinton	Clinton	593	46	33.2	− 0.3	67	30	− 9	2	34	2.87	− 0.15	1.12	11.3	14	6	18	7	sw.	A. E. Reid.
Columbus Junction	Louisa	595	12	35.0	− 4.0	70	30	− 10	2	35	2.11	− 0.40	0.63	7.3	10	17	6	8	s.	J. B. Johnston.
Davenport	Scott	580	42	34.8	− 0.6	69	30	− 9	2	34	1.99	− 0.22	0.86	10.2	13	8	10	13	sw.	U. S. Weather Bureau.
Decorah	Winneshiek	875	20	30.2	− 1.4	58	19†	− 15	2	34	4.74	+ 2.69	2.30	11.5	11	.....	.....	.....	.....	F. H. Baker.
Delaware	Delaware	1,083	22	29.9	− 1.7	60	30	− 14	2	34	3.28	+ 1.45	0.82	6.5	9	8	14	9	nw.	Nettie E. Ball.
Des Moines	Polk	861	35	34.4	− 1.3	68	30	− 10	2	43	3.03	+ 1.38	1.55	6.7	11	5	10	16	sw.	U. S. Weather Bureau
Dubuque	Dubuque	639	40	32.8	− 0.4	61	19	− 10	2	36	2.81	+ 0.60	1.10	5.0	10	2	13	16	s.	Do.
Earlham	Madison	.....	11	33.5	− 0.7	68	30	− 16	2	44	3.00	+ 1.24	1.00	4.5	11	10	9	12	nw.	George Phillips.
Elkader	Clayton	727	34	29.2	− 2.6	56	12†	− 15	2	32	3.28	+ 1.37	1.20	8.0	9	14	6	11	nw.	Chas. Reinecke.
Elma	Howard	1,182	3	27.1	.....	56	19	− 17	2	34	3.99	.....	1.64	10.0	8	6	18	7	nw.	H. A. Moore.
Estherville	Emmet	1,298	18	28.0	− 1.0	62	11	− 19	2	49	1.80	+ 0.36	0.90	4.5	7	.....	.....	.....	se.	A. O. Peterson.
Fairfield	Jefferson	780	29	35.0	+ 1.2	70	30	− 10	2	35	2.60	+ 0.03	0.83	8.3	7	.....	.....	.....	w.	R. M. McKenzie.
Fayette	Fayette	1,003	23	30.0	− 1.2	59	30	− 15	2	33	3.32	+ 1.06	1.10	7.7	11	11	8	12	nw.	R. Z. Latimer.
Forest City	Winnebago	1,226	19	26.2	− 3.5	58	12	− 19	2	48	2.08	+ 0.52	1.10	5.5	7	11	9	11	s.	J. A. Peters.
Fort Dodge	Webster	1,126	13	29.2	− 4.2	62	18	− 15	2†	54	0.80	− 1.46	0.35	3.0	8	16	0	15	nw.	J. F. Monk.
Fort Madison	Lee	516	64	.....	.....	.....	.....	.....	.....	.....	1.88	.....	0.70	7.0	6	6	7	18	s.	Miss L. A. McCready.
Gilman	Marshall	1,052	14	.....	.....	.....	.....	.....	.....	.....	2.62	+ 0.57	1.22	1.0	6	.....	.....	.....	.....	J. L. Wylie.
Grand Meadow	Clayton	1,180	22	29.2	− 2.1	58	29	− 18	2	34	3.91	+ 1.77	1.50	11.0	12	5	15	11	nw.	F. L. Williams.
Grinnell	Poweshiek	1,023	21	33.8	+ 0.7	70	30	− 14	2	37	3.16	+ 1.2	1.44	3.2	10	9	13	9	nw.	D. W. Brainard.
Grundy Center	Grundy	976	22	32.2	− 0.4	63	30	− 15	2	35	3.55	+ 1.73	1.80	3.9	7	.....	.....	.....	nw.	J. B. Calderwood.
Guthrie Center	Guthrie	1,077	18	33.2	− 2.2	63	30	− 15	2	37	2.46	+ 1.06	0.95	4.5	9	14	8	9	nw.	D. G. Beardsley.
Hampton	Franklin	1,155	23	29.9	− 0.4	59	12†	− 16	2	32	3.3	+ 1.18	1.50	6.0	8	2	19	10	sw.	E. C. Grenelle.
Humboldt	Humboldt	1,095	25	29.6	− 2.2	62	30	− 19	2	37	1.3	− 0.17	0.99	2.5	5	19	4	8	nw.	J. P. Peterson.
Independence	Buchanan	921	9	30.5	− 0.3	62	30	− 14	2	39	3.70	+ 2.07	1.35	8.0	11	12	11	8	nw.	R. E. Dudley.
Indianola	Warren	969	22	34.2	− 1.9	68	30	− 10	2	37	2.16	+ 0.84	1.09	5.8	10	8	4	19	nw.	Prof. J. L. Tilton.
Iowa City	Johnson	683	53	30.9	− 3.1	68	30	− 14	2	60	2.69	+ 0.25	0.66	6.3	11	12	3	16	nw.	Prof. A. G. Smith.
Iowa Falls	Hardin	1,170	20	28.2	− 3.7	59	18†	− 17	2	45	3.16	+ 1.43	0.93	8.3	10	9	7	15	nw.	J. B. Parmelee.
Jefferson	Greene	1,052	14	31.5	.....	64	30	− 16	2	46	1.62	− 0.06	0.60	0.9	12	6	10	15	nw.	Ora M. Hall.
Keokuk	Lee	614	42	37.0	− 0.9	71	30	− 7	2	40	2.82	+ 0.45	1.14	T.	11	10	11	10	s.	U. S. Weather Bureau.
Keosauqua	Van Buren	644	21	33.6	− 4.6	74	30	− 11	2†	59	2.53	− 0.01	0.80	6.0	13	3	15	13	.....	J. H. Landes.
Knoxville	Marion	920	18	35.2	− 2.2	70	30	− 10	2	37	2.46	+ 0.89	0.85	2.5	10	13	6	12	nw.	Casey & Belville.
Lacona	Warren	.....	14	.....	.....	.....	.....	.....	.....	.....	3.41	+ 0.91	1.52	1.9	13	7	19	5	.....	J. B. Alter.
Lansing	Allamakee	632	8	28.9	.....	60	19†	− 15	2	46	3.24	.....	1.52	4.6	10	.....	.....	.....	n.	Chas. R. Serene.
Le Claire	Scott	576	13	.....	.....	.....	.....	.....	.....	.....	2.64	0.00	0.78	12.6	17	.....	.....	.....	.....	Miss M. T. Disney.
Marshalltown	Marshall	947	21	30.2	− 3.2	68	30	− 14	2†	53	5.88	+ 3.20	2.00	5.9	13	9	8	14	nw.	Jacob Eige.
Mason City	Cerro Gordo	1,132	16	28.8	− 2.8	59	19	− 18	2	40	.....	.....	.....	3.5	6	4	18	9	nw.	Dr. Roy F. De Sart.
Monroe	Jasper	922	1	33.8	.....	69	30	− 12	2	37	1.55	.....	0.95	1.0	5	12	5	14	nw.	J. A. Dibel.
Mount Pleasant	Henry	729	32	36.0	− 0.7	78	30	− 9	2	48	2.53	+ 0.10	0.87	2.6	12	10	8	13	sw.	J. W. Edwards.
Muscatine	Muscatine	554	53	.....	.....	.....	.....	.....	.....	.....	1.97	− 0.82	0.67	7.1	13	.....	.....	.....	.....	William Molis.
New Hampton	Chickasaw	1,169	16	27.9	− 3.8	55	29	− 17	2	35	4.88	+ 2.87	2.14	5.4	9	17	5	9	s.	A. F. Kemman.
Nora Springs	Floyd	1,064	.....	30.3	.....	62	29	− 15	2	40	4.99	.....	2.54	9.0	17	10	14	7	s.	Arthur Betts.
Northwood	Worth	1,122	17	27.0	− 4.1	58	31	− 19	2	41	3.37	+ 1.51	1.80	13.0	16	13	10	8	sw.	Chas. H. Dwelle.
Olin	Jones	760	15	32.6	− 2.5	66	30	− 10	2	35	2.70	+ 0.16	1.00	7.0	6	10	17	4	nw.	Dr. F. W. Port.
Osage	Mitchell	1,184	26	28.8	− 0.3	57	29	− 17	2	36	3.17	+ 1.41	1.87	4.0	6	9	12	10	nw.	Lester Coonradt.
Oskaloosa	Mahaska	843	37	34.0	− 1.2	70	30	− 14	2	36	2.24	+ 0.38	1.10	3.8	9	13	3	15	sw.	Joseph Boyd.
Ottumwa	Wapello	649	18	36.2	− 2.5	70	30	− 11	2	41	2.27	+ 0.13	0.75	4.1	8	11	12	8	nw.	Chester Potter.
Pella	Marion	877	11	34.6	+ 1.6	71	30	− 13	2	40	2.35	+ 1.32	0.75	6.8	12	22	0	9	nw.	J. H. Ver Steeg.
Perry	Dallas	975	12	33.4	− 3.5	64	30	− 14	2	43	2.12	− 0.02	0.64	5.5	11	8	15	8	nw.	S. J. Brumfield.
Pocahontas	Pocahontas	1,248	9	29.7	.....	62	12	− 17	2	47	2.20	.....	1.08	2.7	12	10	7	14	sw.	F. E. Hronek.
Rockwell City	Calhoun	.....	17	32.1	− 1.5	61	12†	− 14	2	49	2.10	+ 0.02	1.00	11.0	4	17	4	10	.....	C. M. Randall.
Sac City	Sac	1,278	37	32.8	+ 1.5	61	30	− 16	2	47	1.40	− 0.12	0.65	4.0	7	11	18	2	nw.	E. N. Baily.
St. Charles	Madison	1,070	12	35.0	− 3.2	68	30	− 12	2	42	2.29	+ 0.35	0.80	5.7	10	.....	.....	.....	nw.	R. D. Minard.
Sigourney	Keokuk	877	17	33.8	− 3.1	64	30	− 12	2	38	.....	.....	.....	6.6	13	6	15	10	w.	J. T. Parker.
Stockport	Van Buren	745	11	34.0	.....	71	30	− 12	2	36	1.85	− 0.48	0.60	3.0	11	14	5	12	s.	C. L. Beswick.
Storm Lake	Buena Vista	1,440	24	29.9	− 0.3	62	29	− 17	2	49	1.92	+ 0.60	0.98	4.4	10	11	9	11	s.	Chauncy Case.
Tipton	Cedar	807	14	33.9	− 2.7	68	30	− 8	2	29	3.22	+ 0.35	1.49	4.5	10	6	17	8	s.	F. K. Gregg.
Toledo	Tama	856	19	32.0	− 2.7	69	30	− 15	2	36	2.86	+ 0.95	1.10	2.5	7	18	5	8	nw.	I. F. Giger.
Wapello	Louisa	588	15	34.6	− 2.8	69	29	− 9	2	40	1.49	− 0.93	1.01	1.5	3	11	13	7	nw.	G. W. Schofield.
Washington	Washington	769	31	34.8	+ 0.6	69	30	− 2	2	36	2.88	+ 0.62	0.75	6.7	10	8	13	10	nw.	Wm. A. Cook.
