# CLIMATOLOGICAL DATA FOR FEBRUARY, 1911.

## DISTRICT No. 4, LAKE REGION.

Prof. HENRY J. COX, District Editor.

### GENERAL SUMMARY.

The mild weather which prevailed generally in Climatological District No. 4 during January, 1911, continued with but slight interruptions throughout February over all portions of the district west of central New York State. In fact, during the past 10 years no higher mean February temperatures have been experienced in any portion of the Lake region west of Ohio. For the district as a whole the precipitation was nearly normal and the average amounts were well within the extreme values of the previous decade, except in the region of western Lake Superior, where the amount of precipitation recorded was greater than that of any previous February since 1901. From the western shore of Lake Michigan to the eastern borders of Lake Ontario there was an excess of cloudiness, and over this region the daily ranges of temperature were correspondingly small, averaging between 12° and 14°; while in the Champlain Valley and around the western end of Lake Superior, where there was the least cloudiness, the mean daily ranges increased to 20.6° and 17.9°, respectively. In the western portions of the district there was somewhat more wind movement than usual, but, although several comparatively severe storms crossed the district, exceptionally high velocities did not, as a rule, occur. The prevailing direction over these sections was northwest, while to the south of the lower Lakes the winds were generally westerly.

The following table summarizes the general conditions in the various portions of the district:

| Portions of States lying within District No. 4. | Temperature. | | Precipitation. | | | Number of days. | | | | Prevailing wind direction. |
|---|---|---|---|---|---|---|---|---|---|---|
| | Mean. | Departure from normal. | Mean. | Departure from normal. | Mean snowfall. | 0.01 inch or more precipitation. | Clear. | Partly cloudy. | Cloudy. | |
| Minnesota | 16.8 | +6.0 | 1.38 | +0.65 | 14.2 | 5 | 12 | 9 | 7 | ne. |
| Wisconsin | 25.3 | +7.8 | 2.16 | +0.80 | 8.7 | 6 | 11 | 6 | 11 | nw. |
| Illinois | 32.4 | +7.0 | 2.27 | +0.11 | 10.4 | 9 | 8 | 5 | 15 | sw. |
| Indiana | 30.6 | +6.0 | 1.58 | −0.58 | 7.7 | 8 | 8 | 6 | 14 | nw. |
| Upper Michigan | 20.1 | +7.6 | 1.74 | +0.26 | 15.8 | 9 | 7 | 7 | 14 | nw. |
| Lower Michigan | 26.6 | +6.7 | 2.02 | +0.10 | 9.5 | 8 | 6 | 7 | 15 | nw. |
| Ohio | 31.8 | +7.3 | 1.99 | −0.40 | 8.3 | 7 | 7 | 7 | 14 | w. |
| Pennsylvania | 29.6 | +3.5 | 2.11 | −0.74 | 6.0 | 12 | 3 | 8 | 17 | w. |
| New York | 20.8 | +2.0 | 2.97 | +0.62 | 24.7 | 13 | 7 | 7 | 14 | w. |
| Vermont | 15.0 | −3.0 | 1.84 | −0.52 | 21.7 | 10 | 7 | 8 | 13 | n. |

### TEMPERATURE.

In the portion of the district lying below the lake chain the mean temperature for the month was below the normal, the deficiency increasing gradually from the highlands of New York State eastward, reaching an average of 3° in the valley of Lake Champlain. From the outlet of Lake Ontario to the western confines of the Lake region mean temperatures higher than the normal values for the respective sections prevailed. Between the eighty-first and ninety-first meridians the excess was more than 6°, and in some localities throughout this region departures of more than +10° from the monthly normal temperatures occurred.

The daily temperature conditions over the extreme northeastern portion of the district contrasted sharply with those which prevailed over the southern and western sections. In the former region the mean daily temperatures remained persistently low throughout the month and several severe cold waves occurred. While the unseasonable weather was broken by four warm periods, the duration of each was so short that the cold may be said to have been practically continuous. At most of the stations in this area the minimum temperatures of the period were recorded on the 6th, when the daily mean temperatures ranged from 21° to 28° below the normal, but at a few stations the lowest readings did not occur until the 16th. The highest temperatures occurred, as a rule, on the 25th and 26th, in connection with the only pronounced warm period of the month which extended over the entire district.

Over the southern and western portions of the Lake region the number of cold days during February, 1911, was unusually small, and it is a remarkable fact that at no station in central and southern Wisconsin, Illinois, Indiana, and Ohio, lying in this district, was a temperature lower than zero recorded at any time during the month, and but few such temperatures occurred in the central and southern portions of Lower Michigan. Throughout these portions of the district the mean daily temperatures were above normal on 21 days of the period, and on the remaining 7 days there were but few instances where the daily deficiencies exceeded 10°.

Over the sections from central New York State westward there were three well-marked warm periods, the 1st–4th, 12th–18th, and 22d–26th. The highest temperatures of the month occurred generally on the 17th, in the sections lying in Indiana and Ohio and at some localities in Lower Michigan and New York. Elsewhere in the two last-named States, and in the Wisconsin, Upper Michigan, and Minnesota sections, the maximums occurred on the 24th–26th, at the culmination of the last warm spell of the month. The lowest temperatures were recorded generally on the 5th in the Minnesota section, and on the 5th or 10th over the Wisconsin section. Throughout the remaining portions of the southern and western sections of the district there was considerable variation in the date of the minimum temperature of the month, the occurrence appearing to have been determined by those local conditions which best conduced to the night radiation of heat.

PRECIPITATION.

The total monthly precipitation did not, on the average, differ from the normal values by 1 inch in any portion of the district. There was a slight deficiency in the Indiana, Ohio, and Pennsylvania sections, and in the Champlain Valley, and a slight excess throughout the remainder of the region. These small departures from the normal values were, of course, the result of a fairly even distribution geographically, the disturbances which gave rise to the precipitation being either of sufficient magnitude to cover most of the region, or taking such a course as to carry the precipitation area entirely across the district.

With the exception of the extreme northwestern sections, the precipitation was frequent throughout the month, with no distinctly marked periods. However, the greatest portion of the monthly amounts fell in the intervals of the 1st–6th and 14th–20th, accompanying the passage of atmospheric disturbances of considerable magnitude. During the 8th–13th, while rain or snow was recorded at many stations over the district, the amounts were generally light, and in but few instances did falls of more than 0.25 inch occur. A similar condition extended from the 23d to the close of the month, during which interval the various falls were even less in amount than those of the period just noted.

*Snow.*—The precipitation of the month occurred chiefly in the form of snow over the northern portion of the Lake region and in the highlands of New York and Vermont, while over the southwestern sections the respective amounts of rain and snow were nearly equal. The greatest depths of monthly snowfall occurred in the highlands of New York State, where many stations reported amounts of more than 30 inches and several of more than 40. The greatest amount occurring at any station was 47 inches at Wanakena, in St. Lawrence County. Along the southern shore of Lake Superior, also, the total monthly fall reached more than 30 inches at a few stations. From these regions southward and westward the amount of snowfall decreased rapidly, reaching an average of about 6 inches along the southern borders of the district.

At the beginning of February the ground was bare over the southern sections, and to the northward the depths increased gradually to about 20 inches on the Superior shore, while from 3 to 6 inches lay over the Champlain Valley. These depths were greatly increased by the heavy storms of the first week, at the close of which period the southern portions of the district were covered by from 6 to 9 inches of snow, while the measurements in the extreme north and northeast showed more than 30 inches on the ground. Although precipitation continued frequent during the remainder of the month, the large proportion of rain and the high temperatures over the southwestern sections caused a gradual lessening of the depths, and at the close of the last warm period the situation with respect to snow covering was strikingly similar to the condition which prevailed at the beginning of the month.

STORMS.

A number of barometric depressions crossed the district during the month, accompanied by more or less rain or snow and strong winds. Three of these disturbances were of exceptional severity in the sections affected, and caused considerable delays to traffic and communication.

The storm of the 1st–2d swept the extreme northern limits of the Lake region, causing a heavy fall of snow over the Lake Superior region, and much rain, sleet, and snow over the northern counties of New York State. As a consequence, railroad traffic was interrupted to a great extent throughout the whole storm area, while in the northeastern sections some trains were reported to have been stalled in snow-drifted cuts, and telegraph and telephone service suffered much difficulty and delay.

The second disturbance of the month, which approached the Lake region from the southwest and passed over the entire length of the district from the 5th to the 7th, was accompanied by one of the severest snows of recent years. The fall was general over the entire district from Green Bay southward, and eastward to the Vermont limits of the district. The snow, from 5 to 12 inches in depth, driven by strong east to northeast winds, drifted and packed quickly, and in many localities throughout the entire region affected completely tied up traffic by train and street car, while all regular schedules had to be abandoned for the time. Walking during the storm was practically impossible, and in the cities many accidents occurred and some fatalities were reported. The difficulties of transportation and communication were still further increased in many sections by a light mist which followed the fall of snow, and, freezing, crusted the surface badly and coated exposed wires and rails with ice. Press reports from the various parts of the area swept indicate that the effects of the storm were equally severe in all quarters.

On the 13th and 14th another disturbance crossed the district, causing widespread precipitation in all sections west of eastern New York. Over the western Lake Superior region the fall was mostly in the form of snow, but some accompanying rain, mist, and fog, freezing on objects struck, covered the snow surface, sidewalks, shrubbery, etc., with an icy coating one-half inch thick. Over the southern portions of the district the precipitation was entirely in the form of rain, the heavy fall of which served to swell rapidly the streams mentioned in the paragraph on flood conditions. In the eastern sections of the area affected a considerable portion of the precipitation occurred in the form of snow. A few thunderstorms were reported in Upper and Lower Michigan during the passage of this storm. Minor disturbances also passed on the 16th–17th and on the 20th, but they were not severe, and the precipitation was confined chiefly to the extreme eastern portions of the district.

ICE.

During the first two weeks of the month the ice in the rivers and harbors of the upper Lake region increased slowly in thickness, but in the lower Lakes and in the southern portion of Lake Michigan the changes were variable and, as a rule, of small consequence. Thereafter the ice continued to increase over the extreme northern portions of the upper Lakes until the warm weather of the last week set in, but in the other portions of the Lakes there was a decided reduction, and at the end of the period many of the harbors of the lower region were quite free.

In Superior the ice in the harbor at Duluth averaged 33 inches in thickness during the last decade—from 5 to 6 inches thicker than usual—and at one or two points above the harbor proper measurements of 48 inches were made by the United States engineers while making soundings for dredging purposes. At Sault Ste. Marie the river ice reached a maximum thickness of 20 inches on the 27th.

In Lake Michigan the ice in Little Bay De Noquette increased from 16 inches on the 1st to 21 inches on the 28th, but that in Big Bay De Noquette broke up during

the storm of the 14th, the earliest occurrence of the kind in that bay for many years. At the end of the month open water extended from Green Bay to within 3 or 4 miles of Ford River. In the upper end of Green Bay the ice decreased from 9 to 4 inches during the month. Over the southern portions of the lake but little ice was observed.

In Lake Huron the ice in the harbor at Alpena increased from a thin formation at the beginning of the month to 9.5 inches at the close. Floating ice passed through the Detroit River during the entire month, and the river was bank full from the 3d to the 7th, but no solid ice was observed after the 14th.

The eastern end of Lake Erie was covered during the entire month, the maximum thickness at Buffalo reaching 10.5 inches on the 10th. Elsewhere, while floating fields were observed, there was comparatively little harbor ice after the first two weeks. The steamer *Tourist* began making trips from Put-in-Bay to Sandusky on the 7th, thus opening navigation at the latter point.

On Lake Champlain "Broad Lake" closed entirely over on the 4th. Ice harvesting outside the breakwater began on the 19th, and about one-half the required crop had been stored at the end of the period. Measurements of the ice inside the breakwater showed 16.5 inches in thickness on the 27th.

### FLOOD CONDITIONS.

The warm weather and rains which followed the heavy snowstorm of the 5th–6th over the Lower Michigan and Indiana portions of the district reduced the snow covering rapidly and caused such a volume of run-off as to raise several of the rivers to almost flood stage. In the Maumee River a maximum stage of 13.6 feet was reported at Fort Wayne, Ind., on the 15th. The following report by Mr. C. F. Schneider, section director at Grand Rapids, Mich., describes the results of the thawing weather in the valleys of the Grand and the Saginaw Rivers:

The mild, rainy weather which prevailed during the early part of the month carried away practically all of the snow on the ground in the greater part of the Lower Peninsula, and the run-off of melted snow and rain caused a sudden rise in both the Saginaw and Grand River watersheds, resulting for a few days in conditions in both river districts which were quite threatening. A heavy sheet of ice covered the rivers, which was slowly rotted and broken up. The highest water in the lower stretches of the Grand was reached February 18 and 19, and in the Saginaw River on the 21st and 22d.

The greatest danger anticipated on either river was the formation of ice jams. In the breaking up of the ice a large jam, 4 miles long, formed just below the city of Portland, on the Grand River, during the afternoon and night of February 20, damming up the water and causing it to reach flood stage at that place on the morning of February 21. Some damage was done to basements, but vigorous work on the part of the citizens in dynamiting the ice broke the jam on the afternoon of that day, after which the water subsided rapidly.

On the 21st, with the advent of much colder weather, it was feared that frazzle and anchor ice might cause a jam in the flat, low stretches of the river just below Grand Rapids. A large boom was stretched across the river above the city, which thus stopped the running ice and allowed a sheet of surface ice to form. In the meantime the river at Grand Rapids, while below flood stage, was sufficiently high to cause a partial stoppage of the sewers, and on the advice of this office all the sewer pumps were put into use, with the result that no sewer trouble of any kind was experienced.

All danger for the present (March 10, 1911) now seems to be past, as the river stages at all gauging stations, both in the Grand and Saginaw Rivers, are falling and approaching normal. The city authorities of Grand Rapids have shown the utmost confidence in the warnings of the Weather Bureau and have never hesitated at any time to act on its advices.

