

**GREAT LAKES STATES MONTHLY AVERAGE TEMPERATURE DATA  
—BEGINNING OF RECORD TO 1990**

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# GREAT LAKES STATES MONTHLY AVERAGE TEMPERATURE DATA -BEGINNING OF RECORD TO 1990

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**ABSTRACT.** Monthly average temperature data were digitized from the National Climatic Data Center (NCDC) publication *Climatological Data* from beginning of record to 1930 for the states bordering the Great Lakes. Monthly temperature data from 1931 to 1947 for all Great Lakes states (except New York) were combined with previously digitized NCDC monthly data (Tape Deck 3220). New York State's monthly temperature data from 1931 to 1947 were not available from NCDC for this period, and so these data were digitized from *Climatological Data*. The monthly temperature data prior to 1948 for all Great Lakes states were combined with NCDC Tape Deck 3200 temperature data from 1948 to 1990 (monthly average temperatures were calculated for the TD 3200 daily data). A list containing station name, latitude, longitude, elevation, and period of record is given as an appendix. Data reduction, verification, quality control, and analysis methods are summarized. The spatial and temporal distribution patterns of the number of stations is presented. The digital data are available from NCDC.

## 1. INTRODUCTION

Much of the historical National Weather Service (NWS) temperature data for the eight Great Lakes states prior to 1930 are available only in paper copy or microfiche, making them virtually unusable for most computer applications. The Great Lakes Environmental Research Laboratory (GLERL), under the Environmental Research Laboratories' Endangered Data and Increased Access Program funded under the National Environmental Satellite and Data Information Service's (NESDIS) Earth System Data and Information Management Program, digitized these data to make them more accessible for our own ongoing research programs, for use by other researchers, and for use by the public at large. Monthly temperature data from NWS stations in Minnesota, Wisconsin, Illinois, Indiana, Michigan, Ohio, and Pennsylvania, were digitized from beginning of record to 1930, and for New York from beginning of record to 1947. These data were quality controlled for typographical errors (but not for observer or metadata errors) and then combined with existing National Climatic Data Center (NCDC) digital temperature data from 1931 (from 1948 for New York) to 1990. The annual maximum number of stations when including the 1948-1990 period is 1,045. The station number and name, latitude, longitude, and elevation changes for each station were abstracted from Assel et al. (1995) and from U.S. Department of Commerce (1956).

This report documents sources of the monthly temperature data and describes procedures used to abstract, reduce, and quality control these data. The spatial and temporal distribution

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patterns of the temperature stations are illustrated and discussed. A complete tabular summary of the monthly temperature data for this study is not included with this report, but a listing of these stations is included along with their location (latitude, longitude, elevation) and period of record as Appendix A. Missing data is indicated by 99.999 for latitude, 999.999 for longitude, and -999 for elevation. A complete set of computer files of the temperature data and station history data has been made available to NCDC for archiving.

## 2. DATA

### 2.1 Data Sources

Microfiche of historical temperature data (U.S. Dept. of Commerce, 1976) were copied by NCDC from sources listed in the microfiche themselves.

“Climatological data was first published by the Weather Bureau of the U.S. Department of Agriculture in 1896 as the CLIMATE AND CROP SERVICE bulletin. Climatological data was published under this title through January 1906. In February 1906 the title was changed to CLIMATOLOGICAL REPORT of the Weather Bureau’s Climatological Service. These CLIMATOLOGICAL REPORTS were published as monthly issues from February 1906 to June 1909 only. Annual issues were published under that title for the years 1906 through 1913. Beginning with July 1909, and continuing through December 1913, the monthly data were only published as a part of the MONTHLY WEATHER REVIEW, and were presented on a river Drainage District basis. These monthly data from July 1909 through December 1913 are available on microfiche by district. Beginning with January 1914 CLIMATOLOGICAL DATA has been published, monthly and annually, under that title and has continued as CLIMATOLOGICAL DATA to date.”

These microfiche were the source of digitized monthly temperatures from beginning of record to 1930. The NCDC Tape Decks (TDs) 3220 and 3200 were the sources of temperature data for the years 1931-1947 and 1948-1990, respectively. New York stations were not on TD 3220; temperature data for those stations between 1931 and 1947 were digitized from the microfiche source noted above. Additionally, data for stations in other states were not digitized (TD3220) but were available on the microfiche, while other stations were present in TD3220 but not on microfiche (Table 1). A preliminary analysis was made of the total number of stations each year on TD 3220 or on the microfiche. It was concluded that it was not worthwhile to first identify which stations were on the microfiche but not on TD 3200 and then to digitize those stations that were exclusively on the microfiche for the 1931-47 period. The rationale for this decision was that the average of the annual differences was relatively small for each state (ranging from 0.6 to 3.6 stations, Table 1), and for some years, TD 3220 had more stations than the microfiche.

Table 1.— Difference\* in the number of stations on microfiche and TD3220.

| Year | IL  | IN   | MI  | MN  | OH  | PA  | WI   | Average |
|------|-----|------|-----|-----|-----|-----|------|---------|
| 1931 | 1   | 1    | 7   | 8   | 9   | 12  | 4    | 6.0     |
| 1932 | 1   | 0    | 7   | 5   | 11  | 7   | 3    | 4.8     |
| 1933 | 2   | -1   | 8   | 5   | 13  | 7   | 3    | 5.3     |
| 1934 | 3   | -1   | 8   | 4   | 7   | 6   | 2    | 4.1     |
| 1935 | 1   | 0    | 4   | 3   | 8   | 6   | 3    | 3.6     |
| 1936 | 2   | -1   | 0   | 2   | 7   | 5   | 1    | 2.3     |
| 1937 | 2   | -2   | -3  | -1  | 0   | 6   | 0    | 0.3     |
| 1938 | 3   | 0    | -3  | 1   | 2   | 4   | 2    | 1.3     |
| 1939 | 2   | -5   | 1   | 1   | 1   | 4   | 0    | 0.6     |
| 1940 | 3   | -5   | 1   | -1  | -4  | 2   | 0    | -0.6    |
| 1941 | 2   | -3   | 2   | 0   | -7  | 2   | -2   | -0.9    |
| 1942 | 4   | -5   | 2   | 3   | -9  | -3  | -3   | -1.6    |
| 1943 | 5   | -4   | 2   | 1   | -8  | -6  | 1    | -1.3    |
| 1944 | 3   | -9   | -1  | 4   | -3  | 5   | -10  | -1.6    |
| 1945 | 4   | -4   | 0   | 3   | -6  | 3   | 0    | 0.0     |
| 1946 | 5   | -5   | -4  | 5   | -6  | 0   | -3   | -1.1    |
| 1947 | 3   | -2   | -1  | 3   | -5  | 1   | -8   | -1.3    |
| Avg. | 2.7 | -2.7 | 1.8 | 2.7 | 0.6 | 3.6 | -0.4 |         |

\* Negative values indicate more stations on TD 3220.

## 2.2 Procedures

Published temperature data were manually entered into a computer. ASCII files were created for each station from beginning of record to 1930 for all states, and from 1931 to 1947 for New York. These files were edited using programs written in FORTRAN to identify data entry errors and suspected errors in the original data, details are given in section 2.3 below. Stations with data prior to 1930 (that extended past 1930) were combined with the corresponding temperature data from NCDC TD 3220, and stations that began after 1930 were added as 'new' stations. Station metadata were used to identify stations.

Monthly data, from 1948 to 1990, were computed from NCDC TD 3200 Summary of the Day data, which contains separate means for the maximum and minimum temperatures. Some stations on TD3200 had pre-1948 digitized daily data. If a station's data inventory showed it to be one of these stations, then the previously digitized data were used, and the published data were used to fill in periods without data. These stations were the exception and not the rule. We calculated the monthly mean and combined these data with the pre-1948 digital data to form a continuous record for stations that started prior to 1948 and continued after that year. The monthly mean air temperatures for stations on TD 3200 were calculated from the means of the daily maximum and minimum. For stations with months where there were less than 10 days of missing data, the monthly mean was calculated from the available data. If there were 10 or more days with missing data, the mean was not calculated, and a code for missing data (-99.9) was entered.

## 2.3 Quality Control

The digitized temperature data were quality controlled for data entry errors and outliers. For manually entered data, annual averages were calculated from the monthly means and compared to the published annual averages. If the averages did not match, the program flagged that year for that station, and corrections were made to the monthly data as needed. After these data were quality controlled for these inconsistencies with the published data, they were combined with the digitized data from TDs 3220 and 3200, and the entire data set was checked in the following manner: The mean and standard deviation for each month for the entire period of record was calculated, then monthly values were compared to this mean to see if they fell within +/- two standard deviations of the mean. Monthly values that were not within two standard deviations of the long-term monthly mean were then checked with other published data to verify their value. First, the annual **summary** of the *Climatological Data* was checked. If the value in the file and the value in the annual summary agreed, no change was made. If these values differed, the monthly **summary** of the *Climatological Data* was checked. If the value in the file and the value in the monthly summary agreed, no change was made. If the monthly summary and annual summary agreed, then the file value was replaced by that in the *Climatological Data*. If none of the values were the same, the value in the annual summary was used. The entire data set was also checked for duplication of data between two or more stations. Each year of each station was checked with each year of every other station in that state and with adjacent states. If the data for a year were the same at another station, with the exception of all missing, the stations and year(s) were listed in a separate file (Appendix B), but no effort was made to determine which station had the redundant data.

## 3.0 RESULTS

### 3.1 Computer File Documentation

A separate computer file was created for each station containing tabular summaries of monthly temperature data. A description of this file follows. The name of a station's data file is based on that station's identification number assigned by NCDC. All file names follow the format of T<state #> <station #>.DAT. For example, (Table 2) Springfield is station number 8 179 in Illinois, state number 11, thus giving the file name T118179.DAT. For stations that have not been assigned a NCDC station number, an in-house number was assigned pending assignment by NCDC. The in-house numbering system placed '99' in the state number position, the first two numbers of the station number being the state number (01-Illinois, 02-Indiana, 03-Michigan, 04-Minnesota, 05-New York, 06-Ohio, 07-Pennsylvania, and 08-Wisconsin), and the last two numbers being sequential numbers of stations, without NCDC numbers in that state, in alphabetical order. These stations will be assigned numbers by NCDC at a later date.

The first three lines of each data file contain the header information. The first line tells the type of data (temperature). The second line gives the NCDC station number, decimal latitude and longitude, most recent station name, and elevation in feet above sea level. The third line shows the period covered. The fourth line is blank. Following the header are data for each year covered. The order of these data is by year and month (January through December). The FOR-

Table 2. — Example of monthly temperature data at Springfield, IL.

MONTHLY AVERAGE TEMPERATURE (DEGREES FAHRENHEIT)

118179 39.833 -89.667 SPRINGFIELD WSO AP 598

PERIOD OF RECORD = 1938 - 1990

|      |       |       |       |       |       |      |      |      |       |      |      |      |
|------|-------|-------|-------|-------|-------|------|------|------|-------|------|------|------|
| 1938 | -99.9 | -99.9 | -99.9 | 53.1  | 62.1  | 70.2 | 77.0 | 77.3 | 68.7  | 59.8 | 43.1 | 30.1 |
| 1939 | 32.0  | 27.0  | 42.5  | 47.4  | 65.6  | 73.7 | 77.1 | 73.3 | 71.7  | 57.0 | 40.1 | 33.5 |
| 1940 | 11.8  | 29.5  | 37.9  | 49.4  | 58.7  | 72.6 | 76.9 | 75.0 | 66.0  | 59.7 | 38.9 | 35.4 |
| 1941 | 29.0  | 27.2  | 36.2  | 56.2  | 66.4  | 73.1 | 76.4 | 76.0 | 69.6  | 58.9 | 42.2 | 29.9 |
| 1942 | 27.1  | 28.5  | 42.5  | 56.4  | 62.2  | 72.1 | 75.9 | 72.7 | 65.5  | 54.7 | 43.4 | 25.7 |
| 1943 | 26.5  | 34.2  | 36.3  | 49.7  | 60.9  | 74.7 | 77.1 | 76.6 | 62.3  | 53.8 | 37.6 | 24.9 |
| 1944 | 31.3  | 31.9  | 36.8  | 48.8  | 67.1  | 75.4 | 75.7 | 75.0 | 66.4  | 55.3 | 43.3 | 22.9 |
| 1945 | 21.4  | 31.5  | 50.0  | 52.8  | 57.0  | 67.5 | 72.7 | 73.5 | 66.5  | 52.6 | 43.0 | 22.6 |
| 1946 | 29.7  | 33.5  | 52.7  | 54.8  | 61.3  | 71.7 | 75.7 | 68.9 | 65.0  | 58.3 | 44.1 | 34.8 |
| 1947 | 31.0  | 24.2  | 32.9  | 50.6  | 58.5  | 69.2 | 72.0 | 82.1 | 70.3  | 63.0 | 37.4 | 33.3 |
| 1948 | -99.9 | -99.9 | -99.9 | -99.9 | -99.9 | 71.8 | 75.6 | 74.7 | 69.2  | 53.5 | 43.8 | 33.7 |
| 1949 | 29.2  | 31.2  | 40.6  | 50.8  | 65.5  | 74.7 | 78.4 | 73.9 | 60.9  | 57.8 | 44.0 | 35.3 |
| 1950 | 32.3  | 30.4  | 36.4  | 46.1  | 64.8  | 70.8 | 72.3 | 69.1 | 65.6  | 60.9 | 34.6 | 23.0 |
| 1951 | 27.8  | 30.6  | 36.5  | 48.7  | 64.4  | 69.2 | 74.8 | 73.2 | 63.4  | 56.9 | 35.0 | 28.9 |
| 1952 | 30.2  | 35.6  | 38.3  | 52.2  | 62.2  | 78.2 | 77.7 | 73.6 | 67.3  | 49.6 | 43.6 | 34.3 |
| 1953 | 31.8  | 35.6  | 42.2  | 48.6  | 64.1  | 78.0 | 77.6 | 75.2 | 68.2  | 59.5 | 44.0 | 33.2 |
| 1954 | 29.7  | 39.2  | 37.7  | 57.4  | 58.9  | 76.9 | 80.4 | 75.2 | 71.5  | 56.4 | 42.8 | 33.4 |
| 1955 | 27.9  | 31.5  | 40.2  | 59.8  | 65.0  | 69.4 | 80.9 | 77.8 | 69.6  | 55.3 | 37.8 | 28.6 |
| 1956 | 25.9  | 31.9  | 41.2  | 49.7  | 65.0  | 74.5 | 74.5 | 74.7 | 67.0  | 62.3 | 41.3 | 34.4 |
| 1957 | 22.0  | 36.2  | 40.2  | 52.8  | 62.8  | 72.9 | 78.1 | 75.8 | 65.1  | 52.1 | 40.6 | 36.5 |
| 1958 | 28.6  | 22.9  | 36.6  | 53.2  | 63.8  | 68.0 | 73.6 | 75.1 | 67.1  | 56.8 | 44.8 | 26.4 |
| 1959 | 22.4  | 30.3  | 41.6  | 52.9  | 67.0  | 75.1 | 75.5 | 78.2 | 68.9  | 54.1 | 35.7 | 36.9 |
| 1960 | 29.9  | 26.4  | 24.1  | 56.1  | 59.5  | 69.6 | 74.4 | 75.7 | 72.7  | 56.8 | 43.4 | 25.7 |
| 1961 | 24.4  | 33.4  | 43.7  | 47.6  | 58.3  | 70.9 | 75.7 | 73.6 | 69.3  | 56.7 | 42.4 | 27.7 |
| 1962 | 20.1  | 30.3  | 37.1  | 52.6  | 72.2  | 73.9 | 73.7 | 73.4 | 65.0  | 58.3 | 42.9 | 26.5 |
| 1963 | 16.8  | 22.0  | 44.5  | 55.7  | 62.1  | 75.2 | 74.5 | 70.5 | 66.8  | 66.3 | 45.1 | 18.9 |
| 1964 | 30.7  | 29.0  | 38.2  | 55.0  | 68.7  | 75.0 | 77.8 | 74.4 | 68.9  | 53.2 | 46.4 | 29.3 |
| 1965 | 27.3  | 30.0  | 31.1  | 54.6  | 70.2  | 73.2 | 74.2 | 72.3 | 68.5  | 55.0 | 45.6 | 38.2 |
| 1966 | 21.9  | 29.4  | 43.0  | 49.4  | 57.7  | 71.4 | 80.7 | 71.9 | 64.0  | 52.2 | 44.0 | 30.4 |
| 1967 | 29.5  | 26.4  | 43.7  | 56.4  | 59.2  | 73.7 | 72.8 | 68.5 | 63.6  | 54.8 | 38.4 | 31.4 |
| 1968 | 23.7  | 25.6  | 42.7  | 52.8  | 59.0  | 74.5 | 75.8 | 75.2 | 66.6  | 54.7 | 41.3 | 29.0 |
| 1969 | 23.3  | 31.4  | 32.6  | 54.5  | 64.1  | 70.6 | 77.8 | 73.9 | 66.4  | 53.9 | 39.7 | 28.1 |
| 1970 | 17.8  | 28.6  | 37.9  | 54.7  | 66.5  | 71.4 | 76.4 | 73.9 | 69.1  | 56.1 | 41.6 | 34.0 |
| 1971 | 23.6  | 30.6  | 39.0  | 54.3  | 60.4  | 78.9 | 72.4 | 72.4 | 71.1  | 62.8 | 43.7 | 38.4 |
| 1972 | 24.4  | 28.9  | 40.7  | 52.5  | 64.7  | 70.4 | 75.8 | 73.7 | 68.7  | 52.9 | 38.2 | 26.6 |
| 1973 | 29.6  | 30.6  | 48.2  | 51.9  | 59.5  | 73.1 | 76.0 | 75.9 | 69.7  | 60.6 | 45.4 | 27.9 |
| 1974 | 26.0  | 32.5  | 44.2  | 54.7  | 61.5  | 68.3 | 78.8 | 72.8 | 61.8  | 55.7 | 42.1 | 32.6 |
| 1975 | 31.0  | 29.3  | 37.3  | 50.3  | 66.4  | 73.5 | 74.6 | 76.5 | 63.7  | 57.7 | 47.0 | 33.3 |
| 1976 | 23.4  | 39.5  | 45.4  | 55.0  | 59.7  | 72.3 | 77.4 | 71.5 | 65.1  | 49.4 | 34.5 | 24.1 |
| 1977 | 10.2  | 29.5  | 47.5  | 59.8  | 70.9  | 71.5 | 79.3 | 72.8 | 68.5  | 53.8 | 42.7 | 26.9 |
| 1978 | 15.6  | 16.6  | 33.5  | 53.8  | 62.2  | 74.2 | 76.3 | 73.0 | 70.9  | 53.6 | 45.2 | 31.4 |
| 1979 | 12.3  | 17.0  | 40.2  | 50.3  | 63.9  | 74.9 | 75.3 | 73.9 | 67.7  | 55.7 | 41.9 | 35.7 |
| 1980 | 27.7  | 21.7  | 37.0  | 51.0  | 64.5  | 72.0 | 81.3 | 79.3 | 68.6  | 52.7 | 42.2 | 31.6 |
| 1981 | 26.4  | 32.3  | 44.1  | 60.4  | 60.2  | 74.8 | 77.0 | 73.7 | 67.1  | 54.5 | 45.3 | 26.8 |
| 1982 | 16.9  | 24.1  | 40.2  | 48.0  | 70.0  | 68.3 | 77.0 | 72.4 | 66.0  | 55.3 | 42.9 | 38.7 |
| 1983 | 28.6  | 34.8  | 40.5  | 47.7  | 59.9  | 73.8 | 80.3 | 79.9 | 69.0  | 57.1 | 45.6 | 16.0 |
| 1984 | 22.2  | 35.8  | 31.7  | 50.3  | 60.2  | 75.2 | 74.4 | 76.8 | 65.6  | 59.8 | 41.6 | 35.9 |
| 1985 | 18.4  | 24.8  | 45.6  | 57.7  | 65.1  | 69.6 | 74.2 | 70.7 | 67.8  | 58.0 | 42.7 | 21.4 |
| 1986 | 29.0  | 26.8  | 45.2  | 57.3  | 65.8  | 74.6 | 78.7 | 70.0 | 70.4  | 56.0 | 37.8 | 32.5 |
| 1987 | 26.1  | 36.5  | 45.4  | 54.6  | 70.4  | 75.3 | 78.7 | 75.3 | 67.6  | 50.5 | 46.1 | 34.6 |
| 1988 | 25.5  | 25.5  | 41.4  | 52.8  | 65.8  | 73.7 | 78.5 | 78.6 | -99.9 | 49.6 | 42.9 | 31.5 |
| 1989 | 35.9  | 20.3  | 40.6  | 52.2  | 59.2  | 70.4 | 75.3 | 73.2 | 63.7  | 56.8 | 41.9 | 18.6 |
| 1990 | 37.0  | 36.0  | 45.4  | 50.5  | 59.8  | 73.0 | 75.1 | 74.0 | 68.8  | 53.4 | 48.3 | 29.9 |

-99.9 = MISSING OR INSUFFICIENT DATA

IDENTICAL DATA FOR STATION 118179: 118184 1955

TRAN format is (1X,I4,1X,12(1x,f5.1)). Following the data is a blank line followed by a footer. The footer contains notes regarding the data. The first two lines of the footer give the data codes for missing values. This information is followed by station identifier and period for redundant temperature data for those stations listed in Appendix B.

### 3.2 Spatial and Temporal Coverage of Temperature Stations

The temporal distribution of the number of stations in the data set for each year is given in Figure 1. In that figure, a station is counted as active for a given year if it has at least 1 month with data in that year. The temporal distribution is divided into 13 decades, starting from 1861-70 and ending with 1981-90, with the number of stations given at the decade ending year in Figure 1. The decades fall into three periods of relatively little change in the number of stations (1861-1890, 1901-1940, and 1951-1990), and two periods of large increases in the number of stations (1891-1900 and 1941-1950). The number of stations for selected years during the two periods when the number of stations was increasing rapidly are also shown in Figure 1. The spatial distribution of stations for specific years is given in Figures 2-12.

There were only seven stations in 1886, located in Illinois, Michigan, and Indiana (Figure 2). The number of stations almost tripled by 1888 (Figure 3) and tripled again by 1890 (Figure 4). The number of stations in 1890 increased by a factor of 2.5 by 1895 (Figure 5). Most of these additional stations were located in Illinois, Indiana, and New York, with the rest scattered in Ohio, Michigan, and Minnesota. It is not known if these additional stations were not established prior to 1890 or if the data from them was not published until 1890. The number of stations increased by a factor of approximately 1.8 between 1895 (195) and 1896 (353). Most of this increase occurred in Minnesota, Wisconsin, and Pennsylvania (Figures 5 and 6). Annual increases of a little less than 100 stations occurred over the next 2 years, 1897 (Figure 7) and 1898 (Figure 8), due primarily to an increase in the number of stations for Ohio (1897) and for Michigan (1898). The distribution of stations in 1898 makes possible spatial analysis of temperature patterns over all eight Great Lakes states, and while the number of stations would come close to doubling by the late 1940s, it is questionable if the increase in station spatial density would significantly change the large-scale pattern of any spatial analysis, although details may have significant changes. The *variation in* the number of stations between 1901 and 1940 is less than 100 stations [578 (1901), 659 (1940)], a typical distribution pattern is portrayed in Figure 9 (622 stations). A large increase in stations during the decade ending 1950 occurred between 1947 and 1948, (Figures 10 and 11, 196 stations). This increase is attributed to the opening of new stations after World War II. The number of stations over the last four decades (1951-1990) ranged from 953 in 1951 to 1045 in 1971. Because of the relatively small variation in the annual number of stations between 1951 and 1990, the distribution pattern in 1990 (Figure 12) can be taken as typical of this entire period.

