Climatological Data for September, 1909.

DISTRICT No. 5, UPPER MISSISSIPPI VALLEY.

GEORGE M. CHAPPEL, District Editor.

TEMPERATURE.

The temperature, precipitation, and sunshine averages for September, 1909, varied only slightly from the normal though there occurred at times during the period marked deviations from ordinary conditions.

The monthly mean temperature ranged up to 3° above normal in the Dakota sections and in northern and middle Minnesota, while over the remainder of the district there was a deficiency of nearly corresponding measure. The highest temperatures of the month, ranging from about 78° to 100°, occurred generally from the 10th to the 13th, according to geographical order from northwest to southeast; other warm peroids were from the 18th to the 21st and the 27th and 28th. The lowest temperatures, ranging from 20° to 45°, were reported for the most part from the 23d to the 27th, when killing frosts and freezing temperatures were reported generally in eastern and northern North Dakota, northern and middle Minnesota, northern and middle Wisconsin, extreme northern Illinois, and in particularly susceptible localities in northern Indiana; and less severe frost occurred in Iowa, southern Minnesota, and southern Wisconsin, and quite generally over Illinois. Over the greater portion of the district these frosts were the first of the season, although late in August a few northern localities had been lightly touched, and during a cool period extending irregularly from September 1 to 5, killing frost or freezing temperatures had occurred scatteringly in northern and eastern North Dakota and northern Minnesota and in especially exposed places in northern Wisconsin; and light frost had been experienced in southern Minnesota and central and southern Wisconsin and on lowlands in the extreme northern portions of Iowa and Indiana.

PRECIPITATION.

The rainfall, as a rule, was heaviest over the immediate vicinity of the Mississippi River from Minneapolis, Minn., southward to its confluence with the Ohio River, with centers of comparatively heavy precipitation in Union County, southern Illinois, where the rainfall exceeded 9 inches, and over Wabasha County, Minnesota, along Lake Pepin, where the monthly amount was more than 7 inches. Between these centers there was a decrease to about 2 inches over middle Iowa, while northwestward from Lake Pepin there was a decrease to less than 1 inch over the North Dakota section. No snow fell during the month at any station in the district. The wettest period was generally from the 12th to the 14th or 15th, attending the eastward passage of a trough of low barometric pressure across the entire district. Rain was again general from the 21st to the 23d, during which period the heaviest rainfall of the month occurred in Illinois and Indiana as a result of a storm of tropical origin which passed northeastward over that section during the night of the 21st-22d. A tendency toward general precipitation prevailed from about the 2d to the 4th. A dry interval extended from the 16th to the 19th; and from the 24th to the close of the month practically no rain fell. No serious damage from hail or wind was reported. A slight earthquake was felt at many points in Indiana, Illinois, and eastern Iowa about 3:45 a. m. of the 27th.

In Iowa the hot and droughty conditions prevailing at the close of August were broken by lower temperatures on the 1st, and by copious and general showers on the 2d of September. From the 2d to the 14th showers occurred in some part of the State every day, and showers were general and heavy between the 12th and the 14th. Another period of showery weather prevailed between the 19th and the 24th, but the last six days were generally clear and pleasant, although the night temperatures were quite low. The rainfall of the month was very unevenly distributed, being generally heavier in the western than in the eastern portion; the totals ranged from 1.39 inches, in Marshall County, to 5.70 inches, in Calhoun County.

In northeastern Missouri the precipitation was slightly in excess of the normal, occurring generally from the 2d to the 9th; on the 14th, when copious showers were the rule; and on the 21st and 22d. No rain fell during the last eight or nine days.

In Minnesota the precipitation ranged from over 6 inches in Dakota, Goodhue, and Wabasha counties to less than 1 inch in Morrison and Kittson counties. There was an excess in the southeastern counties and in southern Itasca, St. Louis, and Lake counties of 1 to 3 inches, and a deficiency of 1 to over 2 inches in Becker, Marshall, and Kittson counties. General showers occurred over the southern portion of the State from the 3d to the 5th, and over nearly all of the State from the 12th to the 15th, and from the 19th to the 22d. From the 24th to the 30th no rain fell.

In Wisconsin the rainfall averaged slightly below normal, but it was generally well distributed both throughout the month and over the State. Most of the precipitation occurred on the 2d, 3d, 8th, 9th, 12th, 13th, 14th, 21st, and 22d. The greatest amount was 6.98 inches at Mondovi, Buffalo County, and the least amount was 1.52 inches at Lake Mills, Jefferson County.

In northern and eastern North Dakota the precipitation was fairly well distributed geographically, though generally deficient in amount. The greatest amount, 1.87 inches, occurred in Richland County, while one station in McHenry County reported none at all. Light, scattered showers occurred from the 2d to the 4th, inclusive, and heavier rainfall was fairly general from the 11th to the 14th and from the 18th to the 22d; the remaining days were practically rainless.

In Illinois the rainfall was not uniformly distributed; the heaviest falls occurred in the central and southern counties, while at many stations in the northern counties it was slightly deficient. The passage of a tropical storm on the 21st-22d caused the heaviest rainfall of the month. The greatest monthly amount, 7.17 inches, occurred at Cobden, Union County, and the least, 1.05 inches, at Zion, Carroll County.

Following are some excessive amounts of rainfall in one hour or less: At Dubuque, Iowa, on the 13th, 1.99 inches in one hour; at Springfield, Ill., on the 14th, 1.11 inches in 1 hour. The following excessive amount for twenty-four hours was reported in addition to those to be found in the climatological tables: at Cobden, Ill., 2.97 inches, on the 21st.

Temperature.—The monthly mean for the district, as shown by the records of 295 stations, was 61.0°, which is 0.9° below the normal. The highest monthly mean temperature was 71.3°, at Benton, Franklin County, Ill., and the lowest monthly mean was 53.6°, at Prentice, Price County, Wis. The highest temperature reported was 100°, at Mascoutah, St. Clair County, and Tilden, Randolph County, Ill., on the 3d; the lowest temperature reported was 20°, at Long Lake, Oneida County, Wis., on the 26th; the average monthly maximum was 87°, and the average monthly minimum was 34°; the greatest daily range of temperature was 55°, at Oriska, Barnes County, N. Dak. The average of the greatest daily ranges was 37°.

Precipitation.—The average precipitation for the district, as shown by the records of 313 stations, was 3.04 inches, which is 0.10 inch below the normal. The greatest amount, 9.17 inches, occurred at Cobden, Union County, Ill., and the least, none, at Pratt, McHenry County, N. Dak. The greatest amount in twenty-four hours, 3.52 inches, occurred at Reeds Landing, Wabasha County, Minn., on the 12th. Measurable precipitation occurred on an average of seven days.