TABLE 1.—*Climatological data for February, 1911. District No. 4, Lake Region.*

| Stations. | Counties. | Elevation, feet. | Length of record, years. | Temperature, in degrees Fahrenheit. | | | | | | | Precipitation, in inches. | | | | Number of rainy days, 0.01 inch or more. | Sky. | | | Prevailing direction of wind. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Mean. | Departure from the normal. | Highest. | Date. | Lowest. | Date. | Greatest daily range. | Total. | Departure from the normal. | Greatest in 24 hours. | Total snowfall, unmelted. | | Number of clear days. | Number of partly cloudy days. | Number of cloudy days. | | |
| *Minnesota.* | | | | | | | | | | | | | | | | | | | | |
| Duluth | St. Louis | 1,133 | 40 | 16.6 | + 3.0 | 43 | 23 | −13 | 4 | 35 | 1.89 | + 0.90 | 0.81 | 17.5 | 6 | 7 | 12 | 9 | ne. | U. S. Weather Bureau. |
| Floodwood | do | 1,257 | 6 | | | | | | | | | | | | | | | | | M. H. Schussler. |
| Stephens Mine | do | 1,500 | 4 | 14.4 | | 44 | 24 | −31 | 5 | 46 | 1.01 | | 0.80 | 10.1 | 3 | 12 | 9 | 7 | w. | Oliver Iron Mining Co. |
| Two Harbors | Lake | 614 | 17 | 21.2 | + 8.0 | 50 | 24 | −17 | 5 | 35 | 1.82 | + 1.01 | 0.80 | 21.0 | 6 | 15 | 7 | 6 | ne. | Geo. W. Watts. |
| Virginia | St. Louis | 1,434 | 17 | 15.1 | + 7.1 | 46 | 24 | −26 | 5 | 40 | 0.82 | + 0.04 | 0.50 | 8.2 | 5 | 15 | 6 | 7 | nw. | Oliver Iron Mining Co. |
| *Wisconsin.* | | | | | | | | | | | | | | | | | | | | |
| Appleton | Outagamie | 795 | 10 | 25.8 | + 7.8 | 55 | 25 | 0 | 5 | 33 | 2.33 | + 0.97 | 1.20 | 6.0 | 8 | 11 | 5 | 12 | sw. | Wm. O. Thiede. |
| Ashland | Ashland | 647 | 20 | 21.8 | + 8.2 | 45 | 24† | − 4 | 10 | 35 | 1.93 | + 0.70 | 0.90 | 17.0 | 4 | 19 | 3 | 6 | sw. | Sam Wheeler. |
| Bayfield | Bayfield | 635 | 2 | 24.0 | | 44 | 26 | − 2 | 28 | 32 | 3.20 | | 1.60 | 32.0 | 3 | 18 | 4 | 6 | s. | Wm. Miller. |
| Cecil | Shawano | 804 | 13 | 23.7 | + 6.3 | 42 | 23 | − 6 | 5 | 32 | 1.37 | + 0.22 | 0.32 | 7.0 | 6 | 10 | 12 | 6 | nw. | Louis W. Schmidt. |
| Florence | Florence | 1,293 | 20 | 19.8 | + 7.0 | 45 | 24 | −16 | 5 | 37 | 2.21 | + 0.82 | 1.17 | 9.5 | 5 | 13 | 2 | 13 | nw. | Fred S. Evans. |
| Fond du Lac | Fond du Lac | 800 | 25 | 25.7 | + 7.8 | 49 | 25 | 0 | 10 | 35 | 2.34 | + 1.21 | 1.00 | 4.0 | 5 | 6 | 9 | 13 | w. | Geo. W. Marshall. |
| Grand River Locks | Marquette | 770 | 15 | 26.5 | | 52 | 25 | − 4 | 10 | 45 | 2.14 | + 1.09 | 1.00 | 5.0 | 6 | 11 | 6 | 11 | nw. | Jerry Parkinson. |
| Green Bay | Brown | 617 | 25 | 24.6 | + 7.4 | 46 | 25 | 2 | 5 | 30 | 1.96 | + 0.36 | 1.07 | 3.6 | 12 | 4 | 8 | 16 | sw. | U. S. Weather Bureau. |
| Iron River | Bayfield | 1,096 | 2 | | | | | | | | | | | | | | | | | Harry C. Hall. |
| Kewaunee | Kewaunee | 590 | 2 | 26.4 | | 47 | 25 | 5 | 10 | 31 | 3.09 | | 2.00 | 4.2 | 5 | 10 | 6 | 12 | nw. | Eugene V. Kimball. |
| Manitowoc | Manitowoc | 616 | 60 | 27.4 | + 8.0 | 48 | 25 | 4 | 5† | 33 | 1.43 | + 0.08 | 0.62 | 9.0 | 7 | 8 | 6 | 14 | sw. | Johanna Lups. |
| Menasha | Winnebago | 764 | 14 | | | | | | | | 1.80 | + 1.06 | 1.06 | 4.0 | 5 | 15 | 2 | 11 | sw. | Geo. T. Allanson. |
| Menomonee Falls | Waukesha | 842 | 2 | 27.0 | | 46 | 25† | 0 | 10 | 38 | 2.75 | | 1.32 | 8.0 | 7 | 11 | 4 | 13 | nw. | Arthur H. Christman. |
| Milwaukee | Milwaukee | 681 | 40 | 28.7 | + 6.8 | 48 | 25 | 4 | 10 | 29 | 1.98 | + 0.09 | 0.96 | 8.5 | 9 | 9 | 6 | 13 | nw. | U. S. Weather Bureau. |
| New London | Outagamie | 762 | 15 | 24.7 | + 8.9 | 47 | 25 | − 2 | 5 | 38 | 2.30 | + 1.06 | 1.30 | 5.0 | 4 | 10 | 6 | 12 | nw. | August H. Pape. |
| Oconto | Oconto | 590 | 20 | 23.8 | + 6.2 | 45 | 25† | − 4 | 5 | 38 | 2.00 | + 0.44 | 0.70 | 15.0 | 5 | 8 | 9 | 11 | w. | Wm. K. Smith. |
| Oshkosh | Winnebago | 744 | 22 | 25.4 | + 7.6 | 48 | 24† | − 3 | 9 | 36 | 2.26 | + 1.06 | 1.15 | 3.0 | 5 | 13 | 9 | 6 | sw. | Evan Vincent. |
| Pine River *m* | Waushara | 900 | 16 | 27.4 | +11.3 | 48 | 25† | | | | 1.82 | + 0.90 | 1.02 | 6.0 | 5 | 4 | 6 | 5 | nw. | Geo. H. Carpenter. |
| Plum Island | Door | 588 | 3 | 26.2 | | 43 | 23 | 7 | 5 | 30 | 1.00 | | 0.60 | 13.0 | 2 | 8 | 3 | 17 | nw. | Geo. C. Robinson. |
| Plymouth § | Sheboygan | 843 | 1 | 26.2 | | 49 | 25 | 1 | 10 | 37 | 3.20 | | 1.30 | 11.5 | 7 | 8 | 7 | 13 | w. | Paul O. Feldrappe. |
| Port Washington | Ozaukee | 713 | 18 | 28.0 | + 8.5 | 50 | 25 | 2 | 10 | 34 | 3.48 | + 1.75 | 1.58 | 10.3 | 7 | 10 | 4 | 14 | nw. | Richard C. Kann. |
| Racine | Racine | 633 | 14 | 28.8 | + 6.9 | 50 | 24 | 1 | 10 | 35 | 1.83 | + 0.34 | 0.73 | 8.4 | 7 | 11 | 4 | 13 | sw. | Daniel Davis. |
| Ripon | Fond du Lac | 935 | 1 | 25.4 | | 47 | 25† | − 2 | 10 | 29 | 1.55 | | 1.00 | 5.5 | 4 | 12 | 2 | 14 | nw. | Ripon College. |
| Sheboygan | Sheboygan | 831 | 12 | 27.8 | + 8.5 | 47 | 24 | 3 | 10 | 34 | 3.19 | + 1.41 | 1.50 | 8.0 | 5 | 8 | 5 | 15 | sw. | Louis C. Meyer. |
| Sturgeon Bay | Door | 600 | 12 | 25.0 | + 7.1 | 48 | 25 | 0 | 11 | 40 | 2.21 | | 1.37 | 8.0 | 8 | 10 | 8 | 10 | nw. | Adam N. Dier. |
| Superior | Douglas | 671 | 2 | 17.5 | | 44 | 25† | −12 | 5 | 35 | 1.00 | | 0.42 | 9.5 | 8 | 15 | 6 | 7 | ne. | Edward B. Banks. |
| Waupaca | Waupaca | 857 | 16 | 23.7 | + 8.2 | 49 | 25 | − 4 | 10† | 43 | 1.83 | + 0.90 | 1.02 | 4.5 | 5 | 13 | 5 | 10 | sw. | James H. Flagg. |
| *Illinois.* | | | | | | | | | | | | | | | | | | | | |
| Chicago | Cook | 824 | 41 | 32.4 | + 7.0 | 58 | 17 | 8 | 10 | 23 | 2.27 | + 0.11 | 0.55 | 10.4 | 9 | 8 | 5 | 15 | sw. | U. S. Weather Bureau. |
| *Indiana.* | | | | | | | | | | | | | | | | | | | | |
| Auburn | Dekalb | 874 | 15 | 26.2 | + 3.8 | 56 | 17 | 3 | 11 | 29[b] | 2.11 | − 0.21 | 0.97 | | 6 | 7[a] | 2[a] | 18[a] | sw. | Mrs. Josie B. Kuhlman. |
| Berne | Adams | 849 | 2 | 32.8 | | 65 | 17 | 10 | 21 | 32 | 1.29 | | 0.45 | 5.8 | 8 | 7 | 12 | 9 | nw. | Henry M. Reusser. |
| Elkhart | Elkhart | 801 | 9 | 32.6 | | 60 | 17 | 9 | 21 | 23[b] | 1.00 | | 0.53 | 2.5 | 4 | 9[b] | 5[b] | 12[b] | nw. | Dr. Miles Medical Co. |
| Fort Wayne | Allen | 775 | 15 | 32.9 | + 7.1 | 61 | 17 | 7 | 7 | 37 | 1.42 | − 1.38 | 0.55 | 8.8 | 9 | 4 | 9 | 15 | nw. | Orion E. Mohler. |
| Hammond | Lake | 598 | 20 | 29.2 | + 6.0 | 57 | 17 | 0 | 10 | 36 | 2.08 | − 0.21 | 0.70 | 10.0 | 6 | 7 | 8 | 13 | | Carson W. Whitney. |
| Howe | Lagrange | 886 | 6 | 29.7 | | 59 | 16 | 7 | 21 | 30 | 1.41 | | 0.50 | 6.0 | 7 | 13 | 0 | 15 | w. | James E. Zook. |
| South Bend | St. Joseph | 726 | 18 | 29.4 | + 7.1 | 59 | 16 | 7 | 21 | 34 | 1.79 | − 0.54 | 0.55 | 10.5 | 12 | 6 | 5 | 17 | s. | Henry H. Swaim. |
| Whiting | Lake | 606 | 2 | 32.1 | | 56 | 17 | 3 | 10 | 27 | 1.56 | | 0.51 | 10.5 | 8 | 15 | 3 | 10 | sw. | D. H. Boyd. |
| *Michigan—Upper Peninsula.* | | | | | | | | | | | | | | | | | | | | |
| Baraga [f] | Baraga | 623 | 9 | 15.6 | + 2.9 | 38 | 12 | 3 | 2† | 27 | 0.80 | − 0.09 | 0.30 | 8.0 | 4 | 9 | 0 | 13 | w. | D., S. S. & A. Ry. |
| Bergland | Ontonagon | 1,300 | 1 | 19.9 | | 51 | 24 | −14 | 20 | 40 | 2.12 | | 0.80 | 20.0 | 5 | 7 | 6 | 15 | ne. | Frank McMonigal. |
| Blaney | Schoolcraft | | 4 | | | | | | | | | | | | | | | | | Dr. S. S. Hackwell. |
| Calumet | Houghton | 1,246 | 23 | 20.4 | + 7.1 | 44 | 25 | 1 | 5 | 25 | 2.86 | + 1.30 | 0.72 | 32.0 | 13 | 5 | 6 | 17 | w. | F. S. Grierson. |
| Chatham | Alger | 875 | 10 | 19.8 | + 6.6 | 50 | 24 | −15 | 8 | 39 | 1.99 | + 0.08 | 0.24 | 19.6 | 15 | 1 | 10 | 17 | nw. | U. P. Experiment Station. |
| Deer Park | Luce | 610 | 10 | | | | | | | | | | | | | | | | | Mrs. Sara E. McGaw. |
| Detour | Chippewa | 585 | 10 | 19.9 | | 43 | 25 | −10 | 21 | 33 | 1.00 | | 0.50 | 10.0 | | 9 | 0 | 19 | nw. | G. C. Reed. |
| Eagle Harbor | Keweenaw | 622 | 12 | 23.8 | + 8.7 | 48 | 25 | − 1 | 7 | 26 | 1.68 | − 0.41 | 0.95 | 16.8 | 9 | 7 | 8 | 13 | e. | John Nolen. |
| Escanaba | Delta | 612 | 38 | 21.8 | + 6.5 | 47 | 23 | 0 | 28 | 30 | 2.00 | + 0.66 | 0.63 | 14.2 | 12 | 3 | 9 | 16 | nw. | U. S. Weather Bureau. |
| Ewen | Ontonagon | 1,147 | 10 | 17.8 | + 5.1 | 48 | 24 | −17 | 20 | 43 | 1.85 | + 0.58 | 0.60 | 18.5 | 8 | 6 | 17 | 5 | nw. | W. B. Hatfield. |
| Grand Marais | Alger | 610 | 10 | 20.2 | + 6.9 | 40 | 25 | 2 | 6 | 19 | 1.35 | − 0.80 | 0.30 | 13.0 | 10 | 3 | 2 | 23 | n. | Mrs. Lena Truedell. |
| Houghton | Houghton | 668 | 10 | 22.2 | + 8.3 | 50 | 25 | − 1 | 7 | 29 | 2.48 | + 0.77 | 1.27 | 21.0 | 13 | 3 | 10 | 15 | nw. | U. S. Weather Bureau. |
| Humboldt | Marquette | 1,536 | 14 | 19.9 | +11.6 | 51 | 25 | −13 | 20 | 39 | 1.80 | + 1.06 | 0.80 | 18.0 | 4 | 9 | 1 | 18 | w. | D., S. S. & A. Ry. |
| Iron Mountain | Dickinson | 1,111 | 10 | 22.6 | + 9.9 | 48 | 24 | − 8 | 6 | 37 | 1.01 | − 0.06 | 0.66 | 6.5 | 4 | 11 | 9 | 8 | nw. | Chapin Mining Co. |
| Iron River | Iron | 1,504 | 14 | 17.4 | + 8.4 | 48 | 25 | −22 | 5 | 46 | 3.10 | + 2.03 | | 13.0 | 7 | 22 | 3 | 3 | n. | Victor D. Laing. |
| Ironwood | Gogebic | 1,520 | 8 | 19.4 | + 7.6 | 45 | 24† | − 4 | 4† | 29 | 0.95 | − 0.09 | 0.52 | 13.0 | 6 | 14 | 5 | 9 | w. | Prof. J. V. Brennan. |
| Ishpeming | Marquette | 1,536 | 11 | 20.1[e] | +10.4 | 46 | 24 | − 3 | 20 | 29 | 1.23 | − 0.66 | 0.40 | 11.5 | 7 | 4 | 12 | 12 | n. | Cliv'd Cliffs Iron Co. |
| Isle Royale | Keweenaw | 610 | 4 | | | | | | | | | | | | | | | | | J. A. Malone. |
| Mackinac Island | Mackinac | 831 | 10 | 21.0 | + 6.5 | 43 | 25 | − 5 | 5† | 28 | 0.97 | − 0.69 | 0.43 | 5.3 | 10 | 4 | 7 | 17 | e. | M. I. S. P. Commission. |
| Maple Ridge | Delta | | 5 | 20.3 | | 47 | 24 | −10 | 7 | 35 | 2.30 | | 0.60 | 15.0 | 7 | 8 | 2 | 18 | s. | Herman Johnson. |
| Marquette | Marquette | 734 | 40 | 22.9 | + 7.0 | 52 | 24 | 5 | 5 | 26 | 2.40 | + 0.68 | 1.03 | 23.9 | 15 | 5 | 10 | 13 | w. | U. S. Weather Bureau. |
| Menominee | Menominee | 581 | 12 | 24.7 | +10.7 | 44 | 23† | − 1 | 5 | 34[a] | | | | 6.0 | | 15 | 2 | 11 | nw. | C. & N. W. Ry. |
| Newberry | Luce | 773 | 9 | 19.9 | + 7.4 | 44 | 25 | − 5 | 7 | 27 | 1.55 | + 0.14 | 0.37 | | 12 | 4 | 7 | 17 | nw. | John Brown. |
| Powers | Menominee | 868 | 11 | 20.1 | + 6.7 | 46 | 23† | −12 | 20 | 35 | | | | | | 2 | 16 | 10 | n. | C. & N. W. Ry. |
| St. Ignace | Mackinac | 593 | 21 | 20.6 | + 6.6 | 41 | 25 | − 5 | 5† | 32 | 1.60 | + 0.11 | 0.48 | 16.0 | 9 | 16 | 4 | 8 | w. | D., S. S. & A. Ry. |
| Sault Ste. Marie | Chippewa | 614 | 23 | 17.1 | + 3.7 | 46 | 25 | −18 | 5 | 35 | 1.48 | + 0.07 | 0.78 | 14.2 | 15 | 5 | 3 | 20 | e. | U. S. Weather Bureau. |
| Thomaston | Gogebic | 1,347 | 14 | 18.6 | + 9.1 | 45 | 25 | −13 | 20 | 40 | 1.30 | + 0.01 | 0.40 | 13.0 | 6 | 3 | 15 | 10 | w. | D., S. S. & A. Ry. |
| Victoria | Ontonagon | 1,263 | 1 | 17.0 | | 54 | 24 | −12 | 28 | 39 | 1.96 | | 0.61 | 31.5 | 12 | 8 | 7 | 13 | sw. | R. S. Schultz, jr. |
| Watersmeet | Gogebic | | 2 | 18.4 | | 45 | 24 | −11 | 20 | 43 | 1.84 | | 0.50 | 18.4 | 12 | 9 | 5 | 14 | nw. | B. N. Grant. |
| Wetmore | Alger | 878 | 14 | 20.9 | + 9.6 | 46 | 25 | −10 | 7 | 43 | | | | | | 7 | 0 | 21 | n. | D., S. S. & A. Ry. |
| Whitefish Point | Chippewa | 610 | 21 | 20.1 | + 7.5 | 40 | 25 | − 4 | 6 | 27 | 1.98 | + 0.48 | 0.63 | 15.8 | 8 | 9 | 3 | 16 | ne. | Robert Carlson. |
| *Michigan—Lower Peninsula.* | | | | | | | | | | | | | | | | | | | | |
| Adrian | Lenawee | 770 | 33 | 29.4 | + 6.2 | 57 | 18 | 2 | 11 | 36 | 2.09 | − 0.37 | 1.05 | 6.5 | 3 | 8 | 3 | 17 | nw. | B. F. Gibbs. |
| Allegan | Allegan | 698 | 20 | 30.2[b] | + 8.2 | 56 | 17 | 3[d] | 7 | 39[d] | 1.35 | − 0.77 | 0.44 | 3.0 | 6 | 3 | 14 | 11 | w. | Pere Marquette R. R. |
| Alma | Gratiot | 750 | 24 | 27.2 | + 8.3 | 53 | 25 | 4 | 5 | 37 | 2.60 | + 0.91 | 1.18 | T. | 4 | 5 | 10 | 13 | sw. | P. M. Smith. |
| Alpena | Alpena | 609 | 38 | 24.2 | + 6.4 | 52 | 25 | − 3 | 21 | 29 | 1.97 | + 0.18 | 0.79 | 8.9 | 15 | 1 | 14 | 13 | nw. | U. S. Weather Bureau. |
| Ann Arbor | Washtenaw | 930 | 31 | 28.0 | + 5.5 | 58 | 17 | 6 | 11 | 39 | 1.74 | − 0.34 | 0.66 | 7.1 | 9 | 8 | 7 | 13 | nw. | University of Michigan. |
| Arbela | Tuscola | 728 | 15 | 27.8 | + 7.7 | 54 | 17† | 5 | 6 | 29 | 2.27 | + 0.32 | 0.80 | 7.0 | 5 | 0 | 7 | 21 | nw. | Wm. Atkin. |
| Battle Creek | Calhoun | 822 | 27 | 27.8 | + 3.5 | 55 | 17 | 5 | 11† | 35 | 2.26 | − 0.56 | 0.85 | 10.5 | 5 | 4 | 5 | 19 | se. | Elmer E. Sager. |
| Bay City | Bay | 593 | 15 | 27.6 | + 9.9 | 53 | 25 | 4 | 21 | 36 | 3.15 | + 1.73 | 1.50 | 10.0 | 3 | 0 | 1 | 27 | w. | Pere Marquette R. R. |
| Benzonia | Benzie | 832 | 15 | 25.0 | + 5.8 | 45 | 25 | 8 | 22 | 28 | | | | | | 1 | 5 | 22 | nw. | Martin S. Joiner. |
| Berlin | St. Clair | | 22 | 26.1[b] | + 5.8 | 52 | 25 | 1 | 11 | 36 | 1.63 | − 0.32 | 0.60 | 6.5 | 11 | 2 | 6 | 13 | sw. | R. O. Gould. |
| Big Rapids | Mecosta | 906 | 15 | 24.8 | + 8.1 | 48 | 25 | 1 | 11 | 39 | 3.42 | + 1.31 | 1.17 | 5.0 | 8 | 9 | 5 | 14 | w. | Charles Gay. |
| Bloomingdale | Van Buren | | 7 | 29.6 | | 57 | 17 | 2 | 7 | 33 | 1.99 | | 1.50 | 4.5 | 5 | 6 | 14 | 8 | nw. | John W. Haven. |
| Cadillac | Wexford | 1,293 | 2 | 23.0 | | 45 | 25 | 0 | 21 | 27 | 2.59 | | 1.00 | 10.5 | 8 | 6 | 8 | 14 | n. | A. J. Teed. |
| Cassopolis | Cass | 903 | 10 | 30.0 | +10.6 | 57 | 17 | 0 | 21 | 22 | 1.40 | − 0.91 | 0.80 | 11.0 | 5 | 9 | 0 | 19 | sw. | Michigan Central R. R. |
| Charlevoix | Charlevoix | 610 | 33 | 22.4 | + 4.9 | 44 | 25 | − 8 | 6† | 37 | 0.80 | − 0.88 | 0.30 | 8.0 | 3 | 4 | 5 | 19 | sw. | Pere Marquette R. R. |
| Charlotte | Eaton | | 7 | 27.8 | | 56 | 17 | 4 | 11† | 35 | 0.98 | | 0.37 | 5.5 | 7 | 4 | 10 | 14 | w. | City of Charlotte. |
| Cheboygan | Cheboygan | 611 | 21 | 19.2 | + 3.2 | 40 | 25 | − 8 | 21 | 33 | 3.20 | + 1,16 | 1.10 | 32.0 | | 9 | 8 | 11 | nw. | E. A. Bouchard. |