## 4. DISCUSSION

These data have not been corrected for instrumental change, observer error, or changes in instrument location or exposure. Thus, care must be taken in using the monthly temperature in their present form. Future work will include a statistical analysis of station homogeneity and an

# Temperature Stations

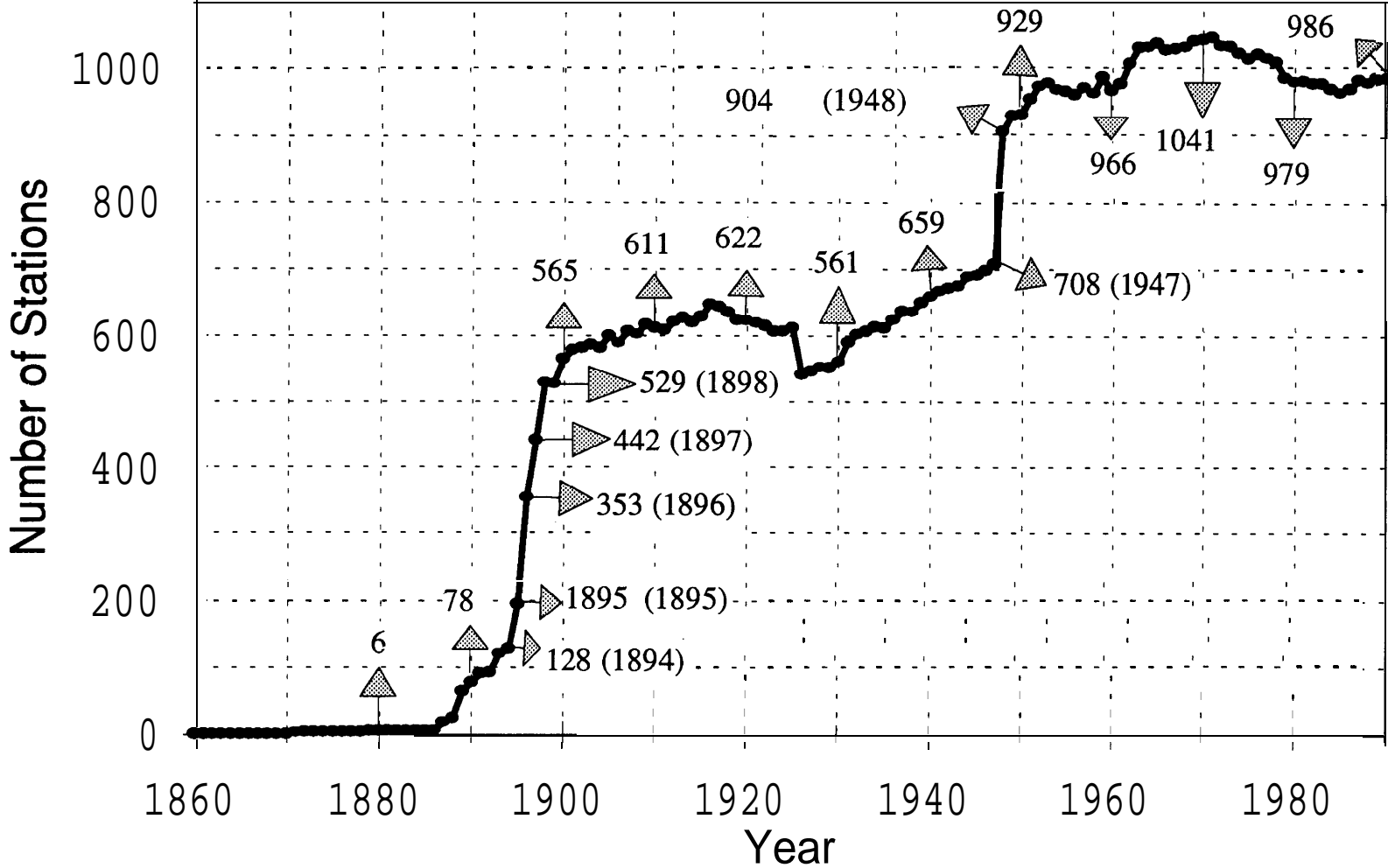


Figure 1. — Temperature stations by year.

# Temperature Stations 1886

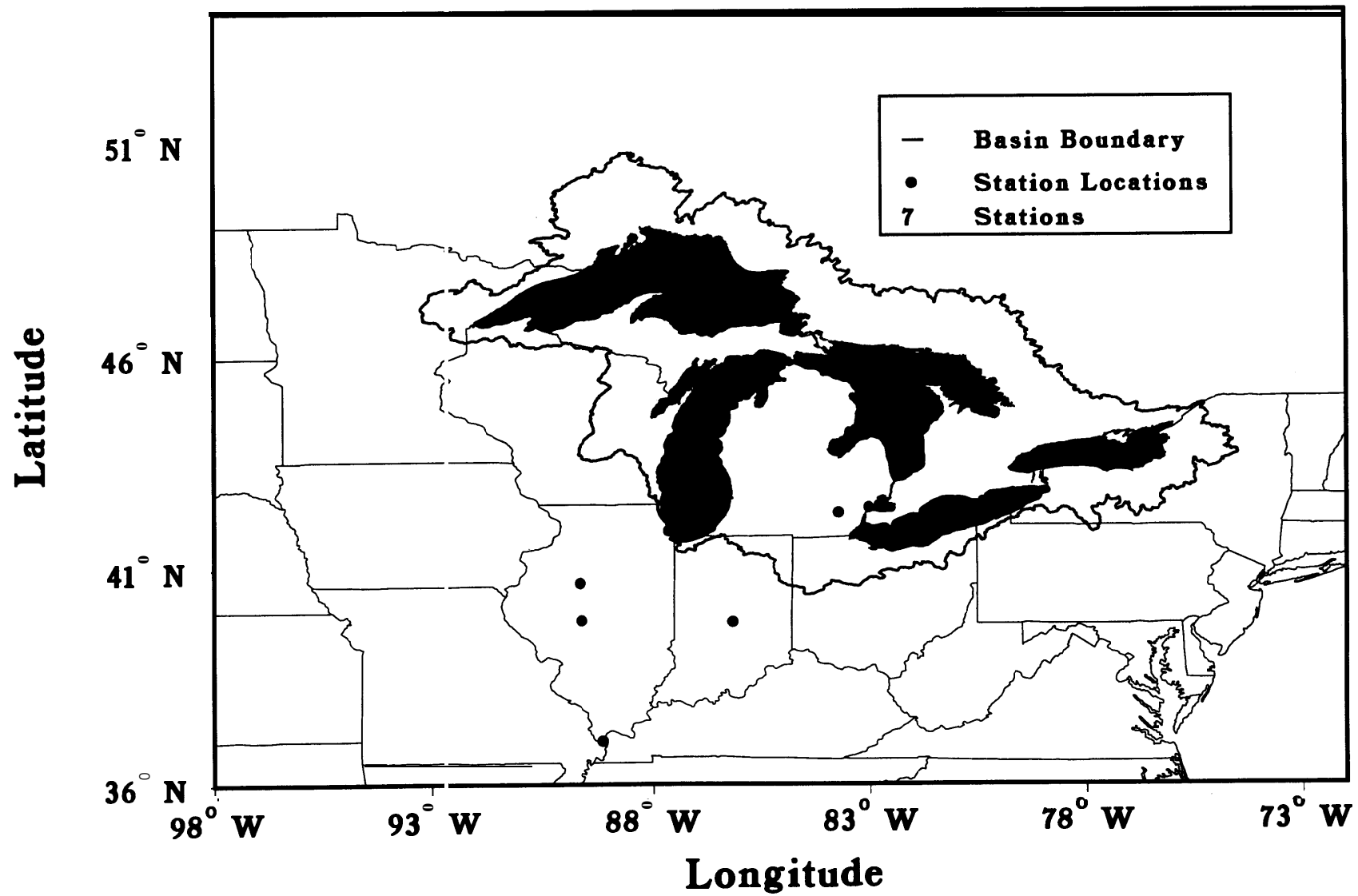


Figure 2. — Distribution of stations for 1886.  
8

# Temperature Stations 1888

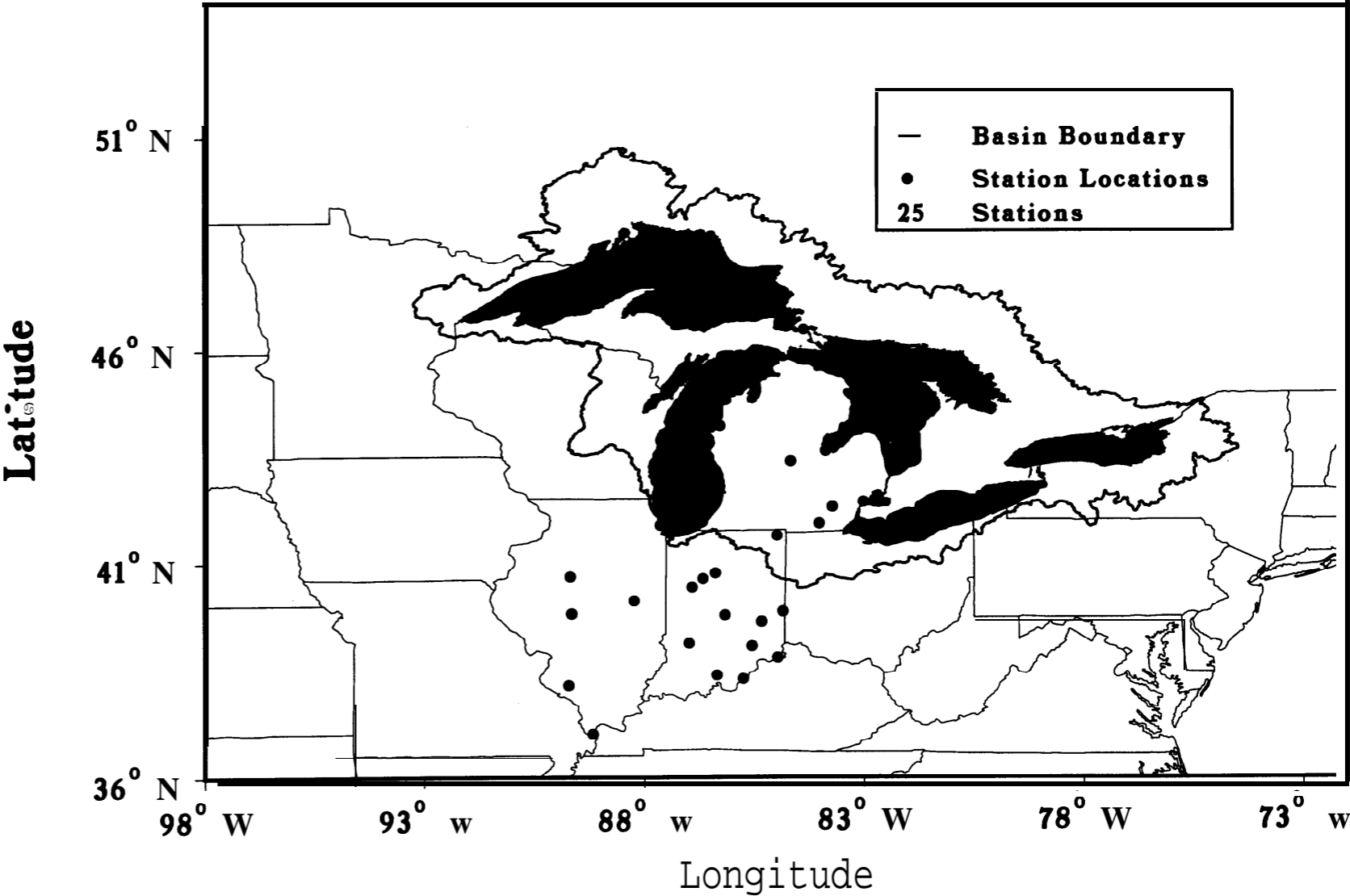


Figure 3. — Distribution of stations for 1888.

# Temperature Stations 1890

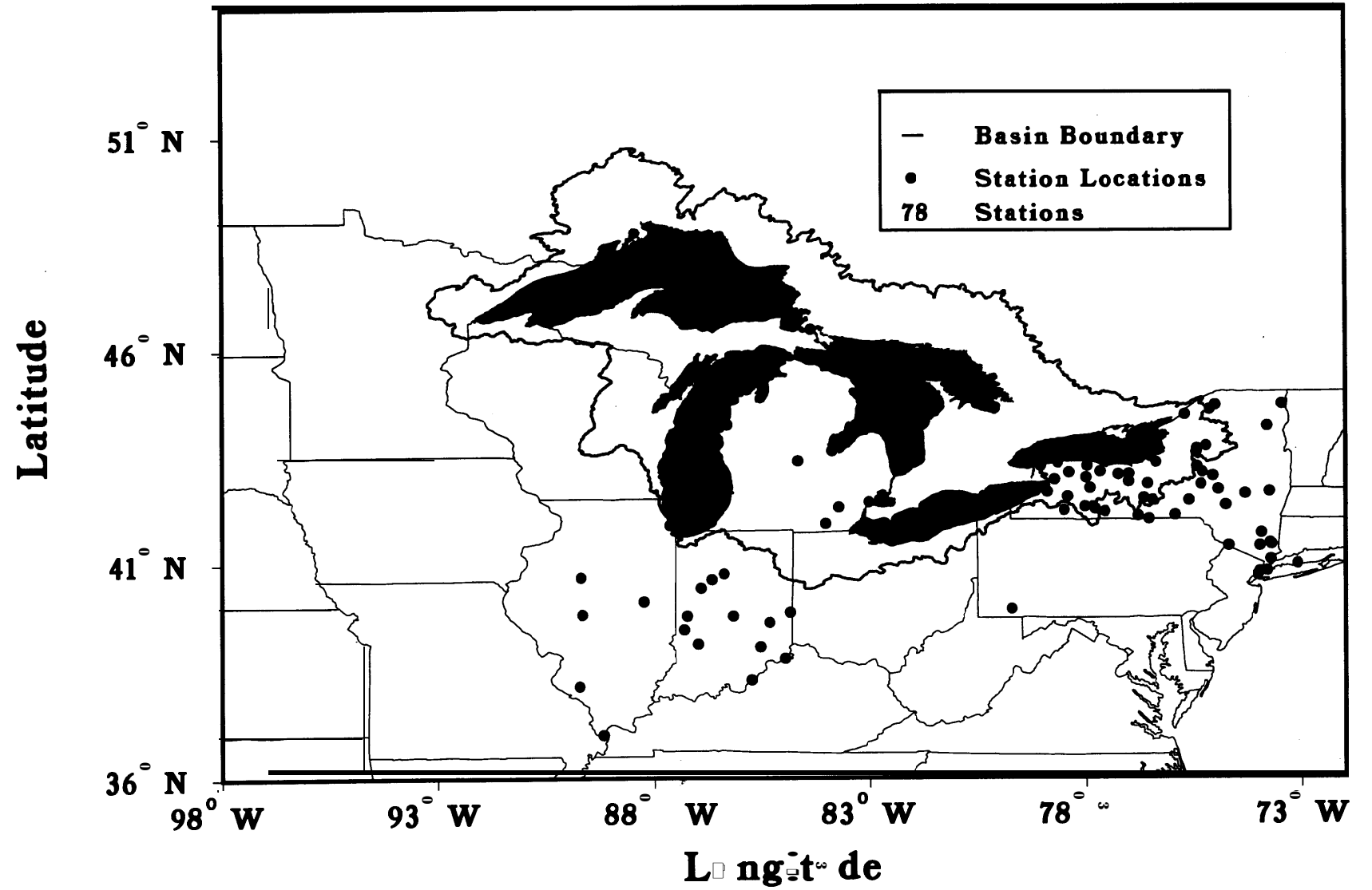


Figure 4. — Distribution of stations for 1890.  
10

# Temperature Stations 1895

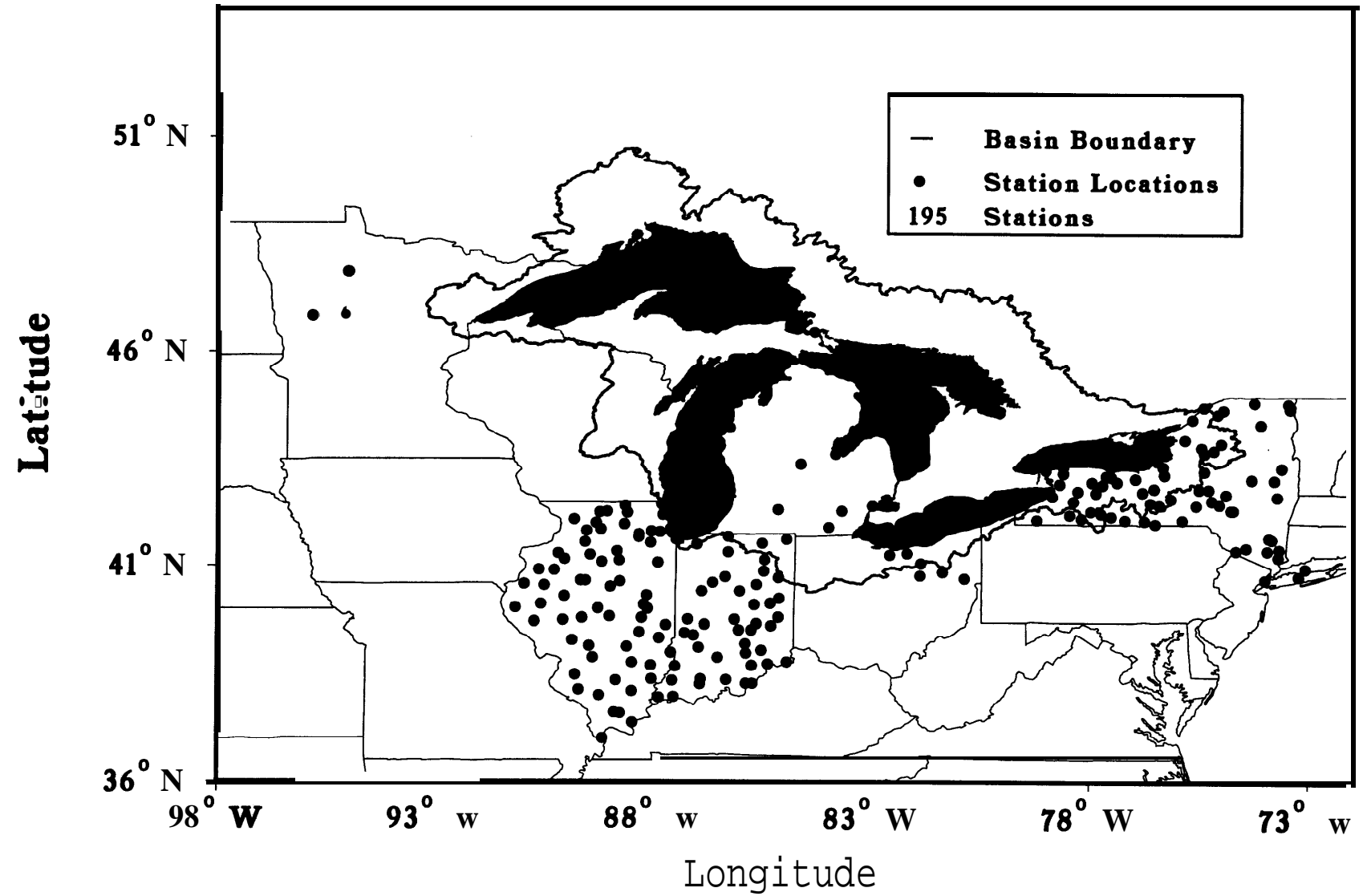


Figure 5. — Distribution of stations for 1895.

# Temperature Stations 1896

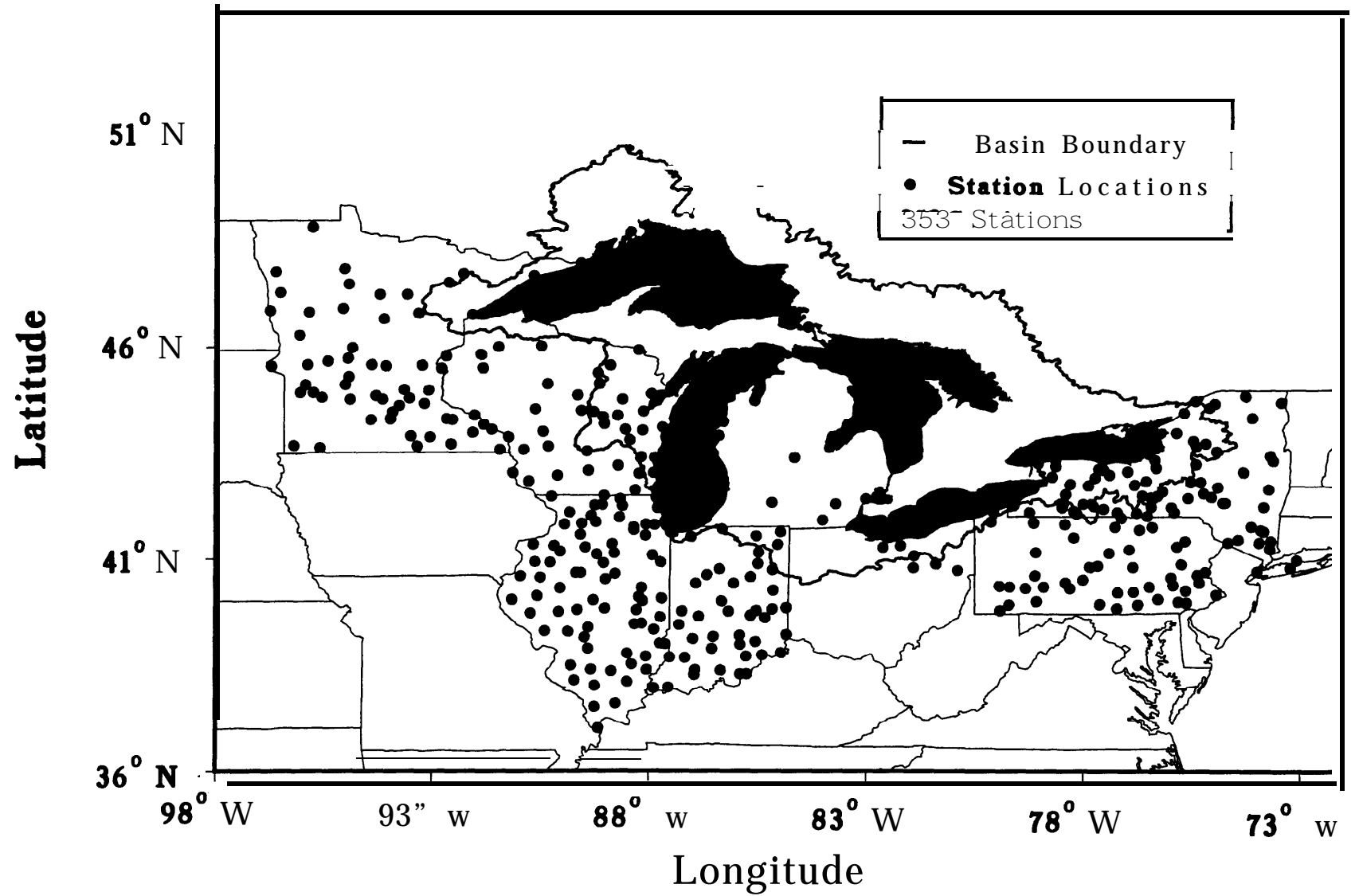


Figure 6. — Distribution of stations for 1896.