TABLE 1.—*Climatological data for September, 1909. District No. 5, Upper Mississippi Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of rainy days, .01 inch or more.	Sky. Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
North Dakota.																				
Amenia	Cass	954	11	60.3	+ 3.3	92	12	33	24	43	0.60	− 1.13	0.25	0.0	5	16	4	10	sw.	C. E. Wood.
Bottineau	Bottineau	1,638	13	57.7	+ 0.6	87	27	26	23	44	0.53	− 0.98	0.42	0.0	4	11	7	12	se.	J. A. Kamp.
Cando	Towner	1,488	7	58.0[h]	+ 3.1	87[h]	11	24[h]	24	47[h]	0.53	− 0.56	0.53	0.0	1					E. T. Judd.
Crosby	Williams		2	60.0		88	17	31	23	36	0.69		0.20	0.0	5	23	2	5	nw.	B. Lancaster.
Devils Lake	Ramsey	1,482	3	58.7	+ 3.1	87	11	31	23	33	1.15	− 0.24	1.02	0.0	5	13	13	4	se.	U. S. Weather Bureau.
Donnybrook	Ward	1,760	9	60.6[a]	+ 5.0	90[a]	11	31[a]	23	49[a]	0.20	− 1.10	0.20	0.0	1				nw.	F. S. Gieselman.
Dunseith	Rolette		11	57.2	+ 2.2	87	11	30	20†	50	0.48	− 1.19	0.27	0.0	2	25	5	0	w.	L. H. Trowbridge.
Edmore	Ramsey	1,524	3																	H. R. Aslakson.
Forman	Sargent	1,249	14	64.2	+ 6.0	93	10	34	24	47	1.14	− 0.66	0.52	0.0	3	11	17	2	nw.	A. Maltby.
Grafton	Walsh	827	11	59.9	+ 4.3	88	11†	33	24†	39	1.68	− 0.30	0.75	0.0	4	15	12	3	s.	H. Lamoure.
Granville	McHenry	1,504	2								0.56		0.29	0.0	5				nw.	W. A. Christiansen.
Hamilton	Pembina	824	11																	D. Wallace.
Hannah	Cavalier	1,568	3	56.6[d]		88[d]	11	27[d]	23	50[d]	T.		T.	0.0	0					J. Moffatt.
Hansboro	Towner		1	57.8		88	11	30	23	44	0.60		0.36	0.0	2	23	3	4	nw.	Geo. Dale.
Hillsboro	Traill	901	3	60.1		88	11	36	5	43	1.73		0.48	0.0	6	19	5	6	s.	M. H. Norman.
Lakota	Nelson	1,519	2	57.6[b]		86[b]	11	30[b]	23	43[b]	1.31		0.57	0.0	6				se.	C. R. Pettes.
Langdon	Cavalier	1,615	13	58.6		91	9†	31	16	43	0.61		0.61	0.0	1	23	0	7	sw.	J. Woolner.
Larimore	Grand Forks	1,134	13			84[m]	3	32[b]	5	44[m]	0.20	− 1.30	0.10	0.0	2					M. Naylor.
Lisbon	Ransom	1,091	4	59.0		90	12	28	24	47	0.62		0.29	0.0	4	14	3	13	s.	H. K. Adams.
McKinney	Ward	1,640	14	58.6	+ 5.5	89	27	30	23†	50	0.16	− 1.37	0.10	0.0	2	11	17	2	nw.	M. P. Swenson.
Manfred	Wells	1,605	7	58.5		91	11	29	22	42	0.32		0.22	0.0	3	16	10	4	nw.	P. B. Anderson.
Mayville	Traill	975	13	59.0	+ 3.6	88	9†	32	23	43	0.50	− 2.12	0.25	0.0	3	17	0	13	s.	M. N. Pope.
Milnor	Sargent		1			82	9†	32	18	47	1.10		0.50	0.0	4	19	2	9	nw.	O. B. Jorgenson.
Minot	Ward	1,557	10	60.4	+ 2.8	90	27	34	23	44	0.49	− 0.71	0.30	0.0	4	20	2	8	w.	J. J. Bates.
Minto	Walsh	820	15	58.1	+ 2.0	87	9	31[a]	30	43[a]	1.37	− 0.79	0.43	0.0	6	18	9	3	se.	S. S. Marsh.
Oriska	Barnes	1,270	3	58.1[e]		91[e]	6	29[e]	7†	55[e]	0.55		0.17	0.0	6				se.	W. E. Williams.
Park River	Walsh	998	5																	A. Heyward.
Pembina	Pembina	789	10	56.2	+ 2.5	86	9	33	24	42	1.66	− 0.67	1.50	0.0	2	20	1	9	w.	F. C. Warner.
Portal	Ward	1,954	14	60.6[e]	+ 6.4	88[e]	20	33[e]	30	46[e]	0.08	− 1.22	0.05	0.0	2				ne.	M. S. Davis.
Power	Richland	1,020	16	58.6	+ 0.4	89	12	32	24	45	1.87	+ 0.11	0.61	0.0	5	18	9	3	se.	J. A. Power.
Pratt	McHenry		4	60.0		90	11	28	23†	50	0.00		0.00	0.0	0	22	7	1	nw.	C. H. Butts.
Towner	...do	1,475	2																	B. Bagley.
University	Grand Forks	830	17	58.4	+ 3.0	86	9	32	24†	45	0.67	− 1.43	0.17	0.0	8	23	6	1	n.	G. W. Stewart.
Wahpeton	Richland	962	17																	E. G. Burch.
Walhalla	Pembina	966	4	60.9		90	11†	32	24†	46	0.62		0.61	0.0	2	21	9	0	w.	
Westhope	Bottineau		2	60.2		88	11†	31	22	45	1.38		0.72	0.0	5	21	3	6	sw.	J. D. Currie.
Willow City	...do	1,471	15																	M. A. Ostby.
Minnesota.																				
Albert Lea	Freeborn	1,229	19	60.4[a]	− 0.6	89	10	38[a]	27	35[a]	2.85	− 0.61	0.90	0.0	6	6	20	4	se.	Edward Carey.
Alexandria§§	Douglas	1,391	15	60.8	+ 2.7	87	12	36	23	39	2.64	+ 0.45	1.20	0.0	6	17	0	13	nw.	P. O. Unumb.
Angus	Polk	870	7	58.4		88	10	31	24	44	2.58		0.80	0.0	8	18	4	8	s.	F. A. Wilson.
Bagley	Clearwater		3	56.1		84	12	28	24	41	1.67		0.40	0.0	6	15	11	4	sw.	Edward T. Teitsworth.
Baudette	Beltrami			55.6		83	12	28	24	40	4.69		2.00	0.0	9	18	7	5	sw.	Franz W. Schmidt.
Beardsley	Bigstone	1,090	16	61.6	+ 0.8	89	11	33	5	39	1.36	− 0.71	0.42	0.0	6	10	15	5	se.	Roy A. Smith.
Beaulieu	Mahnomen	1,200	7	58.5[d]		83[d]	12	33[d]	24	36[d]			0.80	0.0	3	11	8	7	se.	Dr. L. A. Parkinson.
Bird Island	Renville	1,039	19	60.3	− 0.5	86	10	36	1	39	3.18	+ 0.13	0.85	0.0	9	14	10	6	nw.	Dr. F. L. Puffer.
Caledonia§§	Houston	1,179	16	58.2	− 2.7	79	10	39	1	31	5.61	+ 0.82	2.60	0.0	9	13	10	7	se.	W. D. Bedlen.
Campbell§§	Wilkin	984		59.1[a]		89[a]	11	32[a]	5	44[a]			0.54	0.0	7	16	1	12	se.	J. T. Neisess.
Cass Lake§§	Cass	1,300	3								2.17		0.90	0.0	5					C. W. Burns.
Collegeville	Stearns	1,232	16	59.3	− 1.4	79	12	37	1	32	1.69	− 0.90	0.75	0.0	8	18	4	8	se.	Fridolin Tennbreull.
Crookston§§	Polk	863	19	58.4	+ 1.7	85	11	36	15	36	1.56	− 0.47	0.73	0.0	6	18	4	8	s.	A. G. Anderson.
Detroit§§	Becker	1,364	13	58.2	+ 1.6	87	12	29	24	42	1.32	− 1.44	0.48	0.0	5	20	7	3	sw.	G. W. Peoples.
Fairmont, (near)	Martin	753	22	59.8	− 1.0	81	10	39	5	27	3.83	+ 0.92	1.31	0.0	7	11	16	3	s.	W. F. Wheeland.
Faribault	Rice	1,003	12	58.7	− 3.2	83	10	35	1†	33	4.52	+ 0.76	1.73	0.0	13	13	10	7	se.	A. R. T. Wylie.
Farmington	Dakota	902	21	59.4	− 0.9	85	10	37	1	31	6.09	+ 2.72	3.14	0.0	9	11	6	13	se.	E. D. Akin.
Fergus Falls	Ottertail	1,210	17	60.3	+ 1.3	83	11	37	23†	29	1.39	− 0.87	0.44	0.0	8	16	10	4	se.	Chas. E. Kissenger.
Fort Ripley	Morrison	1,135	3	57.5		84	11†	29	5	44	1.93		1.44	0.0	4	18	0	12	s.	J. J. Tucker.
Fosston	Polk	1,288		57.6		83	12	34	24	40	2.47		0.89	0.0	6	16	11	3	s.	O. N. Hem.
Glencoe	McLeod	1,006	13	59.6	0.00	87	10	36	1†	36	5.79	+ 2.10	3.50	0.0	7	14	14	2	se.	C. G. Selvig.
Grand Meadow	Mower	1,338	22	59.8	− 0.1	85	10	35	27	34	5.39	+ 2.19	2.07	0.0	8	13	7	10	sw.	C. F. Greening.
Hallock	Kitson	815	10	58.4	+ 3.5	86	9†	27	24	44	0.82	− 2.32	0.39	0.0	5	19	4	7	s.	D. A. Robertson.
Halstad§§	Norman	870	3	58.2		88	11	33	24	43	1.34		0.41	0.0	7	16	6	8	sw.	A. G. Holstrom.
Hinckley	Pine	1,050	4	59.8[d]		82[b]	11	30[d]	24	36[d]			0.40	0.0	4	12	2	14		W. R. Newman.
International Falls	Koochiching		1	55.2		82	12	28	24	41	2.93		1.39	0.0	6	20	4	6	nw.	Rees Roe.
Kelliher	Beltrami		3	57.0		81	12	26	24	40	2.08		0.88	0.0	6	16	12	2	se.	A. Gilmour.
Lake Crystal	Blue Earth		2	59.4		81	10	39	23†	27	3.31		1.15	0.0	5	18	7	5	nw.	W. P. Cobb.
Leech Lake Dam	Cass	1,300	21	56.2	+ 0.8	80	12	28	24	41	2.13	− 0.72	0.83	0.0	6	7	22	1	se.	Hans Olesen.
Litchfield	Meeker	1,129	1	57.9		80	11	38	23	33	3.45		1.88	0.0	7	17	5	8	w.	N. Y. Taylor.
Little Falls	Morrison	1,117	3	60.0		86	11	35	6†	34	0.91		0.51	0.0	4	14	14	2	se.	Maurice Coleman.
Long Prairie	Todd	1,299	17																	A. W. Sheets.
Lynd (2)	Lyon		17	59.6	− 1.0	85	12†	32	5	40	1.19	− 1.52	0.50	0.0	6	16	8	6	sw.	Jacob Rouse.
Mankato§§	Blue Earth	747	10								3.98	+ 1.03	1.26	0.0	8	14	4	12	se.	Sadie H. Blake.
Milaca	Mille Lacs	1,072	12	57.4	+ 0.3	81	12	28	1	40	2.86	− 0.63	1.70	0.0	7	13	9	8	sw.	C. H. Foss.
Milan	Chippewa	995	15	59.8	− 0.2	86	10	35	5	37	1.85	− 0.30	0.67	0.0	8	6	20	4	nw.	O. K. Opjorden.
Minneapolis (1)	Hennepin	918	18	61.0	− 1.4	84	10	43	24	26	2.98	− 0.68	0.98	0.0	13	12	9	9	se.	U. S. Weather Bureau.
Minneapolis (2)**§	Hennepin	850	16	59.0	− 1.0	85	10	35	24	....	2.93	− 1.10	0.80	0.0	12	14	9	7	s.	J. H. Ashenbeck.
Montevideo§§	Chippewa	900	19	61.6	+ 0.3	88	6†	37	5	44	2.43	+ 0.27	0.81	0.0	6	12	8	10	se.	Lloyd G. Moyer.
Moorhead	Clay	935	28	60.0	+ 3.4	88	12	36	5	38	1.44	− 0.86	0.64	0.0	5	16	12	2	se.	U. S. Weather Bureau.
Mora	Kanabec		4	57.2		83	12	29	5†	40	3.07		1.50	0.0	10	15	7	8	nw.	Hans Peterson.
Morris	Stevens	1,170	24	59.8	+ 0.6	86	11	34	5	41	2.02	− 0.25	1.22	0.0	5	22	4	4	nw.	D. T. Wheaton.
New London	Kandiyohi	1,215	15	59.7	− 0.8	86	12	36	24	45	2.31	− 0.06	1.20	0.0	9	18	10	2	se.	Harold Swenson.
New Richland	Waseca	1,180	15	60.5	− 1.7	85	10	37	5	33	2.89		0.78	0.0	7	13	13	4	sw.	N. O. Tyrholm.
New Ulm§§	Brown	791	29	60.6	− 1.1	87	10	38	23	38	3.93	+ 0.85	1.20	0.0	9	13	1	16	s.	A. J. Eckstein.
Osakis	Douglas	1,343	2	59.2		83	11	33	24	37	3.02		1.13	0.0	8	17	5	8	n.	John B. Johnson.
Park Rapids§§	Hubbard	1,426	19	57.1	+ 1.5	84	12	32	24	38	1.77	− 0.42	0.85	0.0	6	17	3	10	s.	Dr. P. A. Walling.
Pine River Dam	Crow Wing	1,251	22	58.2	+ 1.2	79	12	31	30	41	2.55	− 0.15	1.20	0.0	6	16	13	1	w.	Neil McKay.
Pokegama Falls	Itasca	1,290	22	55.6	+ 1.6	76	10	28	24†	42	4.57	+ 1.72	2.70	0.0	7	17	8	5	sw.	Arthur L. Mampel.
Red Lake	Beltrami		1	58.0		83	12	30	24	37	2.77		1.21	0.0	7	10	14	6	nw.	A. C. Goddard.
Red Wing	Goodhue	708	20	61.8	+ 0.9	85	10	43	1†	31	6.88	+ 3.33	2.75	0.0	6	15	6	9	se.	F. A. Whittier.
Red Wing (river)§§	...do	680	10								7.38	+ 3.83	2.98	0.0	11	16	0	14	se.	Louis Bach.
Redwood Falls	Redwood	1,033	2	61.9		88	10	38	1†	35	2.33		0.65	0.0	7	17	9	4	nw.	N. B. Andersen.
Reeds Landing§§	Wabasha	681	11								6.52	+ 2.64	3.52	0.0	9	14	6	10	se.	John Deschneau.
Rochester§§	Olmstead	991	5	57.2		84	11	34	1†	36	3.45		0.95	0.0	8	10	8	12	s.	S. R. Case.
Roseau	Roseau	1,040	2	57.2		86	12	22	24	43	3.14		1.65	0.0	3	16	9	5	se.	
St. Charles§§	Winona	850	18	59.0	− 2.2	83	10	33	1	38	4.04	+ 0.44	1.43	0.0	9	17	4	9	nw.	S. W. Gleason.
St. Cloud	Sherburne	1,020	31	59.4	+ 0.2	82	12	33	24	34	4.06	+ 0.74	2.63	0.0	8	13	10	7	se.	Jos. H. Capser.
St. Paul	Ramsey	837	38	60.6	+ 0.3	84	10	42	1	28	4.06	+ 0.64	1.25	0.0	13	13	9	8	e.	U. S. Weather Bureau.