TABLE 1.—*Climatological data for February, 1911. District No. 4*—Continued.

| Stations. | Counties. | Elevation, feet. | Length of record, years. | Temperature, in degrees Fahrenheit. Mean. | Departure from the normal. | Highest. | Date. | Lowest. | Date. | Greatest daily range. | Precipitation, in inches. Total. | Departure from the normal. | Greatest in 24 hours. | Total snowfall, unmelted. | Number of rainy days, 0.01 inch or more. | Sky. Number of clear days. | Number of partly cloudy days. | Number of cloudy days. | Prevailing direction of wind. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Michigan—Lower Peninsula*—Continued. | | | | | | | | | | | | | | | | | | | | |
| Clinton | Lenawee | 830 | 21 | 29.3 | + 6.6 | 62 | 17 | − 2 | 11 | 43 | 2.04 | + 0.14 | 0.63 | 5.5 | 6 | 5 | 4 | 19 | nw. | David Woodward. |
| Coldwater | Branch | 984 | 14 | 30.4 | + 9.4 | 57 | 17 | 6 | 21 | 39 | 1.01 | − 0.76 | 0.46 | 6.0 | 6 | 6 | 6 | 16 | nw. | L. S. & M. S. R. R. |
| Concord | Jackson | ..... | 6 | 28.6 | ..... | 50 | 25 | 3 | 11 | 38 | 1.42 | ..... | 0.70 | ..... | 5 | 10 | 14 | 4 | sw. | Dr. W. N. Armstrong. |
| Croton | Newago | 685 | 3 | 26.7 | ..... | 48 | 25 | 3 | 11 | 37 | 2.25 | ..... | 0.72 | 3.5 | 5 | 0 | 17 | 11 | w. | G. R. Mus. Power Co. |
| Detroit | Wayne | 730 | 40 | 28.7 | + 3.7 | 59 | 17 | 12 | 21 | 25 | 2.54 | + 0.35 | 1.23 | 13.3 | 6 | 5 | 8 | 15 | w. | U. S. Weather Bureau. |
| Durand | Shiawassee | 799 | 4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | H. J. Tobin. |
| East Tawas | Iosco | 590 | 14 | 26.5 | + 9.5 | 46 | 25 | − 2 | 21 | 32 | 3.38 | + 2.15 | 2.00 | 28.0 | 4 | 18 | 4 | 6 | w. | Detroit & Mackinac R. R. |
| Eloise | Wayne | 640 | 14 | 29.5 | + 9.6 | 59 | 17 | 7 | 11 | 31 | 2.59 | + 0.36 | 0.99 | 7.5 | 8 | 8 | 6 | 14 | w. | John Gilmore. |
| Flint | Genesee | 730 | 22 | 28.0 | + 8.0 | 54 | 17 | 3 | 11 | 39 | 1.17 | − 0.35 | 0.40 | 5.0 | 7 | 6 | 7 | 15 | w. | Wm. L. Fisher. |
| Frankfort | Benzie | 589 | 7 | 27.1 | ..... | 40 | 13† | 5 | 7 | 20 | 2.40 | ..... | 1.00 | 10.0 | 10 | 8 | 0 | 20 | e. | Capt. Joe Morency. |
| Ganges | Allegan | 665 | 2 | 29.6 | ..... | 56 | 17 | 7 | 7 | 28 | 1.85 | ..... | 0.86 | 6.0 | 7 | 5 | 9 | 14 | sw. | H. H. Hutchins. |
| Gaylord | Otsego | 1,367 | 6 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | Michigan Central R. R. |
| Gladwin | Gladwin | 794 | 15 | 24.5 | + 6.6 | 50 | 25 | − 2 | 21 | 36 | 0.80 | − 0.71 | 0.40 | 7.0 | 2 | 20 | 1 | 7 | nw. | Geo. Smith. |
| Grand Haven | Ottawa | 628 | 30 | 28.8 | + 4.6 | 51 | 16 | 5 | 7 | 27 | 2.31 | + 0.40 | 0.90 | 7.6 | 13 | 6 | 7 | 15 | nw. | U. S. Weather Bureau. |
| Grand Rapids | Kent | 707 | 22 | 29.2 | + 3.7 | 55 | 17 | 10 | 21 | 31 | 2.38 | + 0.47 | 0.93 | 7.0 | 11 | 5 | 7 | 16 | nw. | Do. |
| Grape | Monroe | 625 | 21 | 29.1 | + 5.3 | 58 | 17 | 4 | 11 | 34 | 1.58 | − 0.20 | 0.73 | 7.5 | 7 | 4 | 10 | 14 | w. | Joseph W. Morris. |
| Grass Lake | Jackson | 989 | 5 | 27.4 | ..... | 56 | 17 | 3 | 11† | 35 | 1.42 | ..... | 1.15 | 2.0 | 3 | 9 | 6 | 13 | nw. | Menzo Conklin. |
| Grayling | Crawford | 1,147 | 21 | 24.8 | + 9.1 | 48 | 12 | − 6 | 21 | 39[e] | 2.01 | − 0.04 | 0.50 | 26.5 | 6 | 11 | 15 | 2 | sw. | Dr. D. N. Insley. |
| Harbor Beach | Huron | 635 | 23 | 24.8 | + 4.7 | 52 | 25 | 0 | 10 | 36 | ..... | ..... | ..... | 6.0 | .... | 9 | 0 | 19 | w. | Pere Marquette R. R. |
| Harrison | Clare | 1,159 | 18 | 23.2 | + 5.8 | 47 | 25 | − 2 | 21 | 36 | ..... | ..... | ..... | ..... | ..... | 9 | 6 | 13 | sw. | Do. |
| Harrisville | Alcona | 616 | 27 | 24.2 | + 5.4 | 51 | 25 | − 3 | 21 | 32 | 2.19 | − 0.05 | 1.00 | 22.0 | 11 | 5 | 11 | 12 | nw. | Dr. D. W. Mitchell. |
| Hart | Oceana | 698 | 19 | 28.0 | + 5.1 | 45 | 17 | 0 | 6 | 32 | 2.15 | + 0.10 | 0.95 | 12.0 | 5 | 4 | 11 | 13 | sw. | Pere Marquette R. R. |
| Hayes | Huron | 620 | 21 | 26.5 | + 7.8 | 50 | 25 | 5 | 11 | 35 | 2.55 | + 0.77 | 0.95 | 15.0 | 7 | 3 | 13 | 12 | e. | C. F. Lipprandt. |
| Highland | Oakland | 830 | 19 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 0.62 | − 1.48 | 0.47 | ..... | 2 | ..... | ..... | ..... | ..... | A. D. DeGarmo. |
| Hillsdale | Hillsdale | 1,150 | 14 | 28.2 | + 9.0 | 56 | 17 | 8 | 21 | 30 | 1.73 | − 1.06 | 1.05 | 6.5 | 6 | 7 | 5 | 16 | nw | Prof. C. L. Herron. |
| Holland | Ottawa | 610 | 5 | 27.0 | ..... | 49 | 25 | − 6 | 7 | 30 | 2.36 | ..... | 1.26 | 6.0 | 9 | 1 | 12 | 15 | nw. | *City of Holland.* |
| Howell | Livingston | 924 | 19 | 25.3 | + 4.5 | 50 | 17 | 5 | 11 | 29[e] | ..... | ..... | ..... | 4.0 | .... | 6 | 15 | 7 | sw. | Frank Sharp. |
| Ivan | Kalkaska | ..... | 22 | 22.1 | + 5.4 | 45 | 25 | − 5 | 21 | 44 | 1.10 | − 0.64 | 0.28 | 10.0 | 10 | 5 | 11 | 12 | nw. | O. L. Giddins. |
| Jackson | Jackson | 927 | 14 | 28.7 | + 8.0 | 59 | 17 | 4 | 6 | 27 | 1.25 | − 0.60 | 0.62 | 10.5 | 6 | 9 | 11 | 8 | w. | City of Jackson. |
| Jeddo | St. Clair | 667 | 22 | 26.4 | + 6.4 | 51 | 25 | 6 | 21 | 31 | 1.13 | − 0.61 | 0.45 | 4.5 | 7 | 3 | 5 | 20 | nw. | William Brice. |
| Kalamazoo | Kalamazoo | 955 | 35 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | Kalamazoo Asylum. |
| Lansing (Agr. College) | Ingham | 820 | 47 | 27.6 | + 5.2 | 54 | 17 | 7 | 11 | 35 | 1.77 | − 0.12 | 0.74 | 7.7 | 13 | 6 | 8 | 14 | w. | U. S. Weather Bureau. |
| Lansing (Capitol) | ...do | 881 | 24 | 28.3 | + 6.7 | 51 | 25 | 7 | 21 | 34 | 1.39 | − 0.47 | 0.56 | 6.5 | 9 | 5 | 5 | 18 | sw. | State Board of Health. |
| Lapeer | Lapeer | 827 | 12 | 30.3 | +11.5 | 54 | 25 | 7 | 11 | 35 | 0.90 | − 1.20 | 0.25 | 4.0 | 4 | 3 | 17 | 8 | sw. | Michigan Home. |
| Ludington | Mason | 586 | 13 | 28.2[c] | + 7.3 | 45 | 25 | 2 | 7 | 26[c] | 0.87 | − 0.81 | 0.50 | 7.0 | 3 | 6 | 10 | 9 | e. | Pere Marquette R. R. |
| Luther | Lake | 1,028 | 1 | 24.8 | ..... | 47 | 25 | − 1 | 7 | 42 | 2.41 | ..... | 1.27 | 6.5 | 11 | 7 | 3 | 18 | nw. | John W. Nichoson. |
| Mackinaw | Cheboygan | 592 | 15 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | G. R. & I. R. R. |
| Mancelona | Antrim | 1,121 | 15 | 22.1 | + 7.3 | 43 | 25 | − 2 | 5 | 28 | 1.80 | − 0.09 | 0.60 | 18.0 | 7 | 12 | 1 | 15 | w. | Do. |
| Manistee | Manistee | 600 | 14 | 26.0 | + 6.6 | 48 | 26 | 5 | 7 | 28 | 3.86 | + 1.55 | 2.80 | 4.0 | 3 | 7 | 2 | 19 | nw. | Pere Marquette R. R. |
| Midland | Midland | 604 | 12 | 28.4 | + 9.7 | 52 | 25 | 3 | 21 | 34 | 0.90 | − 0.29 | 0.60 | 6.0 | 3 | 8 | 3 | 17 | ne. | PereMarquette. |
| Montague | Muskegon | 660 | 7 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | Gerard A. Whitebeck. |
| Morenci | Lenawee | 811 | 4 | 29.7 | ..... | 57 | 17 | 2 | 11 | 37 | 1.87 | ..... | 0.62 | 10.0 | 8 | 6 | 2 | 20 | nw. | George J. Tripp. |
| Mount Clemens | Macomb | 615 | 11 | 26.6 | + 6.6 | 56 | 17 | 0 | 21 | 40 | 1.59 | + 0.06 | 0.80 | 8.4 | 5 | 3 | 13 | 12 | nw. | Water Work. |
| Mount Pleasant | Isabella | 826 | 12 | 25.1 | + 7.4 | 50 | 26 | 3 | 27 | 39 | 2.80 | + 1.14 | 1.40 | 8.0 | 4 | 16 | 0 | 12 | w. | Pere Marquette R. R. |
| Muskegon | Muskegon | 587 | 15 | 28.0 | + 8.0 | 50 | 17 | 0 | 7 | 30 | 2.00 | + 0.29 | 0.60 | 7.0 | 4 | 3 | 8 | 17 | n. | G. R. & I. R. R. |
| Old Mission | Traverse | 858 | 17 | 24.0 | + 5.7 | 43 | 25 | 5 | 21 | 26 | 1.79 | + 0.22 | 0.82 | 8.3 | 7 | 5 | 9 | 14 | sw. | E. O. Ladd. |
| Olivet | Eaton | 934 | 21 | 27.6 | + 5.7 | 53 | 17 | 8 | 11 | 30 | 1.35 | − 0.67 | 0.50 | 6.0 | 8 | 7 | 1 | 20 | s. | Prof. G. A Knapp. |
| Omer | Arenac | 616 | 12 | 26.0 | + 9.4 | 50 | 25 | 1 | 5 | 38 | 2.40 | + 1.07 | 1.20 | 24.0 | 3 | 3 | 12 | 13 | ne. | *Detroit & Mackinaw R. R.* |
| Onaway | Presque Isle | 826 | 8 | 19.0 | + 4.4 | 49 | 25 | − 8 | 21 | 26 | ..... | ..... | ..... | ..... | .... | 15 | 3 | 10 | w. | Do. |
| Ovid | Clinton | 760 | 21 | 27.3 | + 7.0 | 54 | 17 | 6 | 5 | 36 | 1.58 | − 0.12 | 0.41 | ..... | 7 | 10 | 2 | 14 | w. | Dr. B. L. Bates. |
| Owasso | Shiawassee | 731 | 14 | 28.7[a] | + 8.8 | 54 | 17 | 7 | 21 | 30[a] | 1.90 | + 0.17 | 0.80 | 8.2 | 8 | 3 | 15 | 9 | s. | Owasso Sugar Co. |
| Petosky | Emmet | 660 | 21 | 24.2 | + 7.4 | 46 | 25 | − 1 | 5† | 29 | 1.20 | − 0.43 | 0.40 | 8.0 | 9 | 4 | 1 | 23 | w. | G. R. & I. R. R. |
| Plymouth | Wayne | 725 | 14 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | Pere Marquette R. R. |
| Pontiac | Oakland | 935 | 11 | 28.1 | + 4.6 | 53 | 25 | 8 | 11 | 30 | 2.34 | + 0.90 | 0.94 | 12.5 | 6 | 10 | 6 | 12 | nw. | Fred W. Shaw. |
| Port Austin | Huron | 618 | 14 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | Pere Marquette R. R. |
| Port Huron | St. Clair | 639 | 36 | 27.2 | + 5.2 | 53 | 25 | 9 | 21 | 30 | 1.76 | − 0.39 | 0.76 | 8.7 | 9 | 6 | 5 | 17 | nw. | U. S. Weather Bureau. |
| Reed City | Osceola | 1,033 | 14 | 28.6 | +13.3 | 48 | 25 | 10 | 7 | 23 | ..... | ..... | ..... | ..... | .... | 5 | 13 | 10 | sw. | Pere Marquette R. R. |
| Roscommon | Roscommon | 1,141 | 7 | 21.9 | ..... | 46 | 25 | −11 | 5 | 40 | 1.39 | ..... | 0.75 | 13.5 | 10 | 1 | 16 | 11 | w. | State Forestry Commission. |
| Saginaw | Saginaw | 601 | 9 | 28.9 | ..... | 53 | 25 | 7 | 6† | 34 | 3.50 | ..... | 1.35 | 7.5 | 9 | 8 | 9 | 11 | sw. | *Postmaster.* |
| Saginaw, W. S | ....do | 601 | 16 | 28.1 | + 7.6 | 54 | 25 | 6 | 5† | 35 | 2.59 | + 0.32 | 1.28 | 5.0 | 10 | 8 | 7 | 13 | sw. | Robert B. Hudson. |
| St. James | Charlevoix | 681 | 5 | 21.9 | ..... | 40 | 25† | 2 | 5† | 25 | 4.11 | ..... | 1.25 | 18.0 | 8 | 14 | 1 | 13 | sw. | Rev. James Malone. |
| St. Joseph | Berrien | 593 | 24 | 31.0 | + 4.2 | 60 | 17 | 11 | 21 | 30 | 2.72 | + 0.18 | 1.40 | 14.0 | 6 | 8 | 3 | 17 | sw. | City of St. Joseph. |
| Sandusky | Sanilac | 790 | 2 | 26.6 | ..... | 48 | 14 | 0 | 6 | 35 | ..... | ..... | ..... | ..... | .... | 3[b] | 9[b] | 14[b] | w. | Pere Marquette R. R. |
| Saranac | Ionia | 639 | 16 | 28.6 | + 5.4 | 55 | 17 | 0 | 11 | 35 | 1.97 | − 0.31 | 0.90 | 6.0 | 5 | 6 | 2 | 20 | nw. | John Wallington. |
| South Haven | Van Buren | 585 | 15 | 23.8 | + 2.2 | 44 | 14 | 8 | 7 | 20 | 2.45 | + 0.80 | 0.60 | 4.5 | 6 | 11 | 6 | 11 | nw. | Mrs. M. F. De Diemat. |
| Stanton | Montcalm | 880 | 17 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | City Stanton. |
| Thornville | Lapeer | 975 | 34 | 27.6 | + 4.7 | 49 | 17 | 8 | 5† | 28 | 2.30 | + 0.22 | 0.40 | 9.5 | 9 | 4 | 3 | 21 | se. | Dr. J. S. Caulkin. |
| Traverse City | Grand Traverse | 588 | 14 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | G. R. & I. R. R. |
| Vassar | Tuscola | 641 | 10 | 28.2 | +10.2 | 52 | 25 | 7 | 11 | 34 | 1.62 | − 0.07 | 0.84 | 4.0 | 2 | 4 | 11 | 13 | nw. | Pere Marquette R. R. |
| Wasepi | St. Joseph | 842 | 14 | 26.7 | + 5.2 | 50 | 25 | − 5 | 21 | 38 | 2.10 | − 0.02 | 0.48 | 8.0 | 8 | 8 | 0 | 20 | nw. | Chas. A. Palmer. |
| West Branch | Ogemaw | 973 | 7 | 21.1 | ..... | 47 | 12 | − 5 | 18 | 37 | 2.80 | ..... | 1.40 | 28.0 | 3 | 8 | 8 | 12 | s. | Mich. Central R. R. |
| Woodlawn | Montmorency | ..... | 9 | 20.2 | + 5.8 | 48 | 25 | −12 | 28 | 37 | 3.10 | + 1.43 | 1.00 | 24.5 | 14 | 7 | 2 | 19 | sw. | T. C. Mathews. |
| Ypsilanti | Washtenaw | 736 | 26 | 27.9 | + 5.0 | 57 | 17 | 2 | 11 | 36 | 2.59 | + 0.13 | 0.98 | 9.0 | 9 | 1 | 22 | 5 | nw. | Orin J. Bemiss. |
| *Ohio.* | | | | | | | | | | | | | | | | | | | | |
| Akron | Summit | 1,081 | 24 | 31.0[d] | + 5.2 | 58 | 14 | 13 | 22 | 34[a] | 1.49 | − 1.09 | 0.49 | 10.0 | 8 | 5 | 2 | 21 | w. | Prof. C. R. Olin. |
| Benton Ridge | Hancock | 800 | 18 | 33.7 | + 8.6 | 63 | 17 | 13 | 11† | 27 | 1.95 | − 0.38 | 0.50 | 7.0 | 7 | 6 | 10 | 12 | sw. | J. W. Powell. |
| Bowling Green | Wood | 670 | 30 | 31.6 | + 8.6 | 62 | 17 | 9 | 11 | 31 | 1.76 | − 0.64 | 0.82 | 5.0 | 4 | 8 | 8 | 12 | sw. | G. C. Houskeeper. |
| Bucyrus | Crawford | 1,000 | 17 | 33.7 | +10.0 | 58 | 16 | 13 | 11 | 37[a] | 3.04 | + 1.02 | 0.65 | 13.0 | 9 | 6 | 5 | 17 | sw. | James R. Hopley. |
| Cleveland (1) | Cuyahoga | 762 | 40 | 31.8 | + 5.0 | 62 | 17 | 15 | 11 | 33 | 1.81 | − 0.80 | 0.49 | 10.0 | 14 | 5 | 5 | 18 | sw. | U. S. Weather Bureau. |
| Cleveland (2) § | ....do | 754 | 14 | 32.0 | + 7.8 | 62 | 17 | 14 | 11 | 29 | 1.86 | − 0.13 | 0.52 | 8.0 | 8 | 5 | 3 | 20 | w. | Rev. F. L. Odenbach, S. J. |
| Conneaut | Ashtabula | 675 | 1 | 30.1 | ..... | 60 | 17 | 10 | 21† | 27 | 1.86 | ..... | 0.62 | 8.5 | 8 | 6 | 5 | 17 | sw. | E. L. Ransom. |
| Defiance | Defiance | 712 | 17 | 31.6 | + 8.2 | 60 | 17 | 3 | 11 | 37 | 0.98 | − 1.07 | 0.41 | 3.0 | 4 | 9 | 6 | 13 | w. | John F. Hielshorn. |
| Findlay | Hancock | 776 | 22 | 31.5 | + 5.3 | 63 | 17 | 6 | 9 | 40 | 2.02 | − 0.98 | 0.78 | 8.0 | 5 | 13 | 11 | 4 | nw. | Dr. E. A. Moser. |
| Fremont § | Sandusky | 628 | 9 | 33.2 | ..... | 63 | 17 | 12 | 11 | 29 | 1.57 | ..... | 0.55 | 7.0 | 5 | 8 | 6 | 14 | sw. | E. Stanley Thomas. |
| Hedges | Paulding | 725 | 17 | 31.0 | + 8.2 | 62 | 17 | 7 | 11 | 31 | 1.94 | − 0.16 | 0.88 | 6.0 | 4 | 14 | 5 | 9 | w. | Charles Stutzman. |
| Hillhouse | Lake | 997 | 18 | 30.1 | + 8.3 | 60 | 17 | 9 | 11† | 28 | 1.85 | − 0.75 | 0.54 | 5.5 | 6 | 8 | 4 | 16 | w. | J. W. Doncaster. |
| Hiram | Portage | 1,260 | 31 | 30.2 | + 6.1 | 59 | 17 | 9 | 21 | 28 | 2.58 | − 0.20 | 0.65 | 10.0 | 8 | 3 | 9 | 16 | nw. | Prof. G. H. Colton. |
| Hudson | Summit | 1,153 | 50 | 30.6 | + 7.2 | 60 | 17 | 8 | 21 | 24 | 1.95 | − 0.55 | 0.60 | 6.5 | 6 | 6 | 5 | 17 | sw. | Dr. W. I. Chamberlain. |
| Lima | Allen | 875 | 12 | 33.6 | + 8.3 | 65 | 17 | 12 | 21 | 31 | 2.87 | − 0.88 | 0.89 | 11.0 | 7 | 15 | 7 | 6 | w. | Miss Ollie DeLong. |
| Medina | Medina | 944 | 23 | 31.6 | + 7.9 | 62 | 17 | 6 | 11 | 34 | 2.66 | + 0.69 | 0.80 | 11.0 | 6 | 6 | 4 | 18 | w. | F. W. Clark. |
| Montpelier | Williams | 880 | 19 | 30.9 | + 8.3 | 58 | 17 | 7 | 11 | 34 | 2.07 | − 0.45 | 0.80 | 13.0 | 7 | 7 | 4 | 17 | w. | G. L. Laser. |
| Napoleon | Henry | 680 | 24 | 32.4 | + 9.3 | 60 | 17 | 9 | 11 | 31 | 1.25 | − 0.88 | 0.37 | 9.0 | 4 | 9 | 5 | 14 | nw. | A. C. Senter. |
| New Bremen | Auglaize | 1,038 | 18 | 34.3 | + 9.8 | 67 | 17 | 13 | 10† | 25 | 1.08 | − 0.89 | 0.54 | 5.5 | 4 | 9 | 10 | 9 | nw. | Miss Lillian Grothaus. |
| North Royalton | Cuyahoga | 1,000 | 18 | 30.8 | + 7.7 | 60 | 17 | 10 | 11 | 31 | 2.66 | + 0.23 | 0.86 | 6.0 | 6 | 10 | 5 | 13 | w. | W. S. Edgerton. |
| Norwalk | Huron | 719 | 25 | 31.4 | + 7.9 | 64 | 17 | 9 | 11 | 41 | 2.46 | + 0.34 | 0.50 | 9.5 | 11 | 3 | 13 | 12 | w. | Dr. Albert Sheldon. |
| Oberlin | Lorain | 855 | 36 | 32.2 | + 6.4 | 63 | 17 | 7 | 11 | 33 | 2.22 | − 0.13 | 0.64 | 10.5 | 7 | 7 | 7 | 14 | w. | Prof. F. F. Jewett. |