Waterloo	Black Hawk	862	30	31.0	− 0.8	61	30	− 13	2	44	3.30	+ 1.55	2.05	5.4	13	19	2	10	nw.	Ralph B. Slippy.
Waukee	Dallas	1,039	10	32.7	− 6.2	67	30	− 15	2	44	3.53	+ 1.58	1.39	3.8	13	18	6	7	sw.	Samuel F. Foft.
Waverly	Bremer	948	17	29.0	− 3.8	61	18	− 17	2	40	3.22	+ 1.27	1.50	4.0	6	.....	.....	.....	nw.	Earl C. Moore.
Webster City	Hamilton	.....	8	32.6	.....	66	29	− 16	2	43	1.73	.....	0.80	0.5	3	4	14	13	nw.	C. D. Carpenter.
West Bend	Palo Alto	1,197	20	29.4	− 1.6	60	12	− 20	2	48	2.24	+ 0.64	0.85	11.5	7	7	14	10	nw.	Phil. Dorweiler.
Whitten	Hardin	1,036	16	31.0	− 2.3	61	30	− 17	2	38	3.37	+ 1.99	1.50	3.0	7	8	9	14	nw.	Dr. F. P. Butler.
Winterset	Madison	1,129	22	34.2	− 1.5	68	30	− 12	2	40	1.52	− 0.41	0.37	4.4	9	9	8	14	nw.	Dr. R. S. Cooper.
Missouri.																				
Gorin	Scotland	700	27	.....	.....	.....	.....	.....	.....	.....	2.82	+ 0.26	1.19	0.9	6	2	16	13	nw.	J. W. Pulliam.
Hannibal	Marion	534	21	38.8	− 2.8	74	30	− 1	2	37	4.07	+ 1.31	1.31	5.4	11	7	13	11	sw.	U. S. Weather Bureau.
Louisiana	Pike	500	36	40.0	− 2.7	74	30	− 2	2	40	6.24	+ 3.65	2.15	6.8	10	18	4	9	n.	J. T. Farrel.
Macon	Macon	88	1	38.6	.....	67	30	− 3	2	44	3.72	.....	0.93	T.	8	15	7	9	nw.	Jno. A. Cook.
Mexico	Audrain	797	36	36.9	− 5.4	75	30	− 1	2	48	5.17	+ 2.52	1.73	5.0	13	13	4	14	nw.	J. Llewellyn.
Palmyra	Marion	617	1	35.5	.....	70	31	− 2	2	41	3.49	.....	1.25	4.2	6	11	7	13	nw.	W. B. Markell.
Steffenville	Lewis	576	21	38.8	− 3.2	74	30	− 6	2	38	3.72	+ 0.83	0.95	3.0	10	13	9	9	sw.	Frank Ball.
Sublett	Adair	1,000	34	36.9	− 2.5	76	31	− 12	2	57	1.52	− 1.19	0.52	4.0	4	11	8	12	sw.	Lewis Spriggs.
Vandalia	Audrain	776	3	39.9	.....	69	30	1	2	32	3.04	.....	2.10	2.5	4	12	6	13	n.	C. B. Ellis.
Warrenton	Warren	865	24	37.8	− 4.2	76	30	0	2	48	5.38	+ 1.98	2.71	10.0	11	7	12	12	se.	Prof. J. H. Frick.

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

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing 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.		
Indiana.																				
Collegeville	Jasper	.....	14	35.5	− 5.6	71	13	− 5	2	35	5.95	+ 2.64	1.86	4.0	9	4	20	7	.....	Otto Miller.
Knox	Starke	716	8	36.1	.....	67	13†	− 3	2	30	6.32	.....	2.41	10.6	15	11	12	8	s.	W. R. R. Tatman.
Laporte	Laporte	810	17	34.2	− 3.6	66	14	− 3	2	34	3.11	− 0.02	0.60	9.7	15	9	6	16	sw.	Wm. M. Walton, jr.
Plymouth	Marshall	790	10	35.4	.....	66	13	− 4	2	31	6.16	.....	1.43	9.8	16	6	17	8	sw.	J. W. Siders.
South Bend	St. Joseph	726	20	35.0	− 2.0	67	14	− 4	2	33	4.80	+ 1.83	1.15	16.5	15	6	14	11	s.	Henry H. Swaim.
Illinois.																				
Aledo	Mercer	738	13	35.1	− 3.7	68	30	− 9	2	35	2.87	+ 0.78	0.94	5.3	10	10	7	14	nw.	William B. Frew.
Alexander	Morgan	670	20	38.0	− 3.1	68	30	− 1	2	37	5.46	+ 2.78	1.55	7.9	13	7	9	15	s.	George H. Hall.
Antioch	Lake	861	12	32.2	− 3.2	61	19	− 8	2†	35	2.53	+ 0.61	0.80	6.5	8	9	11	11	w.	J. C. James.
Astoria	Fulton	650	14	36.4	− 3.6	68	30	− 4	2	35	4.26	+ 1.38	0.95	6.0	10	10	8	13	nw.	Edward V. Bohl.
Aurora	Kane	678	34	33.2	− 1.6	66	24	− 7	2	32	3.43	+ 0.83	1.43	6.2	12	15	5	11	sw.	Miss Alice M. Holden.
Beardstown	Cass	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.68	+ 1.45	1.05	5.5	11	.....	.....	.....	.....	Mrs. L. M. Rice.
Bement	Piatt	700	6	37.8	.....	66	24†	0	2	38	6.09	.....	1.72	4.7	11	14	7	10	s.	N. N. Stevenson.
Bloomington	McLean	840	22	36.0[a]	− 3.5	65[a]	19†	− 4[a]	2	38[b]	5.78	+ 2.62	1.39	10.8	15	10	5	16	s.	Prof. H. N. Pearce.
Cairo	Alexander	359	41	46.6	− 0.4	78	24	14	2	31	7.23	+ 3.21	4.29	1.7	11	11	7	13	s.	U. S. Weather Bureau.
Camp Point	Adams	732	0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. D. M. Morris.
Carbondale	Jackson	412	8	44.3	.....	78	23	9	2	40	7.63	.....	4.24	2.2	11	14	4	13	nw.	State Normal University.
Carlinville	Macoupin	663	23	40.0	− 2.5	71	30	1	2	36	6.06	+ 2.92	1.92	10.5	11	11	11	9	s.	Blackburn College.
Carlyle	Clinton	470	28	.....	.....	.....	.....	.....	.....	.....	5.68	+ 1.78	1.92	4.6	7	.....	.....	.....	.....	Hervey O. Jones.
Chester	Randolph	380	21	.....	.....	.....	.....	.....	.....	.....	7.68	+ 3.97	2.80	13.0	11	.....	.....	.....	.....	Charles S. Gollon.
Clinton	Dewitt	727	3	37.0	.....	66	23†	− 2	2	39	7.46	.....	1.81	6.7	14	15	6	10	sw.	J. Frank Zeigler.
Cobden	Union	656	30	45.8	− 0.8	78	23	8	2	38	7.94	+ 3.16	3.40	2.0	8	17	1	13	sw.	John Buck.
Dakota	Stephenson	929	8	30.2	.....	61	30	− 12	2	33	2.93	.....	0.84	9.1	14	8	14	9	sw.	Elmer G. Smith.
Decatur	Macon	685	22	37.8[a]	− 2.9	67[a]	23	− 1[a]	2	37[b]	6.87	+ 3.51	1.76	9.5	14	15	7	9	nw.	Prof. J. H. Coonradt.
Dixon	Lee	725	23	31.6	− 3.3	64	19†	− 8	2	48	2.64	+ 0.26	1.10	6.5	8	13	9	9	.....	H. U. Bardwell.
Du Quoin	Perry	459	25	43.8	− 3.0	76	23	8	2	38	8.65	+ 4.37	3.20	2.0	7	14	9	8	sw.	G. H. Knetzger.
Dwight	Livingston	600	20	35.0	− 1.7	66	24	− 7	2	34	4.18	+ 1.49	1.37	7.5	14	7	7	17	sw.	Edward O. Welch.
East St. Louis	St. Clair	481	2	.....	.....	.....	.....	.....	.....	.....	7.62	.....	2.98	6.7	9	.....	.....	.....	.....	W. McK. Brown.
Edwardsville	Madison	554	14	.....	.....	.....	.....	.....	.....	.....	8.22	+ 5.12	1.90	7.5	10	.....	.....	.....	.....	W. H. Morgan.
Elgin	Kane	716	6	33.0	.....	63	19†	− 7[a]	2	33[a]	1.42	.....	0.67	6.0	7	8	14	9	sw.	Elgin Observatory.
Ewing	Franklin	449	1	.....	.....	.....	.....	.....	.....	.....	9.68	.....	5.22	.....	11	.....	.....	.....	.....	Ewing College.
Fairview	Fulton	733	2	.....	.....	.....	.....	.....	.....	.....	2.97	.....	0.94	3.1	13	.....	.....	.....	.....	Abram Wilson.
Galva	Henry	842	21	33.7	− 3.4	66	30	− 10	2	32	4.35	+ 1.86	1.27	11.7	11	11	6	14	s.	Prof. F. U. White.
Grafton	Jersey	422	20	.....	.....	.....	.....	.....	.....	.....	5.61	+ 2.02	2.70	7.5	11	.....	.....	.....	.....	R. C. Goodrich.
Greenville	Bond	635	35	41.0	− 1.2	71	23†	3	2	36	8.33	+ 4.51	1.87	8.7	10	16	6	9	sw.	W. H. Reidemann.
Griggsville	Pike	650	28	38.6	− 2.6	71	30	− 1[a]	2	38[a]	4.65	+ 1.94	1.23	4.5	11	10	9	12	sw.	George F. Kneeland.
Havana	Mason	475	21	37.6	− 4.0	70	30	− 3	2	37	1.53	− 1.33	0.65	5.6	13	8	13	10	s.	L. L. Eutenener.
Henry	Marshall	500	25	35.2	− 2.0	66	24	− 8	2	35	3.91	+ 1.44	1.25	5.0	12	14	5	12	nw.	Dr. F. A. Powell.
Hillsboro	Montgomery	675	19	41.0	− 1.9	71	30	1	2	36	7.97	+ 4.36	1.84	8.0	11	13	2	16	s.	Ira L. Woodward.
Joliet	Will	609	22	33.5	− 2.4	67	29	− 6	2	37	3.43	+ 0.60	1.03	4.9	14	12	4	15	sw.	F. M. Muhlig.
Kishwaukee	Winnebago	730	25	31.4	− 2.6	62	19†	− 9	2	28	2.19	− 0.35	0.74	5.9	13	10	10	11	s.	George Stevens.
La Grange	Cook	657	21	33.0	− 2.5	65	19	− 5	2	30	3.39	+ 0.86	1.32	8.0	11	8	9	14	s.	Prof. F. E. Sanford.
La Harpe	Hancock	698	34	35.8	− 2.6	72[a]	30	− 10	2	40[a]	2.74	− 0.15	0.92	6.5	12	13	13	5	nw.	George E. Campbell.
Lanark	Carroll	883	24	30.8[a]	− 2.6	62	30	− 10[b]	2	34[b]	1.67	− 0.42	0.80	7.7	11	13	10	8	nw.	M. N. Wertz.
La Salle	Lasalle	536	8	34.6	− 2.2	67	24	− 7	2	34	3.03	+ 0.21	1.12	7.5	13	5	13	13	sw.	U. S. Weather Bureau.