TABLE 1.—*Climatological data for September, 1909. District No. 5*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of rainy days .01 inch or more.	Sky. Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
Minnesota—Cont'd.																				
St. Peter	Nicollet	840	16	62.0	+ 0.5	85	11	36	5	34	3.84	+ 0.07	1.08	0.0	8	21	5	4	s.	Charles A. Cavanaugh.
Sandy Lake Dam	Aitkin	1,234	16	56.4	+ 0.3	79	12	31	24	35	1.95	− 0.71	1.25	0.0	5	22	5	3	se.	J. W. Comstock.
Shakopee	Scott	750	14																	
State Sanitorium	Cass		1	57.6		78	12	34	24	30	2.28		1.28	0.0	6	17	9	4	se.	Dr. W. J. Marcley.
Stillwater§§	Washington	694	4								5.70		1.70	0.0	11	17	3	10	sw.	W. B. Nease.
Taylors Falls	Chisago		2	60.2		82	12	35	1†	40	4.49		0.82	0.0	10	18	5	7	s.	Mpls. Gen. Elec. Co.
Wabasha	Wabasha	662	17	61.4[a]	− 1.0	85[a]	10	36[a]	1†	37[a]			2.35	0.0	4				s.	Herman Yost.
Warroad	Roseau			55.8		84	12	25	24	39	4.15		2.25	0.0	8	17	9	4	sw.	John Sawyer.
West Concord	Dodge	1,232	1	59.0		84	10	37	1	31	4.09		1.03	0.0	10	11	14	5	nw.	O. H. Orcutt.
Willow River	Pine	1,046	11	55.0	+ 2.2	80	12	28	24	38	3.98	+ 0.27	1.77	0.0	7	14	11	5	n.	J. A. Brandt.
Windom	Cottonwood	1,336	3	61.4		89	10	34	5	42	1.95		0.77	0.0	6	11	15	4	nw.	Taber C. Richmond.
Winnebago§§	Faribault	1,100	10	61.2	− 0.2	88	10	39	23	38	3.95	+ 0.79	1.46	0.0	9	20	2	8	se.	H. H. Haight.
Winnibigoshish	Itasca	1,300	21	58.2	+ 2.0	78	10	32	24	33	2.48	− 0.69	0.85	0.0	6	18	9	3	se.	John Duncan.
Winona	Winona	680	14	61.4	− 0.5	87	10	37	26	31	4.66	+ 1.02	1.85	0.0	11	15	6	9	se.	P. C. Meyers.
Worthington§§	Nobles	979	14	58.7	− 2.2	81	10	36	30	36	2.02	− 1.27	1.01	0.0	5	17	4	9	s.	W. I. Carpenter.
Zumbrota	Goodhue	979	14	59.3	− 1.4	84	10	35	1†	34	5.10		2.75	0.0	11	14	12	4	nw.	W. C. Rowell.
South Dakota.																				
Millbank	Grant	1,148	20	60.0	− 1.0	90	10	34	1	45	1.55	− 0.31	0.71	0.0	6	15	6	9	nw.	T. T. Patridge.
Wisconsin.																				
Antigo	Langlade	1,489	14	57.7		80	20†	27	27	42	2.01		0.81	0.0	5	11	9	10	sw.	E. C. Larzeler.
Barron	Barron	1,115	16	56.8[a]	− 1.5	78[a]	21	28	1	38	4.27	+ 1.14	1.18	0.0	8	17	11	2	se.	W. A. Kent.
Beloit	Rock	750	19	61.0[b]	− 2.0	84[b]	13	37	27	29	3.09	− 0.23	0.74	0.0	6	16	0	14	n.	Smith Observatory.
Brodhead	Green	812	11	61.7	− 1.4	87	13	36	27	33	2.32	− 1.69	0.60	0.0	7	20	5	5	nw.	H. D. Kirkpatrick.
Burnett	Dodge	880	5	59.4		86	13	34	26†	30	2.15		0.61	0.0	5	14	7	9	se.	Geo. W. Smith.
Delavan	Walworth	920	16	61.0	− 1.7	88	13	33	27	34	3.58	− 0.93	1.13	0.0	9	15	3	12	se.	E. S. Austin.
Dodgeville	Iowa	1,116	10																	Geo. H. Butler.
Downing	Dunn	983	6	57.0		84	10	27	1	43	4.29		1.05	0.0	6	8	2	20	sw.	E. F. Stoddard.
Eau Claire	Eau Claire	800	18	59.9	− 0.9	84	10	34	27	35	6.84	+ 2.91	2.99	0.0	10	15	9	6	se.	R. D. Whitford.
Ellsworth	Pierce	1,068	1	61.4[j]		87[j]	10	33[j]	2	26				0.0						H. G. Woods.
Glidden	Ashwood	1,519																		George Sell.
Grand Rapids	Wood	1,021	10	59.2	− 1.5	84	10	29	27	40	3.15	+ 0.12	1.16	0.0	8	21	2	7	s.	W. B. Raymond.
Grantsburg	Burnett	1,095	18	57.1	− 1.3	82	12	29	24	47	3.93	− 0.40	2.00	0.0	5	13	6	11	sw.	Theodore Olsen.
Hancock	Waushara	1,091	17	59.4	− 1.4	81	20	33	27	33	3.43	+ 0.53	1.10	0.0	5	18	4	8	sw.	F. B. Hamilton.
Hatfield	Jackson	973	1	60.6[f]		89[b]	20	21[f]	30	51	3.10		1.07	0.0	5	19	0	11	w.	W. S. Woods.
Hayward	Sawyer	1,197	18	56.4	− 0.6	79	21	27	1	44	2.25	− 1.97	0.85	0.0	6	11	6	13	s.	W. E. Swain.
Hillsboro	Vernon	1,000	18	57.8	− 2.7	83	13	28	25†	36	3.11	+ 0.02	1.37	0.0	5	13	13	4	se.	E. V. Wernick.
Koepenick	Langlade	1,683	18	54.3	− 4.7	78	13†	21	5	45	2.75	− 1.57	1.97	0.0	9				s.	E. S. Koepenick.
La Crosse	La Crosse	714	37	60.7	− 1.0	83	10	37	27	29	4.03	− 0.09	1.94	0.0	9	11	7	12	s.	U. S. Weather Bureau
Lake Mills	Jefferson	897	18	60.4	− 1.8	87	13	34	27	31	1.52	− 1.88	0.52	0.0	9	9	16	5	sw.	S. N. D. Smith.
Lancaster	Grant	1,070	19	61.0	− 0.4	84	10†	34	27	36	2.20	− 1.26	0.91	0.0	7	16	8	6	se.	Edward Pollock.
Long Lake	Oneida	1,592	1	54.0		79	20	20	26	43	2.50		1.70	0.0	9	12	8	10	nw.	Louie Frank.
Madison	Dane	974	31	60.8	− 0.3	84	13	43	26	27	2.20	− 0.98	0.72	0.0	9	11	9	10	se.	U. S. Weather Bureau.
Mather	Juneau	962		57.3		84	20	22	27	43	3.50		1.14	0.0	8	8	3	19	e.	Frank Evans.
Mauston	...do	882	13	59.0	− 1.5	81	13†	30	26	33	2.73	− 0.56	1.23	0.0	5	14	6	10	se.	E. L. Hitchcock.
Meadow Valley	...do	974	18	58.6	− 1.4	85	10†	25	27	44	3.77	+ 0.21	1.70	0.0	8	5	18	7	sw.	C. H. Johnson.
Medford	Taylor	1,420	18	58.1	− 1.3	82	10	29	27	39	3.54	− 0.55	1.37	0.0	6	12	14	4	s.	William Zeit.
Merrill	Lincoln	1,267	3	58.8		86	10	28	25†	45	2.33		1.24	0.0	8	22	3	5	sw.	F. M. McElroy.
Minocqua	Oneida	1,604	5	56.2		76	20†	34	25†	30	3.37		2.00	0.0	5	21	3	6	s.	Charles W. Hooper.
Mondovi	Buffalo	738	1	59.2		85	10	30	1	38	6.98		2.65	0.0	11	15	10	5	sw.	Dr. Charles Hebard.
Mount Horeb	Dane	1,226	5	60.2		84	13	35	26	37	2.37		0.70	0.0	6	17	3	10	nw.	W. M. Lewis.
Muscoda	Grant	666		60.8		89	10	25	27	48	2.40		0.90	0.0	7	8	17	5	e.	Henry Eckstein.
Neillsville	Clark	996	20	59.4	+ 0.3	84	9	29	27	44	3.33	− 0.49	1.49	0.0	6				nw.	William Heaslett.
New Richmond	St. Croix	990	4	59.6[a]		82[a]	21	34[a]	15†	40	4.87		1.04	0.0	11				nw.	F. R. Van Meter.
Osceola§§	Polk	806	18	58.8	− 0.8	83	10	30	1	41	3.80	− 0.30	1.00	0.0	8	14	9	7	e.	C. W. Staples.
Portage	Columbia	809	13	60.1	− 0.9	84	13	34	27	32	3.30	+ 0.36	1.65	0.0	7	19	7	4	nw.	James Clear.
Prairie du Chien§§	Crawford	690	22	61.7	− 2.0	88	11†	35	26	43	2.26	− 1.60	0.88	0.0	8	12	8	10	nw.	John Ducharme.
Prentice	Price	1,551	11	53.6	− 3.0	74	11†	23	27	44	2.51	− 1.66	1.81	0.0	6	12	6	12	sw.	J. G. Lash.
Rhinelander	Oneida	1,550	4	57.4[c]		82[c]	22	27[a]	26	36	2.90		1.70	0.0	12	9	12	9	sw.	John Lind.
Sauk City	Sauk	758	1	61.0		90	13	30	27†	38				0.0		7	18	5		K. Derleth.
Shullsburg	Lafayette	1,019	3	60.4		85	13	33	27	32	3.43		1.73	0.0	6	14	5	11	s.	H. B. Chamberlin.
Solon Springs	Douglas	1,083	2	55.4		79	21	27	26†	44	2.86		1.77	0.0	4	18	3	9	sw.	J. M. Sayles.
Spooner	Washburn	1,104	14	56.2	− 3.6	77	12	31	1†	37	2.48	− 0.56	0.68	0.0	8	21	2	7	sw.	H. A. Bresee.
Stanley	Chippewa	1,082	5	58.0		83	10	28	1	41	4.14		1.34	0.0	9	11	9	10	se.	L. E. Scott.
Stevens Point	Portage	1,113	16	58.0[c]	− 2.4	83[c]	13†	27[c]	27	39	3.84	+ 0.62	1.65	0.0	6				sw.	G. E. Culver.
Valley Junction	Monroe	930	17	57.0	− 3.1	82	20	25	27	41	3.93	+ 0.17	1.31	0.0	7	11	6	13	w.	F. Muermann.
Viroqua	Vernon	1,412	18	60.0	− 0.8	82	10	35	1	34	3.44	− 0.40	0.96	0.0	10	14	9	7	se.	H. E. Rogers.
Vudesare	Vilas	1,600	1	53.2		79	20	24	26	40	0.63		0.27	0.0	4	19	6	5	w.	L. L. Thomas.
Watertown§§	Jefferson	824	17	58.7	− 2.5	85	13	33	27	35	2.58	− 0.73	0.80	0.0	8	12	12	6	se.	Charles J. Salick.
Waukesha (1)	Waukesha	970	13								3.32	− 0.15	0.91	0.0	10					A. V. B. Dey.
Waukesha (2)	...do	864	1	60.4	− 1.8	87	13	36	2†	36	3.14		1.00	0.0	8	10	18	2	nw.	Carroll College.
Wausau	Marathon	1,212	17	58.0	− 0.4	81	20	30	27	35	3.01	− 0.41	1.24	0.0	9	12	13	5	se.	H. A. Beilke.
Weyerhaeuser	Rusk	1,297	2	56.4		80	10	25	27	40	2.33		0.77	0.0	9	15	7	8	se.	Miss Etta Stiles.
Whitehall	Trempealeau	675	17	58.1	− 3.4	87	11	30	1†	38	3.20	− 1.32	1.15	0.0	6	5	24	1	w.	H. A. Towner.
Iowa.																				
Albia§, §§	Monroe	959	10	62.7	− 2.1	88	12	38	27†	37	3.63	+ 0.07	0.84	0.0	11	14	5	11	sw.	J. D. Chenoweth.
Algona§	Kossuth	1,213	34	60.6	− 1.3	85	10	38	27	34	4.71	+ 1.57	1.88	0.0	9	15	7	8	se.	Dr. F. T. Seeley.
Alta§§	Buena Vista	1,513	17	60.8	− 2.1	85	10	37	23	36	2.15	− 1.03	0.50	0.0	12	12	12	6	s.	David E. Hadden.
Alta (near)	Buena Vista										2.16	− 1.57	0.43	0.0	12					W. J. Minard.
Amana	Iowa	721	31	62.1	− 0.4	87	13	34	27	35	3.96	+ 0.71	3.35	0.0	4	15	7	8	se.	C. Schadt.
Ames	Story	926	27	61.8	− 1.7	89	13	33	27	34	2.82	− 0.57	1.00	0.0	8	13	7	10	s.	Iowa State College.
Baxter§	Jasper	998	8	62.3[a]		86[a]	10	36[a]	23†	39[a]	2.20		1.14	0.0	8	17	6	7	se.	W. R. Vandike.
Belle Plaine	Benton	828	18	62.4	− 1.2	86	13	36	24†	37	1.84	− 1.12	1.06	0.0	7	14	8	8	se.	S. P. Van Dike.
Bloomfield§	Davis			66.7		93	10	36	27	46	3.55		1.54	0.0	7	13	8	9	se.	C. R. Davis.
Bonaparte§	Van Buren		17	64.4	− 3.0	94	13	37	27	32	3.26	− 0.78	1.59	0.0	8					B. R. Vale.
Boone§§	Boone	1,134	3	61.8		84	12	41	24†	35	4.24		1.26	0.0	12	15	4	11		Carl Fritz Henning.
Britt§	Hancock	1,236	11	60.7	− 1.0	84	10†	35	23	33	3.70	− 0.04	1.16	0.0	10	6	19	5	s.	George P. Hardwick.
Buckingham	Tama		8								2.06		1.05	0.0	5	18	7	5		W. A. Daniel.
Burlington§, §§	Des Moines	544	12	64.4	− 1.8	91	12†	39	27	41	4.47	+ 1.35	1.91	0.0	10	20	1	9	s.	Max E. Poppe, jr.
Carroll§§	Carroll	1,265	18	60.6	− 2.4	87	9	38	22†	37	5.23	+ 2.34	1.59	0.0	9	15	4	11	se.	Mrs. Joseph J. Wolfe.
Cedar Rapids§§	Linn	733	26	62.6	− 1.4	88	12†	38	27†	42	3.91	+ 1.09	2.56	0.0	4	13	8	9	se.	W. J. Greene.
Charles City	Floyd	1,015	20	59.6	− 2.1	84	20	36	27	31	3.12	+ 0.32	1.66	0.0	9	7	11	12	se.	U. S. Weather Bureau.
Clear Lake§	Cerro Gordo	1,241	9	63.0	+ 0.8	88	10	38	26†	32	4.54		1.20	0.0	8	16	0	14	s.	Oscar Stevens.
Clinton	Clinton	593	40	61.8	− 1.5	90	13	32	30	37	2.27	− 1.04	0.60	0.0	8	11	15	4	s.	Luke Roberts.
Columbus Junction§	Louisa	595	7	63.8		90	13	37	27	33	2.39		1.16	0.0	6	23	4	3	se.	J. B. Johnston.
Davenport	Scott	580	36	63.6	− 1.1	91	13	40	27	30	1.50	− 1.64	0.76	0.0	7	17	4	9	e.	U. S. Weather Bureau.
Decorah	Winneshiek	975	15	59.6	− 2.5	84	10†	32	27	32	3.17	− 0.56	1.08	0.0	6					F. H. Baker.
Delaware	Delaware	1,083	17	60.4	− 1.4	82	20	36	27	36	2.86	− 0.41	1.18	0.0	7	15	10	5	s.	William Ball.