TABLE 1.—*Climatological data for February, 1911. District No. 4*—Continued.

| Stations. | Counties. | Elevation, feet. | Length of record, years. | Temperature, in degrees Fahrenheit. | | | | | | | Precipitation, in inches. | | | | Number of rainy days, .01 inch or more. | Sky. | | | Prevailing direction of wind. | Observers. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Mean. | Departure from the normal. | Highest. | Date. | Lowest. | Date. | Greatest daily range. | Total. | Departure from the normal. | Greatest in 24 hours. | Total snowfall, unmelted. | | Number of clear days. | Number of partly cloudy days. | Number of cloudy days. | | |
| *Ohio*—Continued. | | | | | | | | | | | | | | | | | | | | |
| Ottawa | Putnam | 720 | 16 | 32.4 | + 7.4 | 63 | 17 | 9 | 9† | 32 | 1.28 | − 0.73 | 0.85 | 10.0 | 3 | 0 | 16 | 12 | w. | Prof. J. T. Maidlow. |
| Sandusky | Erie | 629 | 34 | 31.4 | + 4.3 | 62 | 17 | 15 | 11 | 32 | 1.93 | − 0.46 | 0.74 | 7.9 | 11 | 5 | 6 | 17 | w. | U. S. Weather Bureau. |
| Tiffin | Seneca | 775 | 29 | 32.7 | + 6.1 | 63 | 17 | 15 | 11 | 25 | 1.97 | − 0.78 | 0.80 | 8.0 | 6 | 6 | 11 | 11 | nw. | Prof. T. H. Sonnedecker. |
| Toledo (1) | Lucas | 769 | 40 | 31.4 | + 4.6 | 62 | 17 | 13 | 9 | 27 | 2.22 | + 0.26 | 1.07 | 7.2 | 8 | 6 | 10 | 12 | sw. | U. S. Weather Bureau. |
| Toledo (2) § | do | 606 | 7 | 30.6 | | 61 | 17 | 5 | 6 | 27 | 1.86 | | 0.92 | 4.2 | 7 | 6 | 6 | 16 | n. | J. A. Krance, S. J. |
| Upper Sandusky | Wyandot | 854 | 28 | 34.4 | + 7.0 | 64 | 17 | 12 | 21 | 29 | 2.50 | − 0.38 | 0.60 | 11.0 | 6 | 4 | 11 | 13 | sw. | Robt. E. Tracht. |
| Vickery | Sandusky | 588 | 18 | 31.9 | + 8.2 | 62 | 17 | 6 | 11 | 35 | 1.84 | − 0.07 | 0.65 | 6.0 | 8 | 6 | 7 | 15 | w. | John W. Barr. |
| Wauseon | Fulton | 780 | 39 | 29.9 | + 5.2 | 59 | 17 | 7 | 11 | 34 | 2.09 | − 0.83 | 0.91 | 11.6 | 14 | 2 | 11 | 15 | w. | Thomas Mikesell. |
| Wellington | Lorain | 856 | 17 | | | | | | | | | | | | | | | | | W. D. Warren. |
| Willoughby | Lake | 649 | 17 | | | | | | | | | | | | | | | | | C. J. Richardson. |
| *Pennsylvania.* | | | | | | | | | | | | | | | | | | | | |
| Erie | Erie | 658 | 38 | 29.6 | + 3.5 | 59 | 17 | 11 | 5 | 32 | 2.11 | − 0.74 | 0.82 | 6.0 | 12 | 3 | 8 | 17 | w | U. S. Weather Bureau. |
| *New York.* | | | | | | | | | | | | | | | | | | | | |
| Adams Center | Jefferson | 540 | 20 | 21.4 | + 2.3 | 46 | 26 | − 6 | 3 | 36 | 4.34 | + 1.30 | 0.48 | 38.0 | 20 | 4 | 9 | 15 | n. | A. E. Cooley. |
| Angelica | Allegany | 1,340 | 28 | 25.6 | + 4.2 | 47 | 17 | 1 | 23 | 30 | 2.94 | + 1.14 | 0.78 | 25.0 | 13 | 0 | 6 | 22 | w. | C. P. Arnold. |
| Appleton | Niagara | 270 | 20 | 26.8 | + 3.4 | 47 | 17 | 6 | 6 | 32 | 1.05 | − 1.12 | 0.25 | 7.9 | 10 | 0 | 9 | 19 | nw. | H. A. Van Wagoner. |
| Auburn | Cayuga | 715 | 42 | 25.6 | + 1.0 | 47 | 17† | 5 | 6 | 25 | 2.01 | − 0.11 | 0.52 | 20.0 | 8 | 19 | 3 | 6 | n. | A. H. Underwood. |
| Avon | Livingston | 585 | 16 | 25.1 | + 3.4 | 46 | 17 | 0 | 21 | 27 | 1.78 | + 0.03 | 0.30 | 14.0 | 13 | 1 | 9 | 18 | | W. G. Markham. |
| Blue Mountain Lake | Hamilton | 1,750 | 11 | | | | | | | | 5.12 | + 2.08 | 0.77 | 34.5 | 18 | 8 | 5 | 15 | w. | B. F. Merwin. |
| Brockport | Monroe | 537 | 15 | 25.6 | + 3.8 | 45 | 17 | 5 | 6 | 26 | 2.94 | + 0.44 | 0.67 | 28.0 | 14 | 2 | 12 | 14 | w. | W. H. Lennon. |
| Buffalo | Erie | 767 | 60 | 26.5 | + 2.5 | 45 | 26 | 7 | 6 | 28 | 3.95 | + 1.10 | 1.36 | 25.8 | 17 | 1 | 12 | 15 | w. | U. S. Weather Bureau. |
| Canton | St. Lawrence | 448 | 17 | 13.1 | − 4.9 | 49 | 26 | −24 | 6 | 47 | 2.97 | + 0.40 | 0.78 | 22.4 | 15 | 10 | 4 | 14 | ne. | Do. |
| Cape Vincent | Jefferson | 246 | 6 | 16.9 | | 41 | 27 | − 9 | 3 | 32 | 2.10 | | 0.57 | | 7 | 12 | 9 | 7 | e. | Verne M. Rice. |
| Carvers Falls | Washington | 243 | 13 | 16.5 | + 0.9 | 46 | 25 | −20 | 6† | 50 | 2.16 | − 0.16 | 0.81 | 23.0 | 5 | 15 | 3 | 10 | n. | Washburn Fancher, C. E. |
| Chazy | Clinton | 151 | 11 | 12.8 | − 2.3 | 43 | 25† | −20 | 16 | 36 | 1.82 | + 0.33 | 0.80 | 19.0 | 4 | 21 | 1 | 6 | n. | W. R. North. |
| Dannemora | do | 1,490 | 6 | 15.1 | | 48 | 26 | −10 | 6 | 42 | 2.86 | | 0.76 | 28.0 | 15 | 9 | 5 | 14 | w. | Dr. W. N. Thayer. |
| Elba | Genesee | 500 | 12 | 24.0 | + 3.8 | 48 | 17 | 1 | 6 | 29 | 5.00 | + 2.12 | 1.00 | 41.0 | 12 | 9 | 7 | 12 | sw. | Jos. S. Wilford. |
| Fayetteville | Onondaga | 530 | 10 | 24.4 | + 4.4 | 50 | 26 | − 8 | 6 | 43 | 1.84 | − 0.14 | 0.69 | 15.2 | 12 | 10 | 6 | 12 | w. | Dana H. Wells. |
| Gabriels | Franklin | 1,729 | 9 | 13.6 | | 50 | 26 | −26 | 6 | 53 | 2.24 | | 0.78 | 17.5 | 19 | 12 | 3 | 13 | nw. | Gabriels Sanatarium. |
| Harkness | Clinton | 622 | 9 | 15.0 | | 47 | 26 | −14 | 3 | 48[a] | 1.11 | | 0.51 | 12.0 | 9 | 18 | 5 | 5 | w. | J. W. Harkness. |
| Hemlock Lake | Livingston | 900 | 13 | 25.8 | + 5.4 | 47 | 17 | 26 | 3† | 30 | 1.87 | + 0.76 | 1.10 | 11.5 | 2 | 6 | 6 | 16 | s. | D. H. Westbury. |
| Hunt | do | 1,321 | 12 | 28.8 | + 6.2 | 50 | 17† | 6 | 3 | 29 | 5.26 | + 3.44 | 1.56 | 26.0 | 8 | 2 | 12 | 14 | sw. | W. S. Barager. |
| Ithaca | Tompkins | 928 | 33 | 27.1 | + 2.0 | 51 | 25 | 5 | 6 | 30 | 4.34 | + 2.47 | 0.86 | 32.8 | 19 | 2 | 9 | 17 | nw. | U. S. Weather Bureau. |
| Keene Valley | Essex | 1,000 | 13 | | | 55[b] | | −16[b] | 6 | 65[b] | 1.92 | − 0.42 | 0.52 | 17.5 | 11 | | | | | E. R. Wells. |
| King Ferry | Cayuga | | 11 | | | | | | | | 2.37 | + 0.53 | 0.70 | 21.4 | 11 | 5 | 6 | 17 | se. | Lucius A. Goodyear. |
| Lake George | Warren | 350 | 14 | 19.0 | + 1.2 | 52 | 25 | −15 | 6 | 36 | 2.18 | − 1.29 | 0.94 | 21.5 | 10 | 9 | 8 | 11 | ne. | Charles Forsell. |
| Lake Placid Club | Essex | 1,864 | 3 | 10.4 | | 50 | 26 | −24 | 6 | 55 | 5.09 | | 0.66 | 38.0 | 17 | 6 | 11 | 11 | nw. | Henry Van Hoevenberg. |
| Le Roy | Genesee | 920 | 21 | 26.0 | + 5.0 | 48 | 17 | 5 | 6 | 28 | 3.64 | + 0.36 | 1.06 | 31.0 | 19 | 3 | 3 | 22 | nw. | F. W. Ball. |
| Lockport | Niagara | 650 | 24 | 25.5 | + 2.2 | 44 | 17 | 2 | 6 | 25 | 1.70 | − 0.67 | 0.40 | 14.6 | 11 | 3 | 2 | 23 | sw. | J. E. Wakeman. |
| Lowville | Lewis | 900 | 44 | 17.0 | − 2.5 | 45 | 25† | −16 | 6 | 49 | 1.97 | − 0.74 | 1.00 | | 10 | 8 | 7 | 13 | w. | Chas. J. Rice. |
| Moira | Franklin | 200 | 11 | 13.4 | − 1.8 | 49 | 26 | −17 | 6 | 44 | 4.15 | + 0.96 | 0.80 | 41.5 | 14 | 13 | 6 | 9 | ne. | C. E. McBride. |
| Nehasane | Herkimer | 1,750 | 3 | 14.2 | | 46 | 26 | −25 | 6 | 60 | 3.85 | | 0.80 | 39.3 | 21 | 7 | 10 | 11 | w. | L. W. Brown. |
| North Lake | do | 1,822 | 10 | | | | | | | | | | | | | | | | | |
| Ogdensburg | St. Lawrence | 175 | 27 | 15.6 | − 1.5 | 45 | 26 | −22 | 6 | 52 | 4.13 | + 2.00 | 1.10 | 31.2 | 11 | 10 | 12 | 6 | e. | State Hospital. |
| Old Forge | Herkimer | 1,733 | 3 | 16.7 | | 45 | 25 | −23 | 6 | 58 | 4.46 | | 0.80 | 45.1 | 16 | 3 | 9 | 16 | s. | Mrs. S. W. Nelson. |
| Oswego | Oswego | 335 | 41 | 24.4 | + 0.5 | 47 | 17 | 0 | 6 | 32 | 2.89 | + 0.32 | 1.22 | 21.8 | 17 | 1 | 9 | 18 | nw. | U. S. Weather Bureau. |
| Otto | Cattaraugus | 1,410 | 7 | 28.2 | | 50 | 17 | 0 | 22 | 38 | 1.31 | | 0.68 | | 5 | 12 | 3 | 13 | | W. M. Winke. |
| Palermo | Oswego | 460 | 52 | | | | | | | | 2.51 | − 0.52 | 0.60 | 20.1 | 17 | 10 | 9 | 9 | se. | E. B. Bartlett. |
| Perry City | Schuyler | 1,038 | 31 | 25.3 | + 3.9 | 49 | 25 | 0 | 22 | 32 | 3.46 | + 1.34 | 0.88 | 21.2 | 14 | 0 | 5 | 23 | nw. | W. H. Jeffers. |
| Philadelphia | Jefferson | 485 | 5 | 18.0 | | 48 | 26 | −17 | 3 | 45 | 2.01 | | 0.61 | 14.5 | 13 | 4 | 14 | 10 | ne. | E. D. Babcock. |
| Potsdam | St. Lawrence | 300 | 35 | 14.2 | − 3.9 | 51 | 27 | −21 | 6 | 35 | 3.82 | + 1.91 | 0.83 | 8.4 | 12 | 18 | 0 | 10 | ne. | A. E. Sutherland. |
| Roquette Lake | Hamilton | | 3 | 17.4 | | 47 | 26 | −22 | 6 | 54 | 4.06 | | 0.61 | 43.0 | 20 | 6 | 1 | 21 | nw. | R. J. Dunning. |
| Rochester | Monroe | 523 | 82 | 26.7 | + 2.8 | 48 | 17 | 6 | 6 | 28 | 3.20 | + 0.37 | 1.08 | 30.0 | 20 | 1 | 9 | 18 | w. | U. S. Weather Bureau. |
| Romulus | Seneca | 719 | 19 | | | 46[i] | 25† | 8[i] | 3 | | 3.80 | + 2.11 | 0.60 | 34.0 | 11 | | | | | John H. Coryell. |
| Shortsville | Ontario | 740 | 12 | 25.1 | + 3.3 | 48 | 17† | − 7 | 23 | 41 | 1.14 | − 0.44 | 0.30 | 11.4 | 7 | 5 | 10 | 13 | s. | C. H. Latting. |
| Skaneateles | Onondaga | | 16 | | | | | | | | 2.31 | − 0.11 | 0.40 | | 20 | | | | | Edward Conron. |
| Syracuse | do | 597 | 9 | 24.4 | + 0.6 | 50 | 26 | 1 | 6 | 33 | 2.66 | + 0.86 | 0.86 | 22.9 | 21 | 3 | 8 | 17 | nw. | U. S. Weather Bureau. |
| Ticonderoga | Essex | 344 | 13 | | | | | | | | | | | | | | | | | |
| Tupper Lake | Franklin | 1,522 | 11 | 15.0 | + 1.6 | 49 | 26 | −29 | 6 | 61 | 3.32 | + 0.80 | 0.50 | 24.0 | 13 | 14 | 1 | 13 | w. | Rev. Aaron W. Maddox. |
| Volusia | Chautauqua | 1,167 | 12 | 27.0 | + 6.6 | 53 | 17 | 1 | 23 | 41 | 2.20 | − 0.40 | 0.50 | 12.0 | 10 | 4 | 6 | 18 | sw. | Benjamin Breads. |
| Wanakena | St. Lawrence | | 1 | 15.0 | | 45 | 26 | −23 | 5 | 49 | 4.90 | | 0.88 | 47.0 | 12 | 6 | 7 | 15 | sw. | J. Otto Hamele. |
| Watertown | Jefferson | 737 | 19 | 20.4 | + 0.9 | 52 | 26 | − 7 | 3 | 39 | 2.24 | − 0.32 | 0.45 | 20.0 | 17 | 6 | 6 | 16 | | H. P. Dunlap. |
| Wedgewood | Schuyler | 1,430 | 22 | 24.4 | + 2.2 | 46 | 25† | 4 | 6 | 25 | 3.65 | + 1.42 | 0.60 | 37.0 | 18 | 8 | 7 | 13 | nw. | Orlando F. Corwin. |
| Westfield | Chautauqua | 837 | 15 | 28.7 | + 6.0 | 58 | 17 | 8 | 6† | 27 | 3.08 | + 0.84 | 0.61 | 7.0 | 13 | | | | | John R. Rogers. |
| Youngstown | Niagara | | 9 | | | | | | | | 1.69 | | 0.74 | 19.8 | 8 | 0 | 21 | 7 | w. | B. V. Brookins. |
| *Vermont.* | | | | | | | | | | | | | | | | | | | | |
| Burlington | Chittenden | 404 | 4 | 14.6 | − 3.3 | 45 | 26 | −11 | 16 | 39 | 1.39 | + 0.02 | 0.62 | 13.8 | 10 | 5 | 9 | 14 | nw. | U. S. Weather Bureau. |
| Cornwall | Addison | 507 | 18 | 16.6 | − 2.6 | 45 | 25† | −15 | 16 | 35 | 2.70 | + 0.54 | 1.00 | 27.0 | 8 | 12 | 4 | 12 | n. | C. H. Lane. |
| Enosburg Falls | Franklin | 601 | 20 | 13.4 | − 3.6 | 49 | 26 | −28 | 6 | 48 | 1.82 | − 1.20 | 0.64 | 23.5 | 10 | 11 | 4 | 13 | nw. | L. H. Pomeroy. |
| Northfield | Washington | 876 | 25 | 13.6 | − 3.6 | 50 | 26 | −18 | 16 | 48 | 1.61 | − 0.65 | 0.57 | 28.5 | 14 | 5 | 9 | 14 | n. | U. S. Weather Bureau. |
| Wells | Rutland | 750 | 20 | 16.8 | − 2.1 | 42 | 26 | − 8 | 6 | 31 | 1.69 | − 1.30 | 0.53 | 15.5 | 7 | 4 | 12 | 12 | n. | E. R. Pember. |