Lincoln	Logan	575	25	38.2	− 1.1	67	23†	− 2	2	40	6.15	+ 3.13	2.70	9.6	14	12	10	9	nw.	Prof. C. S. Oglevee.
Macomb	McDonough	700	9	.....	.....	.....	.....	.....	.....	.....	3.18	.....	1.08	5.2	9	.....	.....	.....	.....	State Normal University.
Manteno	Kankakee	711	2	.....	.....	.....	.....	.....	.....	.....	4.21	.....	1.34	9.3	14	18	5	8	nw.	J. F. Schmeltzer.
Martinton	Iroquois	633	26	35.8[a]	− 0.9	68[a]	13	− 5[a]	2	35[b]	5.22	+ 2.55	1.50	2.5	10	3	15	13	sw.	Joseph H. Peltier.
Mascoutah	St. Clair	425	23	43.2[b]	− 0.6	78	23†	6[c]	2	42[c]	8.81	+ 4.71	2.50	9.0	12	15	6	10	nw.	Dr. Robert F. Lischer.
Minonk	Woodford	745	20	35.1	− 2.8	66	19†	− 7	2	36	3.45	+ 0.93	1.10	7.0	13	7	12	12	nw.	John C. Danforth.
Monmouth	Warren	784	21	35.0	− 3.4	70	30	− 9	2	39	3.91	+ 1.54	1.30	7.0	10	10	4	17	s.	Dr. J. C. Hutchison.
Morris	Grundy	518	2	35.6	.....	68	24	− 7	2	36	3.42	.....	1.18	3.6	9	8	10	13	nw.	E. G. Cryder.
Morrison	Whiteside	685	19	32.5	− 2.8	66	30	− 10	1	33	2.43	− 0.30	0.83	8.7	14	14	7	10	sw.	S. A. Maxwell.
Morrisonville	Christian	638	14	38.8	− 3.4	68	23	1	2	34	6.07	+ 3.03	1.53	7.6	15	12	9	10	sw.	J. D. Lowis.
Mount Vernon	Jefferson	511	19	40.6	− 4.2	76	23	6	2	54	8.84	+ 3.93	3.90	5.0	8	11	4	16	s.	Theodore P. Stelle.
Nashville	Washington	503	13	.....	.....	.....	.....	.....	.....	.....	7.17	+ 2.00	2.04	7.1	11	.....	.....	.....	.....	H. M. Potter.
Oregon	Ogle	702	4	32.2	.....	64	31	− 10[a]	2	33[a]	2.37	.....	0.80	4.0	6	9	4	18	w.	Samuel Ray.
Ottawa	Lasalle	500	27	32.8[a]	− 4.3	65	19	− 6[a]	2	31[a]	3.87	+ 1.11	1.55	.....	12	8	4	19	sw.	Miss Maude M. Harris.
Pana	Christian	692	27	38.7[b]	− 2.2	69[a]	23	1[b]	2	38[c]	6.46	+ 3.07	1.74	5.1	10	14	5	12	.....	Dr. G. N. Gilbert.
Pawpaw	Lee	930	1	.....	.....	.....	.....	.....	.....	.....	3.13	.....	.....	2.3	9	.....	.....	.....	.....	A. C. McBride.
Peoria	Peoria	609	57	35.4	− 1.6	66	30	− 6	2	36	3.46	+ 0.50	1.33	5.3	13	8	12	11	s.	U. S. Weather Bureau.
Pontiac	Livingston	546	11	35.6	− 4.7	66	30	− 5	2	34	5.13	+ 2.31	1.48	7.5	14	8	4	19	sw.	George Butterworth.
Quincy	Adams	481	7	36.8	.....	72	30	− 1	2†	50	3.24	.....	1.17	1.4	10	.....	.....	.....	.....	Fred J. Brinkoetter.
Riley	McHenry	956	54	30.8	− 0.8	60	19†	− 9	2	33	2.45	+ 0.06	1.06	5.9	12	1	15	15	sw.	John West James.
Roberts	Ford	774	2	.....	.....	.....	.....	.....	.....	.....	6.47	.....	1.62	4.0	13	8	12	11	sw.	R. E. Bradbury.
Rockford	Winnebago	763	21	32.4	− 1.2	63	19†	− 9	2	32	2.80	+ 0.36	1.03	7.4	15	11	8	12	.....	Dr. John R. Porter.
Rushville	Schuyler	670	22	38.0	− 2.2	71	30	− 3	2	40	3.88	+ 1.48	1.09	6.2	12	15	3	13	w.	H. F. Dyson.
St. Charles	Kane	700	18	33.0	− 2.8	64	19†	− 6	2	32	3.00	− 0.04	0.95	7.5	11	5	18	8	s.	Dr. William H. Bishop.
St. Peter	Fayette	500	11	41.3[a]	− 3.3	73	23	4[b]	2	38[b]	6.75	+ 2.98	1.97	11.0	10	9	9	13	sw.	M. L. Lansford.
Sparta	Randolph	538	27	43.1[b]	− 1.8	75[a]	23	11[b]	2	37[b]	.....	.....	3.10	7.0	11	21	3	7	s.	James A. Caldwell.
Springfield	Sangamon	644	33	37.9	− 1.2	70	30	0	2	34	5.55	+ 2.48	2.22	6.8	11	7	6	18	s.	U. S. Weather Bureau.
Streator	Lasalle	626	20	33.4	− 4.8	67	23	− 7	2†	51	3.64	+ 0.72	1.25	4.9	17	18	4	9	sw.	Miss Lora Sweetser.
Sullivan	Moultrie	530	13	38.2	− 4.1	68	23	0	2	35	5.28	+ 2.06	1.65	3.0	8	16	8	7	nw.	C. A. Corbin.
Sycamore	Dekalb	855	33	32.0	− 1.4	63	19†	− 9	2	34	4.52	+ 2.04	2.00	4.0	9	12	5	14	w.	George E. Valentine.
Tiskilwa	Bureau	798	29	.....	.....	.....	.....	.....	.....	.....	3.76	+ 0.94	1.41	9.0	9	.....	.....	.....	.....	F. I. Smucker.
Walnut	do	717	22	33.7	− 3.8	65	30	− 9	2	32	2.95	+ 0.30	1.28	6.5	10	9	14	8	s.	O. C. Nussle.
Warsaw	Hancock	501	15	.....	.....	.....	.....	.....	.....	.....	2.36	+ 0.21	0.72	.....	5	.....	.....	.....	.....	W. R. Kirkbride.
Waterloo	Monroe	719	2	.....	.....	.....	.....	.....	.....	.....	7.98	.....	2.23	6.2	12	.....	.....	.....	.....	Prof. James E. Raibourn.
White Hall	Greene	573	5	39.3	.....	71	30	1	2	29	6.03	.....	1.42	4.6	14	15	11	5	se.	Frank Dillman.
Windsor	Shelby	681	14	39.4	− 1.9	68[a]	30	2	2	35[a]	6.87	+ 3.53	3.10	6.5	12	7	11	13	s.	Herbert Rose.
Winnebago	Winnebago	900	26	31.3	− 2.6	63	19	− 10	2	29	3.48	+ 0.81	1.38	9.5	12	16	6	9	sw.	Frank Osborn.
Yorkville	Kendall	584	26	32.2	− 2.3	63	30	− 9	2	32	3.42	+ 1.16	1.00	1.7	9	12	6	13	w.	Herman A. Grimwood.

[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
† Also on other dates.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for March, 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	31	
North Dakota.																																	
Amenia	Red				T.			.15					.05	.05	T.		T.	.10	.10	T.	.05	T.		.30	.10	T.					T.		0.90
Bottineau	Mouse	T.	.01	.08	T.	.08		.15		.05		.07						.01	.11	.15		T.			.02					.05	T.		0.78
Bowbells	do																																
Cando	Sheyenne																																
Crosby	Mouse	T.	T.	.04						T.	T.	T.	T.	T.			.08	T.	.10	.10					T.								0.38
Devils Lake	Sheyenne	T.	.08		.01		.09		.02			.05	T.			T.		T.	.07	.06				.07		T.				.09			0.54
Donnybrook	Mouse			T.		T.	.15		T.			.05	T.	T.				.10		.30			.10								T.		0.70
Dunseith	do		.06	.02	T.	.06	.12	T.					T.	T.										T.							.04		0.30
Eckman	do																																
Edmore	Sheyenne																																
Fessenden	James																																
Forman	Sheyenne																																
Grafton	Red	.05		.03				.02		.17		.07	.01						.03	.19	.05				.18								0.80
Granville	Mouse		.05			.02		.10				T.						.05	.20					.30							.02		0.74
Hannah	Pembina		T.			.10	T.		.20					.20				.10	T.	.30				T.							T.		0.90
Hansboro	Red					.05	.02		.02	.03	T.							.04		.06				.03							.03		0.28
Hillsboro	do		.20					.30		T.		.40		.25	.05			T.	.30	.20	.05	.10		.60	.20						.10	T.	2.75
Lakota	Sheyenne																																
Langdon	Pembina																																
Larimore	Red		.03			.01		.05		.12		.08	.02					.01	.02	.18	.03				.43						.03	.02	1.03
Lisbon	Sheyenne	T.	T.	T.	T.			.10			.05			T.											.05								0.20
McKinney	Mouse					.15						T.					T.		.30												T.		0.45
McLeod	Sheyenne													.10							.05			.05				.05					0.25
Manfred	do		.05		T.		.10				.10	T.						.07	.10	.15				.10							.12		0.79
Mayville	Red	.01							.02				.05	.01						.01				.50	.10						.08		0.78
Milnor	do	.05	T.				.05										T.	.10					.40								T.		0.60
Minot	Mouse	T.		T.		.03		.12				.03	T.	T.				.05	.03	.20	T.				.10		T.						0.56
Minto	Red			.08			.05		.15			.08						.10		.08			.20								T.		0.74
Oriska	Sheyenne								T.				T.	.20				T.	T.	T.	T.		T.	.10	T.			T.			T.	.33	0.63
Park River	Red		.02				T.	T.	.03	.02		.01						T.	.03	.11				.12		T.		T.			.01		0.35
Pembina	do																																
Power	Sheyenne				T.	.10	.10							.30				T.	.10	.05	T.			.05	.05			.05		T.	T.		0.80
Towner	Mouse		.02		T.		.10		T.				.03			T.		T.	T.	.30				T.						.03			0.48
University	Red	T.	.04		T.	T.	T.	T.	.30	T.		.10						T.	.04	.04	T.	T.		.10	.14		T.	T.			.04		0.80
Wahpeton	do							.10			T.			T.																			0.10
Walhalla	Pembina				T.		T.		.40	.20								.20		.40													1.20
Westhope	Mouse			T.		T.	.10							T.		T.				.05											T.		0.15
Willow City	do		.10				.20		T.				.05	T.		T.		T.	T.	.10						.10					T.		0.55
Minnesota.																																	