# Temperature Stations 1897

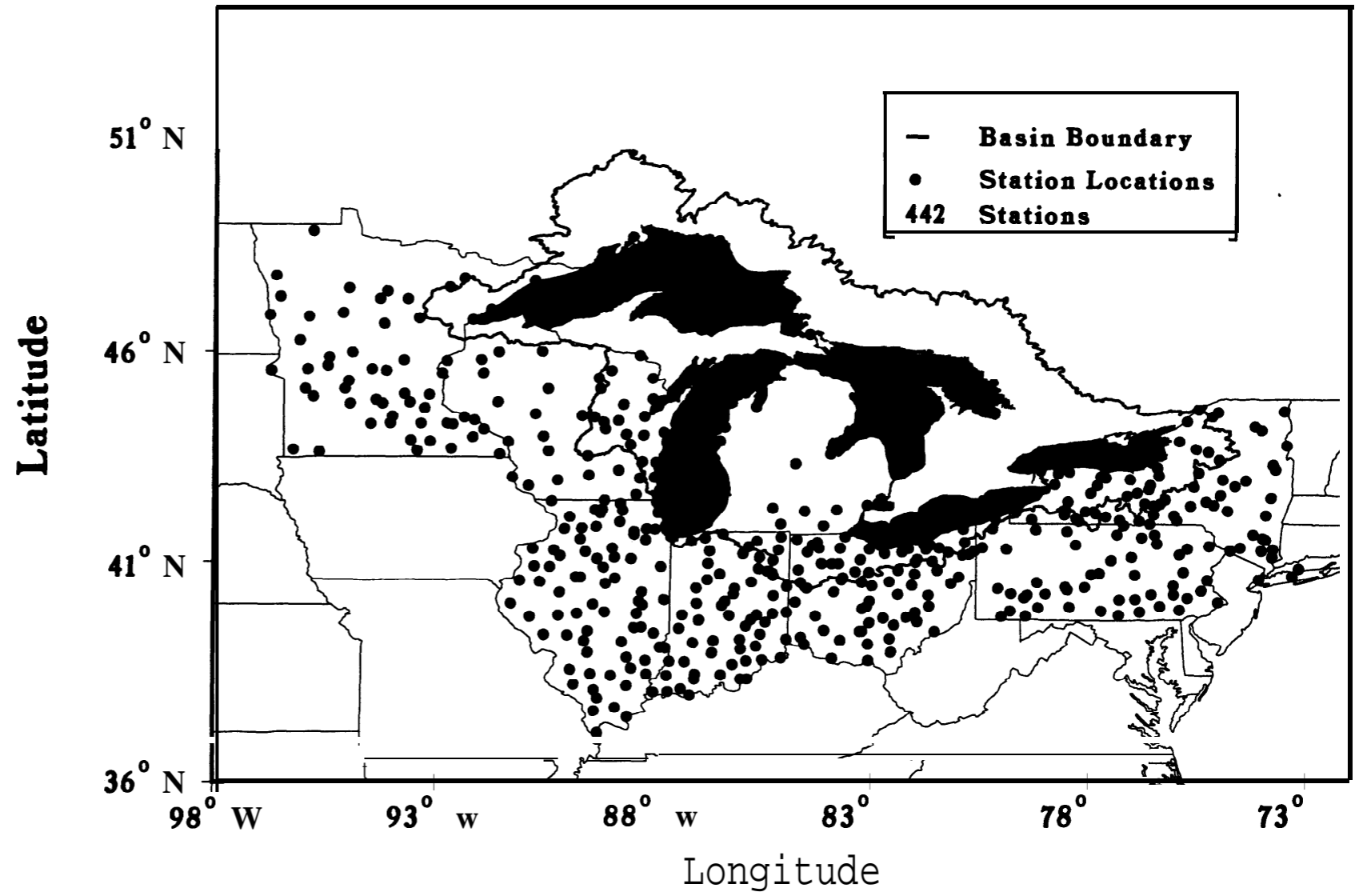


Figure 7. — Distribution of stations for 1897.

# Temperature Stations 1898

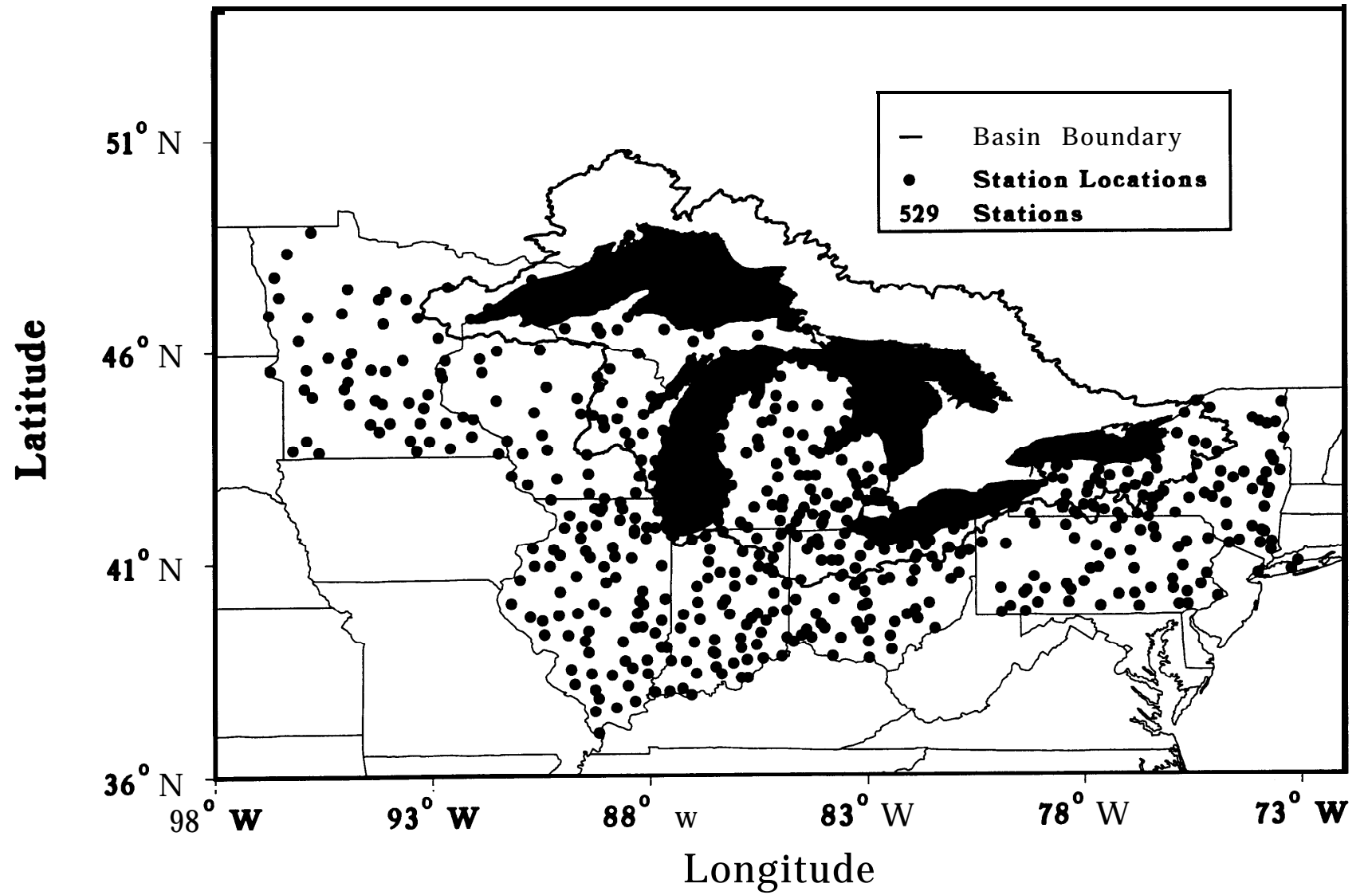


Figure 8. — Distribution of stations for 1898.

# Temperature Stations 1920

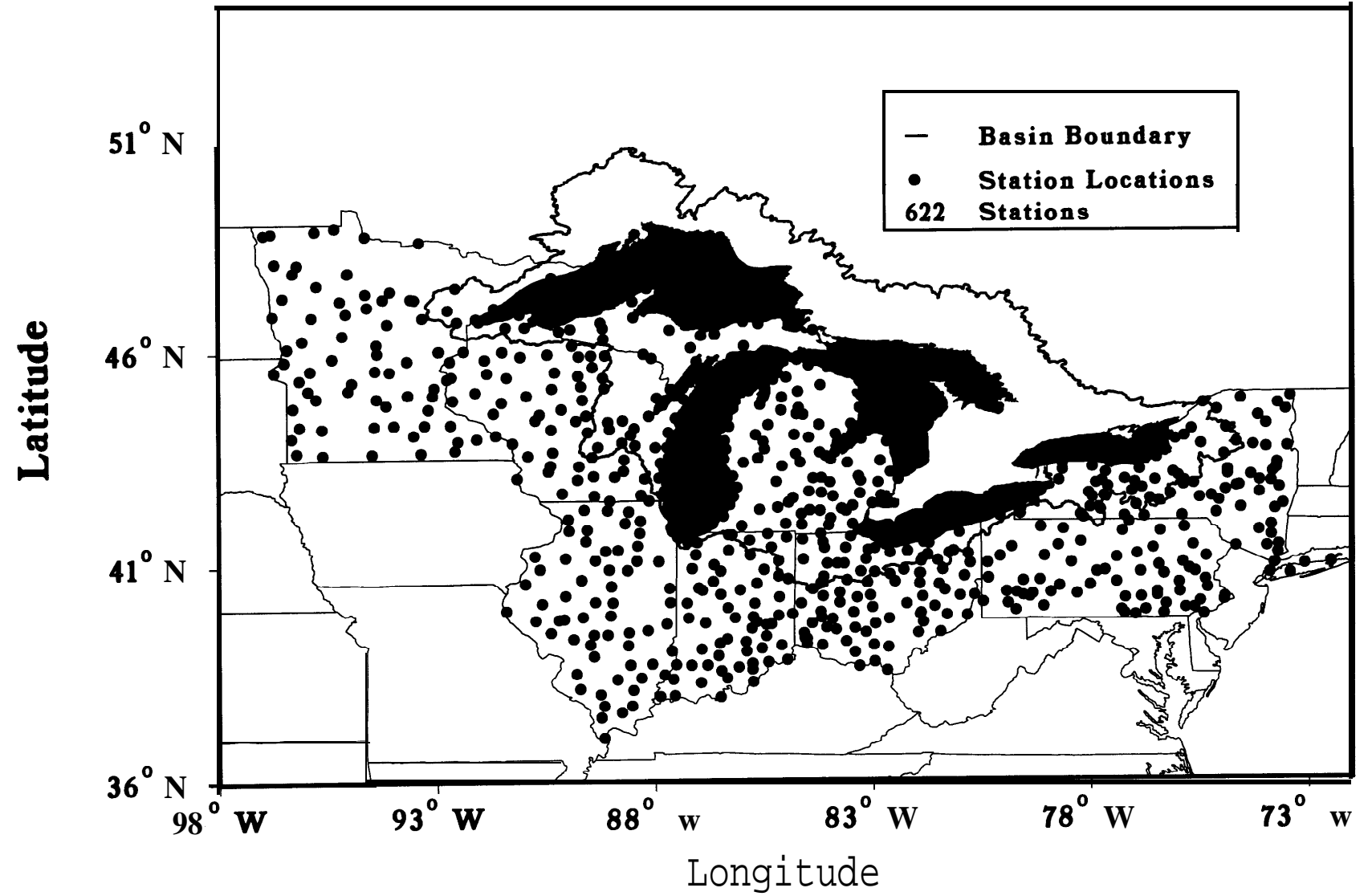


Figure 9. — Distribution of stations for 1920.

# Temperature Stations 1947

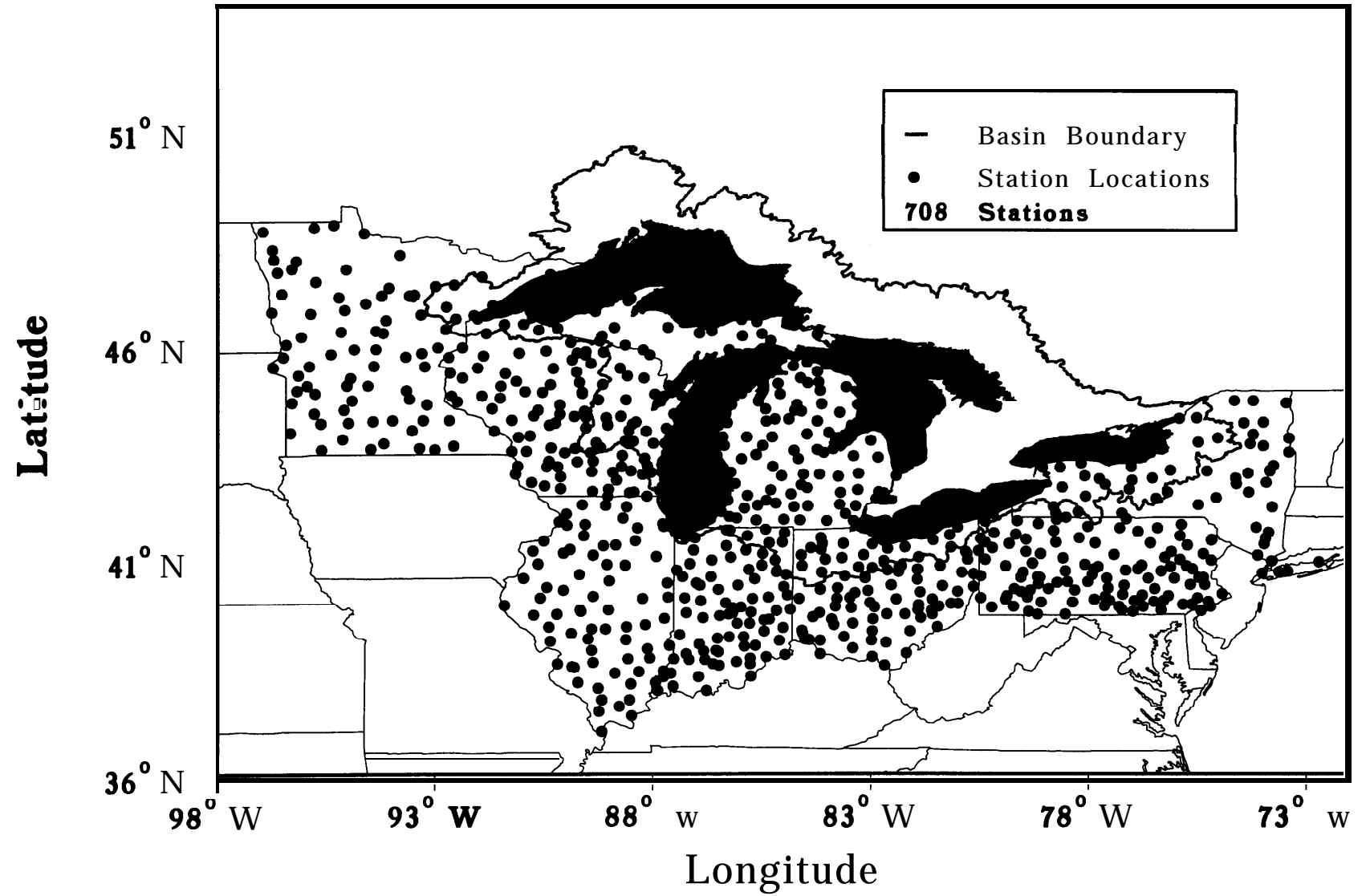


Figure 10. — Distribution of stations for 1947.

# Temperature Stations 1948

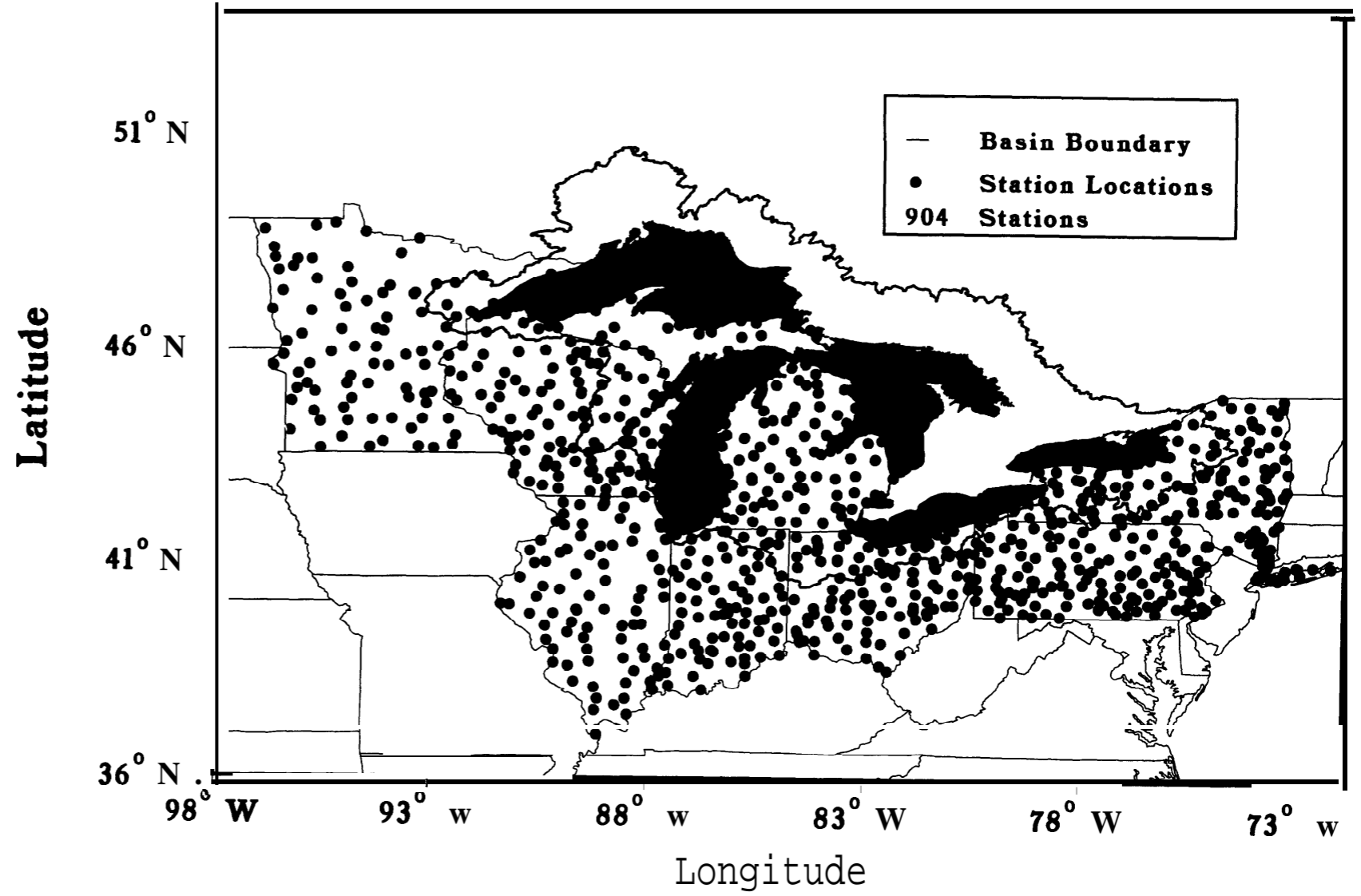


Figure 11. — Distribution of stations for 1948.  
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# Temperature Stations 1990

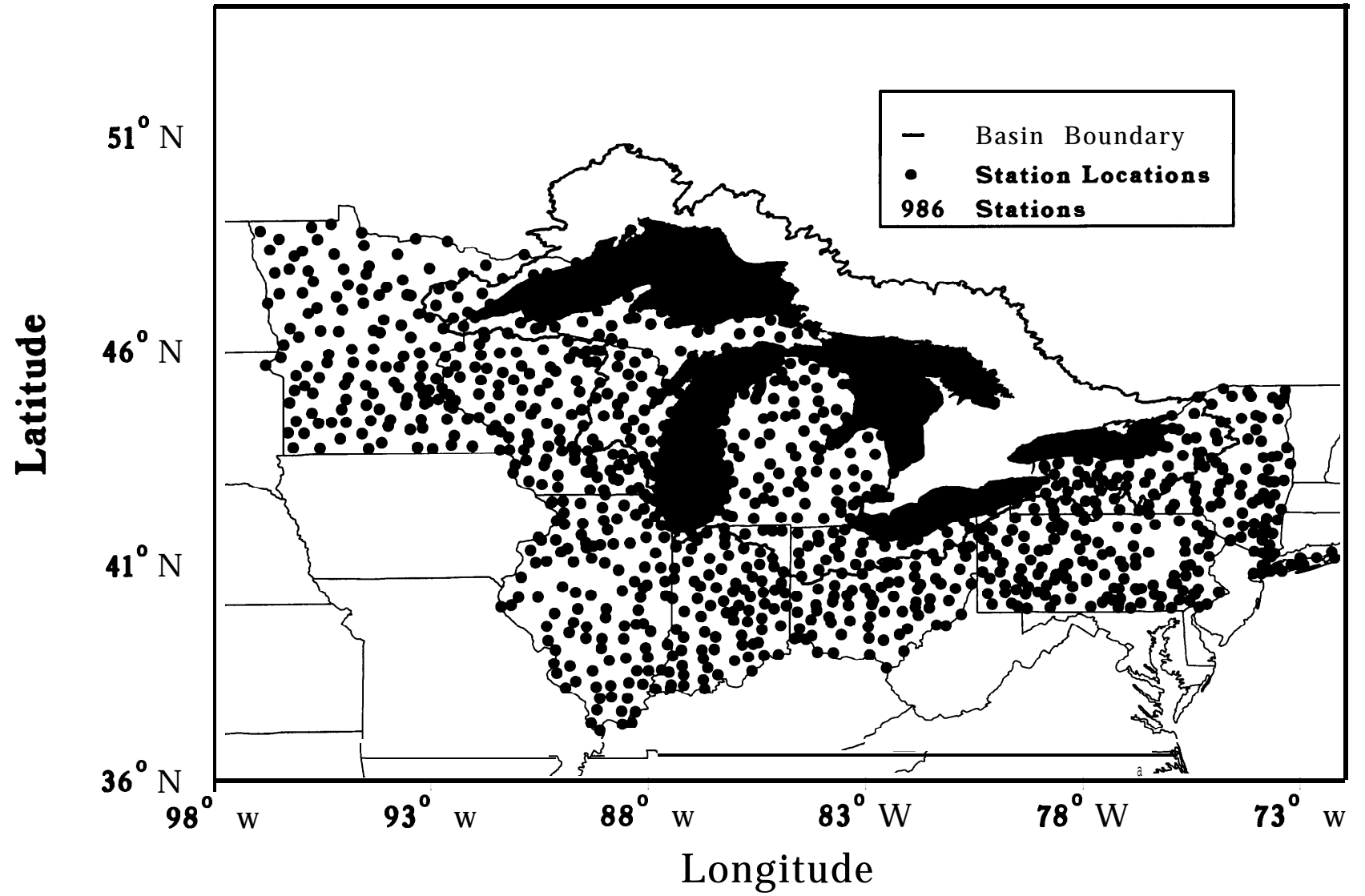


Figure 12. — Distribution of stations for 1990.  
18

examination of the spatial and temporal distribution pattern of monthly and annual temperature. The objective of this analysis will be to identify regional and seasonal trends and changes in long-term means over the period of record, similar to the work described in Bolsenga and Norton (1993) but updated to include the long period of record and expanded to include finer spatial resolution.