TABLE 2.—*Daily precipitation for February, 1911. District No. 4, Lake Region.*

| 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 | |
| *Minnesota.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Duluth | Lake | .80 | .01 | T. | T. | | .03 | .22 | | T. | | | T. | .02 | .81 | T. | | | T. | | | | | | | | | | | 1.89 |
| Floodwood | do | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Stephens Mine | do | .80 | | .01 | | | T. | T. | | | | | | | .20 | | | | T. | | | | | | | | | | | 1.01 |
| Two Harbors | do | .60 | .20 | | | .05 | | .07 | | | | | | | .80 | .10 | | | | | | | | | | | | | | 1.82 |
| Virginia | do | .50 | .07 | | | | | .05 | | | | | | .02 | .18 | | | | | | | | | | | | | | | 0.82 |
| *Wisconsin.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Appleton | Fox | .01 | .05 | | | T. | .33 | T. | T. | | | | T. | .02 | 1.20 | | .30 | .12 | | T. | T. | | | | | | .30 | | | 2.33 |
| Ashland | Lake | * | .70 | .23 | | | T. | .10 | | | | | | | .90 | | | | | | T. | | | | | | | | | 1.93 |
| Bayfield | do | * | 1.60 | | | | | .80 | | | | | | | .80 | | | | | | | | | | | | | | | 3.20 |
| Cecil | Fox | .02 | | | | | .38 | T. | | | | | | T. | .32 | | .30 | .15 | | | | | | | | | .20 | | | 1.37 |
| Florence | Menominee | | .44 | | | | | T. | .20 | | | | | T. | .40 | | * | 1.17 | | | | | | | | | | | | 2.21 |
| Fond du Lac | Fox | T. | T. | | T. | T. | .30 | T. | | | | | T. | T. | .80 | | .30 | .70 | | T. | T. | | | | | | .24 | | | 2.34 |
| Grand River Locks | do | | .06 | | | | .07 | | | | | | T. | T. | 1.00 | | .45 | .26 | | T. | | | | | | | .30 | | | 2.14 |
| Green Bay | Lake | .05 | .03 | | | .05 | .20 | .02 | | T. | | | .01 | .30 | .78 | T. | .27 | .08 | | T. | T. | | | | | .12 | .05 | | | 1.96 |
| Iron River | do | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Kewaunee | do | | | | | T. | .32 | | | T. | | | | | 2.00 | | * | .50 | | T. | | | | | | .27 | | | | 3.09 |
| Manitowoc | do | | .03 | | T. | T. | .62 | | | | | | | * | .45 | * | .15 | | | T. | T. | | | | | | .18 | | | 1.43 |
| Menasha | Fox | | .02 | | | T. | .25 | | | | | | | | 1.06 | | .42 | | | T. | T. | | | | | | .05 | | | 1.80 |
| Menominee Falls | Lake | T. | | | | T. | .65 | | | T. | | | T. | .08 | 1.32 | | .23 | .18 | | .05 | T. | | | | | | .24 | | | 2.75 |
| Milwaukee | do | T. | | T. | | .49 | .47 | T. | | T. | | | T. | .06 | .44 | T. | .13 | .30 | | .04 | T. | | | | | .02 | .03 | | | 1.98 |
| New London | Fox | | | | | T. | .20 | | | | | | T. | | 1.30 | | .50 | | | | | | | | | | .30 | | | 2.30 |
| Oconto | Lake | | | | | .60 | .20 | T. | | | | | | .40 | .70 | | | | | | | | | | | .10 | | | | 2.00 |
| Oshkosh | Fox | | | | | T. | .20 | | | | | T. | T. | 1.15 | | .30 | .28 | | T. | T. | | | | | | .33 | | | | 2.26 |
| Pine River | do | | | | | * | .50 | | | | | | | | 1.02 | | * | .22 | | T. | | | | | | | .08 | | | 1.82 |
| Plum Island | Lake | T. | T. | | T. | T. | .40 | T. | | T. | | T. | T. | T. | .60 | T. | T. | T. | T. | T. | T. | | | T. | | | T. | | | 1.00 |
| Plymouth | do | T. | .01 | | | T. | .98 | | T. | T. | | | T. | .07 | 1.30 | | .34 | .34 | | T. | T. | | | | | | .16 | | | 3.20 |
| Port Washington | do | | | | | | 1.00 | | | | | | | | 1.58 | | .10 | .65 | | .02 | .01 | | | | | | .12 | | | 3.48 |
| Racine | do | | T. | | | T. | .40 | | | | | | T. | .03 | .73 | | .12 | .38 | .15 | T. | .02 | T. | | | | | T. | | | 1.83 |
| Ripon | Fox | | | | | .15 | .40 | | | | | | | * | 1.00 | | T. | | | T. | T. | | | | | | | | | 1.55 |
| Sheboygan | Lake | T. | T. | | T. | T. | .80 | | T. | T. | | | | T. | 1.50 | | .16 | .53 | | T. | T. | | | | | | .20 | | | 3.19 |
| Sturgeon Bay | do | T. | T. | | | .02 | .08 | T. | .01 | T. | T. | | | | 1.37 | .02 | .26 | .14 | | T. | T. | | | | | | .31 | | | 2.21 |
| Superior ‖ | do | .18 | .42 | | | | .07 | .01 | .02 | | | | | .05 | .15 | .10 | T. | T. | | | | | | | | | | | | 1.00 |
| Waupaca | Fox | .02 | | | | | .09 | | | | | | | | 1.02 | | .42 | | | | | | | | | | .28 | | | 1.83 |
| *Illinois.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Chicago | Lake | | T. | T. | | .71 | .18 | T. | | T. | | | T. | .28 | T. | | .11 | .55 | .01 | .10 | .04 | | | | | .29 | T. | | | 2.27 |
| *Indiana.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Auburn | Maumee | | | | .01 | | .97 | .06 | | | T. | | | T. | | .63 | T. | T. | .05 | | | T. | | | | | .39 | | | 2.11 |
| Berne | do | | | T. | .08 | T. | .45 | | | | | | | | .26 | | .05 | .03 | .33 | | .07 | T. | | | | | .02 | | | 1.29 |
| Elkhart | St. Joseph | | | | | | | | | | .10 | | | | .53 | | | .22 | T. | | .15 | | | | | | T. | | | 1.00 |
| Fort Wayne | Maumee | | | T. | .06 | | .55 | | | | T. | | | .01 | .30 | .01 | T. | .13 | .30 | | .05 | T. | T. | | | | .01 | | | 1.42 |
| Hammond | Lake Michigan | | | T. | | .15 | | | | | | | | | | | .38 | .12 | | | .23 | | | | | | .70 | .50 | | 2.08 |
| Howe | St. Joseph | | | | | | .01 | .50 | | | | | .10 | | .20 | | .10 | | .40 | | .10 | | | | | | | | | 1.41 |
| South Bend | do | T. | | | .10 | | .55 | .02 | T. | | .03 | | | .01 | .39 | .01 | | .02 | .45 | | .08 | .04 | | | | | .09 | | | 1.79 |
| Whiting | Lake Michigan | | | T. | | .20 | .50 | | | | | | .01 | T. | .10 | | T. | .51 | | .13 | | .05 | | | .06 | | | | | 1.56 |
| *Michigan—Upper Peninsula.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Baraga | Lake | | | | | | | .10 | .30 | | | | | .30 | .10 | | | | | | | | | | | | | | | 0.80 |
| Bergland | Ontonagon | .50 | .80 | T. | T. | | | .10 | T. | .10 | T. | | | | .62 | | | T. | | | | | | | | | T. | | | 2.12 |
| Blaney | Manistique | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Calumet | Lake | .72 | .56 | T. | .16 | .04 | T. | .06 | T. | .02 | .32 | | | | .26 | .52 | | .08 | | .06 | .04 | | | | | | .02 | T. | T. | 2.86 |
| Chatham | do | .14 | .17 | .04 | | | .12 | .08 | .14 | | | | | | .23 | .12 | .02 | .06 | .12 | .24 | | | .14 | | | | .23 | .14 | | 1.99 |
| Deer Park | do | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Detour | St. Marys | * | .40 | | | | .10 | | | | | | | | * | .50 | | | | | | | | | | | | | | 1.00 |
| Eagle Harbor | Lake | | .95 | T. | .11 | T. | T. | .06 | | T. | .05 | | | T. | .25 | .10 | | .05 | T. | T. | .05 | | | | | | .06 | | | 1.68 |
| Escanaba | do | .34 | .20 | | .01 | T. | .08 | .10 | T. | .04 | | | .05 | T. | .60 | .09 | .26 | .03 | T. | T. | T. | | T. | | | | .20 | | | 2.00 |
| Ewen | Ontonagon | .60 | .20 | T. | T. | | T. | .20 | | .20 | T. | | T. | T. | .50 | | | .05 | T. | T. | .05 | T. | | | | | .05 | T. | T. | 1.85 |
| Grand Marais | Lake | .20 | | | .30 | | | | | | .15 | | | | .05 | | .10 | | .20 | T. | .10 | .05 | | | | | .15 | .05 | | 1.35 |
| Houghton | do | 1.19 | .08 | .04 | .09 | .02 | T. | .01 | | .04 | .07 | | T. | | .77 | | T. | .06 | T. | .01 | .01 | | | | | | .09 | T. | T. | 2.48 |
| Humboldt | Escanaba | .70 | .80 | | T. | | | | | .10 | | | | | .20 | | | | | | | | | | | | | | | 1.80 |
| Iron Mountain | Menominee | .07 | .19 | | | | .09 | T. | | T. | | | | | .66 | | T. | | | | | | | | | | T. | | | 1.01 |
| Iron River | do | | | | T. | T. | | .30 | T. | .20 | | | .20 | .80 | .40 | | .40 | .80 | | T. | | | | | | | | | | 3.10 |
| Ironwood | Lake | .04 | .14 | | T. | | | | | T. | | | | T. | .52 | | | .10 | | T. | .10 | | | | | | .05 | | | 0.95 |
| Ishpeming | Escanaba | .20 | .40 | | | | | | | .05 | | | | | .40 | | | .10 | | .03 | .05 | | | | | | | | | 1.23 |
| Isle Royale | Lake | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mackinac Island | do | .07 | .12 | .01 | .01 | | .06 | T. | | .07 | T. | | | .05 | .13 | T. | .43 | | .02 | | T. | T. | T. | | | | T. | T. | | 0.97 |
| Maple Ridge | do | .40 | .20 | | | | | | | .10 | | | | | .60 | | .20 | .60 | | | .20 | | | | | | | | | 2.30 |
| Marquette | do | .85 | .21 | | .05 | .02 | T. | .02 | | .10 | .01 | | T. | | .63 | | .19 | .10 | .05 | .04 | .10 | .01 | | | | | .02 | | | 2.40 |
| Menominee | Menominee | | T. | | | | .30 | T. | | T. | | | | | .30 | | | | | | | | | | | | | | | |
| Newberry | Tequamenon | .26 | .33 | | .13 | T. | .02 | T. | T. | .05 | T. | T. | T. | T. | .09 | T. | T. | .37 | .04 | .05 | T. | T. | .02 | T. | T. | T. | .17 | T. | .02 | 1.55 |
| Powers | Lake | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| St. Ignace | do | .07 | .48 | | T. | | .10 | | .04 | .10 | | | | .08 | .30 | .08 | T. | .35 | T. | | | | | | | | | | | 1.60 |
| Sault Ste. Marie | St. Marys | .50 | .28 | | .07 | | | T. | .02 | .11 | .01 | | | | .01 | .01 | .08 | .09 | .02 | | | .02 | | | | | .02 | .12 | .12 | 1.48 |
| Thomaston | Lake | .20 | .40 | | | | | .05 | | .05 | | | | | .40 | | | | | | | | | | | | .20 | | | 1.30 |
| Victoria | Ontonagon | .53 | .28 | T. | .18 | | | .05 | T. | .12 | .03 | | | | .61 | .02 | | .07 | T. | T. | .01 | | | | | | .05 | .01 | | 1.96 |
| Watersmeet | do | .18 | .40 | T. | | | .10 | .06 | T. | .06 | | | | .02 | .50 | T. | T. | .15 | | T. | .04 | T. | .12 | | | | .09 | T. | .12 | 1.84 |
| Wetmore | Lake | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Whitefish Point | do | .29 | .63 | | .25 | | | | T. | .05 | .20 | | | | | | | .42 | | | | | | | | | .12 | .02 | | 1.98 |
| *Michigan—Lower Peninsula.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adrian | Raisin | | .22 | | .05 | T. | .60 | | | | | | | | 1.05 | | .17 | | | | | | | | | | | | | 2.09 |
| Allegan | Kalamazoo | | | | | | .30 | | | T. | | | T. | .11 | .44 | | T. | .31 | .08 | | | | | | | | .11 | | | 1.35 |
| Alma | Saginaw | | | | | | .62 | | | T. | T. | | | T. | 1.18 | | T. | .68 | | | | | T. | | | | .12 | | | 2.60 |
| Alpena | Lake | .17 | .07 | T. | .02 | T. | .19 | .02 | .01 | .04 | T. | T. | | .03 | .52 | T. | .61 | .18 | .02 | T. | T. | T. | .01 | | | .03 | .05 | T. | | 1.97 |
| Ann Arbor | Huron | | | T. | .05 | | .40 | | .01 | T. | | | | T. | .66 | .04 | | .18 | .21 | T. | .15 | T. | T. | | | | .04 | | | 1.74 |
| Arbela | Saginaw | | T. | T. | T. | | .80 | T. | | .13 | | | | | .66 | | | | .52 | | | | T. | | | | .16 | | | 2.27 |
| Battle Creek | Kalamazoo | | | | T. | | .81 | T. | T. | T. | | | T. | T. | .85 | T. | T. | .20 | .25 | | .15 | T. | | | | | T. | | | 2.26 |
| Bay City | Saginaw | | | | | | 1.50 | T. | T. | | | | | | .75 | | .90 | | | | | | | | | | | | | 3.15 |
| Benzonia | Betsie | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Berlin | Clinton | | .01 | T. | T. | .31 | | | | T. | .01 | | | .07 | .60 | .02 | | .38 | .08 | .01 | .13 | T. | T. | | | .01 | | T. | | 1.63 |
| Big Rapids | Muskegon | | | | | | .40 | | T. | .10 | T. | | .70 | .08 | 1.17 | .07 | | .62 | | | T. | | | | | | .28 | | | 3.42 |
| Bloomingdale | Lake | | | | | | .20 | | | .05 | | | T. | T. | 1.50 | T. | T. | T. | .20 | T. | T. | T. | | | | | .04 | T. | | 1.99 |
| Cadillac | Manistee | .05 | | | | | .50 | | .05 | T. | .07 | | | | 1.00 | | .75 | | | | T. | | | | | | .05 | .12 | | 2.59 |
| Cassopolis | St. Joseph | | .05 | | | | .80 | | | | | | | | | | | .05 | | | .30 | | | | | | .20 | | | 1.40 |
| Charlevoix | Lake | | T. | | .30 | | .30 | | | | | | | | .20 | | | | | | | | | | | | | | | 0.80 |
| Charlotte | Kalamazoo | | | | | | .30 | | | | | | T. | T. | .13 | .02 | | .37 | .10 | | .01 | .05 | | | | | T. | T. | | 0.98 |
| Cheboygan | Cheboygan | * | .40 | | T. | | | 1.10 | | | | | | | * | .90 | T. | | | | | | T. | | | | .80 | | | 3.20 |
| Clinton | Raisin | | T. | | T. | | .55 | | | | | | | | .63 | .05 | | .18 | .33 | | T. | | | | | | .30 | | | 2.04 |
| Coldwater | St. Joseph | | | | T. | | .46 | | | | | | | .02 | .20 | | | .05 | .22 | | .06 | | T. | | | | T. | | | 1.01 |
| Concord | Kalamazoo | | T. | | | | T. | | | | | | T. | T. | .70 | | | .12 | .25 | | .10 | T. | | | | | .25 | | | 1.42 |
| Croton | Muskegon | | | | T. | T. | .30 | | T. | T. | .05 | | | T. | 1.00 | | T. | .72 | .18 | | | T. | T. | | | | T. | | | 2.25 |