Albert Lea	Mississippi					T.		T.						.10	T.					.10		.10		T.	.70	T.					T.		1.00
Alexandria ‖	do	.02	T.	.03		T.	.02	.07			.07			.05		.03		T.			.02	.02			.04	.02	.03				T.	T.	0.42
Angus	Red	T.	.02			.04			.08	.06		.15					T.		.08			T.		.02			.02	T.			.06		0.53
Bagley	do							.14	.17			.18	.48					.40	.32		.08			.50							.50		2.77
Baudette	Rainy	T.	.01						.01				.11						.08	.30		.01		.11									0.63
Beardsley	Minnesota	T.						T.			.12			T.	.20					.07	T.	T.		.03	.15	.25					T.		0.82
Bemidji ‖	Mississippi			.01				.01		.07			.15	.32					.20		.09					.08		.02			.17		1.12
Bird Island	Minnesota	.04	T.			T.		.12			.43		T.	T.	.01		T.	.01			.02	.01		T.	.08	.02	T.				.03		0.77
Brainerd	Mississippi	.07	T.										.05					.01					.04		.10					T.	.10	.08	0.45
Caledonia ‖	do		.04	.01		T.	.04		T.			.04		.10	.75	.97		.03			.08	.22	.06	.02	1.05		.04					.03	3.48
Campbell ‖	Red	.08						.22			T.			.15			T.	T.			T.	.08			.15	T.		T.			.10	T.	0.78
Cass Lake ‖	Mississippi		T.	.05	T.	T.			T.	.13			.24	.41	.08		T.		.13		.27	.11	T.		.16							.27	1.85
Collegeville	do	.13	T.								.07		.06		.07		T.					.04			.05	.01							0.43
Crookston ‖	Red	T.		.08		.04				.08		T.	.22				T.		.11	.15		.02			.45				T.		T.		1.15
Detroit ‖	do			.12		T.						T.	.40				.08				.05	.05			.06				T.			.25	1.01
Ely	Rainy		T.	.04		.03			.04	T.		.05	T.	.33	.09			T.	.46	T.		T.		T.	.36						T.		1.40
Fairmont (near)	Minnesota	T.		T.	T.	T.	.10	.05			.10				.60			T.			T.	T.			.75	.10					T.		1.70
Faribault ‖	Mississippi																																
Farmington	do	.16	T.			T.		T.			.46		T.	T.	.26	.08	T.	T.		T.	T.	.12		.10	.80	T.	.04				.10		2.12
Fergus Falls	Red	.17	.05	.02	.02	.03		.16			.08			.34			.03	.03		T.	.06	.14			.09	T.				T.	.10		1.32
Fort Ripley ‖	Mississippi	T.	.06	T.					T.		T.			.05	T.	T.	T.		T.			.02			T.	.10			T.			.02	0.25
Fosston	Red		.03						.10	.04		.10	T.	.22			T.	.04	.14	.07	T.	T.		.22							.15		1.11
Glencoe	Mississippi		.15					.08			.40				T.			T.			T.				.08	T.							0.71
Grand Meadow	do	.03				T.		T.			.23				1.27	.11	T.			T.	.15	.18		T.	.53		T.					T.	2.50
Gull Lake Dam	do	.05								.05		T.	.08			T.	.02	T.				.03			.03				T.		.10	.11	0.47
Hallock	Red	T.	T.			.10		.10	.50			T.						.05		.20				.02				T.		.10			1.07
Halstad ‖	do	T.																	.15	.20					.04						.50	.08	0.97
Hinckley	St. Croix																								.40					.05			0.45
International Falls	Rainy					T.						.02	.18	.08				.15	.30	.30													1.03
Itasca State Park	Mississippi													.38						.15				.08							.20		0.81
Lake Crystal	Minnesota		T.				.08	T.		.50	T.			T.	.04					T.	.15			.50	T.	.08				T.			1.35
Leech Lake Dam	Mississippi	.04	.02		T.	T.		.05		.08		.33		.26	T.		.01	.03	.15	.09		.05	T.	.19	.22						.12	.07	1.71
Little Falls	do																																
Littlefork	Rainy								.03			.05		.16				.05	.11					.05									0.45
Long Prairie	Mississippi																																
Lynd	Minnesota	T.		T.	T.			T.			.35				T.			.04		T.	T.												0.39
Mankato ‖	do		.03					.04			.49				.30	.02		.01	T.		.02	.13			.78		.03						1.85
Milaca	Mississippi																																
Milan	Minnesota		T.					.05			.20			.05	T.					T.	T.	.15		.05	.15	.15							0.80
Minneapolis	Mississippi	.06	.01		T.	T.		.01		T.	.55			T.	.21		.02	.01		.04	.01	.10		.25	.23	.05	.02	T.	T.		.08	T.	1.60
Montevideo ‖	Minnesota			T.	T.			.11		T.	.35			.10	T.		.01				T.	.01		T.	T.		.02						0.65
Moorhead	Red	T.	.04		T.	T.	.03	.05	T.			T.	.02	.13	.02	.02	.01	.04	.04	.08	.08	.02		.16	.04			.01			.14		0.93
Mora	St. Croix	.20	T.					.05			.12				.20						.03	.03		.20	.12		.05				.06	.04	1.10
Morris	Minnesota	.10	T.					.15			.20			T.	.10		T.	T.		T.		T.		.05	.05	.05				T.	.01		0.71
New London	Mississippi	.20	T.					.05						.03				.02						.06		.22					.10		0.68
New Richland	Minnesota	.04	T.		T.	T.		.02			.14			T.	.38		T.	T.		T.	.07	.08		.21		.07					T.		1.01
New Ulm ‖	do	.02	T.	T.	T.			.10			.15			T.	T.		T.	.08			.05	.20			.30	T.	.12				T.		1.02
Osakis	Mississippi	.20	T.			.06		.03			.12		T.	.08	.12					T.		T.		T.	.09	T.	.03				T.		0.73
Park Rapids ‖	do		.06		.06	.05							.18	.35			.01		.04		.09	.07	.01		.08				.01		.07	.50	1.58
Piers	do	T.													T.			T.							.10						T.		0.10
Pine River Dam	do		T.						.04	T.		T.	.05	.04	.05			T.						T.	.08					T.	.45		0.71
Pokegama Falls	do	.02	.05			.01		T.		.08		.31		.54	.10		T.	.02	.13	.02				.12	.16						.28	.01	1.85
Red Lake	Red																																
Red Lake Falls	do																																
Red Wing ‖	Mississippi		.12	.04		.04	T.		.02		.04	.34		.02	.50	.08	.02	.02	T.		.10	.14	T.		.96		.08					.16	2.68
Redwood Falls	Minnesota										.40			.01	T.										T.	.05							0.46
Reeds Landing ‖	Mississippi		.02	.01		.01	T.				.02	.10			.24	.18		T.			.06	.06			1.20		.01		T.			.13	2.04
Rochester ‖	do					T.						.31			.60	T.						T.			.48							T.	1.39
Roseau ‖	Red		.04									.08						.15	.8	.30				.04							T.		0.69
St. Charles	Mississippi		T.			T.					.32			.03	1.35		T.				.32	.22			.52		.02						2.78
St. Cloud	do	.06	T.	T.							.05				.03	.05	T.	T.				.06		.03	.14		.03				.01	.02	0.48

TABLE 2.—*Daily precipitation for March, 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	31	Total.
***Minnesota*—Contd.**																																	
St. Paul	Mississippi	.02	T.		T.	T.		.01		T.	.43			T.	.30		.04	.01		.09	T.	.10		.32	.22	.06		T.			.14		1.74
St. Peter	Minnesota																																
Sandy Lake Dam	Mississippi	.04	T.					T.	T.	.18		.39	.11		.13		T.							.05	.07						.26		1.23
State Sanatorium	do		.08					.08		.04		.20		T.			T.		.04	.08				.04	.08						.10		0.74
Stillwater ‖	St. Croix		T.				T.				T.	.18			T.	.42	.20				.25				.73	.27						.20	2.25
Taylors Falls	do		.22								.28				.20							.15			.44		T.				.12		1.41
Thief River Falls ‖	Red		.22	.22				.15	.22			.22							.22					T.	T.								1.25
Warren	do																																
Warroad	Rainy		.11									.08					T.	.52	.22	.22				T.	T.								1.15
Winnebago ‖	Minnesota	T.	T.	T.		T.		.05			.05			T.	.60	.07		.02			T.				.70	T.	.05					T.	1.54
Winnibigoshish	Mississippi		.02		.01	T.		.06		.18		.28	.12	.35			T.		.18	.13		.09		.10	.06				T.		.22		1.80
Winona	do	.01	.01			.01		T.			.21		T.	.05	1.48		.03	T.			.30	.20		.01	.60		T.				.03		2.94
Worthington ‖	Des Moines	T.			.02			T.			.27		T.		.10			.08			.02	.08			.10	T.	.10						0.77
Zumbrota	Mississippi	T.	T.	T.		T.		T.			T.		T.	.03	.58	.01	T.	T.			.05	.09		.01	.78	T.	.04				.06		1.65
South Dakota.																																	
Milbank	Minnesota				T.	T.		T.			.10		T.	.43	.92	.14		T.			.03	.07			.04		.10						1.83
Sisseton	do									T.			.42							.03	.04			.02			.40						0.91
Wisconsin.																																	