TABLE 1—*Climatological data for September, 1909. District No. 5*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmelted.	Number of rainy days, .01 inch or more.	Sky. Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
Iowa—Cont'd.																				
Des Moines	Polk	861	31	63.8	− 1.2	89	12	41	27	34	2.06	− 1.01	0.56	0.0	9	10	9	11	se.	U. S. Weather Bureau.
De Soto§	Dallas	866	8	64.8	.....	92	12	34	27	42	3.39	.....	1.39	0.0	8	18	2	10	sw.	R. D. Minard
Dows§	Wright	1,142	8	60.6	− 1.1	87	10	34	27	36	3.58	+ 0.09	1.43	0.0	7	13	6	11	s.	G. R. Flett.
Dubuque	Dubuque	639	35	62.2	− 1.4	87	13	36	27	32	4.28	+ 0.69	3.25	0.0	9	15	6	9	s.	U. S. Weather Bureau.
Earlham	Madison	.....	6	63.0	+ 0.9	90	12	32	27	36	4.33	.....	2.17	0.0	7	19	1	10	se.	George Phillips.
Elkader	Clayton	727	27	59.8	− 2.7	89	11	30	27	49	2.15	− 1.69	1.25	0.0	4	17	0	13	nw.	Charles Reinecke.
Elma	Howard	.....	.....	.....	.....	82	10	.....	.....	.....	3.08	.....	0.54	0.0	10	8	16	6	se.	H. A. Moore.
Estherville§§	Emmet	1,298	12	58.4	− 2.3	82	18†	36	35	37	4.69	+ 1.46	2.20	0.0	8	19	0	11	s.	A. O. Peterson.
Fairfield	Jefferson	.....	14	64.4[b]	+ 0.4	94[b]	13	34[a]	27	41[b]	2.17	− 1.30	1.40	0.0	9	17	6	7	sw.	R. M. McKenzie.
Fayette§	Fayette	1,003	18	59.4[a]	− 2.9	88[a]	10	30[a]	27	36[a]	2.77	− 0.46	1.13	0.0	8	18	7	5	se.	R. Z. Latimer.
Forest City§, §§	Winnebago	1,226	14	60.8	− 1.2	88	10	38	24	38	3.60	− 0.02	2.07	0.0	5	17	3	10	sw.	J. A. Peters.
Fort Dodge§§	Webster	1,126	8	61.7	.....	91	10	37	27	43	3.73	.....	1.27	0.0	6	16	1	13	sw.	J. F. Monk.
Fort Madison	Lee	516	59	.....	.....	.....	.....	.....	.....	.....	4.24	+ 0.43	1.82	0.0	6	14	6	10	s.	Miss L. A. McCready.
Gilman	Marshall	1,052	9	.....	.....	.....	.....	.....	.....	.....	1.39	.....	0.44	0.0	6	.....	.....	.....	.....	J. L. Wylie.
Grand Meadow	Clayton	1,180	17	59.2	− 2.7	80	10†	35	26†	33	2.68	− 0.95	1.02	0.0	11	12	8	10	sw.	F. L. Williams.
Greene	Butler	.....	9	61.4	− 2.1	87	10	35	27	35	3.69	.....	1.40	0.0	10	5	13	12	e.	J. L. Cole.
Grinnell	Poweshiek	1,023	16	64.2	+ 0.4	89	13	36	27	39	1.86	− 0.49	0.70	0.0	9	11	9	10	s.	D. W. Brainard.
Grundy Center§	Grundy	976	17	62.8	− 0.3	88	10	31	30	40	3.87	+ 0.62	2.20	0.0	8	.....	.....	.....	s.	J. B. Calderwood.
Guthrie Center§	Guthrie	1,077	13	63.0	− 0.9	86	11†	36	27	31	4.33	+ 1.24	1.36	0.0	11	16	6	8	se.	D. G. Beardsley.
Hampton	Franklin	1,155	18	62.6	− 0.3	91	10	36	27	34	4.26	+ 0.70	1.40	0.0	8	9	13	8	se.	E. C. Grenelle.
Humboldt	Humboldt	1,095	17	61.5	− 1.0	86	10	30	27	38	4.22	+ 1.05	1.10	0.0	9	17	4	9	sw.	Henry S. Wells.
Independence§	Buchanan	921	43	61.3	− 0.4	85	10	35	27	35	2.44	− 1.51	1.35	0.0	7	17	7	6	se.	George Donohoe.
Indianola	Warren	969	17	64.2	− 1.3	90	12	41	27	33	2.74	− 0.36	0.99	0.0	8	12	9	9	se.	John L. Tilton.
Iowa City§§	Johnson	683	49	62.2	− 1.4	88	13	33	27	39	2.43	− 1.32	1.35	0.0	7	18	2	10	se.	.....
Iowa Falls§§	Hardin	1,170	15	59.8	− 1.8	85	10†	33	27	43	2.63	− 0.34	1.27	0.0	6	16	2	12	se.	J. B. Parmelee.
Jefferson§	Greene	.....	.....	64.2[c]	.....	88[c]	10†	36[c]	27	39[c]	.....	.....	1.72	0.0	.....	.....	.....	.....	s.	G. W. Jackson.
Keokuk	Lee	547	37	65.7	− 0.7	93	13	42	27	29	3.46	− 0.51	2.08	0.0	9	15	6	9	se.	U. S. Weather Bureau.
Keosauqua§§	Van Buren	644	16	63.4	− 3.5	93	13	34	27	43	3.14	− 1.26	1.04	0.0	12	13	7	10	.....	J. H. Landes.
Knoxville§	Marion	920	12	64.6	− 1.6	88	12	38	27	37	2.96	− 0.56	1.05	0.0	7	10	10	10	.....	Casey & Belville.
Lacona	Warren	.....	9	.....	.....	.....	.....	.....	.....	.....	3.21	.....	1.00	0.0	7	13	10	7	.....	J. B. Alter.
Le Claire	Scott	576	.....	.....	.....	.....	.....	.....	.....	.....	2.03	− 1.75	0.49	0.0	8	.....	.....	.....	.....	Miss Margaret T. Disney.
Marshalltown§§	Marshall	947	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mason City§	Cerro Gordo	1,132	11	59.0	− 4.0	82	10	33	27	31	3.75	+ 1.39	1.70	0.0	9	11	13	6	s.	J. S. Mills.
Mount Pleasant§	Henry	739	26	63.7	− 1.3	89	13†	38	27	30	2.27	− 1.41	0.94	0.0	7	17	7	6	sw.	J. W. Edwards.
Muscatine	Muscatine	.....	49	.....	.....	.....	.....	.....	.....	.....	1.96	− 1.76	0.66	0.0	9	.....	.....	.....	.....	William Molis.
New Hampton§	Chickasaw	1,169	11	59.4	− 2.3	79	20	37	23†	29	2.38	− 1.13	0.91	0.0	7	16	6	8	w.	A. F. Kemman.
Newton§	Jasper	944	19	63.6	+ 0.7	84	12†	40	27	33	1.93	− 1.27	0.70	0.0	6	12	9	9	s.	J. P. Beatty.
Northwood§	Worth	1,222	12	60.4[b]	− 0.4	81[d]	10†	36	27	31[d]	4.09	+ 0.74	1.23	0.0	10	18	4	8	nw.	Charles H. Dwelle.
Olin§	Jones	760	11	59.2	− 3.9	87	18†	33	28	54	2.24	− 0.99	1.80	0.0	1	19	4	7	s.	C. M. Miles.
Osage	Mitchell	1,184	17	61.8	+ 1.8	88	10	35	27	35	3.20	− 0.36	1.35	0.0	6	12	8	10	se.	A. D. Bundy.
Oskaloosa§	Mahaska	843	24	63.2	− 1.3	85	12	37	27	32	3.73	+ 0.70	0.93	0.0	9	18	0	12	se.	Joseph Boyd.
Ottumwa	Wapello	649	14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pella	Marion	877	6	62.8	.....	88	11	32	27	38	1.70	.....	0.56	0.0	7	.....	.....	.....	se.	John H. Ver Steeg.
Perry§	Dallas	975	7	62.8	.....	87	12	38	27	34	5.03	.....	1.50	0.0	10	10	13	7	se.	J. A. Harvey.
Plover	Pocahontas	1,426	12	61.2	− 1.6	87	9	35	5†	37	3.07	− 1.32	0.88	0.0	7	19	6	5	se.	J. S. Smith.
Pocahontas§	...do	.....	4	60.0	.....	86	10	38	5†	30	3.07	.....	0.68	0.0	8	12	8	10	se.	F. E. Hronek.
Ridgeway§	Winneshiek	1,215	10	62.0	− 1.2	88	10	36	1	36	3.74	− 0.57	1.59	0.0	10	16	9	5	s.	Arthur Betts.
Rockwell City§	Calhoun	.....	12	61.6	− 2.2	85	9†	36	23†	40	5.70	+ 2.52	1.75	0.0	8	17	2	11	.....	C. M. Randall.
Sac City	Sac	1,278	26	61.6	+ 0.1	84	10	40	28	36	2.73	− 0.55	0.62	0.0	12	15	4	11	nw.	E. N. Baily.
St. Charles§	Madison	1,070	7	64.8	.....	93	12	41	27	32	2.29	.....	0.58	0.0	6	18	4	8	se.	R. D. Minard.
Sigourney§	Keokuk	877	12	64.0	− 1.6	89	13	38	27	32	4.03	+ 1.01	2.22	0.0	6	9	17	4	.....	J. T. Parker.
Stockport§	Van Buren	.....	6	63.7	.....	90	13	31	27	43	3.13	− 1.11	1.09	0.0	9	16	3	11	se.	C. L. Beswick.
Storm Lake	Buena Vista	1,440	12	62.0	− 0.7	84	9†	39	5	31	2.16	− 0.93	0.66	0.0	9	14	6	10	sw.	S. B. Fracker.
Stuart	Guthrie	1,216	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tipton§	Cedar	807	10	64.8	− 1.0	91	13	42	27	33	1.51	− 1.48	1.04	0.0	3	20	5	5	se.	F. K. Gregg.
Toledo§	Tama	856	14	61.0	− 3.1	84	12	32	27	37	1.88	− 1.09	0.70	0.0	5	.....	.....	.....	.....	I. F. Giger.
Wapello§	Louisa	588	10	64.6	− 1.1	90[c]	13	40[c]	27	33[c]	2.33	− 1.11	0.78	0.0	7	19	6	5	.....	G. W. Schofield.
Washington	Washington	769	27	63.4	− 1.2	89	13	37	27	35	3.67	+ 0.99	2.35	0.0	8	11	15	4	se.	Wm. A. Cook.
Waterloo§§	Black Hawk	862	25	62.2	− 0.6	87	10†	36	28	44	2.08	− 1.80	0.94	0.0	9	14	11	5	se.	M. L. Newton.
Waukee	Dallas	1,039	5	63.2	.....	87	12	40	26†	33	2.95	+ 0.32	1.07	0.0	10	11	12	7	sw.	Samuel F. Foft.
Waverly§	Bremer	948	12	61.1	− 1.4	83	10†	37	24†	32	2.60	− 0.34	0.85	0.0	10	9	13	8	s.	H. S. Hoover.
Webster City§	Hamilton	.....	3	64.1	.....	90	10	35	27	37	3.87	.....	1.24	0.0	6	10	15	5	nw.	C. D. Carpenter.
West Bend§	Palo Alto	1,197	14	60.8	− 0.3	84	10	37	23	33	3.72	+ 0.29	1.75	0.0	10	13	7	10	s.	Joseph Dorweiler.
Whitten§	Hardin	1,036	10	62.0	− 0.8	85	12	37	23	32	2.74	− 0.55	1.80	0.0	3	12	14	4	se.	F. P. Butler.
Wilton Junction§	Muscatine	683	13	63.4	− 1.4	89	13	36	27	33	1.48	− 1.84	0.56	0.0	3	18	9	3	w.	William Lang.
Winterset§	Madison	1,129	17	64.4	− 1.2	90	12	40	27	30	2.74	− 0.62	0.75	0.0	8	4	15	11	se.	Robert S. Cooper.
Zearing§	Story	.....	4	62.8	.....	90	10	31	27	46	3.48	.....	2.05	0.0	5	3	22	5	se.	Orley Reese.
Missouri.																				
Darksville	Randolph	826	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. H. Broaddus.
Gorin	Scotland	.....	23	.....	.....	.....	.....	.....	.....	.....	2.49	− 1.69	1.16	0.0	8	15	6	9	se.	J. W. Pulliam.
Hannibal	Marian	534	18	65.6	− 2.3	92	12	36	27	33	3.52	− 0.04	1.28	0.0	10	17	3	10	e.	U. S. Weather Bureau.
Louisiana	Pike	500	31	65.9	− 2.1	92	13	34	28	35	6.42	+ 3.19	3.30	0.0	10	19	2	9	n.	J. T. Farrell.
Mexico	Audrain	797	31	66.2	− 2.7	95	13	35	27†	47	3.63	− 0.34	2.42	0.0	9	18	2	10	se.	J. F. Llewellyn.
Steffenville	Lewis	576	15	66.8	− 1.3	92	12†	38	27	41	3.74	− 0.30	1.48	0.0	8	16	7	7	e.	Frank Hall.
Sublett	Adair	1,000	29	65.9	− 1.0	94	12	35	27	36	3.10	− 1.05	1.10	0.0	5	15	9	6	se.	Lewis Spriggs.
Indiana.																				
Collegeville	Jasper	.....	.....	62.0	.....	89	14	32	26	37	4.26	.....	1.09	0.0	7	3	17	10	se.	Prof. L. C. Klosterman.
Knox§	Starke	716	.....	61.4	.....	85	13	35	27†	36	3.41	.....	1.87	0.0	8	17	7	6	s.	W. R. R. Tatman.
Laporte	Laporte	810	4	62.2	.....	91	13	36	27	35	2.24	.....	1.35	0.0	5	.....	.....	.....	e.	Chas. D. Rakestraw.
Plymouth	Marshall	790	.....	60.8	.....	86	13	35	27	33	3.49	.....	1.08	0.0	6	18	5	7	se.	J. W. Siders.
Illinois.																				
Aledo	Mercer	738	9	62.9	.....	90	13	37	27	34	3.04	.....	1.66	0.0	8	12	11	7	se.	William B. Frew.
Alexander	Morgan	670	16	65.4	− 2.5	93	13	35	27	36	3.89	+ 0.58	1.85	0.0	11	16	5	9	s.	George H. Hall.
Antioch	Lake	861	8	60.9	.....	88	14†	35	2	37	3.62	.....	1.50	0.0	4	10	14	6	sw.	J. C. James, jr.
Ashton	Lee	830	14	61.2	− 2.7	86	13	34	25†	34	1.96	− 1.10	0.81	0.0	8	14	10	6	nw.	E. J. Yenerich.
Astoria	Fulton	650	9	62.4	− 2.7	91	13	33	27	33	4.03	.....	1.10	0.0	10	17	5	8	nw.	Edward V. Bohl.
Aurora	Kane	687	30	61.0	− 2.7	89	13	34	2†	36	3.28	− 0.11	1.82	0.0	5	12	9	9	se.	W. Holden.
Bement	Piatt	700	10	65.4	.....	91	13	37	27	37	3.36	.....	0.90	0.0	6	17	9	4	ne.	Rev. C. S. Adams.
Benton	Franklin	598	7	71.3	.....	95	9	39	27	38	5.62	.....	2.00	0.0	6	13	4	13	sw.	F. H. Stamper.
Bloomington	McLean	840	17	65.0	− 3.0	92	13	37	26	34	2.35	− 1.11	0.96	0.0	6	20	5	5	se.	Prof. H. N. Pearch.
Cairo	Alexander	359	33	69.6	− 0.6	90	3	45	28	28	5.66	+ 3.19	1.55	0.0	11	17	4	9	ne.	U. S. Weather Bureau.
Cambridge	Henry	824	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.0	.....	.....	.....	.....	.....	John H. Seaton.
Carlinville	Macoupin	663	19	66.3	− 3.0	93	13	36	27	36	4.76	+ 1.41	1.41	0.0	11	18	6	6	se.	R. O. Purviance.
Chester	Randolph	380	5	.....	.....	.....	.....	.....	.....	.....	8.78	.....	2.90	0.0	9	24	2	4	se.	F. A. Gollon, jr.
Chicago	Cook	824	36	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Weather Bureau.
Coatesburg	Adams	763	15	64.8	− 2.9	92	13	37	27	32	4.99	+ 0.53	2.33	0.0	8	18	4	8	se.	Dr. J. R. Lambert.
Cobden	Union	656	26	70.2	− 0.6	93	3	39	27	37	9.17	+ 5.84	3.15	0.0	5	15	9	6	n.	John Buck.