TABLE 2.—*Daily precipitation for February, 1911. District No. 4*—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 | Total. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Michigan—Lower Peninsula*—Continued. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Detroit | Detroit | | T. | .06 | T. | T. | 1.23 | T. | T. | T. | T. | | | T. | .84 | | .05 | .32 | | T. | .04 | | T. | | | | T. | T. | T. | 2.54 |
| Durand | Saginaw | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| East Tawas | Lake | .08 | | | | | 1.00 | | | | | | | | 2.09 | T. | .30 | T. | | | | | | | | | T. | | | 3.38 |
| Eloise | Rouge | | T. | T. | .06 | | .99 | .05 | | | T. | | | T. | .92 | .04 | | .12 | .33 | T. | .08 | | T. | T. | | | T. | | T. | 2.59 |
| Flint | Saginaw | | | | | | .37 | | .01 | | | | | .02 | .40 | | | .30 | .03 | | .04 | | | | | | | | | 1.17 |
| Frankfort | Betsie | | | | | T. | .20 | | | .20 | .10 | | | | 1.00 | | .10 | | | .05 | .10 | .10 | .05 | | | | .50 | | | 2.40 |
| Ganges | Lake | | | | | | .46 | | | | | | | .04 | .68 | .04 | .10 | .43 | .10 | | | | | | | | | | | 1.85 |
| Gaylord | Cheboygan | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gladwin | Saginaw | | | | | | .40 | T. | | | | | | | .40 | | | | | | | | | | | | | | | 0.80 |
| Grand Haven | Grand | | T. | | T. | .30 | .42 | .01 | | .04 | 01 | | .01 | .04 | .89 | | .08 | .39 | | | .01 | .01 | T. | | | | .10 | T. | | 2.31 |
| Grand Rapids | do | | | | T. | .22 | .47 | .07 | | T. | .01 | T. | .01 | .05 | .90 | | .11 | .40 | | T. | .02 | T. | T. | | | T. | .12 | T. | | 2.38 |
| Grape | Raisin | | .01 | | .01 | | .25 | | | | | | | | .73 | | | .16 | .37 | T. | .05 | | T. | | | | | T. | | 1.58 |
| Grass Lake | Grand | | | | | | T. | | | T. | | | | | 1.15 | .09 | | | .18 | T. | T. | T. | T. | | | | | | T. | 1.42 |
| Grayling | Au Sable | .30 | | | .50 | | .40 | | | .11 | T. | | | | .50 | .20 | | T. | T. | | | | | T. | | | | | T. | 2.01 |
| Harbor Beach | Lake | | | | | | .40 | .20 | | | | | | | | | | | | | | | | | | | | | | |
| Harrison | Saginaw | | | | | | .40 | | | | | | | | .20 | | | | | | | | | | | | | | | |
| Harrisville | Lake | .20 | .02 | | .05 | | .40 | .20 | | | | | | | 1.00 | .10 | .02 | | T. | .05 | 10 | .05 | | | | | | | | 2.19 |
| Hart | Pentwater | | T. | | | | .80 | | | .10 | .20 | | | | .95 | | .10 | | | T. | T. | | | | | | | | | 2.15 |
| Hayes | Pigeon | | | | | | .80 | .10 | | | | | | | .40 | | | .95 | | .10 | .10 | | | | | | .10 | | | 2.55 |
| Highland | Huron | | | | | | | | | | | | | .15 | .47 | | | | | | | | | | | | | | | 0.62 |
| Hillsdale | St. Joseph | | | | | | .50 | | T. | T. | | | T. | T. | 1.05 | | T. | .06 | .08 | T. | .02 | .02 | T. | | | | | T. | T. | 1.73 |
| Holland | Lake | | | | | | .55 | | | | T. | | T. | .04 | 1.26 | .04 | .11 | .22 | .11 | T. | | .01 | | | | | .02 | | | 2.36 |
| Howell | Saginaw | | | | | | .10 | | | | | | | T. | | | | .10 | .05 | | 1.00 | | | | | T. | | | | |
| Ivan | Manistee | T. | .08 | | T. | | .10 | | .10 | .10 | .10 | | | T. | .28 | | T. | .04 | T. | .10 | | T. | .10 | | | | .10 | T. | | 1.10 |
| Jackson | Grand | | | | | | .12 | T. | | | | | | | .62 | .06 | | .10 | .22 | | .13 | T. | T. | | | | | T. | | 1.25 |
| Jeddo | St. Clair | | | | | | .25 | | | | .10 | | | T. | .45 | T. | .08 | .15 | | .05 | .05 | | | | | | | T. | | 1.13 |
| Kalamazoo | Kalamazoo | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lansing (Agr. College) | Grand | | | | | .20 | .54 | .01 | | .02 | | | | .07 | .47 | | .13 | .22 | .03 | .01 | .02 | .01 | | | | | .04 | | | 1.77 |
| Lansing (capitol) | do | | | | | | .40 | | | T. | T. | | T. | .02 | .56 | .02 | .01 | .21 | .11 | | .01 | T. | T. | | | | .05 | | | 1.39 |
| Lapeer | Saginaw | | T. | | | | | .20 | .20 | T. | | | | T. | .25 | | | .25 | T. | T. | | | | | | | T. | | | 0.90 |
| Ludington | Pere Marquette | | T. | | | | .50 | | | | | | | | .17 | | | | | | T. | .20 | | | | | T. | | | 0.87 |
| Luther | Manistee | | .04 | | | | .23 | | .03 | .01 | .04 | | | .05 | 1.27 | T. | .04 | .53 | | | | | | | | | .16 | .01 | | 2.41 |
| Mackinaw | Lake | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mancelona | do | .20 | T. | .10 | | .20 | | | | .20 | .40 | T. | | T. | .60 | | | | T. | | T. | T. | T. | | | | T. | .10 | | 1.80 |
| Manistee | Manistee | | | | | | .40 | | | T. | | | | | 2.80 | | .66 | | | | T. | T. | | | | | | | | 3.86 |
| Midland | Saginaw | | T. | | | | .60 | | T. | T. | | | T. | T. | .20 | T. | T. | .10 | | T. | | | | | | | T. | | | 0.90 |
| Montague | White | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Morenci | Maumee | | | | .08 | | .60 | | | | | | | | .62 | | | .10 | .36 | | .02 | .08 | | | | | .01 | | | 1.87 |
| Mount Clemens | Clinton | | | | .80 | | .04 | | T. | | | | | .27 | .31 | T. | T. | .17 | | | T. | | T. | | | | | T. | | 1.59 |
| Mount Pleasant | Saginaw | | | | | | .80 | | | | | | | | 1.40 | .10 | .50 | | | | | | | | | | | | | 2.80 |
| Muskegon | Muskegon | | | | | | .60 | .20 | | T. | | | | T. | .60 | T. | T. | .60 | T. | | T. | T. | | | | | | | | 2.00 |
| Old Mission | Lake | | | | | | .28 | | | .11 | .04 | | | | .82 | | .17 | .20 | | | | | | | | | .17 | | | 1.79 |
| Olivet | Kalamazoo | | | | | | .35 | | .01 | .01 | T. | | T. | T. | .50 | | | .25 | .17 | | .04 | .02 | | | | | T. | | | 1.35 |
| Omer | Lake | | | | | | .60 | | | .60 | | | | T. | 1.20 | | | | | | | | | | | | | | | 2.40 |
| Onaway | Cheboygan | | | | | | | | | | | | | | 1.60 | | | | | | | | | | | | | | | |
| Ovid | Grand | .12 | T. | | | | .26 | .23 | T. | | T. | | | T. | .41 | .35 | | .12 | .09 | | T. | | | | | | T. | | | 1.58 |
| Owasso | Saginaw | | | | | | .80 | | T. | | | | | .02 | .78 | .08 | .01 | .13 | | T. | .03 | | | | | | .05 | | | 1.90 |
| Petoskey | Lake | .10 | .10 | T. | .01 | T. | .02 | | | .10 | .10 | | | | .40 | | .27 | .10 | | | | | | | | | T. | | | 1.20 |
| Plymouth | Rouge | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pontiac | Clinton | | .05 | | | | .94 | | | T. | | | | .03 | .93 | T. | | .11 | | T. | .28 | | T. | | | | T. | | | 2.34 |
| Port Austin | Lake | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Port Huron | St. Clair | | T. | T. | T. | T. | .76 | T. | T. | T. | T. | | T. | .06 | .43 | T. | | .42 | .01 | .01 | .04 | | .02 | | | | .01 | T. | T. | 1.76 |
| Reed City | Muskegon | | | | | | .20 | | | .05 | | | | | | | | | | | | | | | | | | | | |
| Roscommon | Au Sable | | .01 | | .02 | | .45 | | .05 | .03 | .02 | | | | .75 | | .01 | .02 | | | | | | | | | | .03 | | 1.39 |
| Saginaw | Saginaw | T. | T. | | .05 | T. | .70 | | | .05 | .05 | | | .10 | 1.35 | .10 | | 1.00 | | T. | T. | | T. | | | | .10 | T. | | 3.50 |
| Saginaw W. S | do | | .01 | T. | T. | T. | .36 | T. | .03 | .01 | .02 | | T. | .02 | 1.28 | .03 | T. | .81 | T. | T. | T. | | T. | | | | .02 | T. | | 2.59 |
| St. James | Lake | | .65 | | | | 1.25 | | | .25 | | | | .50 | .70 | .10 | | .36 | | | | | | | | | .30 | | | 4.11 |
| St. Joseph | St. Joseph | | | | | | 1.40 | | | | | | | T. | .12 | | T. | .70 | .30 | | .10 | .10 | | | | | | | | 2.72 |
| Sandusky | Lake | | | | | .50 | | | | | | | | | | | | | | | | | T. | | | | | | | |
| Saranac | Grand | | | | | | .55 | | | | | | | | .90 | .08 | | .30 | | | | | | | | | .14 | | | 1.97 |
| South Haven | Lake | | | | | | .40 | | | | | | T. | .60 | T. | | .60 | .40 | .05 | | | | T. | | | | .40 | | | 2.45 |
| Stanton | Grand | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Thornville | Saginaw | | | | | .10 | .35 | .30 | | | | | | | .40 | .25 | | .40 | .20 | | .12 | | | | | | .18 | | | 2.30 |
| Traverse City | Lake | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Vassar | Saginaw | | | | | | T. | | | | T. | | | | .78 | | | .84 | | T. | | | | | | | T. | | | 1.62 |
| Wasepi | St. Joseph | | | | | | .75 | | T. | | | | .08 | .02 | .42 | | .04 | .24 | | | .48 | | | | | | .07 | | | 2.10 |
| West Branch | Lake | | | | | | 1.20 | .20 | | T. | | | | | 1.40 | | | | | | | | | | | | | | | 2.80 |
| Woodlawn | Au Sable | .10 | .25 | | .20 | | .30 | | .10 | .05 | .05 | | | T. | 1.00 | .10 | | .50 | T. | .05 | T. | | .10 | | | | .10 | .20 | | 3.10 |
| Ypsilanti | Lake | | .08 | | .05 | | .50 | | | | | | | T. | .98 | .03 | | .34 | .35 | | .15 | | | | | | .11 | | | 2.59 |
| *Ohio.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Akron ‖ | Lake | .04 | | | .30 | T. | .49 | T. | | | T. | T. | | T. | .30 | .15 | | | .20 | | .30 | .01 | T. | T. | | | T. | | | 1.79 |
| Benton Ridge | Maumee | | | | .45 | | .50 | | | | T. | | | | .30 | | | .08 | .42 | | .15 | .05 | T. | | | | | | T. | 1.95 |
| Bowling Green | Lake | | | T. | .22 | | .60 | | | | | | | | .82 | | | .12 | T. | | T. | T. | | | | | | | T. | 1.76 |
| Bucyrus ‖ | Sandusky | .20 | | | .65 | | .60 | .09 | | | | | | | .25 | | | | .60 | | .40 | .10 | | T. | | | .15 | | | 3.04 |
| Cleveland (1) | Lake | | T. | .14 | .09 | .04 | .45 | T. | T. | .01 | .01 | | T | T. | .24 | .01 | .01 | .30 | .14 | T. | .34 | .01 | .02 | | | | T. | T. | T. | 1.81 |
| Cleveland (2) | do | T. | | .16 | .13 | | .52 | | | T. | | | | | .21 | .01 | | .27 | .19 | | .37 | | T. | | | | T. | | | 1.86 |
| Conneaut | do | | | | .18 | | .36 | | | | .03 | | | | .62 | .02 | | .13 | .38 | | .14 | T. | T. | | | | | | | 1.86 |
| Defiance | Maumee | | | T. | | | .38 | | T. | | T. | | T. | T. | .41 | | | .05 | .14 | T. | T. | T. | T. | T. | | | T. | | | 0.98 |
| Findlay ‖ | do | | | | | | .60 | | | | | | | | .78 | | | .03 | .41 | | .20 | T. | T. | | | | | | | 2.02 |
| Fremont | Sandusky | | | | .15 | | .55 | | | | T. | | | | .44 | | | | .32 | | .11 | | T | | | | | | | 1.57 |
| Hedges | Maumee | | | | | | .60 | | | | | | | | .88 | | | .18 | .28 | | | | | | | | | | | 1.94 |
| Hillhouse | Lake | | | | .25 | T. | .36 | T. | | | T. | | T. | T. | .54 | T. | | .15 | .35 | T. | .20 | T. | T. | T. | | | T. | T. | | 1.85 |
| Hiram | do | | T. | | .56 | | .65 | T. | .01 | | T. | | T. | | .62 | | | .17 | .06 | | .46 | T. | | .05 | | | T. | | T. | 2.58 |
| Hudson | do | | | | .05 | | .20 | | | | | | | | | .50 | | .60 | | | .40 | .20 | | | | | | | | 1.95 |
| Lima | Maumee | T. | | | .37 | | .89 | | .30 | | T. | | | | | | T. | T. | .46 | T. | .20 | T. | | | | | .05 | .60 | | 2.87 |
| Medina | Lake | | | | .80 | T. | .45 | | | | | | | | .55 | | | .15 | .26 | | .45 | | | | | | | | | 2.66 |
| Montpelier | Maumee | | T. | T. | .20 | | .80 | | | | | | T. | T. | .35 | | T. | .14 | .20 | T. | .10 | | T. | | | | .28 | | | 2.07 |
| Napoleon | do | .20 | | | | | .35 | | | | | | | | .37 | | | T. | .33 | | T. | T. | T. | | | | | | | 1.25 |
| New Bremen | do | | | T. | | | .54 | | | | | | | | .17 | | T. | | .22 | .15 | | | | | | | | | | 1.08 |
| North Royalton | Lake | | | | .60 | .20 | | | | | | | | | .86 | | | .20 | .40 | | .40 | | | | | | | | | 2.66 |
| Norwalk ‖ | do | .15 | | .27 | | .50 | .28 | | | | | | | .08 | .20 | .12 | | .06 | .40 | | .30 | | | | | .10 | | | | 2.46 |
| Oberlin | do | | | T. | .32 | | .64 | | .15 | | | | | | .37 | | | .35 | .12 | T. | .27 | T. | T. | | | | | | T. | 2.22 |
| Ottawa | Maumee | | | T. | | T. | .85 | | | | | | T. | T. | .37 | | T. | .06 | T. | | | T. | | | | | T. | | | 1.28 |
| Sandusky | Lake | | | .09 | .06 | .60 | .14 | | | | T. | | | .03 | .49 | | .03 | .20 | .20 | .02 | .07 | T. | T. | | | | T. | | T. | 1.93 |
| Tiffin | Sandusky | | | T. | .30 | T. | .80 | T. | | T. | T. | | T. | T. | .33 | | T. | .16 | .28 | T. | .10 | T. | T. | | | | T. | | T. | 1.97 |
| Toledo (1) | Maumee | | T. | .06 | T. | .18 | .89 | T. | T. | | T. | | T. | T. | .57 | | .02 | .22 | .23 | T. | .05 | T | T. | | | | T. | | T. | 2.22 |
| Toledo (2) | do | | | | .06 | T. | .92 | T. | T. | | T. | | | T. | .45 | .07 | T. | .11 | .23 | T. | .02 | T. | T. | | | | T. | | T. | 1.86 |
| Upper Sandusky | Sandusky | | | | .60 | | .60 | | T. | | T. | | T. | | .30 | T. | | T. | .50 | T. | .40 | .10 | T. | | | | T. | | | 2.50 |
| Vickery | Lake | | | | .14 | | .65 | | | | | | | T. | .47 | .04 | | 10 | .36 | | .07 | T. | | | | | .01 | | | 1.84 |
| Wauseon | Maumee | | | .02 | .01 | .01 | .90 | | T. | | | | .01 | .02 | .47 | .02 | | 11 | .39 | T. | .06 | .05 | .01 | T. | | | .01 | | T. | 2.09 |
| Wellington | Lake | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Willoughby ‖ | do | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| *Pennsylvania.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Erie** | **Lake** | | **T.** | **T.** | **.26** | **T.** | **.14** | **T.** | **.01** | **T.** | **.03** | | **T.** | **.07** | **.80** | **.01** | | **.36** | **.19** | **T.** | **.20** | **T.** | **.02** | | | | **.02** | **T.** | **T.** | **2.11** |