Antigo	Wisconsin	.05	.02			T.				T.	.10			T.	.90	.10	T.				.10	.30		T.	.30						.50		2.37
Barron	Chippewa		.16			.05		.02			.31				.41	.07		T.			.39	.19		T.	1.05		.05		.02		.15		2.87
Beloit	Rock	*	.07	*	.14	.40									.40	.17		T.			.10	.80		.40	.90	T.						.05	3.43
Big St. Germain Dam.	Wisconsin	.14	T.	.08		.05				.18	.12			.05	.20	.31	T.				.15	.35	T.	.03	.80		T.		T.		.02		2.48
Brodhead	Rock			.10		T.		T.						.15	.35	.20		.20				.80		.42	.58	T.	.20						3.00
Burnett	do	T.	T.	T.		T.		T.	T.	T.					.65	.05	.10	T.			T.	.53		*	1.22	T.	T.				T.	T.	2.55
Cornell	Chippewa																																
Cottage Grove	Rock	.01	.01	.06	.02	.01		T.	T.					.31	.76	.05	T.	.01			.10	.54		.04	.50	.01	.02				T.	.03	2.48
Darlington	do	T.			.10		T.							.02	1.00			T.				.40		.03	1.00								2.55
Deerskin Dam	Wisconsin	.40		.40		T.				T.	.15		T.	T.	.22	.70	T.				T.	.30	T.	T.	.63	T.					T.		2.80
Delavan	Rock	.03		.07		.01		T.						.35	.01	.12	T.	T.			.04	1.02			.91		.05				.06		2.67
Dodgeville	do																																
Downing	Chippewa	.40	.20			.40		.10			.60				.20	T.	T.			T.	T.	T.		T.	.20	T.					.10	T.	2.20
Eau Claire	do	.03	.02			.08		.01	T.		.39		T.	.03	1.24	T.	.06				.15	.25		.02	.61		.05		T.		.19	.02	3.15
Glen Flora	Chippewa	.10	T.								.40				.25						.10	.33		T.	1.10							.15	2.43
Grand Rapids ‖	Wisconsin		.08				T.		T.			T.			.82	.92		T.			*	.48	.33	.28	.45				T.			.23	3.59
Grantsburg	St. Croix	.10												*	.50									*	.30		.05		.05		T.		1.00
Hancock	Wisconsin	T.	T.				T.							.25	2.00	.10	.20				.20	.40		*	.52						.10	.10	3.87
Hatfield	Black														1.75						.20	.50			.41								2.86
Hayward	St. Croix			.20		.20				.30					.30			T.	T.		.30			.40	.10		.20				.05		2.05
Hillsboro	Wisconsin	.05	.05			T.		T.			T.			*	2.28	T.	T.	T.			.10	.40		1.10							.13		4.11
Koepenick	do		.10	.10							.20		.10	.10	1.00	.20					.30	.30		.10	.50							.10	3.10
La Crosse	Mississippi	.02	T.		T.	T.		T.			.16	T.	.03	.97	1.26	.02	T.	T.		.18	.34	.37		.43		T.	T.				.13	.02	3.93
Lake Mills	Rock	.04	.01	.05	.02	.03		.02	T.					.18	.52	.10	.02	T.			.18	.55		.12	.83	.04	.02				T.		2.73
Lancaster	Mississippi	.10			.02									.91		T.						.30		1.25	.30								2.88
Long Lake	Wisconsin	.03	.02	.06		.06	T.			.19	.17			.04	.54	.12	T.				.13	.20		.01	66		.01		T.		.02	.01	2.27
Madison	Rock	.01	T.	.08	T.	T.		T.			T.		.03	.67	.09	.09	T.	T.			.02	.55		.72	.12	.01	T.		T.		T.	.02	2.41
Marshfield	Wisconsin	.04	.05	T.		.03		T.	T.		.14			.03	1.99	.01		T.				.22		.58		T.		T.			.21		3.30
Mather ‖	do		.20	T.		T.	T.		T.			.05		T.	1.41	.86		T.			.10	.40	.10	.10	.56		T.		T.		T.	.26	4.04
Mauston	do													.25	1.83						.60	.25		.15	.60							.05	3.73
Meadow Valley	do	T.	T.			T.		T.		T.				.19	1.85	.10	.03				.18	.20		.12	.40						.18		3.25
Medford	Black	T.		.10		.10					.30			.05	.74	.40					.30	.50			.86				T.		.08	.23	3.66
Merrill ‖	Wisconsin		.04		.06		.03					.22			68	53	T.			*	.26	.17	.07	*	.94				T.	T.		.14	3.14
Minocqua	do	.04	T.	.09		.04	T.			.22	.18			.10	.55	.30		T.			.10	.20		T.	.10	T.					.05	.08	2.05
Mondovi	Mississippi	.01	.04			.02		.01			.25			.01	.92	.12	.04				.10	.20		T.	.43		.04				.17		2.46
Mt. Horeb	Rock	.10				T.								.40	.82	.11	T.	.05			.25	.46		.50	.51	T.	.08				.08		3.36
Muscoda ‖	Wisconsin		T.	T.	.04		T.							.37	1.20	.14	T.				.25	.25	T.		.70		T.					T.	2.95
Neillsville	Black					T.					T.				2.10	T.					.10	.50		*	1.25							.20	4.15
New Richmond	St. Croix	.30	.20			.20		.10						T.	.60	.20	.20				.30	.20		.10	2.00		.10	.10			T.		4.60
Osceola	St. Croix	.02	T.		T.	T.		T.			.33		T.		.50		T.			T.	T.	.01	T.	.15	T.	T.			T.		.10		1.01
Park Falls ‖	Chippewa	.16	.07		.07	T.			.25	.04	.03		.01	.28	.76					.11	.14	.03		.93	T.			T.		T.	.15		3.03
Portage	Wisconsin		T.	T.		T.		T.						.24	1.19	T.	T.	T.			.37	.47		.04	.62		.02				.02		2.97
Port Edwards	do	.40				.10			T.		.24			.20	1.80	.30	.10				.10	.60	.10	T.	.75	.10		T.	.10		.50	.20	5.59
Prairie du Chien ‖	Mississippi				T.	T.		T.						.48	1.08		T.		T.		.24	.28	.10	.16	.28		T.						2.62
Prairie du Sac	Wisconsin	.02	.03	T.		.01		T.						.26	.93	T.	T.				.19	.42	.20	.79			.02						2.87
Prentice	Chippewa	.03	.05	.14		.15	.03			.08	.36			.25	.08	.02					.02	.02		*	1.00								2.23
Rest Lake	do																																
Rhinelander	Wisconsin	.05	.04	T.		.04					.32			.07	.72	.26					.16	.19		.02	.52		T.				.23		2.62
Shullsburg	Mississippi	.12		.07		T.								.28	.65	.09	T.	.03			T.	.66		.36	.57	T.	.04						2.87
Solon Springs	St. Croix	.20	T.			T.				T.		T.	T.		1.00		T.	T.		T.		.20		T.		T.						.20	1.60
Spooner	do	.28	T.					.09	T.						.10		T.			.18	.09	T.		.22	.29	T.					.08		1.33
Stanley	Chippewa		.05	T.		T.		T.			T.		.05	T.	.05	.15	T.	T.		T.	.25	.07		T.	.70		.10				.24		1.66
Stevens Point	Wisconsin														1.20	T.						.40			1.20						T.		2.80
Sugar Camp Dam	do	T.		T.		T.				.14	.10			.05	.50						T.	.25			.76						T.		1.80
Tomahawk	do	.05	.05	T.		.04					.30				1.00	.30					.20	.20			*	.40							2.54
Trout Lake	do	.02	T.	.15		.10				.15	.07		T.	T.	.10	T.	T.					.10		.05	.20	T.	T.	*	T.	T.	.10		1.04
Twin Lakes Dam	do		.15		T.										1.00							.92			.60								2.67
Valley Junction	do	.04	.05			.04		.10			.10			.32	1.72	.10	.04				.08	.40		.10	.90								3.99
Viroqua	Mississippi	.06	.02	T.		T.		T.	T.		T.			.25	2.37	.06	T.	T.			.37	.25		.15	.38	T.	T.				.03		3.94
Vudesare	Wisconsin	.20	.08			.30				.10					.56	.30	T.				.20	.35		T.	.60					T.			2.69
Watertown ‖	Rock		.10	.10	.05	T.		T.						.28	.56	.10	.05	.05			.19	.60	.10	.05			.05					T.		2.28
Waukesha	Fox	.05	T.		.15	.07			.05						.68	.15	T.				.04	.55		.05	1.45	.10					.02		3.36
Wausau	Wisconsin	.05		.08		.04					.30			.01	1.70			.01			.13	.18		.61					.03		.13	.06	3.33
Weyerhaeuser	Chippewa	.03		.03		.02		.02	.01		.32			T.	.02	.19	T.			T.	.19	.20		.20	.77		.06				.23		2.29
Whitehall	Mississippi	.10	.10			.10		.10			.10			T.	1.20						.10	.60		*	.60						.20		3.20
Iowa.																																	
Albia ‖	Des Moines							T.						.12	.70	.03	T.	T.			.10	.12		.42	.36	T.	T.						1.85
Algona	do			.03				.09			.15				1.02	T.		.05	T.	.05		.03		.05	.75	.02							2.24
Alta ‖	Raccoon		T.		.04		T.	.02			.08			.04	.65	.05		.08			.05	.02			.70		.06						1.79
Amana	Iowa	T.			T.	.02		.13			.03			.71	.56	.05	T.				.01	.54		.66	.22	T.							2.93
Ames	Skunk	T.		T.							T.		T.	.90	.95	T.	T.			*	.12				.42	.70	.23						3.32
Baxter	do	.01			.02	T.		.10	.03		.03		.04	1.21	1.25	T.	T.			.05	.31	.07		.13	.38	.03							3.66
Belle Plaine	Iowa	.07			.06	.05		.20						.70	1.10	.06	.01			T.	.05	.29		.51	.04	.01							3.15
Belmond	do	.03		.05	.03	.12					.25			.14	1.48	.03	.02	.02		.02	.06	.05		.06	.51	.06	.03				T.		2.96
Bloomfield	Mississippi	.04									.13		.40	.25	.84	.04	.04				.30			.60	.13	.85	.02						3.64
Bonaparte	Des Moines							.09						.25	.20	.03						.73		.35	.11	.10							1.86

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

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Iowa—Continued.																																	
Boone ‖	Des Moines		T.		T.		T.	T.						.30	.75	.15		T.			.25	.65			.28		.05	T.					1.83
Britt	Iowa	T.	T.	.01		T.		.10			.15			T.	1.02	.01	T.	.04		.01	.03	.01		T.	.68	.01	T.						2.07
Buckingham	Cedar	T.	T.			T.		.10						.80	1.27	.04				T.	.25	.08		.22	.47								3.23
Burlington ‖	Mississippi	.02					.05	.03	.09					.05	.23	.05					.08	.31		.40	.50	.06						T.	1.87
Carroll ‖	Raccoon				T.									.14	.99	.20					.20				.28	.10							1.91
Cedar Rapids ‖	Cedar		T.		.05		.05	.08	.10			T.		.25	.60	.08	T.	T.			T.	.80	T.	.31	.59	T.	T.		T.				2.91
Charles City	do	T.		T.		.01	T.	.13			.13		.01	.69	1.52	.08	T.	.04		.37	.16	.18		.56		.03	T.						3.91