TABLE 1.—*Climatological data for September, 1909. District No. 5*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.					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 rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	
Illinois—Cont'd.																				
Colchester	McDonough	694	7											0.0						Eli V. Kinsey.
Dakota	Stephenson	929	....	60.8		86	13	37	27	33	2.23		0.52	0.0	10	15	7	8	e.	Harold Leitzel.
Decatur	Macon	685	17	65.1	− 2.9	91	13	37	27	41	2.79	− 0.53	1.08	0.0	6	22	5	3	ne.	Prof. J. H. Coonradt.
Dixon	Lee	725	19	63.2	− 1.4	90	13†	38	27	35	2.81	− 0.49	1.10	0.0	6	19	4	7	s.	Mrs. E. E. Shaw.
Du Quoin	Perry	459	18	70.6	− 0.4	97	3	38	28	36	5.71	+ 3.16	1.92	0.0	8	18	9	3	se.	G. H. Knetzger.
Dwight	Livingston	600	15	63.4	− 1.2	93	13	34	27	38	2.34	− 0.30	0.80	0.0	8	13	7	10	se.	Edward O. Welsh.
Galva	Henry	842	17	63.4	− 2.1	93	13	36	27	35	2.85	− 0.54	0.89	0.0	10	20	1	9	s.	Prof. F. U. White.
Greenville	Bond	635	26											0.0						M. S. Oudyn.
Griggsville	Pike	650	22	66.4	− 1.6	91	13	41	28	32	4.64	+ 0.73	1.86	0.0	8	18	4	8	se.	George F. Kneeland.
Halfway	Williamson	569	13	69.8	− 1.5	97	3	39	27	37	4.68	+ 1.55	1.83	0.0	8	16	11	3	se.	E. L. Hearn.
Havana	Mason	475	16	66.4	− 2.7	94	12†	42	28	31	5.68	+ 1.89	2.12	0.0	9	13	16	1	ne.	F. & C. Borgelt.
Henry	Marshall	500	20	63.2	− 2.2	90	13	37	27†	32	3.93	+ 0.67	1.54	0.0	9	17	6	7	nw.	Dr. F. A. Powell.
Hillsboro	Montgomery	675	14	66.1	− 3.3	92	3†	36	27	42	6.45	+ 3.14	2.80	0.0	7	19	5	6	se.	Ira L. Woodward.
Joliet	Will	541	17	61.8	− 2.8	89	13	38	27	34	3.09	− 0.49	1.11	0.0	8	14	8	8	se.	F. M. Muhlig.
Kishwaukee	Winnebago	730	19	62.4	− 1.1	88	13	36	27	35	3.59	+ 0.53	1.20	0.0	9	15	8	7	se.	George Stevens.
Knoxville §	Knox	775	19	62.4	− 2.4	91	13	35	27	36	3.63	− 0.12	1.25	0.0	5	17	5	8	sw.	C. N. Butt.
La Grange	Cook	657	16	62.1	− 2.0	90	13	37	27	33	3.26	− 0.51	1.17	0.0	5	17	8	5	sw.	Prof. F. E. Sanford.
La Harpe	Hancock	698	30	64.0	− 2.2	90	13	37	27	32	4.68	+ 0.56	2.62	0.0	6	22	2	6	se.	John S. Campbell.
Lanark	Carroll	883	18	61.3	− 1.3	89	13	28	27	41	1.81	− 1.51	0.60	0.0	7	22	1	7	se.	M. N. Wertz.
La Salle	La Salle	536	33	63.5	− 0.4	91	13	39	27	29	3.15	− 0.05	1.35	0.0	7	16	5	9	ne.	U. S. Weather Bureau.
Lincoln	Logan	482	20											0.0						
Martinton	Iroquois	633	21	61.7	− 3.1	92	10	33	27	39	3.82	+ 0.48	1.55	0.0	4	18	7	5	e.	Joseph H. Peltier.
Mascoutah	St. Clair	425	18	71.0	+ 1.1	100	3	34	28	43	4.16	+ 0.81	1.77	0.0	9	18	8	4	nw.	George Henrich.
Minonk	Woodford	745	15	64.8	− 1.3	95	13	35	27	37	1.98	− 1.66	0.73	0.0	4	18	10	2	ne.	O. M. Davison.
Monmouth	Warren	784	16											0.0						Hugh R. Moffet.
Morrison	Whiteside	685	13	61.6	− 2.9	87	13	35	27	37	2.60	− 0.89	0.69	0.0	7	18	4	8	se.	Harold A. Maxwell.
Morrisonville	Christian	638	9	64.8	− 3.1	91	13	35	27	34	3.39		0.92	0.0	8	20	2	8	se.	J. D. Lowis.
Mount Vernon	Jefferson	511	14	67.6	− 2.7	95	3	37	28	41	3.72	+ 0.62	1.92	0.0	7	19	7	4	n.	Theodore P. Stelle.
Oregon	Ogle	702	....	62.6		89	13	33	27	35	2.79		1.15	0.0	7	15	7	8	se.	Samuel Ray.
Ottawa	La Salle	500	23	63.0	− 2.3	92	13	37	27	32	4.08	+ 0.67	1.38	0.0	7	17	1	12	sw.	Miss Maud M. Harris.
Pana	Christian	692	22	64.5	− 3.2	83	20	34	27	26	3.73	+ 0.35	1.16	0.0	7	24	1	5	nw.	C. W. Sibley.
Peoria	Peoria	609	33	64.0	− 0.3	92	13	35	27	31	3.68	+ 0.56	1.36	0.0	9	16	7	7	se.	U. S. Weather Bureau.
Pontiac	Livingston	546	7	65.2		93	12†	35	27	36	2.15		0.84	0.0	8	17	6	7	s.	George Butterworth.
Riley	McHenry	956	50	61.4	− 0.2	84	12†	37	27	27	3.37	− 0.36	1.25	0.0	10	11	12	7	sw.	John West James.
Rockford	Winnebago	763	13	60.7	− 2.8	85	13	36	27	36	3.41	+ 0.47	0.84	0.0	7	19	1	10	.....	Hosmer C. Porter.
Rushville	Schuyler	670	8	64.8		90	13	38	27	31	3.99		1.45	0.0	6	14	4	12	e.	H. F. Dyson.
St. Charles	Kane	700	12	61.8	− 2.4	89	13	36	27	33	3.59	− 1.11	1.35	0.0	8	17	8	5	se.	Dr. Wm. H. Bishop.
Springfield	Sangamon	644	28	65.2	− 1.2	90	13	39	27	28	3.67	+ 0.30	1.51	0.0	9	15	6	9	se.	U. S. Weather Bureau.
Staunton	Macoupin	625	....	68.4		96	13	35	28	39	4.81		2.02	0.0	5	14	13	3	nw.	William F. Schaefer.
Streator	La Salle	626	15	64.6	− 1.9	95	13	36	27	40	2.74	− 0.60	1.15	0.0	5	22	2	6	sw.	Edward F. Sweetser.
Sullivan	Moultrie	530	9	65.6	− 2.5	92	13	35	27	38	4.37		1.40	0.0	5	15	13	2	sw.	C. A. Corbin.
Sycamore	De Kalb	855	28	61.6	− 1.0	90	13	34	27	39	3.95	+ 0.51	1.43	0.0	5	16	5	9	se.	Miss E. J. Davis.
Tilden	Randolph	500	23	69.0	− 0.6	100	3	36	28	38	5.47	+ 2.22	1.75	0.0	9	20	7	3	nw.	James A. Caldwell.
Tiskilwa	Bureau	798	14	62.2	− 2.7	88	13	38	27	31	3.99	− 0.50	1.33	0.0	9	20	2	8	nw.	F. I. Smucker.
Walnut	....do	717	17	64.0	− 2.7	90	12†	37	27	31	2.41	− 1.47	0.87	0.0	7	15	8	7	e.	O. C. Nussle.
White Hall	Green	573	....	65.0		92	13†	35	28	36	4.74		1.69	0.0	9	20	0	10	w.	Dr. R. A. Pritchett.
Windsor	Shelby	681	10	65.4	− 1.8	93	13	32	28	40	2.94	− 0.23	1.64	0.0	5	11	13	6	s.	Herbert Rose.
Winnebago	Winnebago	900	21	61.6	− 1.8	90	13	36	27	35	2.18	− 1.30	0.66	0.0	8	20	3	7	se.	Frank Osborn.
Yorkville	Kendall	584	21	62.0	− 1.2	92	13	32	27	40	3.32	− 0.24	1.50	0.0	10	15	10	5	w.	Herman A. Grimwood.
Zion	Carroll	938	13	61.6	− 1.8	88	12	33	27	44	1.05	− 2.23	0.90	0.0	2	21	3	6	w.	Robert F. Gillogly.

* Precipitation included in that of the next measurement.
** Temperature extremes are from observed readings of the dry-bulb; means are computed from observed readings.
† Also on other dates.
‡ Separate dates of fall not recorded.
‖ Data are from standard instruments not supplied by the U. S. Weather Bureau.
§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.
‖ Estimated by observer.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.
[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

TABLE 2.—*Daily precipitation for September, 1909. District No. 5, Upper Mississippi Valley.*

Stations.	River basins.	Day of month																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
North Dakota.																																	
Amenia	Red													T.		.25				.06	.15	.04											0.60
Bottineau	Mouse				.05									.42	T.					.03			.03										0.53
Cando	Sheyenne												.53																				0.53
Crosley	Mouse											.11	.20	.20							.16	.02											0.69
Devils Lake	Sheyenne			.06									.95	.07	.06				T.			.01	T.										1.15
Donnybrook	Mouse			T.									T.	T.					T.		T.	.20	T.	T.									0.20
Dunseith	...do												.27	.21							T.		T.										0.48
Edmore	Sheyenne																																.....
Forman	...do		.22											.40						T.		.52											1.14
Grafton	Red													.75	.10						.19	.64											1.68
Granville	Mouse			.29								.06	.14	T.					.06			.01											0.56
Hamilton	Pembina																																.....
Hannah	...do			T.									T.																				T.
Hansboro	Red												.36	.24								T.											0.60
Hillsboro	...do													.45		.10			.48		.40	.03	.27										1.73
Lakota	Sheyenne			.11								T.	.02	.48		.57					.01		.12										1.31
Langdon	Pembina													.61																			0.61
Larimore	Red				.10							T.	.10																				0.20
Lisbon	Sheyenne		T.	.10												.29				.10			.13										0.62
McKinney	Mouse			T.									.10	T.					T.		T.	.06	T.										0.16
Manfred	Sheyenne		T.	T.									.22		.05				.05														0.32
Mayville	Red											T.							.25		.10		.15										0.50
Milnor	Sheyenne		.20												.30						.10	.50											1.10
Minot	Mouse				.30							.04		.10	T.					.05													0.49
Minto	Red			.02										.43	.02				.37		.18	.35											1.37
Oriska	Sheyenne											T.			.17				.09		.12	.02	.11	.04									0.55
Park River	Red																																.....
Pembina	...do				T.									1.50	T.				T.	.16			T.										1.66
Portal	Mouse						.03																.05										0.08
Power	Sheyenne		.04										.61		.23				.51			.48		T.									1.87
Pratt	Mouse																																0.00
Towner	...do																																.....
University	Red			.06	.01							.07		.12	.14				.17			.04	.06										0.67
Wahpeton	...do																																.....
Walhalla	Pembina												T.	.61	.01		T.	T.					T.										0.62
Westhope	Mouse			.54								T.	.72	.03					.03		.02	.04											1.38
Willow City	...do																																.....
Minnesota.																																	
Albert Lea	Mississippi		.50	.05	T.				T.	T.		.20	.45	T.	.90								.75	T.									2.85
Alexandria‖	...do			T.						.35				.20		.24				.25		.40	1.20										2.64
Angus	Red											.09		.78	.07	.15			.70	.10	.08		.61										2.58
Bagley	...do			T.	T.									.33	.22					.62	.05	.40	.05										1.67
Baudette	Rainy			.11	.16						.15			2.00	.17					.76	.94	.30	.10										4.69
Beardsley	Minnesota		.28	T.									.20		.15				.14		.17	.42											1.36
Beaulieu	Red																																.....
Bird Island	Minnesota		.82	.22		T.			.01			.43	.33			.01				.43		.85	.08	T.									3.18
Caledonia‖	Mississippi		.69	.30	.51					.14		2.00	.62	.33	.26						T.		.16										5.01
Campbell‖	Red																																.....
Cass Lake‖	Mississippi			T.						T.			T.		.05	.35			.90		.03		.84										2.17
Collegeville	...do		.07						.06	.04			.43			.01					.21	.75	.12	T.									1.69
Crookston‖	Red				.73							T.		.04	T.	.12				.28	.27	T.	.12										1.56
Detroit‖	...do	T.		T.						.13			T.	T.	.05	.20			.46	T.	T.	.48											1.32
Fairmont	Minnesota		.70	T.	.04				T.			.07	1.31	T.	.33				.38		T.	1.00		T.									3.83
Faribault	Mississippi		.49	.08	.01				.15			.51	1.22	.29	.61					.10	.01	.73	.21	.11									4.52
Farmington	...do		.35	.16	T.				.12	T.		T.	3.14	.86	.49					.06	T.	.61	.30										6.09
Fergus Falls	Red		.10	T.					.12	.01			T.		.25				.36		.04	.44		.07									1.39
Fort Ripley‖	Mississippi									T.	T.				T.					.40	T.	1.10	.34		.09								1.93
Fosston	Red													.50	.24				.27		.89	.51	.06										2.47
Glencoe	Mississippi		.48	.36					T.	T.			3.50	.08	.10						T.	.85	.42										5.79
Grand Meadow	...do		.60	.12	T.				T.	.09		.14	2.07	.17	1.97						T.	T.	.23	T.									5.39
Hallock	Red				T.									.32	.07				.25		.13		.05										0.82
Halstad‖	...do				T.									.07	.02	.13				.22	.17	.41	.32										1.34
Hinckley	St. Croix																																.....
International Falls	Rainy													1.39		.35			.48	.07	.55	.09											2.93
Kelliher	Red													.40	.04	.12			.88		T.	.54	.10										2.08
Lake Crystal	Minnesota		.53										.70		.45				.48			1.15											3.31
Leech Lake Dam	Mississippi													.30		.28				.68	.04	.71	.12										2.13
Litchfield	...do			.25	.02				.10				1.00	.10								1.88	.10										3.45
Little Falls	...do		T.						.02				T.	T.		.04				.51			.34		T.								0.91
Long Prairie	...do																																.....
Lynd(2)	Minnesota																																.....
Mankato‖	Minnesota			.91									.83	.09	.28	.08				.50		.03	1.26										3.98
Milaca	Mississippi								.15	.16			.15	.33						.33			1.70	.04									2.86
Milan	Minnesota		.48	.02								.13	.29		.09				.17		.29	.38											1.85
Minneapolis(1)	Mississippi		.20	.08	T.				.03	.08		.30	.27	.19	.31				.37	.14	.03	.97	.01	T.									2.98
Minneapolis(2)	...do		.20	.11	T.				.03	.08		.10	.48	.07	.38					.51	.04	.80	.08	.05									2.93
Montevideo‖	Minnesota		T.	.58					T.				.25			.06				.41		.81	.32		T.								2.43
Moorhead	Red													T.	.23				.24		.30	.64		.03									1.44
Mora	St. Croix								.16	.04	.01		.01	.42	.01					.42	.03	1.50	.47										3.07
Morris	Minnesota											.50			.18				.12		.32	.90	T.	T.									2.02
New London	Mississippi	.16	.50					.06				.06	.11						.07	.10	1.20	.05											2.31
New Richland	Minnesota		.21	.07					T.	T.		T.	.78	T.	.61					.42	T.	.63	.17	T.									2.89
New Ulm‖	...do		T.	1.20	.05	T.			T.	T.			.73	T.	.14	.05				.37		.44	.80		.15								3.93
Osakis	Mississippi		T.		T.				.08	.06			1.13			.16			T.	.50		1.05	.01		.03								3.02
Park Rapids‖	...do									.03	T.			T.		.14	.01			.85		.01	.73						T.				1.77
Pine River Dam	...do									.15						.20				.60	.20	1.20		.20									2.55
Pokegama Falls	...do									.02				2.70	T.	.26				.66	.04	.83	.06										4.57
Red Lake	Red				.20									.80	.20		.06			.65	.56	.30											2.77
Red Wing	Mississippi		.25	T.	T.				.80	T.			2.75	2.20	.78					.10	T.	T.		T.									6.88
Red Wing (river)‖	...do			.42	.04	T.			.38	.44	T.		2.98	1.82	.24	.52				.02			.48	.04	T.								7.38
Redwood Falls	Minnesota		.65	.38								.04	.26							.48		.46	.06										2.33
Reeds Landing‖	Mississippi			.58	.22	.06				.28			3.52	.06	1.24	.52				.04			T.	T.									6.52
Rochester‖	Mississippi			.72	T.				T.	T.	T.		.84	.14	.95	.43				.10			.12		.15								3.45
Roseau	Rainy													1.65						.79	.70	T.											3.14
St. Charles‖	Mississippi			.70					.03	.09	.02		1.43	.20	1.09	.46				.02													4.04
St. Cloud	...do		.12	.01					.24	.10			.51							.32	.13	2.28	.35										4.06
St. Paul	...do		.19	.15	T.				.04	.05		.13	.71	.30	.39				.68	.12	.05	1.21	.04										4.06
St. Peter	Minnesota		.58	.34					T.				1.08	.12	.33					.60	T.	.64	.15	T.									3.84
Sandy Lake Dam	Mississippi								.02					T.		.12				.36		1.25	.20										1.95
Shakopee	Minnesota																																.....
State Sanitorium	Mississippi												.03	.12	.15					1.28	T.	.69	.01										2.28
Stillwater‖	St. Croix			.38	.18					.24	T.		.70	1.70	.22	.40				.38	.08	.02	1.40		T.								5.70
Taylors Falls	...do			.53					.38	.09			.42	.38	.48					.70	.05	.82	.64										4.49
Wabasha	Mississippi																																.....