## 5. ACKNOWLEDGEMENTS

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Appendix A: Listing of Stations Digitized by State

| <b>State</b> | <b>No. of<br/>Stations</b> | <b>Page</b> |
|--------------|----------------------------|-------------|
| Illinois     | 216                        | 21          |
| Indiana      | 183                        | 23          |
| Michigan     | 263                        | 25          |
| Minnesota    | 230                        | 27          |
| New York     | 392                        | 29          |
| Ohio         | 257                        | 32          |
| Penn.        | 326                        | 34          |
| Wisconsin    | 203                        | 36          |

ILLINOIS

| STN #  | LAT    | LONG    | STATION NAME              | ELEV | POR       | STN #  | LAT    | LONG    | STATION NAME              | ELEV | POR       |
|--------|--------|---------|---------------------------|------|-----------|--------|--------|---------|---------------------------|------|-----------|
| 110055 | 38.383 | -88.050 | ALBION                    | 537  | 1895-1990 | 114013 | 41.300 | -89.317 | HENNEPIN POWER PLANT      | 467  | 1962-1990 |
| 110072 | 41.217 | -90.750 | ALBEDO                    | 728  | 1901-1990 | 114017 | 41.117 | -89.367 | HENRY                     | 494  | 1898-1950 |
| 110080 | 39.750 | -90.080 | ALEXANDER, MORGAN CO.,    | -999 | 1895-1926 | 114108 | 39.150 | -89.483 | HILLSBORO                 | 637  | 1895-1990 |
| 110137 | 38.883 | -90.183 | ALEXON DAM 26             | 437  | 1948-1990 | 114198 | 40.467 | -87.667 | HOOPESTON 1 NE            | 717  | 1902-1990 |
| 110187 | 37.467 | -89.233 | ANNA 1 E                  | 655  | 1901-1990 | 114442 | 39.733 | -90.200 | JACKSONVILLE 2 E          | 617  | 1901-1990 |
| 110203 | 42.500 | -88.133 | ANTIUCH 2 NW              | 758  | 1901-1990 | 114489 | 39.100 | -90.350 | JERSEYVILLE 2 SW          | 637  | 1940-1990 |
| 110286 | 41.867 | -89.223 | ASHTON, LEE CO., IL.      | 830  | 1895-1909 | 114530 | 41.500 | -88.100 | JOLIET BRANDON ROAD DAM   | 547  | 1975-1990 |
| 110291 | 40.228 | -90.355 | ASTORIA, FULTON CO., IL.  | 662  | 1899-1914 | 114535 | 41.550 | -88.083 | JOLIET                    | 555  | 1895-1974 |
| 110338 | 41.750 | -88.350 | AURORA                    | 640  | 1895-1961 | 114593 | 41.083 | -87.917 | KANKAKEE 3 SW             | 635  | 1895-1973 |
| 110442 | 42.167 | -88.150 | BARRINGTON                | 807  | 1962-1990 | 114598 | 41.133 | -87.933 | KANKAKEE 4 NW             | 636  | 1948-1960 |
| 110510 | 38.500 | -89.850 | BELLEVILLE SO ILL UNIV    | 458  | 1947-1990 | 114603 | 41.133 | -87.883 | KANKAKEE WTR POLL CTL     | 647  | 1973-1990 |
| 110591 | 39.922 | -88.573 | BEMENT, PIATT CO., IL.    | 689  | 1908-1913 | 114629 | 37.983 | -89.950 | KASKASKIA R NAV LOCK      | 388  | 1974-1990 |
| 110608 | 38.033 | -88.917 | BENTON FOREST SERVICE     | 457  | 1902-1990 | 114710 | 41.250 | -89.900 | KEWANEE 1 E               | 787  | 1939-1990 |
| 110766 | 40.517 | -89.000 | BLOOMINGTON NORMAL        | 796  | 1893-1977 | 114770 | 42.192 | -89.133 | KISHWAUKEE, DEKALB CO.    | 730  | 1897-1914 |
| 110993 | 37.133 | -88.650 | BROOKPORT DAM 52          | 336  | 1962-1990 | 114790 | 40.908 | -90.282 | KNOXVILLE, KNOX CO.       | -999 | 1895-1909 |
| 111098 | 40.553 | -90.508 | BUSHNELL, MC DONOUGH CO.  | 400  | 1895-1909 | 114805 | 41.017 | -89.350 | LACON 2 E                 | 608  | 1950-1990 |
| 111160 | 38.567 | -90.217 | CAHOKIA                   | 408  | 1969-1990 | 114814 | 41.803 | -87.870 | LA GRANGE, COOK CO., IL.  | 645  | 1895-1917 |
| 111166 | 37.000 | -89.167 | CAIRO WSO CI              | 317  | 1872-1990 | 114823 | 40.583 | -90.967 | LA HARPE                  | 707  | 1895-1990 |
| 111220 | 41.302 | -90.193 | CAMBRIDGE, HENRY CO.      | -999 | 1895-1909 | 114837 | 42.417 | -88.050 | LAKE VILLA 2 NE           | 848  | 1987-1990 |
| 111265 | 37.733 | -89.167 | CARBONDALE SEWAGE PLANT   | 397  | 1910-1990 | 114879 | 42.100 | -89.833 | LANARK                    | 877  | 1895-1915 |
| 111280 | 39.283 | -89.867 | CARLINVILLE               | 635  | 1895-1990 | 114922 | 41.333 | -89.133 | LA SALLE PERU             | 524  | 1902-1963 |
| 111288 | 38.600 | -89.367 | CARLYLE                   | 464  | 1939-1964 | 115043 | 40.643 | -88.784 | LEXINGTON, MC LEAN CO.    | -999 | 1895-1898 |
| 111290 | 38.633 | -89.333 | CARLYLE RESERVOIR         | 508  | 1962-1989 | 115079 | 40.150 | -89.367 | LINCOLN                   | 588  | 1906-1990 |
| 111302 | 38.067 | -88.183 | CARMIL 3                  | -999 | 1987-1990 | 115216 | 38.767 | -88.500 | LOUISVILLE                | 457  | 1895-1897 |
| 111320 | 39.300 | -90.407 | CARROLLTON, GREENE CO.    | -999 | 1896-1907 | 115294 | 37.633 | -89.233 | MAKANDA 1 NW              | 685  | 1951-1976 |
| 111329 | 39.300 | -88.000 | CASEY                     | 638  | 1980-1990 | 115326 | 42.250 | -88.600 | MARENGO                   | 827  | 1901-1990 |
| 111340 | 40.067 | -87.707 | CATLIN, VERMILION CO.     | -999 | 1896-1896 | 115342 | 37.767 | -88.900 | MARION 4 NNE              | 486  | 1968-1990 |
| 111386 | 38.517 | -89.117 | CENTRALIA                 | 478  | 1900-1903 | 115372 | 41.333 | -88.750 | MARSEILLES LOCK           | 497  | 1976-1977 |
| 111436 | 39.483 | -88.167 | CHARLESTON                | 587  | 1896-1990 | 115380 | 39.383 | -87.683 | MARSHALL 1 E              | 587  | 1962-1976 |
| 111469 | 42.417 | -88.667 | CHEMUNG, MC HENRY CO.     | 823  | 1895-1901 | 115390 | 39.335 | -87.883 | MARTINSVILLE, CLARK CO.   | -999 | 1895-1910 |
| 111475 | 40.733 | -88.733 | CHENOA                    | 715  | 1951-1990 | 115395 | 40.917 | -87.728 | MARTINTON, IROQUOIS CO.   | -999 | 1896-1916 |
| 111491 | 37.900 | -89.833 | CHESTER                   | 465  | 1907-1910 | 115405 | 38.483 | -89.800 | MASCOUTAH                 | 434  | 1895-1947 |
| 111497 | 42.117 | -87.767 | CHG BOTANICAL GARDEN      | 638  | 1981-1990 | 115413 | 40.217 | -89.717 | MASON CITY 1 NW           | 598  | 1962-1990 |
| 111526 | 41.883 | -87.617 | CHICAGO GRANT PARK        | 607  | 1972-1976 | 115430 | 39.467 | -88.333 | MATTOON                   | 727  | 1895-1990 |
| 111527 | 41.500 | -87.633 | CHICAGO HEIGHTS           | 634  | 1948-1952 | 115515 | 38.100 | -88.500 | MC LEANSBORO 2 ENE        | 487  | 1895-1990 |
| 111549 | 41.983 | -87.900 | CHICAGO 0 HARE WSO AP     | 677  | 1958-1990 | 115712 | 40.900 | -89.050 | MINONK                    | 758  | 1896-1990 |
| 111572 | 41.783 | -87.600 | CHICAGO UNIVERSITY        | 595  | 1895-1990 | 115751 | 41.450 | -90.500 | MOLINE WSO AP             | 587  | 1929-1990 |
| 111577 | 41.783 | -87.750 | CHICAGO MIDWAY AP         | 628  | 1928-1990 | 115768 | 40.917 | -90.633 | MONMOUTH                  | 775  | 1895-1990 |
| 111582 | 41.883 | -87.633 | CHICAGO WB CITY           | 595  | 1871-1965 | 115791 | 40.033 | -88.567 | MONTECELLO                | 634  | 1899-1901 |
| 111584 | 41.883 | -87.633 | CHICAGO CITY NO 2 WSO     | 597  | 1964-1970 | 115805 | 39.165 | -88.380 | MONTRORSE, EFFINGHAM CO.  | -999 | 1911-1917 |
| 111648 | 41.850 | -87.767 | CICERO                    | 614  | 1933-1959 | 115825 | 41.450 | -88.400 | MORRIS 5 N                | 586  | 1912-1970 |
| 111664 | 38.517 | -88.400 | CISNE 2 ESE               | 456  | 1896-1907 | 115833 | 41.817 | -89.967 | MORRISON                  | 605  | 1901-1990 |
| 111743 | 40.133 | -88.967 | CLINTON 1 SSW             | 707  | 1910-1934 | 115841 | 39.417 | -89.467 | MORRISONVILLE             | 637  | 1979-1990 |
| 111750 | 41.100 | -89.200 | CLEAR CREEK, PUTNAM CO.   | -999 | 1895-1897 | 115846 | 39.383 | -89.400 | MORRISONVILLE 4 SE        | 645  | 1896-1971 |
| 111767 | 40.033 | -91.167 | COATSBURG, ADAMS CO.      | 761  | 1895-1913 | 115888 | 38.400 | -87.750 | MT CARMEL                 | 420  | 1931-1990 |
| 111775 | 37.500 | -89.250 | COBDEN 2 S                | 625  | 1896-1976 | 115893 | 38.450 | -87.783 | MOUNT CARMEL              | 470  | 1910-1977 |
| 111820 | 40.423 | -90.793 | COLCHESTER, MCDONOUGH CO. | -999 | 1905-1909 | 115901 | 42.083 | -89.983 | MOUNT CARROLL             | 707  | 1901-1990 |
| 111940 | 37.617 | -88.833 | CREAL SPRINGS             | 506  | 1964-1968 | 115927 | 40.017 | -89.283 | MOUNT PULASKI             | 640  | 1895-1905 |
| 11214  | 39     | -87.650 | DANVILLE                  | 568  | 1897-1990 | 115943 | 38.350 | -88.867 | MOUNT VERNON              | 490  | 1895-1947 |
| 1121   | 3      | 39.833  | DECATUR                   | 628  | 1894-1990 | 115950 | 39.633 | -89.033 | MOWEAQUA                  | 626  | 1987-1990 |
| 112223 | 41.933 | -88.767 | DE KALB                   | 848  | 1966-1990 | 116011 | 38.383 | -89.333 | NASHVILLE 4 NE            | 526  | 1896-1990 |
| 112348 | 41.833 | -89.550 | DIXON 3 W                 | 708  | 1895-1990 | 116093 | 37.583 | -88.767 | NEW BURNSIDE              | 564  | 1895-1964 |
| 112353 | 37.433 | -88.667 | DIXON SPRINGS AGR CNTR    | 548  | 1967-1990 | 116159 | 38.917 | -88.117 | NEWTON 6 SSE              | 517  | 1944-1990 |
| 112483 | 38.000 | -89.250 | DU QUOIN 4 SE             | 427  | 1895-1990 | 116383 | 37.167 | -89.367 | OLIVE BRANCH              | 438  | 1983-1990 |
| 112497 | 41.100 | -88.417 | DWIGHT                    | 644  | 1897-1927 | 116446 | 38.700 | -88.067 | OLNEY 2 S                 | 487  | 1895-1990 |
| 112600 | 40.663 | -89.573 | EAST PEORIA, TAZEWELL CO. | -999 | 1895-1897 | 116492 | 42.017 | -89.333 | OREGON WATERWORKS         | 704  | 1895-1913 |
| 112614 | 38.567 | -90.183 | EAST ST LOUIS PARKS COL   | 415  | 1942-1968 | 116509 | 41.683 | -88.352 | OSWEGO, KENDALL CO.       | 600  | 1895-1899 |
| 112679 | 38.833 | -89.950 | EDWARDSVILLE 1 NE         | 488  | 1987-1988 | 116526 | 41.350 | -88.850 | OTTAWA                    | 538  | 1895-1990 |
| 112687 | 39.133 | -88.617 | EFFINGHAM 3 W             | 608  | 1895-1990 | 116558 | 39.000 | -87.617 | PALESTINE                 | 524  | 1895-1990 |
| 112736 | 42.033 | -88.333 | ELGIN                     | 768  | 1898-1990 | 116579 | 39.383 | -89.083 | PANA                      | 707  | 1899-1947 |
| 112745 | 42.333 | -90.250 | ELIZABETH 5 S             | 818  | 1984-1990 | 116610 | 39.633 | -87.733 | PARIS WW, EDGAR CO., IL.  | 680  | 1895-1947 |
| 112750 | 37.450 | -88.300 | ELIZABETHTOWN             | 405  | 1949-1967 | 116616 | 41.500 | -87.683 | PARK FOREST               | 717  | 1952-1990 |
| 112850 | 37.735 | -88.338 | EQUALITY, GALLATIN CO.    | -999 | 1898-1919 | 116661 | 41.683 | -88.983 | PAW PAW                   | 938  | 1962-1990 |
| 112888 | 42.033 | -87.683 | EVANSTON PUMP STA         | 625  | 1912-1912 | 116663 | 40.383 | -88.083 | PAXTON                    | 788  | 1987-1990 |
| 112931 | 38.383 | -88.317 | FAIRFIELD RADIO WFIW      | 437  | 1901-1990 | 116711 | 40.667 | -89.683 | PEORIA WSO AP             | 657  | 1856-1985 |
| 112990 | 40.368 | -90.762 | FANDON, MC DONOUGH CO.    | -999 | 1903-1904 | 116753 | 41.333 | -89.150 | PERU 2 W                  | 627  | 1963-1990 |
| 112993 | 40.250 | -88.650 | FARMER CITY               | 738  | 1962-1990 | 116769 | 40.008 | -88.148 | PHILO, CHAMPAIGN CO.      | 650  | 1895-1915 |
| 113109 | 38.683 | -88.567 | FLORA 5 NW                | 507  | 1898-1990 | 116819 | 40.800 | -88.133 | PIPER CITY 3 SE           | 678  | 1968-1990 |
| 113129 | 42.203 | -87.807 | FORT SHERIDAN, LAKE CO.   | 613  | 1895-1899 | 116910 | 40.883 | -88.633 | PONTIAC                   | 650  | 1903-1947 |
| 113257 | 42.300 | -89.617 | FREEPORT                  | 784  | 1909-1973 | 116998 | 41.383 | -89.483 | PRINCETON                 | -999 | 1987-1990 |
| 113262 | 42.300 | -89.600 | FREEPORT WASTE WTR PLT    | 757  | 1973-1990 | 117004 | 40.933 | -89.767 | PRINCEVILLE               | 747  | 1962-1990 |
| 113290 | 41.900 | -90.150 | FULTON DAM 13             | 596  | 1941-1990 | 117067 | 39.950 | -91.400 | QUINCY                    | 607  | 1901-1977 |
| 113320 | 40.950 | -90.383 | GALESBURG                 | 775  | 1948-1990 | 117072 | 39.933 | -91.200 | QUINCY FAA AIRPORT        | 766  | 1948-1991 |
| 113335 | 41.167 | -90.050 | GALVA                     | 867  | 1895-1990 | 117077 | 39.900 | -91.433 | QUINCY DAM 21             | 487  | 1977-1990 |
| 113369 | 41.367 | -88.467 | GEBHARD WOODS ST PK       | 517  | 1970-1990 | 117126 | 39.133 | -89.117 | RAMSEY                    | 606  | 1990-1990 |
| 113384 | 41.450 | -90.167 | GENESEO                   | 647  | 1956-1990 | 117150 | 40.317 | -88.167 | RANTOUL                   | 747  | 1895-1990 |
| 113413 | 40.467 | -88.367 | GIBSON CITY 1 E           | 668  | 1980-1990 | 117155 | 99.999 | 999.999 | RAUM (SOUTH DISTRICT)     | -999 | 1898-1907 |
| 113522 | 37.367 | -88.483 | GOLCONDA DAM 51           | 358  | 1895-1978 | 117187 | 38.033 | -88.983 | REND LAKE DAM             | 467  | 1974-1987 |
| 113530 | 40.117 | -91.033 | GOLDEN 1 NW               | 738  | 1962-1990 | 117211 | 41.330 | -90.672 | REYNOLDS, ROCK ISLAND CO. | 813  | 1896-1898 |
| 113693 | 38.883 | -89.400 | GREENVILLE 1 E            | 586  | 1895-1959 | 117260 | 42.255 | -88.617 | RILEY, MCHENRY CO., IL.   | 956  | 1895-1917 |
| 113717 | 39.717 | -90.733 | GRIGGSVILLE               | 706  | 1895-1989 | 317336 | 40.667 | -88.183 | ROBERTS 3 N               | 744  | 1949-1968 |
| 113750 | 37.800 | -89.170 | HALLIDAYBORO, JACKSON CO. | -999 | 1897-1903 |        |        |         |                           |      |           |

| STN #  | LAT    | LON     | STATION NAME              | ELEV | POR       |
|--------|--------|---------|---------------------------|------|-----------|
| 117382 | 42.200 | -89.100 | ROCKFORD WSO AP           | 727  | 1951-1990 |
| 117388 | 41.517 | -90.567 | ROCK ISLAND DAM 15        | 574  | 1935-1937 |
| 117391 | 41.517 | -90.567 | ROCK ISLAND L & D 15      | 578  | 1985-1990 |
| 117487 | 37.417 | -88.350 | ROSICLARE                 | 498  | 1968-1990 |
| 117495 | 41.810 | -89.950 | ROUND GROVE, WHITESIDE CO | -999 | 1896-1901 |
| 117551 | 40.117 | -90.583 | RUSHVILLE                 | 668  | 1895-1990 |
| 117636 | 38.633 | -88.950 | SALEM                     | 557  | 1958-1990 |
| 117690 | 42.477 | -90.252 | SCALES MOUND, JODAVIESS C | -999 | 1896-1899 |
| 117876 | 39.400 | -88.783 | SHELBYVILLE DAM           | 668  | 1987-1989 |
| 117910 | 38.868 | -89.090 | SHOBONIER, FAYETTE CO.    | -999 | 1900-1905 |
| 117988 | 42.083 | -87.767 | SHOKIE                    | 636  | 1954-1962 |
| 118020 | 37.167 | -88.433 | SMITHLAND L AND D         | 368  | 1981-1990 |
| 118145 | 41.033 | -89.433 | SPARLAND                  | 445  | 1952-1953 |
| 118147 | 38.133 | -89.717 | SPARTA                    | 527  | 1888-1990 |
| 118179 | 39.833 | -89.667 | SPRINGFIELD WSO AP        | 598  | 1938-1990 |
| 118184 | 39.800 | -89.650 | SPRINGFIELD WB CITY       | 605  | 1879-1955 |
| 118189 | 39.767 | -89.600 | SPRINGFIELD 4 SE          | 576  | 1969-1973 |
| 118209 | 39.027 | -88.852 | ST. ELMO, FAYETTE CO.     | 618  | 1915-1917 |
| 118219 | 38.867 | -88.855 | ST. PETER, FAYETTE CO.    | 500  | 1910-1915 |
| 118293 | 42.350 | -90.000 | STOCKTON                  | 967  | 1948-1990 |
| 118353 | 41.133 | -88.800 | STREATOR 2 ENE            | 618  | 1895-1919 |
| 118389 | 39.567 | -88.617 | SULLIVAN 3 SSW            | 648  | 1899-1914 |
| 118419 | 38.430 | -87.520 | SUMNER, LAWRENCE CO.      | 459  | 1909-1912 |
| 118452 | 41.983 | -88.683 | SYCAMORE                  | 844  | 1895-1965 |
| 118460 | 40.367 | -90.433 | TABLE GROVE               | 734  | 1942-1956 |
| 118604 | 41.267 | -89.467 | TISKILWA 2 SE             | 647  | 1895-1990 |
| 118684 | 39.800 | -88.283 | TUSCOLA                   | 658  | 1895-1990 |
| 118740 | 40.100 | -88.233 | URBANA                    | 748  | 1888-1990 |
| 118781 | 38.917 | -89.133 | VANDALIA 3 SW             | 548  | 1973-1990 |
| 118783 | 38.983 | -89.167 | VANDALIA FAA AIRPORT      | 535  | 1951-1973 |
| 118817 | 38.802 | -89.088 | VERNON, MARION., IL.      | 500  | 1906-1908 |
| 118860 | 39.517 | -89.767 | VIRDEN 1 N                | 688  | 1948-1990 |
| 118916 | 41.567 | -89.583 | WALNUT                    | 698  | 1895-1990 |
| 119002 | 38.333 | -90.150 | WAERLOO                   | 657  | 1961-1990 |
| 119021 | 40.783 | -87.767 | WATSEKA 2 NW              | 627  | 1948-1990 |
| 119029 | 42.350 | -87.883 | WAUKEGAN                  | 707  | 1949-1990 |
| 119060 | 40.538 | -87.677 | WELLINGTON, IROQUOIS CO.  | -999 | 1901-1902 |
| 119221 | 41.817 | -88.067 | WHEATON 3 SE              | 686  | 1895-1990 |
| 119241 | 39.433 | -90.383 | WHITE HALL 1 E            | 584  | 1902-1990 |
| 119331 | 39.630 | -90.453 | WINCHESTER, SCOTT CO.     | 700  | 1898-1905 |
| 119354 | 39.433 | -88.600 | WINDSOR                   | 698  | 1902-1990 |
| 119411 | 42.267 | -89.250 | WINNEBAGO, WINNEBAGO CO.  | 900  | 1895-1914 |
| 119822 | 41.640 | -88.448 | YORKVILLE, KENDALL CO.    | 600  | 1900-1914 |
| 119854 | 42.450 | -87.837 | ZION, LAKE CO., IL.       | 842  | 1895-1912 |