Clear Lake	do		.50		.10		.15							.20				.15		.02	.05	.05			.05	.05							1.32
Clinton	Mississippi	.02	T.		.01	.10		.03				T.		.09	.32	.14	.03				.04	.90		.93	.19	.06	.01						2.87
Columbus Junction	Iowa	.05			T.	T.			.10	.05		T.			.18	.32	.10	T.			T.	.60		.63	.05	.03	T.				T.		2.11
Davenport	Mississippi	T.			.01	.05		.12			T.		.02	.19	.02	.02	T.			.01	.30	.33		.82	.04	.06		T.			T.		1.99
Decorah	do	.08	T.	T.				T.			.15				2.30	.20	T.	.05		T.	.24	.83		.15	.67	.05				T.	.02		4.74
Delaware	do			.01		T.		.03						.60	.82	.18	T.	T.			.17	.38		.27	.82								3.28
Des Moines	Des Moines	T.		.01		T.		.01			.01		.14	1.55	.43	.03	T.			.31	.30			.15		.09	T.						3.03
Dubuque	Mississippi	.02		.07		T.		.01			T.		.12	.88	.31	.03	T.	T.		T.	.01	.48		.88		T.	T.	T.					2.81
Earlham	Raccoon	.10	.05			T.		T.			T.		.07	1.00	.90	.10				.01	.28	.10		T.	.31	.08	T.						3.00
Elkader	Mississippi			.07				.07			.05			.50	1.07	.06					.06	.20		1.20							T.		3.28
Elma	Wapsipinicon.			T.	T.			.15			.19			T.	1.64	.10		.05		T.	.50	.20		.50	.66	T.					T.		3.99
Estherville ‖	Des Moines							.05							.60	.05		.05			T.	.10			.90	.05							1.80
Fairfield	Skunk	T.					.16						T.	.56	.44	.04					.06	.51			.83		T.						2.60
Fayette	Mississippi	.05		.07		T.					T.			1.10	.90	.12	T.	.05		.01	.02	.50		.22	.28	T.					T.		3.32
Forest City ‖	Cedar	T.		T.				.15			.08				.90	.20		T.			.20			.50		.05					T.		2.08
Fort Dodge ‖	Des Moines				T.			.05						.05	.10	.10		.05			.05	T.			.35		.05						.80
Fort Madison	Mississippi			T.				.20						.13	.10						.55			.70		.20							1.88
Gilman	Iowa	.10		T.		T.		T.				.02		.92	1.22							.05			.31								2.62
Grand Meadow	Mississippi			.40		T.		.05			.05			.50	1.40	.15	T.	.08			.26	.30		.25	.45	.02					T.		3.91
Grinnell	Iowa	T.			.02	T.	.10	.10			.06		T.	.52	1.44	.10	T.				.43			.35		.04							3.16
Grundy Center	Cedar	T.			.05	T.		.10						.80	1.80						.10	.20			.50	T.							3.55
Guthrie Center	Raccoon	T.			T.	T.		T.			.02		T.	.42	.95	T.	T.	T.		.05	.30	.05		.01	.49	.17	T.	T.					2.46
Hampton	Cedar			.05			.12	.05			T.			1.50	.75		.08				.08			.80		T.							3.43
Humboldt	Des Moines			.01							.34				.99			.05								.04							1.43
Independence	Wapsipini'n	.10	.05	T.		.06		.20			.04			.54	1.35		T.				.02	.30		T.	.54	.50	T.	T.			T.		3.70
Indianola	Des Moines	T.				T.		T.	T.		.02		.04	.30	1.09	.25	T.			T.	.08	.15		.07	.10	.06		T.					2.16
Iowa City ‖	Iowa		.02				.03	.05	.07			T.		.21	.58	.08	T.				T.	.66		.63	.32	.04	T.						2.69
Iowa Falls ‖	do		T.		.10	T.	T.	.10	.03			T.		.14	.93	.58	T.	.05			.54			T.	.59	T.	.10	T.					3.16
Jefferson	Raccoon	T.		T.	.02	T.		.02					T.	.30	.48	.01		.01		.09	.05	.01		.01	.60	.02	T.						1.62
Keokuk	Mississippi	T.			.01	.03		.11			T.		T.	.26	.06	.02	T.			.28	.78			1.14		.12	.01						2.82
Keosauqua ‖	Des Moines	.05			T.			.06	.16					.02	.80	.05	.05	.02			T.	.72		.25	.29	.03	.03						2.53
Knoxville	do	T.				T.		.05			.05		.08	.28	.85	T.	T.				.25	.10		.35	.35	.10	T.						2.46
Lacona	do	.10		.02		T.		.01					.15	.70	.82					.08	.66	.20		.44	.02	.20	.01						3.41
Lansing ‖	do		T.			T.						.07		.24	1.52	.66			T.		.15	.24	T.	.05	.28		.01					.02	3.24
Le Claire ‖	do	.01	.02		.01		.15	.05	.10					.03	.25	.12	.02	.03			.03	.78		.31	.64	.06	.03				T.	T.	2.64
Marshalltown ‖	Iowa		.04		.05	T.	T.	.12	.05			.02		1.01	1.39	.52	T.	T.			.37	.15		.15	2.00	T.	.01	T.			T.		5.88
Mason City	Cedar										.08			1.35							.16	.09				.02							
Monroe	Skunk	T.			T.	T.	T.	T.	T.		T.		T.	.30	.95	.04	T.			.18	.08	T.				T.							1.55
Mount Pleasant	do	.04			T.	T.		.14	.03		T.	T.	T.	.14	.55	.04	T.				.14	.23		.87	.26	.07	.02						2.53
Muscatine ‖	Mississippi	T.	.03				.04	.08	.05					.02	.05	.25	T.	T.			.02	.67		.43	.27	.04	.02						1.97
New Hampton	Wapsipini'n	.20		T.				.10						.91	2.14	.04					.20	.20		.64	.45	T.							4.88
Nora Springs	Cedar	.45	T.	.03	.04	.01		.38			.16		.16	1.10	1.44	.04	T.	.03		.25	.14	.02		.65	T.	.03	T.				.06		4.99
Northwood	do	.20	.05			.05		.30			.10	T.		.02	1.80	.10		.05		.10	.10	.05		.03	.30	.10					.02		3.37
Olin	Wapsipini'n	T.				T.		.20			T.			.65	.35	.20	T.				T.	.30		1.00		T.	T.						2.70
Osage	Cedar	T.				T.		.20						.10	1.87			.10				.10		T.	.80								3.17
Oskaloosa	Des Moines							.07			T.		.04	1.06	.03		.02			.29	.17			.48	.08		T.						2.24
Ottumwa	do				T.	T.		T.			.02		.02	.30	.75	.04				T.		.64		.40	.10	T.							2.27
Pella	do	T.				.05		.09			.01		.05	.32	.75	.06	T.			T.	.28	.09		.55	.05	.05	T.				T.		2.35
Perry	Raccoon	T.			.05	T.		.05	T.		.03			.41	.64	.05	T.	T.			.20	.10		.03	.36	.20	T.						2.12
Pocahontas	Des Moines			.05		T.		.03			.08			.04	1.08		.04	.03		.05	T.	.04		.06	.65	.05							2.20
Rockwell City	Raccoon	.40						T.			T.				.30					.40					1.00								2.10
Sac City	do	.10		.05	.05	T.	T.							.05	.65					T.	.20				.30								1.40
St. Charles	DesMoines	T.				T.		T.			.03		.07	.80	.55	.19	T.			.01		.48		.06	.02	.08							2.29
Sigourney	Skunk	T.	T.		.02	.10		.05	.02		.15			.05	1.00	.09	T.				.03	.55		.41		.03	T.						
Stockport	do	T.				.02		.10					.02	.06	.54	.01	.01				.07	.50		.35	.16	.01	T.						1.85
Storm Lake	Raccoon	T.		.04		T.		.02			.04			.02	.98			.07		.03		.05		.60		.07							1.92
Tipton	Cedar					.11	.04	.30						.42	.18	.28	T.				T.	.34		1.33	.16	.06							3.22
Toledo	Iowa	T.				.05	T.		.20			.02		.65	1.10	.10					.22			.30	.22								1.66
Wapello	do								.13						.35	1.01									T.	T.	T.						1.49
Washington	Skunk	.01						.17			.03		.15	.75	.12						.68			.50	.45	.02							2.88
Waterloo ‖	Cedar		.01		.02	.01		.05						.86	1.19	.38		.02			.04	.30		.16	.25		.01	T.					3.30
Waukee	Raccoon	.05			.02	T.		T.			.04		.16	1.39	1.00	.02	T.			.04	.15	.05		.04	.53	.04	T.						3.53
Waverly	Cedar	.30									.10			.40	1.50	.10								.82									3.22
Webster City	Des Moines			T.	T.	T.		T.			T.			.23	.80	T.				T.	T.	T.		T.	.70	T.							1.73
West Bend	do			.05				.50			.14				.85			.10		T.					.50	.10							2.24
Whitten	Iowa	T.			T.	T.		.20			T.			.50	1.50	T.					.54	.10		.13	.40	T.							3.37
Winterset	Des Moines	T.			.08	T.		T.			.02		T.	.30	.23	.07	T.			T.	.37	.10		T.	.25	.10	T.						1.52
Missouri.																																	
Gorin	Mississippi							.09						1.19		.02					.84			.51	.17								2.82
Hannibal	do	T.			T.	.02		.04					T.	.26	T.	.04	T.				.27	.76	.09		.96	1.02	.43	.18					4.07
Louisiana	do	.20			.02	.10		.12		T.						.07						1.30		.98	2.15	.90	.40						2.24
Macon	do	T.				T.		T.						.41	.70	T.				.68	.93		.40	.28	.28	.04							3.72
Mexico ‖	do	.11					.11	T.	.01					T.	.52	.08	.01				.27	.94	T.	.45	.57	1.73	.08	.29					5.17
Palmyra	do	1.25			T.		T.												.42		.60	.59		.32		.31							3.49
Steffenville	do	.05			T.			.05					T.	.38	.80	.07					.50	.95			.45	.40	.07						3.72
Sublett	do	T.												.52	T.	T.	T.				.10	.40		.50		T.	T.						1.52
Vandalia	do	T.				T.								T.							.16	.60		T.		2.10		.18					3.04
Warrenton ‖	do	.13	T.		.01		.17		.01						.55	.01						.59		.41	.42	2.71	T.	.37					5.38
Indiana.																																	
Collegeville	Iroquois					.10		.10	T.						.27	T.						.34		1.20	1.14	1.86	.20					.74	5.95
Knox	Kankakee	.18	.02		.07	.14	.40	T.							.15	T.	.04	T.			.10	.81		1.50	.91	1.45	.18	.10				.27	6.32
Laporte	do	.10	.12		.08	.10									.14		.12			.22		.05	.20	.55	.10	.60	.30	.10				.33	3.11
Plymouth	do	.08	.03		.19	.17	.13	T.	.02						.22	T.	.08				.19	.61		1.43	1.08	1.31	.15	.25				.22	6.16
South Bend	do	.05	.08		.05	.09	.36		T.						.25	T.	.10				.13	.20		1.15	.53	.88	.60	.18				.15	4.80

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

Stations.	Watershed.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Illinois.																																	