TABLE 2.—*Daily precipitation for September, 1909. District No. 5*—Continued.

Stations.	River basins.	Day of month. 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.
Minnesota—Cont'd.																																	
Warroad	Rainy											.10		2.25	.09	.01	.03		.70		.94	T.	.03										4.15
West Concord	Mississippi		.42	.15	.01				.14			.04	1.03	.10	.90					.40			.90										4.09
Willow River	St. Croix								T.	.02				1.00		.09	T.			.60	.06	1.77	.44										3.98
Windom	Des Moines		.73	.04								T.	.45	T.	.18					.25	T.	T.	.30	T.									1.95
Winnebago‖	Minnesota		.01	.67		T.			.03	T.			1.35	.11		.10				.20		.02	1.46		T.								3.95
Winnibigoshish	Mississippi													.20		.31				.83	.16	.85	.13										2.48
Winona	do		.54	.22	.01				.04	.01	T.	T.	1.85	.20	1.55	.01				T.	T.		.02	.21									4.66
Worthington‖	Des Moines	T.	T.	.52	T.							T.	1.01	T.	.10	T.				.21			.18										2.02
Zumbrota	Mississippi		.67	.15	.03				.10	.04			2.75	.02	.71					.10			.43	.10									5.10
South Dakota.																																	
Milbank	Minnesota		.08	.71					T.	T.				T.		.16				.13		.15	.32							T.			1.55
Wisconsin.																																	
Antigo	Wisconsin			T.					T.	.24	T.		.24	.70	.81	T.						T.	.02										2.01
Barron	Chippewa		T.	T.					.58	.08			.93	.82	.54					.07		.07	1.18										4.27
Beloit	Park		*	.74					.62				.58		.39						T.	.64	.12										3.09
Brodhead	do	.22	.60	T.					T.	T.			.47	.25	.20							.48	.10										2.32
Burnett	do		T.	.57	T.				*	.23			.26	T.	.48							*	.61	T.					T.				2.15
Delavan	do		.77		.03				.01	.87			.04		.55	.03						1.13	.15						T.				3.58
Dodgeville	do																																
Downing	Chippewa		T.	.55	T.				1.05	T.			.96	1.03	.60					.10	T.	T.											4.29
Eau Claire	do		.11	.28	T.				.60	.13		T.	.60	2.99	1.64		T.			.34		T.	.06	.09									6.84
Ellsworth	Mississippi																																
Gliddon	Chippewa																																
Grand Rapids	Wisconsin			.18	T.				*	.04		T.	.71	1.16	.65	.20							.14	.07									3.15
Grantsburg	St. Croix								.38	.10												2.00	1.00	.45									3.93
Hancock	Wisconsin		T.	T.	T.				.35	T.			.70	1.10	1.10									.18									3.43
Hatfield	Black			.23						.09			1.07	.87	.84																		3.10
Hayward	St. Croix								.15	T.	T.			.12	.51					.37	T.	.85	.25	T.									2.25
Hillsboro	Wisconsin		.73		T.				.20				.60		1.37									.21									3.11
Koepenick	Wisconsin			.22					.14				.30	.31	1.66	.05						.01	.03							.03			2.75
La Crosse	Mississippi		.86	.04	T.				.04	T.	.01	.12	1.82	.26	.74								.14										4.03
Lake Mills	Park		.07	.40	.02				T.	.04			.11	T.	.12	.08						.16	.52						T.				1.52
Lancaster	Mississippi	.42	.08						.05	.09			.59	.06	.91																		2.20
Long Lake	Wisconsin				T.					.11			.18	.11	1.70	.05	T.						.10	.14						.09	.02		2.50
Madison	Park		.70	.02					.05	.04			.54	.27	.33							.21	.04	T.	T.				T.				2.20
Mather‖	Wisconsin			.30						.23	T.		.56	1.14	.37	.62							.12		.16								3.50
Mauston	do			.50	.05								.50	.45	1.23																		2.73
Meadow Valley	do		T.	.60					T.	.14			1.70	.27	.88	.03						T.	.13	.02									3.77
Medford	Black			.15					.16	.10			.91	.85	1.37																		3.54
Merrill	Wisconsin			.15					.09	.08	T.		.49	.24	1.24	.02													.02	T.			2.33
Minocqua	do								.10				T.	.97	2.00					T.		.20	.10										3.37
Mondovi	Mississippi		.18	.15	.01				1.70	.01			2.65	.08	1.86	.02				.23			.09										6.98
Mt. Horeb	Park		.70						T.	.06			.60	.25	.60							.16	T.										2.37
Muscoda‖	Wisconsin			.90		T.				.08	T.		.06	.10	.90	.18							T.	T.	.18								2.40
Neillsville	Black			.16								1.49	.52		.40				.70					.06									3.33
New Richmond	St. Croix		.17	.34					.19	.05			1.00	1.00	.61					.38	.03	.06	1.04										4.87
Osceola‖	do		T.	.20					.10			.93	.32	T.	.45					.70	.10	1.00	T.										3.80
Portage	Wisconsin		.42						.40				.40	1.65	.13							.23		.07									3.30
Prairie du Chien‖	Mississippi			.61		T.			T.	.14	.02		.04	.49	.73	.15							.08	T.	T.								2.26
Prentice	Chippewa				.06				.20	T.			.32		1.81					.04		T.	.08										2.51
Rhinelander	Wisconsin									.20	.01		.30	.13	1.70	.27				.03			.08	.09	.04					.02		.03	2.90
Sauk City	do																																
Shullsburg	Mississippi		.55					.27					.47	.27	1.73							T.	.14										3.43
Solon Springs‖	St. Croix									T.				T.	.06				.03	1.00		1.77											2.86
Spooner	do				T.				.27	.10				.06	.58					.46	.03	.65	.33										2.48
Stanley	Chippewa			.13					.43	.06			.87	1.03	1.34	.07				.14				.07									4.14
Stephens Point	Wisconsin		T.	.10					.60				1.65	.09	1.20									.20					T.				3.84
Valley Junction	do		.16	.53	T.					.29			1.31	.36	.96		T.						T.		.32								3.93
Viroqua	Mississippi		.42	.64	T.				.12	.03			.74	.35	.96	T.						T.	.12	.04	.02								3.44
Vudesare	Wisconsin	.06								T.						.27			T.	T.	T.	T.			T.			T.	.25	.05			0.63
Watertown‖	Park		*	.44	.05				T.	.52	.07		.56		.14							*	.76	.04	T.				T.				2.58
Waukesha (1)	Fox			.27		.03			.01	.77			.45	.08	.58							.17	.91						.05				3.32
Waukesha (2)	do			.31					.02	.75			.30		.53							1.00	.16						.07				3.14
Wausau	Wisconsin			.08	.01				.22	.17			.62	.63	1.24	.02						T.	.02						T.				3.01
Weyerhaeuser	Chippewa			.02					.25	.03			.52	.22	.77						.03	.19	.20	T.									3.23
Whitehall	Mississippi		.13	.35	T.				T.	T.			1.10	1.15	.44					.03				T.	T.								3.20
Iowa.																																	
Albia	Des Moines		T.	.82	.02		.10	.30		.61	.04			.48	.84	.25							.07	.10									3.63
Algona	do		.23	.05								.47	1.88	.09	.93					.30	T.	.60	.16	T.									4.71
Amana	Iowa		.53		T.				.08				T.	.70	2.65								T.	T.									3.96
Ames	Skunk		.16	T.	.03		.08			T.		.15	.22	1.00	1.00					T.	T.		.18	T.									2.82
Baxter	do		.34	.01	T.		.07		T.	T.			.01	.53	1.14						.05		.05	T.									2.20
Belle Plaine	Iowa		.52	T.			T.		.02	.08			.11	.02	1.06						T.		.03										1.84
Bloomfield	Mississippi		.70		.08		.42		.48	.02					1.54								.31										3.55
Bonaparte	Des Moines		.80		.03		.20		.22	.03					1.59						.21		.18										3.26
Boone	do		T.	.35	T.		.06	.20		T.	.13		.19	1.24	1.26	.08				.02	T.	.02	.65	T.	.04								4.24
Britt	Iowa	T.	.17	.05	T.				.03			.33	1.16	.07	.95					.08	T.		.68	.18									3.70
Buckingham	Cedar		.36											1.05	.50						.05			.10									2.06
Burlington	Mississippi			.78	T.	.01	.03	.10	.08	.20	T.				1.91	.73						T.	.44	.19									4.47
Carroll	Raccoon		.30			.22	.26					.66	1.59	.73	.10				.12			1.25											5.23
Cedar Rapids	Cedar		.50	T.	T.				T.	T.		T.	.09	2.56	.76								T.	T.	T.								3.91
Charles City	do		.55	.03					.04			.14	.33	.30	1.64						T.	.08	T.	.01									3.12
Clear Lake	do		.33							.40	.60	.40		.18	1.20								1.40	.03									4.54
Clinton	Mississippi		.50						.22	.02			.08	.30	.60							.25	.30	T.									2.27
Columbus Jct.	Iowa		.78		T.		T.	.05	.19	.01				T.	1.16							T.	.20										2.39
Davenport	Mississippi		.27		T.		T.		.03	T.			.04	.07	.60						T.	.25	.15										1.50
Decorah	do			.62					.07			.05	1.08	.65	.70																		3.17
Delaware	do		.56	.03					T.	.07			.52	.35	1.18								.15										2.86
Des Moines	Des Moines		.56		T.		.35		T.	.02		T.	.16	.35	.34					T.	T.	.22	.03	.03									2.06
De Soto	Raccoon		.55		.02		.45		T.	.01		T.	.05	1.39	.52						T.		.40										3.39
Dows	Iowa		.11	.08								.43	.25	.85	1.43						.43												3.58
Dubuque	Mississippi		.35		T.				.21	.03		T.	.15	3.02	.45						T.	.01	.01	.05									4.28
Earlham	Raccoon		.57		.11		.47			T.		T.	.12	2.17	.43								.44										4.33
Elkader	Mississippi		.57						.08				.25		1.25							T.											2.15
Elma	Wapsipinicon		.54	.50	T.				.02	.02		.35	.35	.42	.33					T.	T.		.05	.50									3.08
Estherville	Des Moines		T.	.38	T.	T.			T.			.15	2.20		.20	.12				.34		.20	1.10										4.69
Fairfield	Skunk		.02				.14	.02	.29	.01				.01	1.40						.07		.21										2.17
Fayette	Mississippi		.80	.04					.10			T.	.03	.60	1.13							.04	T.	.03									2.77
Forest City	Cedar			.55	T.				T.				2.07	.06	.85	.07				T.													3.60
Fort Dodge	Des Moines		T.	.16			T.	T.	T.	T.			.73	1.27	1.05					.06			.46										3.73
Ft. Madison	Mississippi		.36				.18		.25	T.				1.15	1.82							T.	.48										4.24
Gilman	Iowa		.38		T.				.08	T.		T.	.20	.22	.44							T.		.07									1.39
Grand Meadow	Mississippi		.54	.10					.10	T.		.02	.22	.55	1.02	.02						.03	.05	.03									2.68
Greene	Cedar		.51	.10					.05	.02		.13	.30	.96	1.40								.05	.17									3.69

TABLE 2.—*Daily precipitation for September, 1909. District No. 5*—Continued.