STN # - STATION NUMBER, LAT - LATITUDE, LON - LONGITUDE, ELEV - ELEVATION, POR - PERIOD OF RECORD, 99.999 - UNKNOWN LATITUDE, 999.999 - UNKNOWN LONGITUDE, -999 - UNKNOWN ELEVATION

**INDIANA**

| STN #  | LAT    | LON     | STATION NAME              | ELEV | POR       | STN #  | LAT    | LON     | STATION NAME             | ELEV | POR       |
|--------|--------|---------|---------------------------|------|-----------|--------|--------|---------|--------------------------|------|-----------|
| 120076 | 41.400 | -85.333 | ALBION 5 E                | 986  | 1916-1972 | 124730 | 41.650 | -85.417 | LAGRANGE SEWAGE PLANT    | 907  | 1962-1990 |
| 120177 | 40.100 | -85.717 | ANDERSON SEWAGE PLANT     | 857  | 1895-1990 | 124782 | 41.500 | -86.300 | LAKEVILLE 1 W            | 848  | 1989-1990 |
| 120200 | 41.633 | -84.983 | ANGOLA                    | 1017 | 1887-1990 | 124837 | 41.600 | -86.717 | LA PORTE                 | 817  | 1897-1990 |
| 120270 | 39.400 | -87.100 | ASHBORO                   | 886  | 1896-1988 | 125050 | 39.583 | -84.917 | LIBERTY 3 SSE            | 996  | 1968-1979 |
| 120334 | 41.333 | -85.050 | AUBURN 2 SSE              | 886  | 1896-1988 | 125080 | 41.722 | -85.423 | LIMA, LAGRANGE CO.       | -999 | 1905-1909 |
| 120545 | 38.850 | -86.500 | BEDFORD                   | 864  | 1898-1978 | 125117 | 40.750 | -86.383 | LOGANS PORT CICOTT ST BR | 606  | 1887-1990 |
| 120676 | 40.667 | -84.950 | BERNE                     | 837  | 1898-1990 | 125174 | 41.283 | -87.417 | LOWELL                   | 677  | 1963-1990 |
| 120784 | 39.167 | -86.517 | BLOOMINGTON INDIANA U     | 877  | 1956-1969 | 125217 | 39.967 | -86.050 | LYNWGGDFARMS             | 747  | 1976-1988 |
| 120824 | 40.783 | -85.167 | BLUFFTON                  | 827  | 1969-1971 | 125237 | 38.733 | -85.400 | MADISON SEWAGE PLANT     | 465  | 1893-1990 |
| 120829 | 40.750 | -85.183 | BLUFFTON 1 N              | 818  | 1971-1990 | 125322 | 38.367 | -86.350 | MARENGO                  | 576  | 1888-1969 |
| 120830 | 40.800 | -85.167 | BLUFFTON 4 N              | 844  | 1895-1958 | 125337 | 40.567 | -85.667 | MARION 2 N               | 797  | 1891-1990 |
| 120831 | 40.733 | -85.167 | BLUFFTON WATERWORKS       | 566  | 1897-1990 | 125381 | 38.783 | -84.967 | MARKLANDDAM 39           | 486  | 1887-1959 |
| 120852 | 38.033 | -87.250 | BOONVILLE 2 E             | 772  | 1889-1990 | 125387 | 40.833 | -85.300 | MARKLE, HUNTINGTON CO.,  | 814  | 1887-1911 |
| 120858 | 40.533 | -87.467 | BOSWELL                   | -999 | 1896-1901 | 125435 | 39.617 | -85.333 | MAUZY                    | 1054 | 1887-1948 |
| 120975 | 39.217 | -84.850 | BRIGHT, DEARBORN CO.      | 676  | 1925-1990 | 125607 | 41.700 | -86.817 | MICH CITY PHILLIPS AP    | 656  | 1959-1971 |
| 121030 | 39.417 | -85.017 | BROOKVILLE                | 808  | 1983-1990 | 125656 | 39.117 | -85.133 | MILAN WATERWORKS         | 995  | 1955-1961 |
| 121192 | 39.033 | -85.533 | BUTLERVILLE 1 WNW         | 735  | 1887-1930 | 125837 | 40.750 | -86.767 | MONTICELLO               | 708  | 1924-1930 |
| 121197 | 39.050 | -85.550 | BUTLERVILLE 2 WNW         | 957  | 1892-1990 | 125873 | 39.117 | -85.100 | MOORES HILL              | 984  | 1902-1959 |
| 121229 | 39.817 | -85.167 | CAMBRIDGE CITY            | 794  | 1943-1949 | 126001 | 37.950 | -87.883 | MOUNT VERNON             | 425  | 1893-1990 |
| 121315 | 39.700 | -86.467 | CARTERSBURG               | 537  | 1962-1990 | 126018 | 40.133 | -85.350 | MUNCIE 4 SE              | 954  | 1893-1962 |
| 121425 | 38.367 | -85.683 | CHARLESTOWN ORD PLANT     | 676  | 1907-1970 | 126020 | 40.200 | -85.417 | MUNCIE BALL STATE UNIV   | 947  | 1962-1990 |
| 121719 | 40.917 | -87.150 | COLLEGEVILLE ST JOS COL   | 896  | 1893-1963 | 126056 | 39.200 | -86.250 | NASHVILLE                | 627  | 1912-1948 |
| 121734 | 41.150 | -85.483 | COLUMBIA CITY             | 858  | 1963-1990 | 126164 | 39.933 | -85.383 | NEW CASTLE               | 974  | 1950-1990 |
| 121739 | 41.133 | -85.483 | COLUMBIA CITY 1 S         | 625  | 1893-1990 | 126179 | 38.133 | -87.933 | NEW HARMONY              | 395  | 1941-1952 |
| 121747 | 39.200 | -85.917 | COLUMBUS                  | 844  | 1893-1924 | 126304 | 39.550 | -86.100 | NEW WHITELAND            | 797  | 1971-1990 |
| 121772 | 39.667 | -85.667 | CONNERSVILLE, FAYETTE CO. | 627  | 1962-1981 | 126435 | 39.000 | -85.650 | NORTH VERNON 2 SW        | 796  | 1931-1990 |
| 121843 | 40.117 | -87.450 | COVINGTON 3 SW            | 767  | 1942-1990 | 126465 | 40.100 | -86.263 | NORTHFIELD, BOONE CO.    | 800  | 1897-1908 |
| 121869 | 38.867 | -86.833 | CRANE NAVAL DEPOT         | 758  | 1982-1990 | 126465 | 41.700 | -86.233 | NOTRE DAME MOORE SE      | 734  | 1912-1953 |
| 121873 | 40.067 | -86.933 | CRAWFORDSVILLE 2 NW       | 688  | 1892-1981 | 126506 | 39.900 | -85.983 | OAKLANDON GEIST RESVR    | 804  | 1944-1990 |
| 121882 | 40.050 | -86.900 | CRAWFORDSVILLE PWR PL     | 737  | 1893-1975 | 126542 | 41.617 | -87.183 | OGDEN DUNES              | 617  | 1951-1989 |
| 121952 | 41.167 | -86.467 | CULVER EXPERIMENT FARM    | 566  | 1887-1990 | 126580 | 38.883 | -86.550 | OOLITIC PURDUE EXP FARM  | 657  | 1893-1990 |
| 122149 | 40.617 | -86.667 | DELPHI 3 NND              | 696  | 1955-1990 | 126625 | 39.133 | -85.283 | OSGOOD                   | 926  | 1961-1968 |
| 122309 | 38.450 | -86.700 | DUBOIS S INDE FORAGE FRM  | 901  | 1894-1903 | 126705 | 38.533 | -86.483 | PAOLI, ORANGE CO., IN.   | 640  | 1898-1947 |
| 122549 | 38.800 | -87.233 | EDWARDS PORT POWER PLANT  | 467  | 1904-1983 | 126808 | 39.983 | -85.767 | PENDLETON REFORMATORY    | 825  | 1964-1965 |
| 122554 | 38.283 | -85.900 | EDWARDSVILLE, FLOYD CO.   | 801  | 1902-1912 | 126830 | 40.067 | -87.500 | PERRYSVILLE 4 WNW        | 628  | 1981-1990 |
| 122586 | 41.700 | -85.933 | ELKHART                   | 597  | 1920-1978 | 126864 | 40.750 | -86.050 | PERU WATERWORKS          | 646  | 1898-1901 |
| 122605 | 39.033 | -86.933 | ELLISTON                  | 847  | 1948-1990 | 126872 | 38.500 | -87.283 | PETERSBURG 61 BRIDGE     | 495  | 1989-1990 |
| 122638 | 40.267 | -85.850 | ELWOOD                    | 786  | 1906-1913 | 126989 | 41.333 | -86.300 | PLYMOUTH                 | 808  | 1989-1990 |
| 122645 | 39.533 | -86.633 | EMINENCE                  | 517  | 1969-1990 | 127028 | 41.333 | -86.317 | PLYMOUTH POWER SUBSTA    | 794  | 1894-1989 |
| 122660 | 38.283 | -86.467 | ENGLISH                   | 437  | 1962-1975 | 127069 | 40.417 | -85.000 | PORTLAND 1 SW            | 917  | 1964-1990 |
| 122725 | 38.000 | -86.000 | EVANS LANDING             | 395  | 1895-1990 | 127090 | 39.285 | -87.607 | PRAIRIE CREEK, VIGO CO.  | -999 | 1899-1902 |
| 122731 | 39.967 | -87.550 | EVANSVILLE                | 387  | 1940-1990 | 127102 | 41.633 | -85.200 | PRAIRIE HEIGHTS          | 997  | 1973-1990 |
| 122738 | 38.050 | -87.533 | EVANSVILLE WSO AP         | 999  | 1899-1903 | 127125 | 38.350 | -87.583 | PRINCETON 1 W            | 487  | 1893-1990 |
| 122805 | 40.417 | -85.650 | FAIRMOUNT, GRANT CO.      | 575  | 1899-1952 | 127298 | 40.933 | -87.150 | RENSSELAER               | 657  | 1900-1990 |
| 122813 | 39.250 | -87.383 | FARMERSBURG               | 976  | 1893-1990 | 127362 | 39.850 | -84.850 | RICHMOND WATERWORKS      | 975  | 1888-1968 |
| 122825 | 40.250 | -85.150 | FARMLAND 5 NNN            | 777  | 1897-1946 | 127370 | 39.883 | -84.883 | RICHMONDWTRWKS 2 NNE     | 1027 | 1968-1990 |
| 123024 | 41.083 | -85.167 | FORT WAYNE WB CITY        | 807  | 1939-1990 | 127482 | 41.067 | -86.217 | ROCHESTER                | 776  | 1904-1990 |
| 123037 | 41.000 | -85.200 | FORT WAYNE WSO AP         | 825  | 1930-1971 | 127508 | 37.883 | -87.048 | ROCK PORT, SPENCER CO.   | -999 | 1897-1990 |
| 123062 | 40.617 | -87.317 | FWLER                     | 848  | 1914-1990 | 127522 | 39.767 | -87.233 | ROCKVILLE                | 696  | 1889-1990 |
| 123082 | 40.317 | -86.500 | FRANKFORT DISPOSAL PL     | 576  | 1893-1971 | 127547 | 37.933 | -86.500 | ROME, PERRY CO.          | 370  | 1903-1939 |
| 123095 | 39.517 | -86.067 | FREELAND 2 NNE            | 770  | 1893-1990 | 127601 | 40.850 | -86.500 | ROYAL CENTER             | 727  | 1918-1930 |
| 123104 | 38.867 | -87.300 | FREELANDVILLE             | 550  | 1902-1947 | 127646 | 39.600 | -85.450 | RUSHVILLE SEWAGE PLANT   | 965  | 1901-1990 |
| 123213 | 41.617 | -87.383 | GARY                      | 607  | 1936-1978 | 127724 | 38.167 | -86.800 | SAINT MBINRAD            | 517  | 1959-1990 |
| 123418 | 41.567 | -85.833 | GOSHEN COLLEGE            | 818  | 1914-1990 | 127747 | 40.383 | -85.000 | SALAMONIA 7 W            | 975  | 1906-1976 |
| 123513 | 39.650 | -86.850 | GRBENCASLE 1 E            | 845  | 1895-1990 | 127755 | 38.617 | -86.083 | SALEM                    | 806  | 1897-1990 |
| 123527 | 39.783 | -85.750 | GREENFIELD                | 877  | 1903-1990 | 127875 | 38.700 | -85.767 | SALEM                    | 554  | 1894-1990 |
| 123547 | 39.333 | -85.450 | GREENSBURG 2 E            | 948  | 1897-1990 | 127935 | 38.983 | -85.900 | SCOTTSBURG               | 575  | 1892-1990 |
| 123650 | 41.630 | -87.505 | HAMMOND, LAKE CO.         | 598  | 1891-1919 | 127959 | 39.167 | -87.250 | SEYMOUR 2 N              | 530  | 1899-1990 |
| 123777 | 40.467 | -85.450 | HARTFORD CITY 4 NW        | 936  | 1959-1990 | 127999 | 39.517 | -85.783 | SHAKAMAK STATE PARK      | 757  | 1893-1990 |
| 123881 | 40.467 | -84.850 | HECTOR, JAY CO.           | 936  | 1959-1990 | 128036 | 38.667 | -86.800 | SHELBYVILLE SEWAGE PL    | 558  | 1912-1990 |
| 123915 | 38.567 | -85.767 | HENRYVILLE STATE FOREST   | 936  | 1959-1990 | 128187 | 41.700 | -86.317 | SHOALS HIWAY 50 BRIDGE   | 797  | 1893-1990 |
| 123960 | 39.267 | -86.350 | HICKORY HILL, BROWN CO.   | 936  | 1959-1990 | 128290 | 39.283 | -86.767 | SOUTH BEND WSO AP        | 557  | 1949-1990 |
| 124008 | 41.533 | -87.250 | HOBART, LAKE CO., IN.     | 600  | 1902-1947 | 128349 | 38.283 | -87.250 | SPURGEON 2 N             | 480  | 1962-1990 |
| 124023 | 38.250 | -87.033 | HOLLAND, DUBOIS CO.       | 931  | 1905-1939 | 128528 | 39.100 | -87.417 | SULLIVAN                 | 517  | 1963-1976 |
| 124113 | 41.717 | -85.417 | HOWE                      | 885  | 1903-1953 | 128610 | 41.400 | -85.733 | SYRACUSE, KOSCIUSKO CO.  | 864  | 1897-1907 |
| 124168 | 38.267 | -86.950 | HUNTINGBURG AIR PORT      | 500  | 1902-1907 | 128698 | 37.950 | -86.767 | TELL CITY POWER PLANT    | 404  | 1939-1990 |
| 124176 | 40.883 | -85.500 | HUNTINGTON WATERWORKS     | 805  | 1893-1979 | 128723 | 39.350 | -87.417 | TERREHAUTE 8 S           | 565  | 1954-1990 |
| 124181 | 40.850 | -85.500 | HUNTINGTON WATERWORKS     | 737  | 1979-1990 | 128725 | 39.450 | -87.300 | TERRE HAUTE CAAAP        | 585  | 1890-1954 |
| 124244 | 41.633 | -87.083 | INDIANA DUNES NAT LKSH    | 784  | 1942-1949 | 128737 | 41.167 | -87.333 | THAYER. NEWTON CO.       | -999 | 1930-1930 |
| 124254 | 39.883 | -86.167 | INDIANAPOLIS HOL PARK     | 790  | 1931-1990 | 128784 | 40.217 | -86.117 | TIPTON 5 SW              | 908  | 1899-1990 |
| 124259 | 39.733 | -86.267 | INDIANAPOLIS AP           | 725  | 1871-1964 | 128789 | 40.283 | -86.067 | TIPTON HIGHWAY GARAGE    | 875  | 1897-1897 |
| 124264 | 39.767 | -86.167 | INDIANAPOLIS MONUMT CIR   | 745  | 1964-1976 | 128809 | 41.538 | -85.540 | TOPEKA, LAGRANGE CO.     | 950  | 1893-1906 |
| 124267 | 39.850 | -86.117 | INDIANAPOLIS FALL CREEK   | 755  | 1951-1990 | 128848 | 39.417 | -86.150 | TRAFALGAR                | 848  | 1989-1989 |
| 124272 | 39.750 | -86.117 | INDIANAPOLIS SE SIDE      | 927  | 1899-1990 | 128973 | 40.467 | -85.450 | UPLAND 1 S               | 925  | 1989-1990 |
| 124356 | 39.900 | -86.633 | JAMESTOWN 1 S             | 466  | 1893-1898 | 128989 | 38.800 | -86.067 | VALLONIA, JACKSON CO.    | -999 | 1936-1944 |
| 124372 | 38.383 | -86.933 | JASPER                    | 464  | 1888-1973 | 128999 | 41.517 | -87.033 | VALPARAISO WATERWORKS    | 806  | 1893-1990 |
| 124382 | 38.283 | -85.750 | JEFFERSONVILLE            | 445  | 1930-1979 | 129040 | 40.117 | -87.267 | VEEDERSBURG              | 684  | 1893-1952 |
| 124407 | 38.267 | -87.750 | JOHNSON EXPERIMENT FARM   | 445  | 1930-1979 | 129064 | 39.067 | -85.250 | VERSAILLES               | 977  | 1969-1977 |
| 124449 | 40.383 | -87.417 | JUDYVILLE, WARREN CO.     | 1004 | 1948-1972 | 129080 | 38.750 | -85.067 | VEVAY                    | 477  | 1960-1990 |
| 124492 | 41.450 | -85.250 | KENDALLVILLE              | 836  | 1896-1902 | 129112 | 38.683 | -87.517 | VINCENNES                | 428  | 1894-1982 |
| 124527 | 40.767 | -87.450 | KENTLAND                  | 697  | 1939-1990 | 129113 | 38.733 | -87.500 | VINCENNES 5 NE           | 458  | 1982-1990 |
| 124642 | 39.783 | -85.533 |                           |      |           |        |        |         |                          |      |           |

| STN #  | LAT    | LON     | STATION NAME               | ELEV | POR       |
|--------|--------|---------|----------------------------|------|-----------|
| 129427 | 40.417 | -86.917 | W LAFAYETTE PURDUE U       | 625  | 1887-1953 |
| 129430 | 40.467 | -87.000 | WEST LAFAYETTE 6 NW        | 716  | 1901-1990 |
| 129511 | 41.233 | -87.067 | WHEATFIELD 2 NNW           | 656  | 1916-1990 |
| 129557 | 40.000 | -86.333 | WHITESTOWN                 | 947  | 1896-1990 |
| 129570 | 41.650 | -87.483 | WHITING                    | 625  | 1909-1962 |
| 129670 | 41.000 | -86.650 | WINAMAC 5 SW               | 698  | 1897-1990 |
| 129678 | 40.183 | -84.917 | WINCHESTER AIR PORT        | 1115 | 1931-1990 |
| 129690 | 41.217 | -85.817 | WINOHA LAKE, KOSCIUSKO CO. | 865  | 1908-1930 |
| 129792 | 39.117 | -86.983 | WORTHINGTON                | 524  | 1887-1919 |

STN # - STATION NUMBER, LAT - LATITUDE, LON - LONGITUDE, ELEV - ELEVATION, POR - PERIOD OF RECORD, 99.999 - UNKNOWN LATITUDE, 999.999 - UNKNOWN LONGITUDE, -999 - UNKNOWN ELEVATION