Aledo	Mississippi	T.			T.	.03		.19					T.	.03	.36	.06						.94		.76	.31	.12	.07						2.87
Alexander	Illinois	.15			T.	.05	T.	.04						.16	.07	.02	T.	T.			.15	1.04		.75	1.18	1.55	.14	.16				T.	5.46
Antioch	do			T.	.10	.04		T.						T.	.80	.14						.50		.56	.29	T.	.10						2.53
Astoria	do	T.			T.	.03		.25					T.	.55	T.	.05	T.				.38	.85		.95	.40	.35	.45	T.			T.		4.26
Aurora	do	.10				.20		.01					T.	.20	.20	T.	.10				.05	1.00		1.10	.33	.12	T.				.02		3.43
Beardstown ‖	do	.10			T.	T.			.23	.05					.55	.05	T.				.30	.75		1.00	.65	.70	T.	.30				T.	4.68
Bement	Mississippi				.03	.03	T.	T.						.03	.41	T.		.01			T.	.83		1.55	1.26	1.72	.20					.02	6.09
Bloomington	Illinois	.07			T.	.10		.04	.06	.01				.10	.07	.02	.01				.18	1.34		1.37	1.39	.76	.22	T.	T.			.05	5.78
Cairo	Mississippi	.01			T.	.06					.24			1.05		T.	T.			T.	1.07	.19		.04	.02	4.29	.24	.02					7.23
Camp Point	do																																
Carbondale	do	.12			.03	.13					.09			.60		T.	T.			T.	.53	1.05			.25	4.24	.52	.07					7.63
Carlinville	Illinois	.21		T.	T.	.14		T.			.03			.41		T.					.05	1.04		.55	1.16	1.92	.52	.03					6.06
Carlyle	Mississippi	T.	T.		T.	.03					.02	.38							T.			1.15	T.	T.	1.60	1.92	.58	T.					5.68
Chester ‖	do	.22					.16				.04	.02			.82		.04					1.92			.62	2.80	.22	.82					7.68
Clinton	Illinois	.10		T.	T.	.09		.04						.12	.21	.01	T.	T.			.10	1.29		1.78	1.46	1.81	.30	.05				.10	7.46
Cobden	Mississippi	.25									.25			.55			T.			T.	.30	1.14			1.05	3.40	1.00	T.					7.94
Dakota	do	.05	.05	T.	.07	.02	T.	T.						.03	.41	.13	.03	.04			.08	.84	T.	.48	.60	T.	.10					T.	2.93
Decatur	Illinois	.12		.05	T.	.15		.03					T.	.20	T.	.05		.03			.15	1.20		1.33	1.27	1.76	.38	.15					6.87
Dixon ‖	Mississippi		.08	T.	T.		.17							T.	.25	T.		T.			.05	1.10		.42	.52	.05	T.						2.64
Du Quoin	do			T.		.15					.11			.61		T.					.93			T.	3.20	2.92	.73						8.65
Dwight	Illinois	.12	T.		.03	.13		T.						.25	.08	T.	.05				.15	1.14		1.37	.24	.35	.07	.10			T.	.10	4.18
East St. Louis ‖	Mississippi	.15					.17		T.			.08			.19		T.					1.65		.79	.84	2.98		.77					7.62
Edwardsville	do					.21					.10			.28		.03					1.40			1.83	1.90	1.65	.74	.08					8.22
Elgin	Illinois	T.			T.	.05		T.	T.					.03	T.	.02	.01	T.			.05	.67		.59		T.							1.42
Ewing	Mississippi		.14			.02	.09				.05	.06		.96		T.					T.	.96			1.46	5.22	.63	.09					9.68
Fairview	Illinois	.07	T.		T.	.03		.10	.01					.03	.18	.03	T.				.14	.94		.83	.34	.23	.04	T.				T.	2.97
Galva	do	.04			T.	.02	T.	.20	T.					.05	1.01	.04	T.				.20	1.00		1.27	.26	.26	T.				T.		4.35
Grafton ‖	Mississippi	.15	T.		.04		.06		.04			.16			.30	T.	T.					.96		.30	.30	2.70		.60					5.61
Greenville	do	.07			T.	.15		T.			.29	.07		.35		T.						1.42		1.59	1.87	1.72	.80	T.					8.33
Griggsville	Illinois	T.			T.	T.		.04					T.	.08	.02	.03					.11	.97		1.04	1.23	.87	.24	.02					4.65
Havana	do	.05				.02		.09						.03	T.	.02	.01				.03	.12		.65	.10	.22	.13					.06	1.53
Henry	do	.03				.10		.15						.20	.14	.03	T.				.10	1.25		1.20	.40	.17	T.				.14		3.91
Hillsboro	Mississippi	.28		.06		.18		T.			.07	.15		.44	T.	T.						1.62		1.10	1.84	1.68	.55						7.97
Joliet	Illinois	.07			.04	.08		.02						.80	T.	T.	.05			.05	.10	.80		1.03	.20	.09	.04				.06		3.43
Kishwaukee	Mississippi	.03	T.	.01	T.	.03								.16	.31	.02	.02	.01			.07	.74		.55	.23	.01							2.19
LaGrange	Illinois					.09		.20						.19		.11	.07				.15	.87		1.32	.20	.13	T.				.06		3.39
La Harpe	do	.02				.01		.09	.02				T.	T.	.23	.01	.01				.18	.88		.92	.12	.25	T.						2.74
Lanark	Mississippi	T.	.03	T.		.04		T.						.07	.16	.08	.02	T.			.05	.40		.48	.32	T.		T.			.02		1.67
La Salle	Illinois	T.		T.	.01	.06		.01					.02	.36	.01	T.	.02			.04	.29	.83		1.07	.14	.17	T.	T.			T.		3.03
Lincoln	do	.09			T.	.15		.05	T.					.17	T.	.07		.04			.15	1.30		.92	.92	1.78	.33	.10				.08	6.15
Macomb	do				T.	T.		.40							.27	T.	T.				.18	1.08		.76	.34	.10	.04	.01			T.		3.18
Manteno	do	.12	.02		.05	.08		T.							.42		T.	.02			.16	.98		1.34	.29	.45	.15	.07				.06	4.21
Martinton	do	.05				T.		T.						T.	.02	T.		T.			.17	.80		1.40	.95	1.50	.05	.16				.12	5.22
Mascoutah	Mississippi	.05	.17	T.		.10	.01	T.			.10			.60		T.						2.24		.05	1.95	2.50	.74	.30					8.81
Minonk	Illinois	.12			T.	.10		.12						.31	.02	T.	T.				.15	.90		1.10	.34	.14	.05	.04				.06	3.45
Monmouth	Mississippi	.07			T.	T.	.04	T.							.34	.10					.04	1.04		1.30	.18	.30	.50						3.91
Morris	Illinois	.08				.12	T.							.22	.18	T.	T.				.24	1.00		1.18	.32	.08	T.					T.	3.42
Morrison	Mississippi	.04	T.		.03	.19		.02	T.					.05	.14	.05	.05				.05	.83		.63	.30	.03	.02				T.		2.43
Morrisonville	Illinois	.22	T.	.04	.02	.06		T.			.03	.06		.33	T.	.01					.02	1.43		.80	1.26	1.53	.20	.06					6.07
Mount Vernon ‖	Mississippi	.50									T.	.23			.83							.68			1.50	3.90	.58	.62					8.84
Nashville	do	.02	T.		T.	.22	.06	T.			.06	.08	T.	.72	T.	T.				T.		1.10			1.95	2.04	.90	.02					7.17
Oregon	do				.50	T.		T.						T.	.22	T.	T.	T.			.05	.40		.80	.40	T.							2.37
Ottawa	Illinois				.05	.06								.34	.13	.02	.04				.08	1.55		1.23	.23	.05	.09				T.		3.87
Pana	Mississippi	.02		T.		.14	T.	T.			.14	T.		.15		T.						1.74		1.40	1.30	1.32	.20	.05					6.46
Pawpaw	Illinois	T.				.04		.02						.19	.19	T.	T.				.05	1.16		*	1.38	.10					T.		3.13
Peoria	do	T.			T.	.02		.22					T.	.16	.01	.01	.02				.52	.97		.95	.31	.07	.09	T.			.11		3.46
Pontiac	do	.10	T.		T.	.06		.20	.05					.34	.14	T.	T.				.15	1.01		1.48	.30	.70	.10	.20				.24	5.13
Quincy ‖	Mississippi	.08			T.		T.	.03	T.						.19	T.					.45	.72		.65	.41	.57	.02	.12					3.24
Riley	do	.04		.04		.08		.01						.20	.08	.10	T.	T.			.07	1.06		.43	.29	.05					T.		2.45
Roberts	Illinois	.06			T.	.08		.20	T.					.05	.05	T.	T.	T.		.20	.02	1.03		1.38	1.62	1.56	.15	T.				.07	6.47
Rockford	Mississippi	.04		.02	.07	.09		T.						.17	.27	.10	.01	.02			.06	1.03		.60	.28	.02	.02				T.		2.80
Rushville	Illinois					.04		.18						.14	.04	.05	.05				.08	.92		1.09	.68	.31	.30	T.				T.	3.88
St. Charles	do	.08	T.		.07	.10		T.						.05	.22	.04	T.	T.			.04	.95		.90	.40	.15	T.				T.	T.	3.00
St. Peter	Mississippi	.20	.10		T.	.23	T.	T.			.13			.55		T.						.76		.25	1.76	1.97	.80						6.75
Springfield	Illinois	.03		T.	T.	.04	T.	.05			T.		T.	.28	T.	.03	T.			T.	.50	.81		1.02	2.15	.40	.24	T.					5.55
Streator ‖	do	.10	.01		.01	T.	.13		.04					.01	.43	.01	T.	.01			.08	1.25	T.	.31	1.03	.09	.02	.05	T.			.06	3.64
Sullivan	Mississippi	.05				.32		T.				.15		.31		T.								1.65	1.58	.97	.25						5.28
Sycamore	do	.10		T.		.10								.10	2.00	T.	T.				.10	1.00		.80	.22	.10	T.				T.		4.52
Tiskilwa	Illinois	T.				.12	.06							.14	.17	T.					.14	1.10		1.41	.40	.22	T.			T.			3.76
Walnut	Mississippi	T.				.10		.01						.04	.14	.01	T.				.01	1.28		.89	.25	.22	T.					T.	2.95
Warsaw ‡	do																																2.36
Waterloo	do	.04	T.		T.	.10	.08	T.			.05	.01		.73		T.	T.					2.23	T.	2.00	1.87	.28	.52	.07					7.98
White Hall	Illinois	.07			.02	.05		.04				.01	T.	.22	.19	.03	T.					1.22		1.34	1.22	1.42	.17	.03					6.03
Windsor	Mississippi	.15	T.	.02	.03	.16	T.	T.			.15	.21		.25	T.	T.	T.					.72		1.58	1.60	1.50	.50	T.					6.87
Winnebago	do	.02		.07	T.	.12								.35	.18	.08	T.	T.			.07	1.11		.56	.82	.07	.03						3.44
Yorkville	Illinois	T.			.02	.05		T.						.20	.05	T.	T.				.10	.90		1.00	1.00	.10	T.				T.		3.82

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

TABLE 3.—*Maximum and minimum temperatures for March, 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....	−1	−21	6	−19	20	−22	15	−16	10	− 2	21	− 7	−3	− 3	14	−11	4	4	10	−17	11	− 5	12	−14	19	−13	−5	−10
2....	29	−31	29	−18	34	−24	39	− 8	5	− 8	16	−25	17	−20	20	−20	20	−21	26	−21	19	−20	3	−35	26	−18	2	−28
3....	11	− 5	8	− 7	25	− 2	20	4	0	−15	25	8	11	−10	29	14	23	−11	19	1	21	−17	17	− 1	29	8	18	−10
4....	35	− 6	36	4	40	0	41	4	− 5	−22	26	0	33	− 6	25	− 4	32	0	36	− 3	34	− 1	22	−30	27	1	22	−20
5....	4	− 8	20	− 5	28	10	20	6	−10	−20	31	6	4	0	32	10	15	10	35	0	21	1	22	− 2	31	0	20	− 4