Stations.	River basins.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Iowa—Cont'd.																																	
Grinnell	Iowa		.64				.05		.06	.10		T.	.05	.14	.70						.05		.07										1.86
Grundy Center	Cedar		.25	.07	T.				.05	T.			T.	2.20	.90								.10	.05	.25								3.87
Guthrie Center	Raccoon		.45	.03			.35	.01		.01		.08	.33	1.25	1.36					T.	T.		.42	.04									4.33
Hampton	Cedar		.23	.03					.05			1.40	.13	.97	1.35							.10											4.26
Humboldt	Des Moines		.22	.06						.01		1.10	.52	.80	1.05					.10			.36										4.22
Independence	Wapsipinicon		.23	.04					.18				.07	.55	1.35								.02										2.44
Indianola	Des Moines		.68		.02		.47	T.	.01				.01	.43	.99								.13										2.74
Iowa City	Iowa			.56						.09				.03	1.35	.24						.12	T.	.04									2.43
Iowa Falls	...do			.24	T.	T.		T.		T.	T.		.26	1.27	.62	.22					T.	.02	T.	T.	T.								2.63
Jefferson	Raccoon		.25	T.	T.	.25	.25			T.			.57	.72	1.72																		
Keokuk	Mississippi		.43		.08		.21		.25	.02				1.29	.79							.25	.14										3.46
Keosauqua	Des Moines			.55	T.	.06	.03	.26	.02	.65	.02				.71	.33						.40	.06	.05									3.14
Knoxville	...do		1.05		T.		.38		.30			T.	.18	.18	.81								.06										2.96
Lacona	...do		.60		.10		.66		.58					.15	1.00								.12										3.21
Le Claire	Mississippi	.03		.37		T.			T.	.17	.05			T.	.24	.49						T.	.36	.32									2.03
Marshalltown	Iowa																																
Mason City	Cedar		.37	.09								.28	.72	.20	1.70					.06		.01	.32										3.75
Mt. Pleasant	Skunk		.53		T.		.12		.52	.01				T.	.94						.01	T.	.14										2.27
Muscatine	Mississippi			.48			.02	T.	.04	.06				.01	.66	.34							.10	.25									1.96
New Hampton	Wapsipinicon		.50	.10	T.				.05	.02		.11	.60		.91									T.									2.38
Newton	Skunk		.65		T.		.11		T.				.18	.19	.70								.10										1.93
Northwood	Cedar		.42	.03					.06	.02		.24	1.00	.08	1.23								.95	.06									4.09
Olin	Wapsipinicon		.04	.06	.08										.20	1.80					.06												2.24
Osage	Cedar		.57	.01								.30	.82	.15	1.35								T.	T.									3.20
Oskaloosa	Des Moines		.78		.03		.25		.42				.70	.93	.47						.12	T.	.03										3.73
Pella	...do		.55				.20		.10				.16	.10	.56								.03		T.								1.70
Perry	Raccoon		.23		.05		.33	.04	.03			T.	.64	1.34	1.50					.03			.84	T.									5.03
Plover	Des Moines		.12									.60	.88	.20	.42					.10			.75										3.07
Pocahontas	...do		.20									.68	.52	.40	.46					.28	T.	.41	.12	T.									3.07
Ridgeway	Mississippi		.50	.09					.11	.03		.12	1.05	.20	1.59							.01		.04									3.74
Rockwell City	Raccoon		.30		T.		.05			T.		.50	.50	1.75	1.35					.45		.80											5.70
Sac City	...do		.24	.01			.11					.32	.28	.62	.57					.07	.05	.33	.04	.09									2.73
St. Charles	Des Moines		.50		.06		.58		T.					.37	.58								.20	T.									2.29
Sigourney	Skunk		.82		T.		.16		.73	T.			.06	T.	2.22								.04										4.03
Stockport	...do		.75	.19	.03		.07		.75	.05				T.	1.09						.13	T.	.07										3.13
Storm Lake	Raccoon		.28		T.	T.		.05				.66	.24	.10	.30						.04	.47		.02									2.16
Tipton	Cedar		.41						T.	T.				T.	1.04								.06										1.51
Toledo	Iowa		.45										.10	.55	.70							.08											
Wapello	Iowa		.29						.30	.07				.66	.78							.10	.13										2.33
Washington	Skunk		.67				.02		.12				.15	.03	2.35						.15		.18										3.67
Waterloo	Cedar		.46	T.					.03	.05		.05	.13	.04	.33							T.	.02	T.	.07								2.08
Waukee	Raccoon		.44	T.	.02	.30			.02	T.		.02	.30	1.07	.45								.27	.06									2.95
Waverly	Cedar		.44	.04	.02				.05	.01		.17	.17	.85	.81									.04									2.60
Webster City	Des Moines		.15						T.			.31	.26	1.07	1.24					T.			.84										3.87
West Bend	...do		.18	.05	T.					T.		.58	1.17	.13	.67					.11	.03	.60	.20	T.									3.72
Whitten	Iowa		.32	T.	T.		T.		T.	T.		T.	T.	1.80	.62						T.		T.	T.									2.74
Wilton Junction	Cedar		.42											.56	.50																		1.48
Winterset	Des Moines		.75		.02	T.	.45		T.	.03		T.	.05	.62	.40					T.	T.		.42										2.74
Zearing	Iowa	.21		.05									.10	2.05	1.07																		3.48
Missouri.																																	
Darksville	Charlton																																
Gorin	Mississippi		.28		.14		.24		.28	.02			.17		1.16								.20										2.49
Hannibal	...do		.15	.12	.24		.36	.10	.17	.45					1.28							.53	.03										3.52
Louisiana	...do		T.	.04	.25		.15	.55	.23	.81					3.30	.10						.92	.07										6.42
Mexico	...do		*	.02	.29	T.	*	2.42	.04	.18	T.			*	.30	.04						*	.31	.03									3.63
Steffenville	Mississippi		T.	.21		.35	.25	.24	.50						1.48							.05	.66										3.74
Sublett	Chariton				.10		.50	.85	T.	.55					1.10						T.												3.10
Warrenton	Mississippi																																
Indiana.																																	
Collegeville	Iriquois			1.05					T.	.90						.50					.10	.37	1.09	.25									4.26
Knox	Kankakee			.75	.02					.12						.48						.12	1.34	.53					.05	T.			3.41
Laporte	...do									.05						.60							1.35	.23					.01	T.			2.24
Plymouth	...do			.37	T.					.17						.97					.20	T.	1.08	.70	T.				T.		T.		3.49
Illinois.																																	
Aledo	Mississippi		.48				.04	T.	.13	.01					1.66						.09	.28	.35										3.04
Alexander	Illinois		.01	.13	.05		.06	.02	.21	.14					1.29	.56						1.16	.26										3.89
Antioch	...do			.60					T.	.52					1.00							T.	1.50										3.62
Ashton	Mississippi		.10	.31	T.				.19	.02			T.	.22	.05						.26	.81											1.96
Astoria	Illinois		.20	.50	.08		.05	T.	.20	.10					.80	.25						1.10	.75										4.03
Aurora	...do			.99	T.				T.	.13					T.	.34					T.	T.	1.19	.63									3.28
Beardstown	...do																																
Bement	Mississippi		.71					.11								.39						.90	.75	.50									3.36
Benton	...do							.95	T.		1.47					.30						2.00	.25	.65									5.62
Bloomington	Illinois		.14						.14	T.					.16	.37						.96	.58										2.35
Cairo	Mississippi		.01	.08	.80	.01		1.25	.46	.66	.01				T.	.13						1.44	.81										5.66
Cambridge	...do																																
Carlinville	Illinois		T.	.17	.04		.04	.15	.03	1.09					.55	.21						1.41	.66	.41									4.76
Carlyle	Mississippi							.90		.95					.70							1.40	.30										4.25
Chester	...do			.01	T.	.32		2.90	.14	.46	.90					1.02						T.	2.02	1.01									8.78
Chicago	Illinois																																
Coatsburg	Mississippi		T.	T.	.14		.20	.66	.48	.20					2.33							.46	1.03										4.90
Cobden	...do			T.	T.	T.		3.15	.18		2.12					T.						2.97		.75									9.17
Colchester	Illinois																																
Dakota	...do		.19	.52					.05	.37			.15		.29						.01	.18	.43		.04								2.23
Decatur	...do		.15	.50	T.		.03		T.	.22					.81							1.08											2.79
Dixon	Mississippi		.51	T.					.50	.15					.35							1.10	.20										2.81
Du Quoin	...do		T.	.06	.02	.06	T.	.90		.80					.37							1.92	1.58										5.71
Dwight	Illinois		.04	.35	T.	T.			.04						.51	.15					T.	.45	.64	.16									2.34
Galva	...do		.47	.02		.02	T.		.12	.05					.89	.02						.81	.44	.01									2.85
Grafton	Mississippi			.14	.12			.82		.12						.93							1.90	.14									4.17
Greenville	...do		.02	.05	T.		.05	.52		2.30					.08	1.40						1.30	.49										6.24
Griggsville	Illinois		T.	.19	.12	.18		.23	T.	.29					1.86							1.49	.28										4.67
Halfway	Mississippi			.11	T.	.06		.83	.04		.93					.05						1.83		.83									4.68
Havana	Illinois		.20	1.08	.05		.03		.10	.08					2.12							1.42	.60										5.68
Henry	...do		.22	.20	.02	T.			.30	.08					.94	.60						.58	.99										3.93
Hillsboro	Mississippi			.15		T.		.15		2.80	.62					.80							1.45	.48									6.45
Joliet	Illinois		.22	.72	T.		T.		.08						1.09	.02					.03	.55	.38										3.09
Kishwaukee	Mississippi		.19	.40					.03	.19			.23		1.20						.09	.26	1.00										3.59
Knoxville	Illinois		.42											.75	1.25							.77	.44										3.63
La Grange	...do		1.10	T.					T.	T.					.46	.06					T.	.47	1.17						T.				3.26
La Harpe	...do		.86		T.		.08		.56	T.					2.62							.20	.36										4.68
Lanark	Mississippi		.10	.30	T.				.12	.27			T.		.60							.21	.21										1.81
La Salle	Illinois		.38	.13	.02				.04	T.					1.35						T.	.86	.37										3.15
Lincoln	...do																																

TABLE 2.—*Daily precipitation for September, 1909. District No. 5*—Continued.