TABLE 2.—*Daily precipitation for February, 1911. District No. 4*—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 | |
| *New York.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Adams Center | Lake Ontario | | .48 | | .46 | T. | .30 | .40 | .30 | .20 | .35 | .20 | .30 | .20 | .10 | .05 | | .15 | .10 | | .20 | .10 | .20 | .10 | | | .11 | .04 | T. | 4.34 |
| Angelica | Genesee | .02 | | | .38 | | .40 | .10 | T. | | .12 | T. | | | .78 | .23 | T. | .38 | .11 | .03 | .30 | .04 | .05 | T. | | | T. | | T. | 2.94 |
| Appleton | Lake Ontario | | .10 | | .25 | | .05 | .15 | T. | | .06 | | | .06 | .10 | .08 | | .10 | T. | | .10 | T. | T. | | | | T. | T. | T. | 1.05 |
| Auburn | Oswego | | | | .22 | | .27 | .31 | T. | | | | | T. | .24 | .11 | | .27 | | .07 | .52 | T. | | | | | T. | T. | T. | 2.01 |
| Avon | Genesee | .02 | | | .30 | T. | .17 | .26 | .10 | | | | | T. | .18 | .18 | .02 | .22 | | .08 | .15 | | .05 | | T. | | T. | | .05 | 1.78 |
| Blue Mountain Lake | Raquette | | .57 | | .35 | | .20 | .70 | .40 | T. | .20 | .10 | .10 | .10 | .10 | | | .77 | .10 | .20 | .10 | T. | | | .63 | .20 | .10 | .20 | | 5.12 |
| Brockport | Lake Ontario | | .03 | T. | .42 | .03 | .30 | .52 | T. | | | | | .05 | .67 | .28 | | .18 | .03 | .21 | .15 | | | | | | | .02 | .05 | 2.94 |
| Buffalo | Lake Erie | T. | .05 | .05 | .22 | .01 | .92 | .02 | .01 | .02 | .12 | | .02 | .08 | 1.32 | T. | | .61 | .01 | T. | .16 | .09 | .24 | T. | T. | T. | T. | T. | T. | 3.95 |
| Canton | Grass | | .78 | | .64 | | .16 | .42 | .11 | | .03 | .02 | .16 | .06 | T. | | | .14 | T. | | .02 | | .33 | | .06 | | .02 | .02 | | 2.97 |
| Cape Vincent | St. Lawrence | .57 | T. | .20 | | | .54 | | T. | .32 | T. | .18 | | | | | | .04 | | | T. | .25 | | T. | | | T. | | | 2.10 |
| Carvers Falls | Lake Champlain | | .35 | | .75 | | | .81 | .15 | | | | | .10 | | | | | | | | | | | | | | | | 2.16 |
| Chazy | do | | .50 | | | | | .80 | .10 | | | | | | | | | | | | | | | | .42 | | | | | 1.82 |
| Dannemora | do | .01 | .52 | | .40 | .17 | | .76 | .08 | | .05 | .10 | .20 | | | | | .09 | T. | | .03 | T. | .18 | .02 | .20 | T. | T. | .05 | | 2.86 |
| Elba | Lake Ontario | | T. | | .20 | .20 | .30 | .60 | T. | | .30 | | .20 | T. | .60 | 1.00 | | .60 | T. | T. | .40 | T. | T. | .30 | T. | | .30 | T. | T. | 5.00 |
| Faust | Raquette | .26 | | .18 | | .11 | | .16 | .14 | | .14 | | .12 | | | | | .27 | .21 | | .07 | | .15 | | | .41 | .08 | | | 2.30 |
| Fayetteville | Oswego | | .04 | | .12 | .08 | .08 | .69 | .04 | | | T. | T. | .08 | .04 | | | .32 | | | .31 | .02 | .02 | | T. | | | T. | T. | 1.84 |
| Gabriels | St. Regis | | .78 | .09 | .06 | .07 | | .20 | .08 | | .05 | .08 | .11 | .07 | .05 | | | .11 | .03 | .05 | .07 | T. | .10 | .05 | .14 | | T. | .05 | T. | 2.24 |
| Harkness | Lake Champlain | | .51 | .01 | .03 | | | .31 | .02 | | .02 | | .12 | | | | | .03 | | | .06 | | | | | | | | | 1.11 |
| Hemlock Lake | Genesee | | | | T. | | .77 | | | | T. | | | T. | 1.10 | | | | | T. | | | | | | | T. | | | 1.87 |
| Horse Shoe | St. Lawrence | .44 | T. | T. | .05 | .13 | .07 | .05 | | | .30 | .18 | .02 | | | | | .07 | | | | | .05 | | | .04 | | | .03 | 1.43 |
| Hunt | Genesee | | | | .74 | | .60 | | | | .20 | | | | 1.00 | | | 1.56 | | | .60 | | .20 | | | | .36 | | | 5.26 |
| Ithaca | Oswego | | .01 | .30 | .08 | .02 | .80 | .06 | .01 | | T. | | T. | .06 | .79 | .05 | | .55 | .01 | T. | .62 | .15 | .18 | T. | .14 | | .06 | .19 | .26 | 4.34 |
| Keene Valley | Ausable | | .52 | T. | .11 | T. | T. | .48 | .18 | | .06 | .08 | .18 | .09 | .02 | | | .08 | T. | | .12 | | | | | | | | | 1.92 |
| King Ferry | Oswego | | | | .53 | | .17 | .23 | .08 | | | | | | .70 | | | .23 | | | .31 | .02 | .03 | | .03 | | | | .04 | 2.37 |
| Lake George | Lake Champlain | | .21 | .12 | .94 | | .61 | .14 | .02 | | T. | .03 | | | .02 | | | .03 | | | .06 | | | | | | | | | 2.18 |
| Lake Placid Club | Ausable, W. Br | | .66 | .26 | .31 | .10 | | .23 | .31 | | .46 | .51 | .09 | .12 | | | | .41 | T. | | .12 | | .46 | .32 | T. | | .12 | .35 | .26 | 5.09 |
| Le Roy | Genesee | T. | .05 | | .35 | .04 | .30 | .43 | .12 | | .09 | | | .11 | 1.06 | .10 | | .33 | .09 | .02 | .25 | .02 | .11 | | .07 | | .05 | T. | .05 | 3.64 |
| Lockport | Lake Ontario | T. | .04 | | .24 | T. | .14 | .28 | .02 | | | | | T. | .40 | .25 | | .18 | .02 | | .12 | | T. | | | | T. | T. | .01 | 1.70 |
| Lowville | Black | | .10 | | 1.00 | | .10 | | | .10 | | .20 | | .10 | | | | .02 | | | .08 | T. | .15 | .12 | | | | | | 1.97 |
| Moira | St. Lawrence | | .80 | | .60 | | | .60 | .10 | .05 | .05 | .25 | .60 | .05 | .30 | | | .05 | | | T. | | .40 | .10 | .20 | | T. | T. | | 4.15 |
| Nehsane | Black | | .80 | T. | .45 | .15 | .01 | .28 | .10 | | .15 | .15 | .22 | .03 | .04 | | | .22 | .03 | .03 | .12 | .02 | .30 | .07 | .40 | | .05 | .23 | T. | 3.85 |
| North Lake | do | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ogdensburg | St. Lawrence | T. | 1.10 | | .61 | .04 | | .90 | .30 | | .03 | | .30 | .55 | T. | | | .08 | | | T. | | .12 | | | | | .10 | | 4.13 |
| Old Forge | Black | | .59 | | .60 | .25 | | .40 | .15 | | .43 | .21 | .16 | | .03 | | | .11 | | .08 | .14 | | .80 | .14 | .35 | | .02 | | | 4.46 |
| Oswego | Lake Ontario | .02 | .11 | T. | 1.22 | T. | .15 | .16 | .06 | | .02 | T. | .16 | .04 | .20 | .02 | | .07 | T. | T. | .25 | .06 | .04 | | .30 | | .01 | T. | T. | 2.89 |
| Otto | Lake Erie | | T. | | .24 | | .03 | | | | .06 | | | T. | .30 | T. | | .68 | | | | | | | | | | T. | | 1.31 |
| Palermo | Lake Ontario | | .50 | .03 | .60 | T. | .10 | .20 | .10 | | T. | .04 | .13 | .10 | .10 | .23 | | .06 | T. | T. | .10 | .10 | .03 | | .05 | | .04 | T. | T. | 2.51 |
| Perry City | Oswego | | | | .55 | | .28 | .26 | .09 | | T. | | | | .48 | .40 | | .54 | .25 | .02 | .30 | .05 | T. | | .14 | | | .02 | .08 | 3.46 |
| Philadelphia | St. Lawrence | | .61 | | .14 | T. | T. | .37 | .11 | | .15 | | .13 | T. | .02 | | .15 | | | | .03 | | .05 | | .15 | | .04 | .06 | | 2.01 |
| Potsdam ‖ | Raquette | .02 | .70 | .83 | .63 | | .45 | .39 | | .24 | | | .24 | | .17 | | | | | | | | .06 | .08 | | | | .01 | | 3.82 |
| Raquette Lake | do | | .61 | .07 | .42 | .30 | | .50 | .16 | | .13 | .12 | .22 | .08 | .11 | | | .09 | .10 | .11 | .16 | | .13 | .10 | .50 | | | .11 | .04 | 4.06 |
| Rochester | Genesee | | .06 | .02 | .20 | .04 | .85 | .23 | .09 | | .02 | T. | .04 | .09 | .77 | | | .16 | T. | .02 | .31 | .01 | .10 | | .04 | | .03 | .05 | .07 | 3.20 |
| Romulus | Oswego | | | | .10 | | .60 | .60 | | | | | | | .40 | .40 | | .40 | | .20 | .50 | .30 | T. | .20 | .10 | | | | | 3.80 |
| Shortsville | do | | T. | | T. | | .30 | .11 | T. | | T. | | | | .18 | | | | | .10 | .30 | | .05 | T. | | | | | .10 | 1.14 |
| Skaneateles | do | | T. | .24 | .40 | T. | .18 | .06 | .05 | T. | .07 | .03 | | .08 | .10 | .09 | .03 | .20 | .18 | .20 | .12 | .05 | .07 | .11 | .02 | T. | .03 | T. | | 2.31 |
| Syracuse | do | T. | .01 | T. | .49 | .16 | .50 | .36 | .06 | | .04 | .03 | .02 | .06 | .19 | .07 | | .11 | .01 | .03 | .29 | .01 | .08 | T. | .09 | | .02 | .03 | T. | 2.66 |
| Ticonderoga | Lake Champlain | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tupper Lake | Raquette | | .30 | | .20 | .25 | | .40 | .20 | | | .47 | | .10 | | | | .50 | | .18 | .08 | | .15 | T. | .41 | | | .08 | | 3.32 |
| Volusia | Lake Erie | .04 | T. | | .32 | T. | .30 | T. | | | .26 | | | .06 | | | | .35 | .50 | | .20 | T. | .12 | | | | .05 | | | 2.20 |
| Wanakena | Oswegatchie | | .60 | .25 | .20 | | .50 | .10 | | | .50 | | | .24 | | | | .35 | | | .15 | | .81 | | .88 | | .32 | | | 4.90 |
| Wards Creek | Raquette | .14 | .21 | .29 | | .26 | | | .12 | | | .21 | .09 | .05 | | | | .06 | | | .32 | | | .22 | | .18 | | .19 | | 2.34 |
| Watertown | Black | | .45 | | .08 | .02 | | .27 | .06 | | .14 | .06 | .14 | | | | | .25 | .03 | .02 | .06 | .06 | .14 | .06 | .27 | | .13 | | | 2.24 |
| Wedgewood | Oswego | .02 | T. | T. | .49 | T. | .40 | .30 | .02 | | .05 | .03 | | | .60 | .33 | | .28 | .12 | .08 | .47 | .06 | .15 | .06 | .17 | | | T. | .02 | 3.65 |
| Westfield | Lake Erie | | T. | | .36 | T. | .17 | .11 | | | .26 | .08 | .03 | .06 | .71 | T. | | .61 | .31 | T. | .21 | | .13 | T. | | | .04 | T. | | 3.08 |
| Youngstown | Lake Ontario | | | .09 | | | .51 | | | | | | T. | .09 | .74 | .07 | | .04 | | | .08 | T. | .07 | | | | | | | 1.69 |
| *Vermont.* | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Burlington | Champlain | | .62 | T. | .16 | | .03 | .31 | .06 | T. | .02 | T. | .06 | T. | | | | .01 | T. | T. | .08 | T. | T. | T. | .04 | T. | | | | 1.39 |
| Cornwall | do | | .40 | | .40 | | T. | 1.00 | .20 | | T. | T. | .10 | .10 | | | | T. | | | .30 | | | | .20 | | | | | 2.70 |
| Enosburg Falls | do | | .64 | .28 | .09 | | | .19 | .04 | | .02 | | .29 | | | | | .13 | T. | | T. | | .08 | | .06 | | | | | 1.82 |
| Northfield | do | | .39 | .05 | .33 | | .10 | .47 | .02 | T. | T. | .01 | .03 | .02 | | | | .06 | T. | | .05 | T. | .02 | .01 | .05 | | | T. | | 1.61 |
| Wells | do | | .29 | .08 | .53 | | | .34 | | | .21 | | | .03 | | | | .21 | | | | | | | | | | | | 1.69 |