MICHIGAN

| STN #  | LAT    | LON     | STATION NAME             | ELEV | POR       | STN #  | LAT    | LON     | STATION NAME                | ELEV | POR       |
|--------|--------|---------|--------------------------|------|-----------|--------|--------|---------|-----------------------------|------|-----------|
| 200089 | 46.650 | -88.483 | ALBERTA FORD FOR CENTER  | 1317 | 1957-1990 | 202833 | 42.443 | -84.192 | FITCHBURG, INGHAM CO.       | 981  | 1898-1905 |
| 200094 | 42.250 | -84.767 | ALBION                   | 946  | 1946-1990 | 202846 | 42.967 | -83.750 | FLINT WSO AP                | 777  | 1931-1990 |
| 200128 | 42.517 | -85.833 | ALLEGAN                  | 677  | 1931-1990 | 202851 | 43.017 | -83.700 | FLINT 7 W                   | 687  | 1948-1990 |
| 200146 | 43.383 | -84.667 | ALMA                     | 767  | 1887-1990 | 202984 | 44.650 | -86.200 | FRANKFORT 2 NE              | 876  | 1898-1990 |
| 200159 | 42.917 | -83.033 | ALMONT                   | 827  | 1978-1990 | 203051 | 42.583 | -86.200 | GANGES, ALLEGAN CO.         | 655  | 1908-1939 |
| 200164 | 45.067 | -83.567 | ALPENA WSO AP            | 697  | 1931-1990 | 203081 | 46.167 | -85.300 | GARNET                      | 1024 | 1910-1952 |
| 200169 | 45.067 | -83.433 | ALPENA WW+TRTMT+PLT      | 597  | 1948-1990 | 203096 | 45.033 | -84.717 | GAYLORD 2 W                 | 1358 | 1900-1990 |
| 200230 | 42.300 | -83.717 | ANN ARBOR UNIV OF MICH   | 907  | 1881-1990 | 203123 | 46.283 | -85.950 | GERMFASK WILDLIFE REF       | 714  | 1939-1961 |
| 200343 | 44.983 | -84.167 | ATLANTA 2 SW             | 1178 | 1931-1990 | 203170 | 43.967 | -84.467 | GLADWIN                     | 788  | 1898-1990 |
| 200417 | 43.817 | -83.000 | BAD AXE                  | 726  | 1925-1990 | 203176 | 44.933 | -85.917 | GLEN ARBOR 4 NE             | 635  | 1954-1958 |
| 200446 | 43.900 | -85.850 | BALDWIN                  | 847  | 1899-1990 | 203178 | 44.917 | -85.967 | GLEN ARBOR LEELANAU SCH     | 614  | 1947-1954 |
| 200457 | 42.785 | -83.235 | BALLMT., OAKLAND CO.     | 932  | 1898-1909 | 203290 | 43.067 | -86.217 | GRAND HAVEN FIRE DEPT       | 627  | 1898-1990 |
| 200485 | 46.883 | -88.600 | BARAGA 5 WNW             | 648  | 1967-1987 | 203319 | 46.667 | -85.967 | GRAND MARAIS 1 SE           | 628  | 1900-1990 |
| 200489 | 46.783 | -88.483 | BARAGA 1 N               | 808  | 1898-1951 | 203332 | 42.900 | -85.667 | GRAND RAPIDS WB AIRPORT     | 686  | 1948-1963 |
| 200552 | 42.333 | -85.183 | BATTLE CREEK             | 938  | 1895-1990 | 203333 | 42.883 | -85.517 | GRAND RAPIDS WSO AP         | 717  | 1963-1990 |
| 200568 | 43.617 | -83.867 | BAY CITY                 | 597  | 1887-1978 | 233337 | 42.967 | -85.667 | GRAND RAPIDS WB CITY        | 645  | 1948-1956 |
| 200647 | 46.183 | -88.883 | BEECHWOOD 7 WNW          | 1668 | 1949-1990 | 203362 | 41.943 | -83.469 | GRAPE, MONROE CO.           | 625  | 1898-1916 |
| 200710 | 42.133 | -86.433 | BENTON HARBOR AIRPORT    | 656  | 1898-1990 | 203379 | 42.253 | -84.213 | GRASS LAKE, JACKSON C.O.    | 989  | 1905-1915 |
| 200715 | 44.630 | -86.233 | BENZONIA, BENZIE CO.,    | 832  | 1898-1930 | 203391 | 44.650 | -84.700 | GRAYLING                    | 1147 | 1898-1990 |
| 200718 | 46.583 | -89.550 | BERGLAND DAM             | 1306 | 1949-1990 | 203429 | 43.200 | -85.250 | GREENVILLE 2 NNE            | 886  | 1931-1990 |
| 200723 | 42.908 | -82.883 | BERLIN, ST. CLAIR CO.,   | -999 | 1898-1912 | 203477 | 42.383 | -82.900 | GROSSE POINTE FARMS         | 618  | 1950-1990 |
| 200735 | 41.950 | -86.417 | BERRIEN SPRINGS 5 W      | 757  | 1898-1990 | 203481 | 42.433 | -82.883 | GROSSE POINT SHORES         | 584  | 1946-1950 |
| 200745 | 46.483 | -90.017 | BESSEMER, GOGEBIC CO.    | 1433 | 1931-1938 | 203504 | 42.400 | -85.400 | GULL LAKE BIOL STA          | 896  | 1931-1990 |
| 200770 | 46.800 | -87.733 | BIG BAY 1 S              | 688  | 1945-1990 | 203521 | 42.217 | -86.367 | HAGAR, BERRIEN CO.          | 650  | 1902-1907 |
| 200779 | 43.700 | -85.483 | BIG RAPIDS WATERWORKS    | 936  | 1898-1990 | 203529 | 44.467 | -83.717 | HALE LOUD DAM               | 827  | 1931-1990 |
| 200787 | 42.548 | -83.213 | BIRMINGHAM, OAKLAND CO.  | 860  | 1898-1906 | 203561 | 42.085 | -84.557 | HANOVER, JACKSON CO.        | 1130 | 1898-1903 |
| 200793 | 46.100 | -85.95  | BLANEY, SCHOOLCRAFT CO.  | -999 | 1906-1911 | 203576 | 41.867 | -86.633 | HARBERT, BERRIEN CO.        | -999 | 1906-1990 |
| 200864 | 43.383 | -85.967 | BLOOMINGDALE             | 738  | 1904-1990 | 203585 | 43.867 | -82.683 | HARBOR BEACH 3 NW           | 608  | 1899-1990 |
| 200924 | 45.217 | -84.800 | BOYNE FALLS ST NURSERY   | 834  | 1948-1963 | 203616 | 44.033 | -84.800 | HARRISON 1 NNN              | 1166 | 1898-1985 |
| 200925 | 45.167 | -84.917 | BOYNE FALLS              | 746  | 1961-1990 | 203624 | 44.650 | -83.300 | HARRISVILLE                 | 656  | 1899-1965 |
| 200972 | 46.067 | -85.167 | BREVORT 6 NW             | 706  | 1953-1968 | 203627 | 44.617 | -83.417 | HARRISVILLE 7 SW            | 657  | 1965-1971 |
| 201176 | 44.267 | -85.400 | CADILLAC                 | 1306 | 1898-1990 | 203628 | 44.750 | -83.300 | HARRISVILLE 6 N             | 610  | 1971-1984 |
| 201213 | 47.167 | -88.500 | CALUMET CAAAP            | 1095 | 1931-1952 | 203632 | 43.700 | -86.367 | HART                        | 688  | 1898-1990 |
| 201221 | 41.750 | -84.767 | CAMDEN, HILLSDALE CO.    | 1210 | 1898-1899 | 203661 | 42.650 | -85.300 | HASTINGS                    | 787  | 1898-1990 |
| 201299 | 43.450 | -83.400 | CARO STATE HOSPITAL      | 678  | 1928-1990 | 203698 | 43.933 | -83.267 | HAYES, HURON CO.            | 620  | 1898-1914 |
| 201331 | 42.260 | -82.400 | CARSONVILLE, SANILAC CO. | 804  | 1898-1906 | 203744 | 46.667 | -88.333 | HERMAN, BARAGA CO.          | 1828 | 1968-1990 |
| 201364 | 41.908 | -86.010 | CASSOPOLIS, CASS CO.     | 900  | 1900-1938 | 203769 | 43.583 | -86.100 | HESPERIA, NEWAYGO CO.       | 787  | 1948-1990 |
| 201439 | 46.517 | -87.983 | CHAMPION VAN RIPER PARK  | 1576 | 1949-1990 | 203785 | 44.517 | -84.750 | HIGGINS LAKE                | 1196 | 1908-1978 |
| 201468 | 45.317 | -85.283 | CHARLEVOIX               | 607  | 1898-1990 | 203823 | 41.933 | -84.633 | HILLSDALE                   | 1087 | 1898-1990 |
| 201476 | 42.550 | -84.833 | CHARLOTTE                | 906  | 1902-1990 | 203858 | 42.800 | -86.117 | HOLLAND                     | 617  | 1898-1990 |
| 201484 | 46.350 | -86.933 | CHATHAMEKIP FARM         | 887  | 1900-1988 | 203908 | 47.167 | -88.500 | HOUGHTON AP, HOUGHTON CO.   | 1076 | 1900-1990 |
| 201486 | 46.333 | -86.917 | CHATHAM EXP FARM 2       | 878  | 1987-1990 | 203914 | 47.117 | -88.567 | HOUGHTON MICH TECH          | -999 | 1931-1950 |
| 201492 | 45.650 | -84.467 | CHEBOYGAN                | 597  | 1898-1990 | 203932 | 44.317 | -84.883 | HOUGHTON LAKE, ROSCOMMON    | 1147 | 1931-1990 |
| 201634 | 42.073 | -83.972 | CLINTON, LENAWEE CO.     | 830  | 1898-1916 | 203936 | 44.367 | -84.683 | HOUGHTON LAKE AP, ROSCOMMON | 1157 | 1964-1990 |
| 201675 | 41.950 | -85.000 | COLDWATER STATE SCHOOL   | 986  | 1897-1990 | 203947 | 42.583 | -83.917 | HOWELL WASTEWATER PL        | 928  | 1898-1990 |
| 201704 | 42.233 | -86.317 | COLOMA 3 NNW             | 706  | 1931-1951 | 203991 | 47.370 | -87.87  | HUMBOLDT, MARQUETTE CO.     | 1536 | 1898-1929 |
| 201744 | 42.177 | -84.640 | CONCORD, JACKSON CO.     | -999 | 1905-1912 | 204006 | 46.883 | -87.867 | HURON MOUNTAIN              | 625  | 1949-1959 |
| 201755 | 47.467 | -87.867 | COPPER HARBOR            | 620  | 1977-1978 | 204078 | 42.983 | -85.050 | IONIA, IONIA CO.            | 758  | 1898-1990 |
| 201777 | 47.483 | -87.950 | COPPER HARBOR 3 WNW      | 637  | 1979-1984 | 204090 | 45.833 | -88.067 | IRON MOUNTAIN WATERWKS      | 1068 | 1899-1990 |
| 201780 | 47.467 | -87.867 | COPPER HARBOR FT WILKNS  | 637  | 1948-1990 | 204104 | 46.467 | -90.183 | IRONWOOD, GOGEBIC CO.       | 1437 | 1901-1990 |
| 201800 | 45.883 | -87.300 | CORNELL 4 WSW            | 887  | 1963-1990 | 204127 | 46.483 | -87.650 | ISHPEMING                   | 1447 | 1898-1987 |
| 201804 | 45.983 | -87.267 | CORNELL 6 NNN            | 916  | 1951-1970 | 204130 | 48.000 | -88.900 | ISLE ROYAL, KEWEENAW CO.    | -999 | 1900-1990 |
| 201896 | 45.633 | -85.033 | CROSS VILLAGE            | 716  | 1953-1990 | 204150 | 42.267 | -84.450 | JACKSON AP, JACKSON CO.     | 1016 | 1897-1990 |
| 201901 | 43.273 | -82.618 | CROSSWELL, SANILAC CO.   | 731  | 1931-1939 | 204153 | 44.600 | -85.100 | IVAN, KALKASKA CO.          | 1000 | 1898-1951 |
| 201922 | 46.167 | -88.233 | CRYSTAL FALLS 6 NE       | 1367 | 1948-1989 | 204184 | 43.150 | -82.600 | JEDDO, ST. CLAIR CO.        | 667  | 1898-1920 |
| 202015 | 42.317 | -83.233 | DRARBORN                 | 617  | 1952-1990 | 204244 | 42.283 | -85.600 | KALAMAZOO STATE HOSP        | 956  | 1898-1990 |
| 202028 | 46.617 | -85.617 | DEER PARK STATE FOREST   | 675  | 1900-1954 | 204257 | 44.733 | -85.167 | KALKASKA, KALKASKA CO.      | 1047 | 1948-1990 |
| 202094 | 46.017 | -83.917 | DE TOUR VILLAGE          | 607  | 1900-1990 | 204320 | 43.200 | -85.767 | KENT CITY 2 SW              | 846  | 1948-1990 |
| 202102 | 42.417 | -83.017 | DETROIT CITY AIRPORT     | 637  | 1871-1990 | 204328 | 46.483 | -88.883 | KENTON, HOUGHTON CO.        | 1176 | 1940-1990 |
| 202103 | 42.233 | -83.333 | DETROIT METRO. WSO AP    | 637  | 1958-1990 | 204394 | 46.250 | -84.467 | KINCHELOE AF BASE           | 780  | 1960-1990 |
| 202104 | 42.233 | -83.533 | DETROIT WBAP WILLOW RUN  | 716  | 1950-1968 | 204406 | 46.250 | -84.467 | KINROSS AIR FORCE BASE      | 785  | 1953-1959 |
| 202140 | 42.650 | -84.650 | DIMONDALE 1 WSW          | 887  | 1978-1990 | 204502 | 44.317 | -85.200 | LAKE CITY, MISSAUKEE CO.    | 1247 | 1898-1990 |
| 202248 | 41.983 | -86.083 | DOWAGIAC 2 E             | 764  | 1939-1951 | 204623 | 46.733 | -88.450 | LANSE 2 S                   | 776  | 1948-1967 |
| 202250 | 41.983 | -86.133 | DOWAGIAC 1 W             | 746  | 1953-1990 | 204641 | 42.767 | -84.600 | LANSING AP, INGHAM CO.      | 847  | 1940-1990 |
| 202293 | 46.333 | -87.167 | DUKES, MARQUETTE CO.     | 1110 | 1927-1942 | 204655 | 43.050 | -83.333 | LAPEER, LAPEER CO.          | 878  | 1898-1990 |
| 202298 | 46.317 | -84.233 | DUNBAR FOREST EXP STA    | 608  | 1945-1990 | 204660 | 43.033 | -83.283 | LAPEER 2 SE                 | 834  | 1931-1949 |
| 202307 | 41.950 | -83.650 | DUNDEE, MONROE CO.       | 681  | 1900-1990 | 204670 | 46.200 | -86.98  | LATHRUP, DELTA CO.          | 1042 | 1898-1904 |
| 202329 | 42.912 | -83.987 | DURAND, SHIawassee CO.   | 799  | 1907-1927 | 204790 | 44.687 | -83.412 | LINCOLN, ALCONA CO.         | 785  | 1898-1903 |
| 202332 | 47.467 | -88.167 | EAGLE HARBOR COAST GD    | 630  | 1899-1972 | 204944 | 42.933 | -85.333 | LOWELL                      | 647  | 1948-1990 |
| 202381 | 45.150 | -85.133 | EAST JORDAN              | 596  | 1931-1990 | 204954 | 43.900 | -86.400 | LUDINGTON 4 SE              | 697  | 1896-1990 |
| 202393 | 42.700 | -84.467 | EAST LANSING EXP FARM    | 895  | 1899-1960 | 204967 | 44.417 | -84.017 | LUPTON 1 S                  | 907  | 1951-1990 |
| 202394 | 42.733 | -84.483 | EAST LANSING WB CITY     | 865  | 1948-1959 | 204969 | 44.033 | -85.683 | LUTHER                      | 1035 | 1909-1953 |
| 202395 | 42.667 | -84.483 | EAST LANSING 4 S         | 887  | 1957-1990 | 204995 | 45.850 | -84.620 | MACKINAC ISLAND, MACKINAC   | 831  | 1901-1938 |
| 202423 | 44.283 | -83.500 | EAST TAWAS               | 598  | 1898-1990 | 205000 | 45.783 | -84.733 | MACKINAW CITY NO 2          | 596  | 1898-1972 |
| 202437 | 42.517 | -84.650 | EATON RAPIDS             | 876  | 1948-1990 | 205024 | 41.875 | -84.042 | MADISON, LENAWEE CO.        | 760  | 1898-1901 |
| 202445 | 42.017 | -86.250 | EAU CLAIRE 4 NE          | 877  | 1924-1990 | 205043 | 44.900 | -85.083 | MANCELONA                   | 1114 | 1898-1953 |
| 202490 | 43.367 | -85.067 | EDMORE 3 SSW             | 958  | 1977-1978 | 205065 | 44.233 | -86.300 | MANISTEE                    | 678  | 1888-1990 |
| 202497 | 44.617 | -86.217 | ELBERTA                  | 606  | 1953-1967 | 305073 | 45.950 | -86.250 | MANISTIQUE                  | 627  | 1898-1990 |
| 202626 | 45.750 | -87.033 | ESCANABA                 | 607  | 1898-1990 | 205097 | 44.850 | -85.850 | MAPLE CITY                  | 736  | 1959-1990 |
| 202631 | 43.650 | -83.850 | ESSEKVILLE               | 597  | 1978-1990 | 205148 | 42.722 | -82.498 | MARINE CITY, ST. CLAIR CO.  | -999 | 1903-1906 |
| 202671 | 43.900 | -85.267 | EWART                    | 1007 | 1937-1990 |        |        |         |                             |      |           |

| STN #  | LAT    | LON     | STATION NAME               | ELEV | POR       |
|--------|--------|---------|----------------------------|------|-----------|
| 205558 | 41.917 | -83.400 | MONROE                     | 597  | 1917-1990 |
| 205567 | 43.467 | -86.417 | MONTAGUE 4 NW              | 657  | 1902-1990 |
| 205603 | 41.717 | -84.200 | MORENCI                    | 778  | 1907-1990 |
| 205637 | 48.100 | -88.550 | MOTT ISLAND ISLE ROYALE    | 626  | 1940-1990 |
| 205642 | 41.800 | -85.750 | MOTTVILLE, ST. JOSEPH CO.  | 920  | 1898-1900 |
| 205650 | 42.600 | -82.817 | MOUNT CLEMENS AF BASE      | 588  | 1898-1990 |
| 205662 | 43.583 | -84.767 | MT PLEASANT UNIVERSITY     | 806  | 1898-1990 |
| 205690 | 46.400 | -86.650 | MUNISING                   | 627  | 1911-1990 |
| 205712 | 43.167 | -86.233 | MUSKEGON WSO AP            | 637  | 1948-1990 |
| 205801 | 43.417 | -85.783 | NEWAYGO 2                  | 758  | 1976-1984 |
| 205803 | 43.483 | -85.633 | NEWAYGO HARDY DAM          | 766  | 1907-1974 |
| 205816 | 46.333 | -85.500 | NEWBERRY STATE HOSPITAL    | 888  | 1898-1990 |
| 205991 | 45.117 | -85.983 | NORTH MANITOU IS NO 2      | 596  | 1954-1965 |
| 205995 | 42.268 | -84.960 | NORTH MARSHALL, CALHOUN CO | 990  | 1898-1902 |
| 206007 | 45.133 | -85.650 | NORTHPORT 2 W              | -999 | 1898-1990 |
| 206158 | 44.917 | -85.500 | OLD MISSION 3 SSW          | 657  | 1898-1990 |
| 206164 | 42.445 | -84.933 | OLIVET, EATON CO.          | 934  | 1898-1919 |
| 206171 | 44.047 | -83.855 | OMER, ARENAC CO.           | 616  | 1898-1925 |
| 206184 | 45.433 | -84.233 | ONAWAY STATE PARK          | 696  | 1931-1990 |
| 206189 | 45.183 | -84.200 | ONAWAY 12 S                | 895  | 1900-1955 |
| 206210 | 46.867 | -89.317 | ONTONAGON                  | 706  | 1900-1977 |
| 206220 | 46.833 | -89.200 | ONTONAGON 6 SE             | 797  | 1977-1990 |
| 206292 | 43.008 | -84.372 | OVID, CLINTON CO.          | 760  | 1898-1911 |
| 206300 | 43.017 | -84.183 | OWOSSO WASTEWATER PLANT    | 778  | 1898-1990 |
| 206404 | 42.217 | -85.900 | PAW PAW                    | 717  | 1931-1965 |
| 206438 | 45.567 | -84.783 | PELLSTON FAA AIRPORT       | 726  | 1942-1990 |
| 206507 | 45.367 | -84.983 | PETOSKEY                   | 617  | 1898-1990 |
| 206590 | 44.467 | -85.133 | PLIONEER                   | 1437 | 1951-1953 |
| 206642 | 42.368 | -83.468 | PLYMOUTH, WAYNE CO.        | 725  | 1898-1924 |
| 206658 | 42.650 | -83.300 | PONTIAC STATE HOSPITAL     | 988  | 1901-1990 |
| 206661 | 44.043 | -82.995 | PORT AUSTIN, HURON CO.     | 618  | 1898-1909 |
| 206680 | 42.983 | -82.417 | PORT HURON                 | 597  | 1898-1990 |
| 206922 | 43.875 | -85.512 | REED CITY, OSCEOLA CO.     | 1033 | 1898-1921 |
| 206968 | 46.167 | -85.250 | REXTON                     | 875  | 1952-1957 |
| 207068 | 46.067 | -87.167 | ROCK                       | 948  | 1905-1990 |
| 207075 | 46.410 | -89.110 | ROCKLAND, ONTONAGON CO.    | 1190 | 1898-1899 |
| 207089 | 45.383 | -83.833 | ROGERS CITY 3 S            | 740  | 1948-1978 |
| 207091 | 45.400 | -83.917 | ROGERS CITY 5W             | 1015 | 1950-1953 |
| 207094 | 45.350 | -83.783 | ROGERS CITY 5 SE           | 628  | 1898-1990 |
| 207097 | 42.817 | -83.017 | ROMEO 1 N                  | 806  | 1898-1973 |
| 207122 | 44.500 | -84.600 | ROSCOMMON                  | 1137 | 1900-1951 |
| 207190 | 46.283 | -84.617 | RUDYARD 4 N                | 757  | 1978-1990 |
| 207217 | 43.450 | -83.967 | SAGINAW CON. P. CO.        | 608  | 1902-1987 |
| 207227 | 43.533 | -84.083 | SAGINAW FAA AIRPORT        | 666  | 1898-1990 |
| 207253 | 43.300 | -84.133 | SAINT CHARLES              | 608  | 1948-1990 |
| 207274 | 45.850 | -84.717 | ST IGNACE (MACKINAC BR)    | 607  | 1898-1990 |
| 207277 | 45.750 | -85.500 | ST JAMES BEAVER ISLAND     | 678  | 1905-1990 |
| 207280 | 43.017 | -84.550 | SAINT JOHNS                | 760  | 1898-1990 |
| 207286 | 42.100 | -86.517 | ST. JOSEPH, BERRIEN CO.    | 593  | 1931-1941 |
| 207350 | 43.417 | -82.833 | SANDUSKY                   | 776  | 1909-1990 |
| 207358 | 42.930 | -85.215 | SARANAC, IONIA CO.         | 639  | 1906-1939 |
| 207366 | 46.467 | -84.367 | SAULT STE MARIE WSO        | 727  | 1888-1990 |
| 207405 | 43.967 | -86.267 | SCOTTVILLE 1 NE            | 686  | 1948-1978 |
| 207413 | 43.883 | -85.183 | SEARS 2S                   | 1024 | 1948-1951 |
| 207515 | 46.283 | -85.950 | SENEYNATLWLR               | 716  | 1961-1990 |
| 207557 | 46.483 | -88.717 | SIDNAW, HOUGHTON CO.       | 1330 | 1898-1940 |
| 207590 | 43.192 | -85.938 | SLOCUM, MUSKEGON CO.       | -999 | 1902-1907 |
| 207662 | 42.100 | -84.248 | SOMERSET, HILLSDALE CO.    | -999 | 1898-1907 |
| 207690 | 42.400 | -86.283 | SOUTH HAVEN EXP FARM       | 628  | 1898-1990 |
| 207812 | 46.067 | -88.633 | STAMBAUGH 1 S              | 1568 | 1931-1990 |
| 207820 | 44.000 | -83.967 | STANDISH 1 N               | 618  | 1938-1990 |
| 207826 | 43.295 | -85.080 | STANTON, MONTCALM CO.      | 880  | 1898-1912 |
| 207867 | 45.417 | -87.717 | STEPHENSON 6 W             | 718  | 1948-1990 |
| 208043 | 46.600 | -85.233 | TAHQUAMENON FALLS S PK     | 756  | 1968-1990 |
| 208159 | 46.518 | -89.925 | THOMASTON, GOGEBIC CO.     | 1347 | 1898-1914 |
| 208172 | 42.943 | -83.283 | THORNVILLE, LAPEER CO.     | 975  | 1898-1914 |
| 208184 | 41.933 | -85.633 | THREERIVERS                | 817  | 1931-1990 |
| 208251 | 44.733 | -85.583 | TRAVERSE CITY FAA AP       | 626  | 1896-1990 |
| 208293 | 46.200 | -85.017 | TROUT LAKE                 | 847  | 1948-1990 |
| 208402 | 43.210 | -82.983 | VALLEY CENTER, SANILAC CO. | 803  | 1898-1899 |
| 208411 | 41.917 | -85.913 | VANDALIA, CASS CO.         | 884  | 1898-1900 |
| 208417 | 45.167 | -84.450 | VANDERBILT 11 ENE          | 937  | 1931-1990 |
| 208422 | 45.780 | -86.550 | VAN'S HARBOR, DELTA CO.    | -999 | 1902-1904 |
| 208434 | 43.372 | -83.585 | VASSAR, TUSCOLA CO.        | 641  | 1898-1920 |
| 208506 | 46.667 | -89.233 | VICTORIA, ONTONAGON CO.    | 1236 | 1909-1924 |
| 208650 | 42.750 | -83.050 | WASHINGTON 2 NNW           | 838  | 1974-1987 |
| 208680 | 46.283 | -89.167 | WATERSMEET                 | 1617 | 1909-1990 |
| 208725 | 42.267 | -83.350 | WAYNE                      | 635  | 1931-1956 |
| 208746 | 42.950 | -84.950 | WEBBER DAM, IONIA CO.      | 663  | 1931-1939 |
| 208751 | 42.667 | -84.183 | WEBBERVILLE, INGHAM CO.    | 884  | 1902-1910 |
| 208800 | 44.267 | -84.233 | WEST BRANCH                | 898  | 1900-1990 |
| 208851 | 46.380 | -86.620 | WETMORE, ALGER CO.         | 878  | 1898-1911 |
| 208887 | 43.552 | -85.772 | WHITE CLOUD, NEWAYGO CO.   | 873  | 1898-1903 |
| 208920 | 46.767 | -84.967 | WHITEFISH POINT            | 618  | 1900-1990 |
| 209006 | 42.683 | -84.300 | WILLIAMSTON                | 898  | 1898-1990 |
| 209014 | 42.083 | -83.583 | WILLIS 5 SSW               | 668  | 1931-1983 |
| 209105 | 45.283 | -84.617 | WOLVERINE STATE FOREST     | 774  | 1931-1949 |
| 209218 | 42.250 | -83.617 | YPSILANTI E. MICH UNIV     | 787  | 1898-1990 |