6....	15	−17	13	− 8	26	− 5	25	4	− 5	−28	20	−10	13	−11	20	0	27	− 8	16	− 5	25	− 6	13	−20	18	− 4	11	−17
7....	32	− 8	33	10	33	− 5	44	4	− 8	−22	25	8	28	− 5	25	8	37	12	28	11	38	− 3	15	−18	26	9	20	−27
8....	38	15	36	23	56	−15	44	25	10	−20	52	25	36	10	50	23	61	27	45	25	59	12	47	12	54	25	42	15
9....	36	25	35	22	54	24	41	27	20	−15	51	28	35	17	43	31	53	28	38	22	51	29	39	20	41	31	40	20
10....	39	16	37	21	45	23	41	27	32	−12	44	29	37	22	42	32	52	31	44	27	50	30	41	24	39	31	40	24
11....	24	13	33	5	36	23	27	21	22	− 8	43	22	30	23	43	26	56	24	35	26	47	29	36	9	46	28	33	12
12....	27	4	32	7	35	23	33	17	28	− 5	49	28	35	15	54	35	49	30	36	26	54	27	34	28	59	37	35	27
13....	17	14	27	6	40	25	24	21	30	− 5	48	31	33	23	49	38	50	29	32	20	60	29	34	30	47	32	35	30
14....	10	− 4	10	− 3	50	24	21	0	24	− 8	33	17	20	12	46	20	25	25	22	7	49	26	32	15	32	15	30	15
15....	20	−14	21	− 6	40	12	18	− 3	32	−10	25	7	18	− 7	24	12	24	5	20	− 1	36	13	18	8	27	12	22	2
16....	13	−14	12	− 3	32	10	18	0	15	− 5	26	6	14	− 5	20	10	18	6	16	4	41	10	20	− 2	19	10	18	− 3
17....	21	− 8	26	6	24	10	29	5	18	−12	34	10	30	4	30	6	35	10	36	5	43	11	29	−12	36	9	22	− 8
18....	9	4	11	3	28	5	15	8	26	− 5	47	28	20	9	51	28	49	15	20	17	57	16	30	23	54	33	22	8
19....	5	− 5	4	− 9	25	12	10	− 3	20	− 8	36	15	13	10	52	32	29	29	18	− 1	41	32	25	11	52	16	23	10
20....	6	−17	6	−13	24	10	9	−13	18	−10	22	0	12	−11	33	12	19	− 2	11	− 8	27	5	15	− 4	26	10	15	−10
21....	11	−20	11	−12	23	7	16	− 9	16	− 5	17	5	20	− 8	23	10	20	4	20	− 1	21	7	14	2	19	10	12	0
22....	18	−16	24	− 5	40	5	20	−10	24	−10	26	2	26	−10	27	14	34	5	29	−10	35	4	26	−15	29	10	25	− 6
23....	14	− 7	23	8	30	15	15	− 5	32	− 8	28	21	23	− 8	38	23	32	15	26	20	40	10	27	11	34	26	25	10
24....	13	− 2	10	− 4	28	10	14	− 2	40	− 5	29	18	17	10	47	27	24	19	20	4	35	25	23	11	33	15	28	12
25....	15	− 2	12	− 6	30	12	20	0	32	5	23	6	18	− 8	29	20	22	10	20	− 1	26	15	24	− 4	24	14	27	− 3
26....	14	−12	15	− 7	25	13	16	− 8	28	0	26	6	18	− 7	24	11	23	0	20	− 2	26	5	24	− 1	29	8	25	− 4
27....	27	−11	26	− 8	23	− 5	39	− 5	32	− 2	28	2	25	− 8	27	11	33	10	28	− 2	30	7	24	− 7	26	8	24	−12
28....	46	− 4	41	18	32	− 6	46	6	36	− 8	46	21	40	0	46	23	40	23	48	16	50	10	45	16	49	25	45	18
29....	45	18	44	31	48	12	45	28	38	5	53	36	48	17	55	35	45	23	54	33	54	21	48	31	54	40	45	34
30....	39	27	41	33	56	20	43	31	42	8	54	38	40	30	54	36	50	34	50	35	56	25	46	33	53	39	45	30
31....	48	25	48	30	57	25	54	30	43	10	53	30	51	30	55	32	58	34	55	32	58	32	50	28	55	34	42	26
Mns..	21.9	−2.3	23.5	3.0	35.1	7.9	27.8	6.0	28.0	−8.1	34.1	13.3	24.6	3.4	36.4	17.5	34.2	13.5	29.5	8.4	39.2	12.2	27.6	4.7	35.9	16.2	26.1	4.2

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....	21	−12	15	− 5	20	−15	21	− 6	20	2	16	−23	18	−14	17	− 6	23	− 1	18	−10	23	1	22	− 1	21	− 3	24	3
2....	13	−20	6	−25	17	−16	20	−14	19	−13	14	−24	16	−16	27	−18	31	− 9	29	−16	25	− 9	33	−10	26	−10	27	− 7
3....	24	2	20	−10	24	2	32	18	33	14	18	−10	20	0	37	21	39	− 9	34	14	42	25	42	31	39	18	49	27
4....	21	−12	26	−27	26	− 5	26	2	24	9	20	−25	22	−16	27	4	27	21	26	4	30	20	32	17	28	17	34	23
5....	30	12	34	5	32	10	34	6	34	8	20	−12	29	9	34	10	34	18	34	3	34	12	38	15	36	10	36	14
6....	16	−10	19	−21	19	− 8	17	− 4	10	− 3	15	−14	19	− 8	25	− 3	22	4	20	− 1	20	3	30	8	18	1	24	6
7....	20	−18	20	−20	20	−19	28	3	22	2	18	−32	19	−21	35	19	31	3	29	18	30	14	44	26	26	13	45	22
8....	48	18	48	18	50	16	54	25	45	21	44	10	44	12	55	24	53	18	54	20	53	25	63	33	52	23	62	33
9....	44	29	48	18	43	16	45	33	46	31	44	22	45	26	49	32	47	25	45	33	50	33	53	37	50	31	49	35
10....	45	30	49	18	41	28	38	28	39	28	40	24	38	29	43	34	40	29	42	30	44	30	44	34	43	29	50	31
11....	44	29	46	16	45	26	45	27	44	27	40	11	40	19	50	25	47	27	47	28	47	31	52	28	46	26	51	30
12....	55	35	50	30	55	33	58	37	53	32	48	20	51	33	58	35	55	27	56	35	57	37	57	35	54	34	59	35
13....	47	36	55	32	51	38	52	42	53	41	48	28	50	37	52	40	59	35	53	41	59	45	55	44	58	43	59	45
14....	45	24	48	18	50	40	47	28	57	33	40	20	45	36	48	20	54	45	47	21	57	28	46	24	56	33	56	30
15....	26	14	25	8	48	16	28	16	33	16	20	9	40	11	27	14	25	23	26	14	28	19	30	18	33	19	30	21
16....	22	7	.....	.....	22	9	24	14	26	12	20	− 9	20	5	28	12	28	17	21	11	30	15	29	18	27	14	35	16
17....	32	0	29	− 3	26	0	33	12	34	12	29	− 7	24	0	38	10	43	15	36	11	46	15	52	19	43	13	60	20
18....	57	20	48	28	55	25	58	32	55	34	46	24	52	23	55	35	61	19	58	34	62	40	64	42	59	42	67	43
19....	54	38	57	17	58	41	59	32	60	41	49	33	55	40	52	22	61	39	52	25	64	45	57	27	61	43	65	45
20....	51	12	27	9	54	20	32	16	51	21	47	10	53	16	25	6	30	24	26	14	56	26	27	15	54	24	47	23
21....	26	17	55	10	26	15	24	14	26	13	20	− 5	27	14	23	6	22	22	22	11	32	17	24	12	27	14	31	16
22....	29	5	27	2	27	5	29	9	26	7	28	−12	28	6	31	6	34	8	28	8	33	13	32	10	29	9	37	14
23....	36	22	42	22	35	19	49	26	55	26	30	10	31	20	55	25	59	8	47	28	66	33	66	32	59	29	67	36
24....	36	26	32	− 1	47	31	46	27	54	26	33	20	46	16	47	26	38	33	42	28	61	36	50	31	58	34	60	35
25....	31	17	22	− 8	31	15	28	22	26	18	25	12	29	12	28	22	34	29	29	18	36	25	33	29	34	23	35	28
26....	29	10	29	− 7	32	14	27	19	26	14	23	− 2	29	10	24	9	28	22	24	13	29	22	29	20	26	22	29	25
27....	31	13	28	5	33	14	32	20	31	15	23	−10	30	10	28	11	30	19	27	13	32	23	32	15	32	22	31	21
28....	50	20	50	15	47	21	48	25	44	23	41	2	45	18	46	24	52	19	48	24	50	26	52	27	49	25	52	27
29....	56	38	55	38	57	36	60	42	54	36	41	27	51	35	57	36	58	29	57	38	60	38	63	41	58	38	60	40
30....	53	33	57	38	61	40	57	41	60	39	42	33	56	34	58	38	67	39	57	37	69	42	68	41	60	40	71	46
31....	53	36	57	30	51	34	54	39	51	36	40	22	47	33	58	32	56	39	55	35	57	43	58	38	55	42	60	42
Mns..	36.9	15.2	37.5[a]	8.3[a]	38.8	16.2	38.9	20.4	39.1	20.0	31.7	4.9	36.1	13.8	39.7	18.4	41.5	20.5	38.5	18.8	44.6	24.9	44.4	24.4	42.5	23.2	47.2	26.7

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

Date.	Hannibal, Mo.		Laporte, Ind.		Illinois.															
					Cairo.		Mascoutah.		La Salle.		Galva.		Carbondale.		Peoria.		Springfield.		Winnebago.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	28	4	28	17	32	24	32	16	24	0	22	1	35	18	25	3	29	10	22	2
2	30	−1	27	−3	32	14	38	6	26	−7	17	−10	31	9	23	−6	25	0	12	−10
3	50	28	42	8	53	32	51	.....	43	26	43	16	50	25	45	23	47	25	37	8
4	41	25	36	21	49	33	42	34	27	21	37	20	47	34	34	20	41	25	26	13
5	41	19	35	7	50	29	50	22	34	14	34	16	48	21	35	14	42	19	33	11
6	28	11	31	10	37	23	42	18	17	5	19	2	41	19	19	5	24	10	21	0
7	49	23	26	4	41	25	40	20	29	10	28	10	38	17	31	13	36	18	23	4
8	64	36	47	20	62	38	70	31	51	23	51	22	66	34	57	27	62	34	45	22
9	50	38	55	33	64	49	63	42	49	33	47	35	66	49	48	32	52	35	45	31
10	49	32	38	28	55	46	50	38	38	30	41	28	59	42	38	30	38	31	42	26
11	55	36	47	28	56	36	52	32	44	33	45	32	56	34	45	31	46	30	47	22
12	60	39	55	28	62	42	64	32	55	34	53	33	64	30	58	34	59	34	57	32
13	57	45	65	39	62	52	64	50	57	43	58	42	61	48	59	46	58	46	58	46
14	58	29	66	47	67	47	66	50	59	34	58	35	68	41	59	32	62	35	59	39
15	29	22	47	24	47	27	54	26	34	22	35	20	57	28	32	22	35	23	36	18
16	37	20	31	8	44	26	42	24	31	18	31	10	44	23	33	15	36	19	29	9
17	61	24	35	14	57	34	60	27	45	17	46	14	59	24	51	15	55	21	36	10
18	67	43	58	32	63	41	66	36	61	39	61	39	65	39	63	37	63	38	56	32
19	66	46	64	35	65	49	68	38	63	42	62	40	67	42	64	43	66	41	63	41
20	50	26	60	35	68	54	60	42	57	32	56	27	62	49	56	29	55	34	54	28
21	33	20	48	10	61	34	55	30	32	17	31	15	61	34	34	17	37	22	28	16
22	40	19	35	15	50	28	44	22	34	14	34	9	47	23	36	15	39	20	28	9
23	71	39	43	29	77	49	78	36	67	33	60	30	78	38	65	35	67	36	48	25
24	58	37	64	38	78	67	68	52	67	34	65	39	75	38	65	40	66	41	61	35
25	38	31	40	29	72	41	52	38	34	26	40	25	69	42	40	29	41	32	35	23
26	31	25	31	25	41	27	40	26	28	22	30	19	43	28	29	23	32	25	26	18
27	31	21	28	25	35	25	38	18	32	23	33	19	34	24	33	21	31	23	32	17
28	50	25	39	15	47	31	49	25	45	27	46	23	50	23	46	25	45	25	46	24
29	59	37	54	28	60	41	60	.....	57	37	59	34	62	34	58	36	58	35	56	35
30	74	45	61	40	68	31	78	.....	65	44	66	40	71	45	66	41	70	43	62	38
31	62	45	59	40	66	54	66	48	56	42	57	39	66	51	58	42	59	45	55	40
Mns	48.9	28.7	45.0	23.5	55.5	37.7	54.9	31.4[e]	43.9	25.4	44.0	23.4	56.1	32.5	45.3	25.5	47.6	28.2	41.2	21.4

[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.