Stations.	River basins.	Day of month.																															Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Illinois—Cont'd.																																	
Loami	Illinois		T.	.25	T.		.04		.05	.25					1.04							.92	.27										2.82
Martinton	do		.85							.87											T.	1.55	.55										3.82
Mascoutah	Mississippi			.21			.62	.07		.52					.23	.60						1.71	.20										4.16
Minonk	Illinois		.50		T.				.18	T.					T.							.73	.57										1.98
Monmouth	Mississippi																																
Morrison	do		.06	.42	T.	T.			.55	.02	T.			T.	.69							.22	.64		T.								2.60
Morrisonville	Illinois		T.	.46	.03		T.	.01		.35						.69						.88	.05	.92									3.39
Mt. Vernon	Mississippi			.21				.40	.05		.76					.12						T.	1.92	.26									3.72
Oregon	do		.10	.49	T.				.20	.30					.30						T.	.25	1.15										2.79
Ottawa	Illinois			.74					.03						1.08	.47						.25	1.38	.13									4.08
Pana	Mississippi		T.	.64	T.		.02		T.	.35						.38						1.16	.99	.19									3.73
Peoria	Illinois		.44	.07	.01		.01		.33	.01					1.25							1.19	.37										3.68
Pontiac	do		.07	.23	T.				.08						.12	.20						.30	.84	.31									2.15
Riley	Mississippi		.08	.58	T.	.01			.05	.05					1.15	.05						.12	1.25	.03									3.37
Rockford	do			.73		T.				.72	.03			.34		.84						T.	.60	.15	T.					T.			3.41
Rushville	Illinois		T.	.71			.21			.17					1.45							1.30	.15										3.99
St. Charles	do		T.	.83					T.	.12					.36	.11					.31	.12	1.35	.39					T.				3.59
Springfield	Illinois		.12	.29	.03		.03		.07	.18					1.51							1.16	.28										3.67
Staunton	Mississippi		T.				.87	T.	T.	.54												.40	.98	2.02									4.81
Streator	Illinois			.40	T.					.20						.51							1.15	.48									2.74
Sullivan	Mississippi		T.	1.10			T.		T.	.61						.61						1.40		.65									4.37
Sycamore	do			.70						.27						1.43							1.15	.40									3.95
Tilden	do		T.	.04		T.		1.15	.31	.62	.14					1.15						1.75	.25	.06									5.47
Tiskilwa	Illinois		.15	.28	T.	.01	T.		.30	.74					.54	.24						.40	1.33										3.99
Walnut	Mississippi		.16	.25					.21	.02					.57							.36	.84										2.41
Warsaw	do		.37				.35		.36					2.50	.36						.21		.20										4.35
White Hall	Illinois		T.	T.	.39		.13	.20	.14	1.11					.88	.12						1.69	.08										4.74
Windsor	Mississippi		T.							.50						.45						1.64	.20	.15									2.94
Winnebago	do		.06	.60					.10	.66			.13		.63							.37	.63										2.18
Yorkville	Illinois		.05	.75					.10	.05					.40	.05					.02	.10	1.50	.30									3.32
Zion	Mississippi														.90							.15											1.05

TABLE 3.—*Maximum and minimum temperatures at selected stations, September, 1909. 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...	79	40	72	45	73	32	80	44	72	38	64	37	68	42	68	37	65	39	69	42	68	43	77	36	67	42	66	38
2...	83	44	73	50	60	45	79	53	71	42	64	45	68	47	60	42	56	44	68	46	58	44	66	44	63	46	67	45
3...	79	48	80	49	79	49	81	57	74	48	66	50	81	49	59	52	69	51	79	48	60	51	67	53	61	53	74	47
4...	65	38	64	43	68	47	81	41	72	40	67	54	62	47	67	54	69	55	65	45	69	52	66	32	67	51	68	52
5...	78	37	73	45	71	31	79	41	71	37	67	42	70	37	69	38	71	37	70	36	70	40	68	54	67	44	67	39
6...	74	41	69	42	76	44	70	42	70	38	74	48	65	45	68	50	88	44	70	43	71	45	70	48	71	50	69	52
7...	83	45	78	48	79	41	84	43	82	40	75	43	76	40	77	46	78	52	78	40	76	48	77	36	75	52	74	41
8...	82	47	77	54	75	43	84	55	82	50	71	56	78	50	64	52	76	50	75	56	71	49	74	51	64	60	78	54
9...	82	53	86	53	79	56	85	58	86	52	75	56	81	55	80	59	83	61	82	58	80	60	71	55	74	60	70	57
10...	79	44	77	48	84	45	83	44	81	40	76	57	75	47	85	54	88	57	80	52	87	56	76	50	84	56	78	53
11...	87	52	87	59	87	56	89	46	83	52	78	57	85	55	75	58	85	58	88	65	82	57	77	53	78	63	73	52
12...	64	55	75	57	90	63	59	55	76	59	79	61	83	64	77	61	83	63	88	66	81	63	79	60	78	63	77	60
13...	67	52	63	51	73	55	70	52	63	51	76	57	70	60	74	50	84	60	72	51	72	62	78	61	70	62	70	61
14...	65	42	61	43	77	32	67	42	58	40	69	50	67	43	61	49	72	53	73	43	64	57	76	56	62	54	65	48
15...	75	35	69	42	72	32	80	36	61	39	68	40	65	36	68	44	75	41	71	36	70	42	66	45	67	44	68	44
16...	70	40	69	45	75	38	77	45	63	48	76	50	67	45	75	47	82	42	72	48	80	42	68	52	77	53	72	53
17...	78	44	74	44	79	36	86	41	71	46	71	46	72	45	79	46	78	45	75	40	79	48	62	48	72	54	67	43
18...	63	45	70	47	84	47	70	47	71	50	76	51	81	50	78	54	86	48	84	55	83	49	77	52	78	54	76	48
19...	70	32	72	45	76	38	74	44	63	50	73	48	70	45	77	60	74	44	72	42	74	53	74	54	73	58	70	50
20...	68	40	69	48	85	48	71	38	70	42	77	53	68	53	81	57	81	50	78	52	80	54	76	50	79	57	74	50
21...	60	30	62	43	61	50	60	40	60	48	74	50	57	50	76	61	69	57	60	50	82	56	70	52	81	55	70	51
22...	61	30	60	40	64	45	65	36	51	38	61	44	57	44	67	50	63	46	60	44	62	49	58	48	59	47	55	49
23...	58	26	57	31	64	32	63	34	54	34	58	39	57	41	66	37	66	38	60	38	62	38	60	33	62	42	56	39
24...	74	30	68	37	75	28	75	37	51	33	66	39	61	38	68	39	72	39	66	37	68	41	56	36	63	42	64	32
25...	78	45	74	45	77	31	83	40	62	38	66	42	70	45	71	39	72	42	72	44	73	40	63	38	66	42	65	38
26...	80	46	77	51	78	37	85	41	70	39	67	40	70	47	65	37	70	44	71	49	68	41	65	35	62	43	65	40
27...	87	47	84	51	84	47	90	50	74	42	70	42	75	50	66	35	80	43	80	48	72	41	66	46	66	42	70	42
28...	79	46	75	45	78	48	80	45	77	41	74	52	70	48	75	49	79	45	72	50	77	41	72	44	74	54	72	48
29...	61	44	59	40	70	44	72	38	71	44	73	47	65	40	67	50	74	45	65	44	69	50	65	48	65	52	67	50
30...	74	42	71	38	76	33	80	38	74	34	68	43	69	42	75	41	72	40	72	43	72	40	68	31	69	45	69	36
31...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mns	73.4	42.0	71.5	46.0	75.6	42.4	76.7	44.1	69.4	43.1	70.6	48.0	70.1	46.7	71.3	48.3	75.3	47.8	72.9	47.0	72.7	48.4	69.6	46.7	69.8	51.3	69.2	47.1

Date.	Wisconsin.														Iowa.													
	Delavan.		Eau Claire.		La Crosse.		Madison.		Mauston.		Spooner.		Wausaw.		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...	66	37	71	36	68	40	64	44	65	32	65	31	65	33	63	42	65	45	62	40	65	46	63	51	66	44	75	52
2...	70	36	67	37	66	43	64	46	66	38	67	32	72	37	57	49	58	46	55	46	60	49	61	54	61	47	65	54
3...	66	48	60	52	60	54	62	53	60	52	71	50	59	53	63	55	70	52	62	54	71	58	67	59	66	56	82	58
4...	78	58	68	53	66	52	70	55	68	57	66	51	64	54	67	53	70	57	67	50	71	57	70	54	71	54	70	60
5...	69	43	70	39	67	44	65	49	67	38	66	31	65	38	70	39	69	48	67	40	69	51	68	47	68	49	71	54
6...	79	45	72	45	69	49	69	49	68	46	72	35	72	44	72	53	66	48	68	50	68	57	59	56	70	53	64	56
7...	72	53	75	48	74	52	70	55	72	48	73	40	71	45	70	45	76	51	73	45	76	54	69	56	75	49	69	56
8...	71	51	68	56	66	57	68	54	68	51	69	51	74	52	70	59	67	52	66	60	67	60	69	61	64	60	72	61
9...	76	60	71	59	72	60	70	59	68	58	66	58	62	57	80	61	80	61	77	61	80	65	79	65	77	62	84	66
10...	81	57	84	56	83	59	80	57	80	55	73	53	79	58	85	53	84	59	84	54	83	60	85	61	81	57	86	65
11...	80	58	77	61	76	59	76	60	74	60	75	56	72	58	78	63	83	59	75	60	84	63	86	64	79	60	85	64
12...	85	61	77	67	79	64	74	63	74	61	77	63	73	54	78	63	88	63	79	66	88	66	89	68	83	67	91	67
13...	88	66	76	65	81	64	84	66	81	66	72	61	79	64	76	62	88	68	75	63	91	69	84	68	87	66	93	70
14...	83	66	68	58	64	56	76	58	78	60	62	54	73	56	64	53	72	66	63	52	73	57	69	55	73	59	84	65
15...	68	51	67	47	68	52	63	55	64	50	67	47	64	52	67	41	68	53	66	46	69	53	70	49	66	51	70	54
16...	72	41	76	46	76	48	69	49	70	41	72	45	69	43	75	41	75	47	76	46	73	48	79	49	73	47	75	49
17...	78	47	73	50	72	50	75	53	69	50	69	43	66	52	78	50	81	48	78	48	81	56	81	54	79	53	81	55
18...	74	53	77	51	79	50	75	53	76	46	75	48	74	48	80	55	82	52	79	57	82	59	86	58	79	57	84	60
19...	81	55	75	51	78	61	79	56	78	68	69	54	72	57	72	56	84	59	77	61	84	62	82	63	82	63	83	60
20...	85	57	73	52	83	58	83	59	81	51	75	44	81	52	80	59	86	59	84	58	86	62	86	60	84	61	86	65
21...	73	63	79	67	76	63	75	62	76	64	71	58	76	65	81	55	76	60	76	57	74	63	78	53	75	63	78	65
22...	72	54	71	54	69	51	64	52	70	56	62	43	71	57	62	49	66	56	64	44	64	50	66	53	66	51	65	56
23...	65	48	63	41	68	42	63	48	67	41	56	37	62	39	66	39	69	43	67	38	67	44	69	42	67	44	69	45
24...	65	41	65	39	64	42	62	45	62	35	62	34	61	35	69	41	71	43	67	39	67	44	72	41	65	44	69	45
25...	66	36	66	35	66	39	61	44	62	32	61	32	61	34	70	45	67	43	68	37	67	46	72	45	65	40	70	44
26...	60	35	64	35	62	38	58	43	59	30	61	33	60	33	64	41	64	41	62	37	62	42	65	44	62	41	62	44
27...	64	33	66	34	64	37	61	43	63	31	65	35	65	30	66	38	66	38	65	36	64	40	68	41	64	36	65	42
28...	72	40	74	44	74	48	74	47	71	43	71	43	68	44	76	55	80	38	75	47	77	47	80	46	79	47	74	45
29...	61	44	65	49	63	47	59	49	67	50	62	47	61	45	68	47	68	48	66	43	68	47	73	51	65	50	75	50
30...	66	36	71	38	66	41	64	47	66	38	63	33	64	38	68	41	72	42	68	38	69	42	71	43	67	42	70	46
31...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mns	72.9	49.1	71.0	48.8	70.6	50.7	69.2	52.4	69.7	48.3	67.8	44.7	68.5	47.6	71.2	50.1	73.7	51.5	70.4	49.1	73.3	53.9	73.9	53.7	72.0	52.4	75.6	55.8

TABLE 3.—*Maximum and minimum temperatures at selected stations, September, 1909. District No. 5*—Continued.

Date.	Hannibal, Mo.		Laporte, Ind.		Illinois. Cairo.		Greenville.		La Salle.		Mt. Vernon.§§		Peoria.		Springfield.		Winnebago.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	70	59	65	43	76	62	72	56	68	44	.....	.....	70	47	70	54	68	39
2	67	58	75	40	83	58	74	52	69	40	.....	.....	69	48	70	48	70	38
3	86	63	71	52	90	70	92	59	76	56	.....	.....	81	58	85	57	70	42
4	74	60	73	60	83	71	83	62	70	61	.....	.....	71	59	74	61	72	50
5	73	56	71	51	77	62	76	60	71	52	.....	.....	72	52	71	56	69	45
6	64	57	75	45	81	57	69	56	70	53	.....	.....	69	54	64	53	72	48
7	65	57	83	48	69	60	70	57	77	50	.....	.....	78	58	72	60	75	49
8	72	64	87	52	80	66	78	64	70	56	.....	.....	68	62	74	62	68	62
9	84	68	75	61	89	68	89	67	82	64	.....	.....	80	63	79	69	78	60
10	86	66	76	60	85	68	86	65	82	62	.....	.....	83	61	84	66	81	56
11	86	66	89	56	86	69	86	62	84	59	.....	.....	85	59	85	60	83	58
12	92	68	87	54	89	68	89	65	89	63	.....	.....	91	65	89	63	86	60
13	92	73	91	62	88	73	90	66	91	67	.....	.....	92	67	90	67	90	66
14	81	61	86	66	85	71	86	66	86	63	.....	.....	88	62	89	63	82	62
15	72	51	74	54	75	65	77	57	69	53	.....	.....	72	50	73	56	67	53
16	76	45	75	48	75	58	76	52	73	47	.....	.....	73	43	74	51	73	43
17	80	52	82	48	79	58	81	54	81	54	.....	.....	81	50	79	54	81	49
18	84	61	79	52	83	60	85	59	82	55	.....	.....	84	59	82	58	79	53
19	82	57	81	57	88	62	86	59	84	55	.....	.....	83	60	83	58	83	55
20	86	65	83	50	82	69	85	65	86	64	.....	.....	87	64	84	64	88	57
21	73	63	73	61	74	62	72	63	72	63	.....	.....	72	63	70	64	73	63
22	66	54	77	59	85	61	82	60	66	54	.....	.....	68	53	73	55	67	57
23	69	44	61	46	69	56	68	53	66	47	.....	.....	66	45	66	49	65	44
24	68	43	63	42	71	50	72	50	66	46	.....	.....	68	43	68	48	67	42
25	70	41	64	39	68	52	72	48	66	43	.....	.....	68	40	69	45	67	41
26	63	46	59	38	64	50	65	43	61	41	.....	.....	63	42	62	43	62	37
27	64	36	58	36	62	45	65	38	64	39	.....	.....	63	35	62	39	66	36
28	73	40	63	38	69	45	68	42	72	44	.....	.....	71	40	70	42	75	40
29	77	49	60	48	77	49	77	40	66	47	.....	.....	71	43	75	50	66	40
30	69	46	63	43	72	55	71	48	66	41	.....	.....	68	38	68	47	65	40
31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mns	75.5	55.6	74.0	50.3	78.5	60.7	78.1	56.3	74.2	52.8	.....	.....	75.2	52.8	75.1	55.3	73.6	49.5