STN # - STATION NUMBER, LAT - LATITUDE, LON - LONGITUDE, ELEV - ELEVATION, POR - PERIOD OF RECORD, 99.999 - UNKNOWN LATITUDE, 999.999 - UNKNOWN LONGITUDE, -999 - UNKNOWN ELEVATION

**MINNESOTA**

| STN #  | LAT       | LONG    | STATION NAME             | ELEV | POR       | STN #  | LAT    | LONG    | STATION NAME               | ELEV | POR       |
|--------|-----------|---------|--------------------------|------|-----------|--------|--------|---------|----------------------------|------|-----------|
| 210018 | 47.300    | -96.517 | ADA                      | 914  | 1896-1990 | 217727 | 47.433 | -92.967 | HIBBING PWR SUBSTATION     | 1536 | 1962-1981 |
| 210050 | 48.300    | -95.983 | AGASSIZ REFUGE           | 1146 | 1961-1990 | 213730 | 47.383 | -92.850 | HIBBING FAA AP             | 1356 | 1962-1990 |
| 210059 | 46.533    | -93.717 | AITKIN                   | 1228 | 1958-1990 | 213756 | 48.067 | -95.850 | HIGH LANDING 2 NW          | 1167 | 1948-1948 |
| 210075 | 43.650    | -93.350 | ALBERT LEA               | 1238 | 1896-1990 | 213793 | 46.017 | -92.933 | HINCKLEY                   | 1046 | 1905-1990 |
| 210112 | 45.867    | -95.383 | ALEXANDRIA FAA AP        | 1428 | 1897-1990 | 213795 | 46.017 | -92.950 | HINCKLEY NO. 2             | 1045 | 1920-1920 |
| 210157 | 43.883    | -94.150 | AMBOY                    | 1068 | 1905-1906 | 213913 | 47.845 | -89.960 | HOVLAND, COOK CO.          | 630  | 1905-1907 |
| 210195 | 48.100    | -96.700 | ANGUS 1 N                | 877  | 1902-197s | 213921 | 47.583 | -92.133 | HOYT LAKES 5 N             | 1527 | 1958-1984 |
| 210252 | 48.333    | -96.733 | ARGYLE 4 E               | 876  | 1931-1990 | 213962 | 44.917 | -94.367 | HUTCHINSON 1 N             | 1106 | 1916-1990 |
| 210287 | 45.367    | -96.133 | ARTICHOKE LAKE           | 1084 | 1917-1990 | 214026 | 48.567 | -93.383 | INT FALLS WSO AP           | 1188 | 1912-1990 |
| 210317 | 46.250    | -95.767 | ASHBY, GRANT CO          | 1293 | 1899-1906 | 214068 | 47.617 | -91.383 | ISABELLA 1 W               | 2015 | 1957-1990 |
| 210355 | 43.617    | -93.000 | AUSTIN 3 S               | 1227 | 1938-1990 | 214096 | 46.983 | -92.233 | ISLAND LAKE RESERVOIR      | 1375 | 1963-1975 |
| 210390 | 47.683    | -91.917 | BABBITT 2 SE             | 1624 | 1931-1986 | 214103 | 46.250 | -93.500 | ISLE 8 N                   | 1296 | 1963-1990 |
| 210432 | 47.525    | -95.397 | BLACKLEY, CLEARWATER CO  | 1446 | 1906-1917 | 214106 | 47.217 | -95.200 | ITASCA UNIV OF MINN        | 1497 | 1911-1990 |
| 210515 | 48.717    | -94.617 | BAUDETTE                 | 1085 | 1909-1990 | 214176 | 44.650 | -93.617 | JORDAN 1 S                 | 937  | 1949-1990 |
| 210520 | 48.417    | -94.567 | BAUDETTE 21 SSE          | 1188 | 1910-1990 | 214213 | 48.583 | -96.517 | KARLSTAD                   | 1058 | 1962-1990 |
| 210541 | 45.550    | -96.717 | BEARDSLEY                | 1095 | 1896-1973 | 214233 | 47.933 | -94.450 | KELLIHER                   | 1398 | 1909-1990 |
| 210546 | 47.337    | -95.807 | BEAULIEU, MAHNOMEN CO.   | 1200 | 1901-1912 | 214306 | 48.500 | -92.650 | KETTLE FALLS               | 1124 | 1989-1990 |
| 210628 | 44.622    | -93.763 | BELLE PLAINE, SCOTT CO.  | 800  | 1896-1896 | 214418 | 43.867 | -91.300 | LA CRESCENT DAM 7          | 656  | 1967-1981 |
| 210643 | 47.500    | -94.933 | BEMIDJI AIRPORT          | 1385 | 1896-1990 | 214438 | 44.450 | -92.267 | LAKE CITY                  | 686  | 1897-1990 |
| 210667 | 45.317    | -95.600 | BENSON                   | 1045 | 1952-1990 | 214441 | 44.105 | -94.215 | LAKE CRYSTAL, BLUE BARTH C | 900  | 1898-1918 |
| 210746 | 48.200    | -93.800 | BIG FALLS                | 1228 | 1930-1990 | 214534 | 44.000 | -95.950 | LAKE WILSON                | 1677 | 1973-1990 |
| 210754 | 47.700    | -93.550 | BIGFORK 5 ESE            | 1410 | 1959-1980 | 214546 | 44.250 | -95.317 | LAMBERTON SW EXP STA       | 1147 | 1961-1990 |
| 210783 | 44.767    | -94.900 | BIRD ISLAND              | 1095 | 1896-1976 | 214652 | 47.250 | -94.217 | LEECH LAKE DAM             | 1307 | 1896-1990 |
| 210803 | 47.717    | -94.567 | BLACKDCK RANGER STA      | 1404 | 1907-1908 | 214711 | 43.510 | -92.503 | LE ROY, MOWER CO.          | 1286 | 1899-1990 |
| 210809 | 47.750    | -94.517 | BLACK DUCK               | 1400 | 1889-1990 | 214721 | 44.467 | -93.917 | LE SUEUR                   | 835  | 1896-1897 |
| 210839 | 43.868    | -93.052 | BLOOMING PRAIRIE, STEELE | 1286 | 1896-1904 | 214778 | 45.117 | -94.533 | LITCHFIELD                 | 1135 | 1907-1990 |
| 210934 | 46.367    | -94.183 | BRAINERD                 | 1224 | 1899-1955 | 214793 | 45.983 | -94.350 | LITTLE FALLS 1 N           | 1127 | 1905-1990 |
| 210939 | 46.367    | -94.200 | BRAINERD                 | 1187 | 1955-1990 | 214806 | 48.400 | -93.550 | LITTLEFORK RANGER STA      | 1184 | 1910-1916 |
| 210989 | 47.267    | -91.850 | BRIMSON                  | 1528 | 1886-1990 | 214861 | 45.983 | -94.850 | LONG PRAIRIE               | 1294 | 1896-1990 |
| 211063 | 45.617    | -96.833 | BROWNS VALLEY            | 997  | 1973-1990 | 214918 | 47.700 | -90.667 | LUTSEN 3 NNE               | 1308 | 1896-1990 |
| 211107 | 45.183    | -93.883 | BUFFALO                  | 1007 | 1958-1990 | 214937 | 43.667 | -96.200 | LWERNB                     | 1507 | 1896-1990 |
| 211198 | 43.567    | -91.450 | CALEDONIA 5 SE           | 1188 | 1896-1990 | 214994 | 45.000 | -96.167 | MADISON SEWAGE PLANT       | 1086 | 1940-1990 |
| 211227 | 45.567    | -93.233 | CAMBRIDGE STATE HOSP     | 1006 | 1896-1990 | 215012 | 47.317 | -95.983 | MAHNOMEN 1 W               | 1205 | 1927-1990 |
| 211245 | 46.100    | -96.417 | CAMPBELL                 | 978  | 1909-1990 | 215020 | 47.467 | -92.983 | MAHONING MINE              | 1584 | 1931-1962 |
| 211263 | 44.717    | -96.283 | CANBY                    | 1246 | 1916-1990 | 215073 | 44.150 | -94.017 | MANKATO                    | 848  | 1984-1990 |
| 211374 | 47.383    | -94.617 | CASS LAKE                | 1306 | 1916-1990 | 215136 | 45.000 | -93.650 | MAPLE PLAIN                | 977  | 1896-1986 |
| 211390 | 45.317    | -93.283 | CEDAR                    | 918  | 1962-1990 | 215175 | 47.600 | -93.683 | MARCELL RANGER STN         | 1398 | 1981-1990 |
| 211420 | 45.165    | -93.045 | CEDAR ANOKA CO.          | -999 | 1920-1927 | 215204 | 44.467 | -95.767 | MARSHALL                   | 1157 | 1935-1990 |
| 211465 | 44.800    | -93.583 | CHASKA                   | 727  | 1931-1990 | 215224 | 44.283 | -92.533 | MAZEPPA, WABASHA CO.       | 934  | 1896-1897 |
| 211489 | 43.847    | -92.185 | CHATFIELD. FILLMORE CO.  | 976  | 1923-1928 | 215234 | 47.635 | -95.887 | MCINTOSH, POLK CO.         | -999 | 1907-1908 |
| 211630 | 46.700    | -92.517 | CLOQUET                  | 1277 | 1911-1990 | 215298 | 46.983 | -92.733 | MEADOWLANDS 9 S            | 1277 | 1916-1985 |
| 211675 | 47.267    | -93.467 | COLERAINE                | 1324 | 1934-1954 | 215325 | 45.667 | -94.817 | MELROSE                    | 1216 | 1954-1990 |
| 211691 | 45.583    | -94.400 | COLLEGEVILLE ST JOHN U   | 1236 | 1896-1990 | 215392 | 45.800 | -93.667 | MELROSE                    | 1097 | 1897-1990 |
| 211776 | 47.867    | -93.067 | COOK 18 W                | 1325 | 1959-1990 | 215400 | 45.117 | -95.933 | MILACA 1 ENE               | 1020 | 1896-1990 |
| 211840 | 47.183    | -92.417 | COTTON 3 E               | 1348 | 1962-1990 | 215430 | 45.067 | -93.300 | MILAN                      | 814  | 1989-1990 |
| 211857 | 48.267    | -92.467 | CRANE LAKE RANGER STA    | 1120 | 1961-1977 | 215435 | 44.883 | -93.217 | MINN-ST PAUL WSO AP        | 837  | 1948-1990 |
| 211891 | 47.800    | -96.617 | CROOKSTON NW EXP STA     | 887  | 1896-1990 | 215488 | 44.167 | -91.817 | MINNESOTA CITY DAM 5       | 674  | 1896-1978 |
| 211979 | 44.953    | -95.600 | CURRIE, MURRAY CO.       | 1460 | 1900-1904 | 215533 | 47.950 | -94.217 | MIZPAH, KOOCHICHING CO.    | 1409 | 1932-1940 |
| 212038 | 44.6.8.33 | -96.050 | DAWSON                   | 1065 | 1896-1896 | 215563 | 44.933 | -95.750 | MONTEVIDEO 1 SW            | 997  | 1896-1990 |
| 212050 | 4.883     | -94.367 | DEEP PORTAGE             | 1478 | 1983-1990 | 215589 | 46.867 | -96.750 | MOORHEAD ST TEACH COL      | 944  | 1896-1953 |
| 212088 | 45.050    | -93.783 | DELANO                   | 938  | 1977-1990 | 215598 | 46.450 | -92.750 | MOOSE LAKE 1 SSE           | 1117 | 1913-1990 |
| 212142 | 46.833    | -95.850 | DETROIT LAKES 1 NNE      | 1385 | 1895-1990 | 215615 | 45.883 | -93.300 | MORA                       | 996  | 1904-1990 |
| 212246 | 46.767    | -92.083 | DULUTH HARBOR STATION    | 616  | 1896-1990 | 215638 | 45.583 | -95.883 | MORRIS WC EXP STA          | 1147 | 1896-1990 |
| 212248 | 46.833    | -92.183 | DULUTH WSO AP            | 1437 | 1903-1990 | 215660 | 47.532 | -92.620 | MOUNTAIN IRON, ST. LOUIS C | -999 | 1896-1910 |
| 212253 | 46.783    | -92.100 | DULUTH                   | 1165 | 1935-1959 | 215693 | 48.300 | -95.983 | MUD LAKE NATIONAL WLR      | 1145 | 1957-1961 |
| 212476 | 45.983    | -95.967 | ELBOW LAKE               | 1218 | 1962-1988 | 215819 | 48.100 | -93.083 | NETT LAKE                  | 1357 | 1972-1973 |
| 212559 | 47.900    | -91.867 | ELY, ST. LOUIS CO.       | 1470 | 1911-1913 | 215842 | 45.300 | -94.933 | NEW LONWN                  | 1247 | 1896-1990 |
| 212645 | 47.467    | -92.567 | EVELETH WASTE WATER PL   | 1458 | 1986-1990 | 215853 | 43.892 | -93.495 | NEW RICHLAND, WASECA CO.   | 1180 | 1896-1919 |
| 212698 | 43.633    | -94.467 | FAIRMONT                 | 1195 | 1906-1990 | 215887 | 44.283 | -94.417 | NEW ULM 2 SE               | 868  | 1896-1990 |
| 212721 | 44.300    | -93.267 | FARIBAULT                | 946  | 1897-1990 | 215912 | 48.353 | -96.327 | NEWFOLDBN, MARSHALL CO.    | -999 | 1898-1901 |
| 212737 | 44.667    | -93.183 | FARMINGTON 3 NW          | 984  | 1896-1990 | 216007 | 44.167 | -94.033 | NORTH MANKATO              | 796  | 1954-1984 |
| 212742 | 46.633    | -93.167 | FARMINGTON 1 W           | 925  | 1957-1970 | 216148 | 47.833 | -95.850 | OKLEE                      | 1158 | 1967-1990 |
| 212768 | 46.283    | -96.067 | FERGUS FALLS             | 1327 | 1896-1990 | 216152 | 44.783 | -94.983 | OLIVIA                     | 1098 | 1976-1990 |
| 212826 | 46.933    | -92.917 | FLOODWOOD, ST. LOUIS CO  | 1257 | 1903-1911 | 216210 | 48.117 | -93.100 | ORR                        | 1386 | 1970-1971 |
| 212842 | 47.000    | -92.917 | FLOODWOOD 4 N            | 1258 | 1896-1990 | 216212 | 48.050 | -93.100 | ORR 5 SW                   | 1307 | 1961-1972 |
| 212881 | 45.267    | -92.917 | FOREST LAKE 4 SE         | 918  | 1958-1990 | 216235 | 45.868 | -95.153 | OSAKIS, DOUGLAS CO.        | -999 | 1907-1916 |
| 212904 | 46.183    | -94.367 | FORT RIPLEY              | 1157 | 1906-1930 | 216276 | 46.417 | -95.567 | OTTERTAIL                  | 986  | 1961-1990 |
| 212916 | 47.583    | -95.733 | FOSTON                   | 1318 | 1909-1990 | 216287 | 44.100 | -93.233 | OWATONNA                   | 1156 | 1961-1990 |
| 213076 | 44.550    | -94.217 | GAYLORD                  | 1025 | 1956-1990 | 216360 | 46.917 | -95.067 | PARK RAPIDS                | 1448 | 1893-1990 |
| 213104 | 47.083    | -96.783 | GEORGETOWN 1 E           | 898  | 1962-1990 | 216386 | 45.383 | -94.733 | PAYNESVILLE                | 1187 | 1970-1973 |
| 213169 | 44.770    | -94.147 | GLENCOE, MCLEOD CO.      | 1006 | 1896-1921 | 216479 | 45.817 | -94.000 | PIERZ, MORRISON CO.        | 1162 | 1912-1916 |
| 213174 | 45.667    | -95.417 | GLENWOOD 2 WNW           | 1207 | 1896-1990 | 216547 | 46.667 | -94.117 | PINE RIVER DAN             | 1255 | 1896-1990 |
| 213206 | 47.733    | -95.517 | GONVICK 2 W              | 1447 | 1969-1969 | 216565 | 44.017 | -96.317 | PIPESTONE                  | 1716 | 1899-1990 |
| 213282 | 47.733    | -90.350 | GRAND MARAIS             | 617  | 1913-1990 | 216573 | 45.490 | -92.787 | PLEASANT MOUNDS, CHISAGO   | -999 | 1896-1904 |
| 213290 | 43.700    | -92.567 | GRAND MEADOW             | 1356 | 1896-1990 | 216612 | 47.250 | -93.583 | POKEGAMA DAM               | 1288 | 1896-1990 |
| 213293 | 48.000    | -89.583 | GRAND PORTAGE 5 NE       | 637  | 1896-1990 | 216654 | 43.667 | -92.083 | PRESTON                    | 936  | 1952-1990 |
| 213296 | 47.967    | -89.683 | GRAND PORTAGE R S        | 738  | 1958-1990 | 216780 | 47.877 | -94.912 | REDBY, BELTRAMI CO.        | 1158 | 1925-1930 |
| 213303 | 47.233    | -93.500 | GRAND RAPIDS NC SCHOOL   | 1318 | 1915-1990 | 216785 | 47.875 | -95.018 | RED LAKE, BELTRAMI CO.     | -999 | 1908-1924 |
| 213307 | 45.637    | -93.443 | GRANDY, ISANTI CO.       | 930  | 1917-1919 | 216787 | 47.883 | -96.283 | RED LAKE FALLS             | 1047 | 1913-1990 |
| 213311 | 44.817    | -95.550 | GRANITE FALLS POWER PL   | 896  | 1896-1896 | 216795 | 47.867 | -95.033 | RED LAKE INDIAN AGENCY     | 1227 | 1893-1990 |
| 213411 | 46.417    | -94.350 | GULL LAKE DAM            | 1225 | 1911-1990 | 216817 | 44.567 | -92.533 |                            |      |           |

| STN #  | LAT    | Lon     | STATION NAME               | ELEV | POR       |
|--------|--------|---------|----------------------------|------|-----------|
| 217149 | 46.483 | -96.267 | ROTHSAY                    | 1217 | 1959-1990 |
| 217277 | 43.973 | -92.067 | ST. CHARLES, WINONA CO.    | 850  | 1896-1923 |
| 217294 | 45.550 | -94.067 | ST CLOUD WSO AP            | 1048 | 1896-1990 |
| 217326 | 43.983 | -94.617 | ST JAMES FILTRATION PL     | 1088 | 1958-1990 |
| 217377 | 44.983 | -93.083 | ST PAUL                    | 928  | 1896-1990 |
| 217386 | 44.933 | -93.067 | ST PAUL WB AIRPORT         | 705  | 1948-1953 |
| 217405 | 44.300 | -93.967 | ST PETER 2 SW              | 857  | 1896-1990 |
| 217460 | 46.800 | -93.317 | SANDY LAKE DAM LIBBY       | 1237 | 1896-1990 |
| 217502 | 45.550 | -93.767 | SANTIAGO 3 E               | 1026 | 1961-1990 |
| 217514 | 45.733 | -94.952 | SAUK CENTRE, STEARNS CO.   | 1244 | 1896-1898 |
| 217573 | 44.797 | -93.525 | SHAKOPEE, SCOTT CO.        | 745  | 1896-1909 |
| 217740 | 43.900 | -95.883 | SLAYTON 9 Sw               | 1586 | 1898-1973 |
| 217907 | 44.250 | -94.983 | SPRINGFIELD 1 NW           | 1076 | 1937-1990 |
| 218011 | 47.400 | -92.400 | STEPHENS MINE, ST. LOUIS C | 1500 | 1906-1914 |
| 218025 | 44.650 | -94.517 | STEWART 6 Ssw              | 1046 | 1957-1990 |
| 218037 | 45.033 | -92.783 | STILLWATER 1 SE            | 716  | 1958-1990 |
| 218187 | 46.633 | -93.133 | TAMARACK                   | 1275 | 1959-1961 |
| 218191 | 46.967 | -95.650 | TAMARAC WILDLIFE REF       | 1488 | 1977-1990 |
| 218204 | 45.417 | -92.650 | TAYLORS FALLS 1 NE         | 764  | 1906-1949 |
| 218227 | 44.300 | -92.200 | THEILMAN                   | 737  | 1962-1990 |
| 218243 | 48.067 | -96.183 | THIEF RIVER FALLS          | 1137 | 1905-1972 |
| 218247 | 48.183 | -96.167 | THIEF RIVER FALLS          | 1138 | 1972-1990 |
| 218254 | 48.217 | -95.250 | THORHULT 1 S               | 1197 | 1959-1990 |
| 218311 | 47.750 | -92.283 | TOWER 3 S                  | 1467 | 1896-1990 |
| 218323 | 44.233 | -95.617 | TRACY                      | 1406 | 1912-1990 |
| 218332 | 47.950 | -95.650 | TRAIL 12 NNE               | 1166 | 1963-1966 |
| 218419 | 47.017 | -91.667 | TWO HARBORS                | 636  | 1897-1990 |
| 218429 | 44.283 | -96.133 | TYLER                      | 1758 | 1916-1990 |
| 218543 | 47.500 | -92.550 | VIRGINIA                   | 1446 | 1911-1987 |
| 218552 | 44.383 | -92.033 | WABASHA                    | 707  | 1896-1909 |
| 218579 | 46.400 | -95.150 | WADENA 3 S                 | 1357 | 1904-1990 |
| 218618 | 47.067 | -94.583 | WALKER AH GWAH CHING       | 1414 | 1907-1990 |
| 218656 | 48.567 | -95.633 | WANNASKA 8 SE              | 1198 | 1963-1990 |
| 218673 | 48.800 | -96.783 | WARREN, MARSHALL CO.       | 859  | 1912-1922 |
| 218679 | 48.917 | -95.317 | WARROAD                    | 1076 | 1901-1990 |
| 218692 | 44.067 | -93.517 | WASECA EXPERIMENT STN      | 1156 | 1914-1990 |
| 218700 | 48.167 | -94.517 | WASKISH RANGER STATION     | 1176 | 1963-1986 |
| 218808 | 43.750 | -93.733 | WELLS 1 NW                 | 1205 | 1968-1981 |
| 218822 | 44.155 | -92.902 | WEST CONCORD, DODGE CO.    | 1232 | 1909-1910 |
| 218907 | 45.800 | -96.483 | WHEATON                    | 1025 | 1914-1990 |
| 218939 | 47.283 | -92.183 | WHITEFACE RESERVOIR        | 1496 | 1965-1975 |
| 218999 | 45.117 | -95.017 | WILLMAR COUNTY HWY GAR     | 1140 | 1896-1950 |
| 219004 | 45.133 | -95.017 | WILLMAR STATE HOSPITAL     | 1137 | 1931-1990 |
| 219015 | 46.317 | -92.843 | WILLOW RIVERINE CO.        | 1048 | 1898-1909 |
| 219033 | 43.867 | -95.117 | WINDOM                     | 1388 | 1905-1990 |
| 219046 | 43.767 | -94.167 | WINNEBAGO                  | 1118 | 1899-1990 |
| 219059 | 47.433 | -94.050 | WINNIBIGOSHISH DAN         | 1324 | 1897-1990 |
| 219067 | 44.050 | -91.633 | WINONA                     | 655  | 1896-1990 |
| 219072 | 44.083 | -91.683 | WINONA DAM 5 A             | 665  | 1905-1981 |
| 219093 | 44.533 | -94.367 | WINTHROP                   | -999 | 1917-1919 |
| 219101 | 47.933 | -91.767 | WINTON POWER PLANT         | 1345 | 1914-1990 |
| 219166 | 43.617 | -95.600 | WORTHINGTON                | 1596 | 1896-1971 |
| 219170 | 43.650 | -95.583 | WORTHINGTON 2 NNE          | 1577 | 1971-1990 |
| 219173 | 46.717 | -93.067 | WRIGHT 4 NW                | 1306 | 1961-1990 |
| 219249 | 44.300 | -92.667 | ZUMBROTA                   | 994  | 1896-1990 |
| 990401 | 44.858 | -94.302 | LAKESIDE, RENVILLE CO.     | 1040 | 1896-1902 |