TABLE 3.—*Maximum and minimum temperatures at selected stations, February, 1911. District No. 4, Lake Region.*

| Date. | Duluth, Minn. | | Wisconsin. | | | | | | Chicago, Ill. | | Fort Wayne, Ind. | | Michigan—Upper Peninsula. | | | | | | | | | | Michigan—Lower Peninsula. | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Florence. | | Green Bay. | | Milwaukee. | | | | | | Escanaba. | | Ewen. | | Houghton. | | Marquette. | | Sault Ste. Marie. | | Alpena. | | Battle Creek. | | Cadillac. | |
| | 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.... | 25 | 5 | 26 | 8 | 32 | 21 | 39 | 33 | 45 | 33 | 48 | 18 | 29 | 18 | 30 | 13 | 26 | 21 | 24 | 20 | 18 | 14 | 28 | 21 | 35 | 20 | 25 | 18 |
| 2.... | 18 | − 3 | 26 | 13 | 31 | 21 | 39 | 25 | 43 | 29 | 50 | 30 | 22 | 16 | 25 | 9 | 21 | 13 | 22 | 17 | 18 | 3 | 27 | 12 | 30 | 22 | 26 | 9 |
| 3.... | 24 | − 6 | 26 | 12 | 32 | 20 | 34 | 26 | 38 | 27 | 36 | 24 | 29 | 21 | 27 | 19 | 29 | 17 | 28 | 19 | 25 | 5 | 27 | 13 | 31 | 19 | 25 | 6 |
| 4.... | 3 | −13 | 27 | 2 | 31 | 6 | 33 | 16 | 36 | 23 | 35 | 32 | 27 | 3 | 25 | − 1 | 21 | 4 | 25 | 5 | 27 | − 4 | 27 | 11 | 31 | 22 | 26 | 12 |
| 5.... | 14 | −11 | 14 | −16 | 17 | 2 | 24 | 12 | 26 | 22 | 33 | 20 | 15 | 1 | 13 | −13 | 15 | 3 | 15 | 5 | 8 | −18 | 15 | 4 | 24 | 12 | 13 | 5 |
| 6.... | 18 | 11 | 16 | 5 | 21 | 10 | 26 | 18 | 28 | 22 | 30 | 18 | 13 | 6 | 24 | 4 | 19 | 11 | 14 | 7 | 12 | − 2 | 18 | 14 | 21 | 12 | 15 | 8 |
| 7.... | 19 | 10 | 20 | − 4 | 24 | 7 | 28 | 18 | 31 | 22 | 29 | 7 | 23 | 5 | 21 | −15 | 22 | − 1 | 23 | 6 | 14 | − 6 | 24 | 13 | 22 | 8 | 25 | 5 |
| 8.... | 25 | 3 | 33 | 8 | 28 | 11 | 33 | 18 | 34 | 19 | 39 | 24 | 24 | 11 | 32 | 8 | 33 | 20 | 33 | 17 | 31 | 12 | 34 | 19 | 33 | 18 | 31 | 15 |
| 9.... | 20 | − 1 | 28 | 15 | 27 | 16 | 24 | 15 | 30 | 14 | 39 | 15 | 29 | 16 | 22 | 9 | 30 | 19 | 30 | 20 | 28 | 16 | 29 | 15 | 28 | 10 | 28 | 15 |
| 10.... | 15 | −12 | 18 | 7 | 20 | 3 | 20 | 4 | 22 | 8 | 29 | 13 | 24 | 11 | 12 | − 5 | 19 | 7 | 20 | 14 | 22 | 0 | 30 | 19 | 22 | 15 | 25 | 15 |
| 11.... | 24 | 13 | 30 | 3 | 39 | 9 | 43 | 14 | 43 | 22 | 45 | 8 | 33 | 6 | 20 | 9 | 25 | 6 | 31 | 13 | 22 | 8 | 39 | 11 | 40 | 5 | 37 | 12 |
| 12.... | 27 | 18 | 29 | − 1 | 35 | 26 | 39 | 34 | 39 | 37 | 38 | 29 | 32 | 10 | 31 | −12 | 31 | 18 | 31 | 19 | 24 | 18 | 38 | 26 | 36 | 32 | 36 | 32 |
| 13.... | 32 | 27 | 34 | 24 | 37 | 33 | 36 | 33 | 43 | 37 | 41 | 34 | 36 | 29 | 37 | 21 | 33 | 30 | 34 | 28 | 27 | 20 | 34 | 29 | 38 | 32 | 35 | 31 |
| 14.... | 32 | 27 | 33 | 23 | 34 | 32 | 44 | 35 | 53 | 37 | 56 | 37 | 30 | 24 | 30 | 24 | 31 | 25 | 29 | 21 | 25 | 21 | 30 | 25 | 45 | 33 | 34 | 24 |
| 15.... | 29 | 26 | 31 | 21 | 34 | 31 | 36 | 33 | 39 | 36 | 46 | 36 | 29 | 24 | 34 | 22 | 30 | 24 | 29 | 21 | 21 | 17 | 29 | 26 | 40 | 32 | 30 | 24 |
| 16.... | 32 | 28 | 34 | 26 | 34 | 31 | 39 | 34 | 56 | 36 | 55 | 32 | 33 | 27 | 38 | 29 | 35 | 30 | 35 | 25 | 31 | 21 | 33 | 29 | 48 | 32 | 33 | 29 |
| 17.... | 33 | 18 | 33 | 29 | 36 | 31 | 38 | 33 | 58 | 35 | 61 | 43 | 36 | 30 | 34 | 28 | 35 | 30 | 36 | 31 | 34 | 31 | 36 | 33 | 55 | 35 | 40 | 31 |
| 18.... | 25 | 9 | 32 | 19 | 34 | 21 | 34 | 31 | 38 | 32 | 49 | 33 | 30 | 18 | 30 | 18 | 30 | 15 | 31 | 20 | 32 | 14 | 35 | 24 | 38 | 27 | 31 | 24 |
| 19.... | 20 | − 1 | 20 | 11 | 23 | 17 | 31 | 23 | 34 | 25 | 35 | 25 | 20 | 9 | 20 | 9 | 19 | 11 | 20 | 10 | 16 | 4 | 24 | 10 | 32 | 21 | 25 | 10 |
| 20.... | 11 | 0 | 16 | 2 | 23 | 8 | 26 | 14 | 29 | 21 | 29 | 17 | 20 | 4 | 10 | −17 | 19 | 6 | 20 | 8 | 15 | − 5 | 22 | 9 | 38 | 12 | 21 | 4 |
| 21.... | 33 | 2 | 33 | − 4 | 27 | 6 | 27 | 10 | 29 | 12 | 27 | 11 | 33 | 6 | 29 | 0 | 30 | 1 | 30 | 6 | 26 | − 9 | 26 | − 3 | 22 | 5 | 26 | 0 |
| 22.... | 33 | 12 | 28 | 19 | 34 | 20 | 33 | 22 | 33 | 22 | 35 | 20 | 28 | 15 | 22 | 10 | 29 | 21 | 29 | 21 | 27 | 14 | 31 | 18 | 33 | 18 | 27 | 20 |
| 23.... | 43 | 16 | 43 | 15 | 42 | 20 | 45 | 23 | 43 | 26 | 43 | 17 | 47 | 17 | 42 | 5 | 38 | 27 | 47 | 23 | 37 | 13 | 44 | 15 | 38 | 15 | 40 | 13 |
| 24.... | 43 | 23 | 45 | 24 | 44 | 29 | 47 | 32 | 49 | 32 | 47 | 29 | 45 | 25 | 48 | 18 | 45 | 29 | 52 | 28 | 35 | 13 | 39 | 24 | 41 | 28 | 37 | 23 |
| 25.... | 39 | 24 | 44 | 23 | 46 | 32 | 48 | 33 | 51 | 33 | 53 | 30 | 39 | 29 | 40 | 14 | 50 | 28 | 45 | 35 | 46 | 27 | 52 | 35 | 49 | 30 | 45 | 30 |
| 26.... | 35 | 5 | 38 | 20 | 39 | 21 | 39 | 28 | 41 | 33 | 49 | 39 | 36 | 18 | 46 | 14 | 39 | 14 | 40 | 14 | 39 | 15 | 41 | 23 | 42 | 34 | 40 | 26 |
| 27.... | 14 | − 9 | 20 | 7 | 23 | 14 | 28 | 20 | 33 | 26 | 43 | 27 | 22 | 7 | 15 | 0 | 17 | 5 | 14 | 7 | 15 | 7 | 23 | 9 | 35 | 22 | 27 | 13 |
| 28.... | 28 | − 7 | 25 | − 4 | 27 | 6 | 25 | 14 | 28 | 20 | 32 | 23 | 29 | 0 | 26 | −10 | 29 | 9 | 30 | 6 | 24 | 8 | 27 | 7 | 27 | 19 | 22 | 8 |
| Mns.. | 25.5 | 7.6 | 28.6 | 11.0 | 31.2 | 18.0 | 34.2 | 23.2 | 38.3 | 26.5 | 41.1 | 24.7 | 29.0 | 14.5 | 28.0 | 7.5 | 28.6 | 15.8 | 29.2 | 16.6 | 25.0 | 9.2 | 30.8 | 17.5 | 34.4 | 21.1 | 29.5 | 16.5 |

| Date. | Michigan—Lower Peninsula. | | | | | | Ohio. | | | | | | | | Erie, Pa. | | New York. | | | | | | | | Vermont. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Detroit. | | Muskegon. | | Saginaw, W. S. | | Cleveland. | | Lima. | | Sandusky. | | Toledo. | | | | Buffalo. | | Canton. | | Rochester. | | Syracuse. | | Burlington. | | Northfield. | |
| | 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.... | 30 | 25 | 34 | 24 | 31 | 20 | 44 | 25 | 39 | 20 | 45 | 24 | 36 | 24 | 39 | 23 | 27 | 17 | 8 | − 1 | 26 | 13 | 23 | 8 | 8 | − 2 | 11 | − 5 |
| 2.... | 41 | 18 | 32 | 22 | 32 | 17 | 55 | 22 | 54 | 29 | 54 | 22 | 45 | 23 | 49 | 17 | 43 | 15 | 10 | − 3 | 42 | 14 | 41 | 8 | 23 | 2 | 15 | 2 |
| 3.... | 31 | 18 | 32 | 20 | 30 | 15 | 40 | 21 | 33 | 24 | 37 | 21 | 35 | 21 | 41 | 16 | 39 | 12 | 5 | −23 | 32 | 11 | 31 | 5 | 22 | − 8 | 17 | −17 |
| 4.... | 35 | 20 | 30 | 18 | 32 | 18 | 40 | 24 | 36 | 21 | 37 | 24 | 39 | 25 | 36 | 22 | 34 | 23 | 34 | 3 | 34 | 27 | 39 | 28 | 38 | 20 | 39 | 17 |
| 5.... | 21 | 13 | 20 | 13 | 19 | 6 | 24 | 16 | 30 | 21 | 24 | 18 | 25 | 17 | 22 | 11 | 23 | 7 | 26 | −21 | 27 | 10 | 32 | 3 | 32 | − 7 | 30 | − 7 |
| 6.... | 21 | 13 | 20 | 13 | 19 | 12 | 38 | 21 | 36 | 29 | 36 | 20 | 28 | 18 | 30 | 11 | 23 | 7 | 1 | −24 | 21 | 6 | 11 | 1 | 0 | −10 | 5 | −18 |
| 7.... | 24 | 16 | 24 | 0 | 26 | 15 | 30 | 19 | 34 | 18 | 26 | 18 | 24 | 15 | 32 | 21 | 30 | 19 | 16 | 0 | 27 | 21 | 24 | 11 | 22 | − 2 | 15 | 4 |
| 8.... | 32 | 22 | 32 | 18 | 34 | 17 | 31 | 23 | 33 | 25 | 32 | 22 | 38 | 23 | 33 | 25 | 32 | 20 | 30 | 14 | 31 | 24 | 33 | 24 | 28 | 20 | 24 | 15 |
| 9.... | 34 | 14 | 30 | 23 | 33 | 19 | 39 | 21 | 39 | 18 | 40 | 17 | 39 | 13 | 39 | 21 | 35 | 22 | 33 | 5 | 35 | 24 | 32 | 25 | 34 | 17 | 32 | 5 |
| 10.... | 27 | 15 | 24 | 20 | 27 | 18 | 25 | 20 | 38 | 15 | 24 | 17 | 26 | 17 | 27 | 23 | 31 | 23 | 28 | 4 | 31 | 24 | 30 | 24 | 26 | 12 | 28 | 6 |
| 11.... | 39 | 14 | 39 | 9 | 43 | 7 | 38 | 15 | 38 | 17 | 40 | 15 | 41 | 14 | 38 | 17 | 34 | 18 | 23 | 12 | 32 | 20 | 33 | 22 | 24 | 10 | 23 | 7 |
| 12.... | 37 | 32 | 40 | 35 | 39 | 34 | 37 | 32 | 41 | 16 | 37 | 32 | 37 | 30 | 36 | 31 | 33 | 29 | 20 | 11 | 35 | 30 | 36 | 28 | 15 | 9 | 24 | 8 |
| 13.... | 39 | 34 | 37 | 34 | 38 | 34 | 41 | 35 | 43 | 35 | 41 | 35 | 41 | 34 | 38 | 36 | 40 | 28 | 12 | 7 | 36 | 25 | 36 | 26 | 11 | 1 | 24 | 12 |
| 14.... | 36 | 30 | 35 | 34 | 38 | 32 | 56 | 31 | 57 | 40 | 44 | 33 | 48 | 35 | 41 | 30 | 28 | 23 | 11 | − 3 | 26 | 23 | 28 | 20 | 7 | − 6 | 21 | 5 |
| 15.... | 33 | 28 | 35 | 30 | 34 | 29 | 38 | 31 | 48 | 38 | 33 | 31 | 35 | 31 | 38 | 29 | 33 | 23 | 11 | − 5 | 30 | 21 | 25 | 12 | 10 | − 9 | 18 | −15 |
| 16.... | 45 | 30 | 41 | 34 | 38 | 32 | 54 | 34 | 56 | 34 | 52 | 32 | 52 | 30 | 41 | 35 | 42 | 25 | 20 | −14 | 38 | 21 | 37 | 6 | 24 | −11 | 30 | −18 |
| 17.... | 59 | 35 | 50 | 33 | 48 | 34 | 62 | 34 | 65 | 48 | 62 | 34 | 62 | 36 | 59 | 33 | 44 | 32 | 40 | 14 | 48 | 34 | 47 | 33 | 36 | 11 | 41 | 3 |
| 18.... | 37 | 29 | 33 | 28 | 36 | 29 | 34 | 31 | 49 | 35 | 35 | 30 | 37 | 29 | 34 | 30 | 36 | 29 | 34 | 21 | 37 | 30 | 34 | 29 | 34 | 21 | 34 | 22 |
| 19.... | 29 | 17 | 28 | 23 | 31 | 16 | 33 | 21 | 40 | 21 | 30 | 22 | 30 | 19 | 30 | 19 | 30 | 14 | 21 | 0 | 31 | 16 | 29 | 8 | 21 | 1 | 22 | − 8 |
| 20.... | 26 | 16 | 24 | 11 | 28 | 15 | 24 | 21 | 23 | 17 | 24 | 20 | 26 | 16 | 22 | 16 | 21 | 13 | 14 | − 1 | 22 | 13 | 18 | 8 | 13 | − 2 | 13 | − 8 |
| 21.... | 21 | 12 | 28 | 9 | 28 | 6 | 21 | 16 | 22 | 12 | 22 | 17 | 26 | 14 | 19 | 13 | 18 | 8 | 15 | − 1 | 19 | 10 | 15 | 6 | 10 | 4 | 12 | 0 |
| 22.... | 33 | 21 | 28 | 22 | 32 | 22 | 30 | 20 | 32 | 16 | 32 | 22 | 35 | 25 | 30 | 18 | 30 | 16 | 24 | 11 | 29 | 18 | 29 | 15 | 26 | 9 | 27 | 5 |
| 23.... | 41 | 19 | 38 | 18 | 47 | 17 | 36 | 20 | 39 | 20 | 40 | 20 | 45 | 22 | 35 | 16 | 31 | 12 | 31 | 2 | 35 | 14 | 34 | 14 | 30 | 6 | 27 | 6 |
| 24.... | 42 | 31 | 38 | 32 | 44 | 28 | 39 | 31 | 43 | 28 | 42 | 30 | 47 | 33 | 36 | 29 | 34 | 27 | 30 | 17 | 35 | 27 | 33 | 23 | 27 | 14 | 27 | 6 |
| 25.... | 51 | 34 | 43 | 35 | 54 | 34 | 51 | 35 | 51 | 32 | 52 | 34 | 53 | 35 | 48 | 34 | 43 | 33 | 42 | 22 | 43 | 35 | 44 | 29 | 42 | 15 | 44 | 7 |
| 26.... | 45 | 35 | 46 | 35 | 45 | 37 | 51 | 36 | 50 | 43 | 50 | 38 | 48 | 39 | 47 | 36 | 45 | 35 | 49 | 35 | 46 | 38 | 50 | 36 | 45 | 31 | 50 | 12 |
| 27.... | 35 | 23 | 40 | 22 | 38 | 22 | 37 | 27 | 48 | 23 | 38 | 28 | 39 | 26 | 37 | 24 | 35 | 19 | 37 | 8 | 38 | 20 | 40 | 18 | 42 | 9 | 42 | 9 |
| 28.... | 28 | 21 | 34 | 17 | 30 | 15 | 27 | 21 | 51 | 20 | 30 | 23 | 32 | 23 | 25 | 18 | 24 | 17 | 19 | 0 | 24 | 16 | 21 | 12 | 11 | 1 | 13 | 0 |
| Mns . | 34.7 | 22.7 | 34.4 | 22.6 | 34.8 | 21.4 | 38.4 | 25.1 | 41.7 | 25.5 | 37.8 | 25.0 | 38.2 | 24.5 | 35.8 | 23.4 | 32.8 | 20.2 | 23.0 | 3.2 | 32.5 | 20.9 | 31.6 | 17.2 | 23.6 | 5.6 | 25.3 | 2.0 |