STN # - STATION NUMBER, LAT - LATITUDE, Lon - LONGITUDE, ELEV - ELEVATION, POR - PERIOD OF RECORD, 99.999 - UNKNOWN LATITUDE, 999.999 - UNKNOWN LONGITUDE, -999 - UNKNOWN ELEVATION

**NEW YORK**

| STN #  | LAT     | LON     | STATION NAME             | ELEV | POR       | STN #  | LAT    | LON     | STATION NAME            | ELEV | POR       |
|--------|---------|---------|--------------------------|------|-----------|--------|--------|---------|-------------------------|------|-----------|
| 300015 | 43.900  | -76.067 | ADAMS CENTER             | 404  | 1907-1922 | 301949 | 41.017 | -72.500 | CUTCHOGUE               | 46   | 1899-1938 |
| 300023 | 42.100  | -77.233 | ADDISON                  | 994  | 1891-1990 | 301966 | 44.717 | -73.717 | DANNEMORA               | 1347 | 1906-1990 |
| 300028 | 42.100  | -77.233 | ADDISON 1 NNE            | 1238 | 1927-1988 | 301974 | 42.567 | -77.700 | DANSVILLE               | 696  | 1920-1990 |
| 300030 | 43.688  | -73.740 | ADIRONACK LODGE          | -999 | 1901-1902 | 301979 | 42.583 | -77.717 | DANSVILLE CAA AP        | 654  | 1929-1953 |
| 300040 | 43.097  | -78.385 | ALABAMA                  | -999 | 1890-1891 | 302020 | 44.505 | -75.275 | DEKALB                  | 441  | 1903-1906 |
| 300042 | 42.750  | -73.800 | ALBANY WSO AP            | 287  | 1948-1990 | 302036 | 42.250 | -74.933 | DELHI 2 SW              | 135  | 1924-1990 |
| 300047 | 42.650  | -73.750 | ALBANY                   | 12   | 1889-1970 | 302060 | 42.067 | -75.433 | DEPOSIT                 | 1000 | 1963-1990 |
| 300049 | 42.583  | -73.733 | Albany 4 S               | 97   | 1948-1970 | 302071 | 42.700 | -79.017 | DERBY 2 NW              | 644  | 1948-1961 |
| 300055 | 43.283  | -78.167 | ALBION 2 NE              | 517  | 1939-1990 | 302079 | 42.817 | -75.883 | DE RUYTER 4 N           | 1304 | 1903-1924 |
| 300063 | 42.467  | -73.933 | ALCOVE DAM               | 607  | 1948-1990 | 302091 | 40.800 | -73.300 | DIX HILLS               | 128  | 1987-1990 |
| 300070 | 42.900  | -78.500 | ALDEN                    | 860  | 1898-1904 | 302129 | 41.017 | -73.867 | DOBBS FERRY             | 247  | 1948-1990 |
| 300077 | 44.333  | -75.917 | ALEXANDRIA BAY 1 SW      | 267  | 1937-1972 | 302169 | 42.083 | -74.967 | DOWNSVILLE DAN          | 1305 | 1959-1987 |
| 300085 | 42.250  | -77.783 | ALFRED                   | 1746 | 1889-1990 | 302180 | 42.493 | -76.298 | DRYDEN                  | -999 | 1896-1899 |
| 300090 | 42.093  | -78.500 | ALLEGANY                 | 1440 | 1907-191s | 302198 | 42.483 | -79.350 | DUNKIRK POWER PLANT     | 596  | 1892-1953 |
| 300093 | 42.100  | -78.750 | ALLEGANY STATE PARK      | 1504 | 1924-1990 | 302366 | 42.250 | -74.183 | EAST JEWETT             | 1988 | 1985-1990 |
| 300159 | 42.917  | -74.133 | AMSTERDAM LOCK 10        | 284  | 1904-1923 | 302506 | 42.650 | -78.900 | EDEN                    | 837  | 1889-1943 |
| 300175 | 42.150  | -77.800 | ANDOVER                  | 1674 | 1922-1948 | 302517 | 42.133 | -74.233 | EDGEWOOD                | 1664 | 1894-1894 |
| 300183 | 42.300  | -78.017 | ANGELICA                 | 1424 | 1889-1990 | 302540 | 43.083 | -78.187 | ELBA                    | 750  | 1900-1918 |
| 300200 | 43.327  | -78.650 | APPLETON                 | 300  | 1889-1923 | 302554 | 44.217 | -73.600 | ELIZABETHTOWN           | 585  | 1898-1990 |
| 300220 | 42.533  | -78.417 | ARCADE                   | 1496 | 1889-1990 | 302582 | 41.717 | -74.400 | ELLENVILLE              | 356  | 1948-1990 |
| 300242 | 43.250  | -74.517 | ARIETTA                  | 1708 | 1978-1978 | 302599 | 42.850 | -78.633 | ELMA                    | 775  | 1948-1960 |
| 300280 | 42.557  | -77.472 | ATLANTA                  | 1200 | 1900-1906 | 302610 | 42.083 | -76.783 | ELMIRA 2 SE             | 866  | 1889-1990 |
| 300321 | 42.933  | -76.533 | AUBURN 2 NE              | 778  | 1889-1990 | 302615 | 42.167 | -76.900 | ELMIRA FAA AIRPORT      | 946  | 1948-1960 |
| 300331 | 42.733  | -76.650 | AURORA RESEARCH FARM     | 835  | 1956-1990 | 302627 | 42.100 | -76.067 | ENDICOTT                | 838  | 1985-1990 |
| 300343 | 42.917  | -77.750 | AVON                     | 564  | 1895-1990 | 302675 | 42.117 | -77.133 | Erwin                   | 931  | 1948-1960 |
| 300351 | 40.717  | -73.367 | BABYLON                  | 50   | 1948-1959 | 302720 | 43.150 | -74.900 | FAIRFIELD               | 1467 | 1979-1981 |
| 300360 | 42.300  | -75.483 | BAINBRIDGE               | 1028 | 1937-1990 | 302760 | 40.750 | -73.433 | FARMINGDALE 2 NE        | 84   | 1920-1956 |
| 300362 | 42.283  | -75.483 | Bainbridge Jennison      | 970  | 1948-1990 | 302770 | 44.250 | -74.517 | FAUST                   | -999 | 1904-1913 |
| 300379 | 43.150  | -76.333 | BALDWINVILLE             | 384  | 1891-1908 | 302780 | 43.033 | -76.000 | FAYETTEVILLE            | 530  | 1900-1920 |
| 300385 | 42.900  | -73.867 | BALLSTON LAKE            | -999 | 1904-1931 | 302850 | 42.333 | -76.568 | FLEMING                 | 1000 | 1889-1900 |
| 300424 | 43.833  | -74.800 | BARNES CORNERS           | 1528 | 1979-1987 | 302872 | 40.767 | -73.867 | FLUSHING                | 60   | 1931-1938 |
| 300443 | 43.000  | -78.183 | BATAVIA                  | 905  | 1948-1990 | 302888 | 42.967 | -74.417 | FONDA                   | 454  | 1949-1949 |
| 300448 | 42.350  | -77.350 | BATH                     | 1116 | 1961-1990 | 302934 | 44.033 | -75.767 | FORT DRUM               | 637  | 1975-1985 |
| 300489 | 41.317  | -74.000 | BEAR MOUNTAIN WB         | 1304 | 1948-1953 | 302940 | 43.252 | -79.050 | FORT NIAGARA            | 263  | 1890-1899 |
| 300505 | 42.667  | -78.383 | BEAVER MEADOW            | 1487 | 1976-1981 | 302953 | 42.933 | -74.617 | FORT PLAIN              | 316  | 1905-1947 |
| 300511 | 41.233  | -73.717 | BEDFORD HILLS            | 434  | 1948-1977 | 302964 | 40.800 | -73.800 | FORT SCHUYLER           | 65   | 1890-1959 |
| 300540 | 42.117  | -75.117 | BEERSTON                 | 1554 | 1912-1918 | 303025 | 42.333 | -78.467 | FRANKLINVILLE 1 SSW     | 1587 | 1896-1990 |
| 300621 | 40.600  | -73.967 | BENSONHURST              | 25   | 1950-1951 | 303033 | 42.450 | -79.300 | FREDGNIA                | 768  | 1914-1990 |
| 300630 | 44.215  | -74.990 | BENSON MINES             | -999 | 1909-1909 | 303038 | 42.367 | -74.067 | FREEHOLD 2 NW           | 456  | 1963-1978 |
| 300641 | 42.617  | -73.367 | BERLIN 5 S               | 1107 | 1904-1906 | 303065 | 42.133 | -78.233 | FRIENDSHIP 7 SW         | 1646 | 1893-1990 |
| 300686 | 42.083  | -76.100 | BINGHAMTON WB AIRPORT    | 834  | 1915-1951 | 303102 | 44.433 | -74.167 | GABRIELS                | 1766 | 1900-1978 |
| 300687 | 42.217  | -75.983 | BINGHAMTON WSO AP        | 1605 | 1896-1990 | 303124 | 42.700 | -77.400 | GANNETT HILL            | 1957 | 1971-1990 |
| 300691 | 42.100  | -75.917 | BINGHAMTON               | 864  | 1890-1968 | 303152 | 41.217 | -74.000 | GARNEVILLE              | 198  | 1983-1989 |
| 300740 | 42.333  | -74.800 | BLOOMVILLE               | -999 | 1895-1896 | 303177 | 42.883 | -77.000 | GENEVA EXP STATION      | 590  | 1889-1968 |
| 300766 | 42.067  | -78.167 | BOLIVAR                  | 1586 | 1896-1990 | 303184 | 42.883 | -77.033 | GENEVA RESEARCH FARM    | 726  | 1891-1990 |
| 300785 | 43.450  | -75.350 | BOONVILLE 2 SSW          | 1587 | 1949-1990 | 303259 | 41.517 | -73.933 | GLENHAM                 | 287  | 1933-1990 |
| 300795 | 42.897  | -75.533 | BOUCKVILLE               | 1420 | 1897-1916 | 303284 | 43.333 | -73.733 | GLENS FALLS FARM        | 505  | 1988-1990 |
| 300808 | 44.045  | -73.733 | BOYDS CORNERS            | 564  | 1889-1893 | 303289 | 43.317 | -73.650 | GLENS FALLS FIRE STA    | 354  | 1902-1956 |
| 300862 | 44.0783 | -73.250 | BRENTWOOD                | 105  | 1891-1899 | 303294 | 43.350 | -73.617 | GLENS FALLS FAA AP      | 325  | 1948-1990 |
| 300889 | 0.950   | -72.300 | BRIDGEHAMPTON            | 64   | 1898-1990 | 303319 | 43.050 | -74.333 | GLGVERSVILLE            | 818  | 1982-1990 |
| 300937 | 43.250  | -77.967 | BROCKPORT 2 NW           | 415  | 1890-1990 | 303346 | 44.350 | -75.517 | GOUVERNEUR 3 NW         | 466  | 1937-1990 |
| 300950 | 42.817  | -75.317 | BROOKFIELD               | 1350 | 1890-1896 | 303354 | 42.483 | -78.933 | GOWANDA STATE HOSPITAL  | 877  | 1948-1990 |
| 301012 | 42.933  | -78.733 | BUFFALO WFSO AP          | 716  | 1889-1990 | 303360 | 42.783 | -73.467 | GRAFTON                 | 1566 | 1950-1990 |
| 301093 | 42.317  | -74.017 | CAIRO                    | 304  | 1925-1963 | 303416 | 43.133 | -75.117 | GRAVESVILLE 2 N         | 1125 | 1950-1960 |
| 301095 | 42.333  | -74.050 | CAIRO 1 NW               | 477  | 1979-1990 | 303452 | 43.117 | -73.833 | GREENFIELD CENTER       | 614  | 1906-1955 |
| 301101 | 41.767  | -75.050 | CALLICOON                | 800  | 1949-1966 | 303464 | 41.100 | -72.367 | GREENPORT POWER HOUSE   | 25   | 1958-1990 |
| 301103 | 41.783  | -75.050 | Callicoon 2              | 1300 | 1949-1966 | 303480 | 43.090 | -73.502 | GREENWICH               | 425  | 1898-1912 |
| 301110 | 43.367  | -75.783 | CAMDEN 2 NW              | 516  | 1960-1990 | 303500 | 42.250 | -74.558 | GRIFFIN CORNERS         | 2260 | 1901-1912 |
| 301136 | 42.417  | -73.400 | CANAAN 2 E               | 1187 | 1900-1903 | 303507 | 43.233 | -75.400 | GRIFFISS AIR FORCE BASE | 496  | 1980-1990 |
| 301144 | 42.917  | -74.583 | CANAJOHARIE              | 307  | 1897-1903 | 303553 | 43.317 | -73.850 | Hadley                  | 564  | 1948-1978 |
| 301152 | 42.850  | -77.283 | CANANDAIGUA 3 S          | 727  | 1948-1990 | 303602 | 42.817 | -75.533 | HAMILTON                | 1214 | 1894-1963 |
| 301170 | 42.383  | -78.183 | CANEADEA DAM             | 1480 | 1929-1939 | 303619 | 42.433 | -77.150 | HAMMONDSPORT 4 NE       | 1300 | 1902-1892 |
| 301185 | 44.567  | -75.117 | CANTON 4 SE              | 415  | 1889-1990 | 303660 | 44.573 | -73.538 | HARKNESS                | 622  | 1902-1932 |
| 301190 | 44.125  | -76.337 | CAPE VINCENT             | 256  | 1905-1925 | 303773 | 42.783 | -77.617 | HEMLOCK                 | 904  | 1898-1990 |
| 301207 | 41.417  | -73.700 | CARMEL 1 SW              | 496  | 1890-1984 | 303781 | 40.717 | -73.633 | HEMPSTEAD-GARDEN CITY   | 87   | 1948-1972 |
| 301260 | 42.233  | -73.867 | CATSKILL 1 N             | 256  | 1896-1977 | 303786 | 40.683 | -73.667 | HEMPSTEAD MALVERNE      | 44   | 1948-1966 |
| 301272 | 42.917  | -75.867 | CAZENOVIA                | 1254 | 1916-1951 | 303881 | 43.283 | -74.783 | HILTON                  | 294  | 1948-1959 |
| 301280 | 42.550  | -73.783 | CEDAR HILL               | -999 | 1898-1903 | 303889 | 43.317 | -75.117 | HINCKLEY                | 1196 | 1960-1990 |
| 301285 | 40.650  | -73.517 | Cedar Creek Pk. Want.agh | 10   | 1948-1990 | 303916 | 43.383 | -74.733 | HOFFMEISTER 3 W         | 1726 | 1963-1965 |
| 301387 | 44.750  | -74.217 | CHASM FALLS              | 1066 | 1931-1990 | 304024 | 42.250 | -73.783 | HUDSON                  | 325  | 1920-1957 |
| 301391 | 42.367  | -73.600 | CHATHAM                  | 426  | 1905-1970 | 304025 | 42.250 | -73.800 | HUDSON STATE SCHOOL     | 66   | 1957-1990 |
| 301401 | 44.883  | -73.433 | CHAZY                    | 176  | 1903-1990 | 304040 | 42.217 | -78.503 | HUMPHREY                | 1950 | 1889-1902 |
| 301415 | 42.217  | -75.850 | Chenango Forks 2 S       | 887  | 1948-1951 | 304045 | 42.535 | -77.967 | HUNT                    | 1150 | 1905-1920 |
| 301433 | 42.617  | -73.417 | CHERRY PLAIN             | 1404 | 1948-1949 | 304090 | 43.013 | -75.037 | ILION                   | -999 | 1889-1890 |
| 301436 | 42.817  | -74.733 | CHERRY VALLEY 2 NNE      | 1364 | 1952-1990 | 304102 | 43.750 | -74.283 | INDIAN LAKE 2 SW        | 1665 | 1900-1990 |
| 301589 | 42.667  | -74.500 | COBLESKILL               | 965  | 1948-1956 | 304130 | 40.783 | -73.100 | ISLIP FCWOS             | 84   | 1986-1990 |
| 301593 | 42.667  | -74.500 | COBLESKILL 2             | 908  | 1956-1986 | 304174 | 42.450 | -76.450 | ITHACA CORNELL UNIV     | 966  | 1889-1990 |
| 301595 | 42.667  | -74.433 | COBLESKILL 2 ESE         | 1178 | 1987-1990 | 304206 | 42.100 | -79.250 | JAMESTOWN               | 1395 | 1891-1960 |
| 301600 | 42.467  | -73.800 | COEYMANS                 | -999 | 1905-1906 | 304207 | 42.133 | -79.200 | JAMESTOWN 4 NE          | 1258 | 1960-1990 |
| 301623 | 42.667  | -78.683 | COLDEN 1 N               | 1036 | 1957-1990 | 304208 | 42.117 | -79.233 | JAMESTOWN WATER WORKS   | 1396 | 1962-1974 |
| 301708 | 43.317  | -73.933 | CONKLINGVILLE DAM        | 816  | 1976-1990 | 304220 | 44.433 | -73.680 | JAY                     | 999  | 1900-1901 |
| 301723 | 44.917  | -74.300 | CONSTABLE 1 S            | 427  | 1965-1982 | 304234 | 41.783 | -74.933 | JEFFERSONVILLE          | 1080 | 1904-1946 |
| 301725 | 43.567  | -75.433 | CONSTABLEVILLE           |      |           |        |        |         |                         |      |           |

| STN #  | LAT    | LON     | STATION NAME            | ELEV | POR       | STN #  | LAT    | LON     | STATION NAME             | ELEV | POR       |
|--------|--------|---------|-------------------------|------|-----------|--------|--------|---------|--------------------------|------|-----------|
| 304560 | 43.472 | -74.412 | LAKE PLEASANT           | -999 | 1910-1910 | 306701 | 43.967 | -76.283 | Point Peninsula          | 253  | 1987-1990 |
| 304575 | 42.450 | -74.467 | LANSING MANOR           | 1108 | 1985-1990 | 306720 | 42.900 | -76.017 | POMPEY                   | 1300 | 1891-1891 |
| 304632 | 40.733 | -73.933 | LAUREL HILL             | 15   | 1950-1951 | 306750 | 43.050 | -76.633 | PORT BYRON               | -999 | 1900-1901 |
| 304640 | 42.633 | -78.048 | LAUTERBRUNNEN           | -999 | 1913-1931 | 306768 | 40.950 | -73.067 | Port Jefferson           | 10   | 1948-1990 |
| 304647 | 44.750 | -74.650 | LAWRENCEVILLE           | 484  | 1932-1990 | 306774 | 41.383 | -74.683 | PORT JEFFERS             | 474  | 1890-1990 |
| 304680 | 42.977 | -77.992 | LE ROY                  | 900  | 1889-1911 | 306789 | 42.033 | -78.333 | POTSDAM                  | 1436 | 1962-1968 |
| 304698 | 42.583 | -78.033 | LEITCHWORTH PARK        | 1264 | 1932-1952 | 306805 | 44.670 | -74.985 | POTSDAM                  | 425  | 1889-1914 |
| 304715 | 43.183 | -79.050 | LEWISTON 1 N            | 336  | 1935-1972 | 306817 | 41.683 | -73.933 | POUGHKEEPSIE             | 105  | 1890-1971 |
| 304717 | 43.133 | -78.967 | LEWISTON 3 SE           | 638  | 1987-1990 | 306820 | 41.633 | -73.883 | POUGHKEEPSIE FAA AP      | 155  | 1948-1990 |
| 304731 | 41.800 | -74.733 | LIBERTY 1 NE            | 1585 | 1898-1990 | 306823 | 41.700 | -73.933 | Poughkeepsie Midtown     | 80   | 1948-1990 |
| 304791 | 43.067 | -74.867 | LITTLE FALLS CITY RES   | 907  | 1897-1990 | 306825 | 41.717 | -73.933 | Poughkeepsie 1 N         | 50   | 1948-1990 |
| 304796 | 43.033 | -74.867 | LITTLE FALLS MILL ST    | 364  | 1900-1990 | 306827 | 41.717 | -73.917 | Poughkeepsie Pendell Rd. | 220  | 1948-1990 |
| 304808 | 42.250 | -78.800 | LITTLE VALLEY           | 1584 | 1942-1990 | 306867 | 43.567 | -76.133 | PULASKI                  | 365  | 1948-1990 |
| 304844 | 43.183 | -78.650 | LOCKPORT 2 NE           | 524  | 1891-1990 | 306941 | 43.817 | -74.667 | RAQUETTE LAKE            | 1784 | 1908-1922 |
| 304849 | 43.200 | -78.633 | LOCKPORT 4 NE           | 446  | 1891-1990 | 306957 | 44.300 | -74.100 | RAY BROOK                | 1627 | 1971-1990 |
| 304912 | 43.783 | -75.483 | LOWVILLE                | 868  | 1891-1990 | 306965 | 43.750 | -75.683 | RECTORS CORNERS          | 1818 | 1987-1990 |
| 304940 | 43.062 | -76.995 | LYONS                   | 426  | 1889-1907 | 307024 | 42.533 | -74.167 | RENSELAEVILLE 2 NW       | 1737 | 1971-1990 |
| 304984 | 43.317 | -76.100 | MALLORY                 | 456  | 1887-1975 | 307035 | 41.883 | -73.867 | RHINEBECK 4 SE           | 317  | 1916-1974 |
| 304996 | 44.850 | -74.283 | MALONE                  | 888  | 1891-1990 | 307077 | 43.567 | -76.050 | RICHLAND                 | 524  | 1948-1952 |
| 305113 | 42.517 | -74.967 | MARYLAND 6 SW           | 1198 | 1984-1990 | 307080 | 42.633 | -74.567 | RICHMONDVILLE            | 1185 | 1900-1905 |
| 305134 | 44.933 | -74.850 | MASSENA FAA AIRPORT     | 204  | 1948-1990 | 307090 | 43.233 | -78.395 | RIDGEWAY                 | 420  | 1897-1906 |
| 305199 | 43.617 | -75.100 | MC KEEVER               | 1488 | 1927-1953 | 307115 | 41.850 | -74.050 | RIFTON 1 N               | 45   | 1925-1956 |
| 305291 | 42.600 | -74.317 | MIDDLEBURG              | 636  | 1889-1969 | 307120 | 42.265 | -79.710 | RIPLEY                   | -999 | 1904-190s |
| 305310 | 41.450 | -74.450 | MIDDLETOWN 2 NW         | 705  | 1891-1990 | 307134 | 40.967 | -72.717 | RIVERHEAD RESEARCH FARM  | 104  | 1939-1990 |
| 305334 | 41.850 | -73.617 | MILLBROOK               | 824  | 1948-1990 | 307160 | 43.183 | -77.633 | Rochester                | 246  | 1948-1952 |
| 305346 | 41.950 | -73.517 | MILLERTON               | 748  | 1948-1953 | 307167 | 43.117 | -77.667 | ROCHESTER WSO AP         | 556  | 1889-1990 |
| 305377 | 40.733 | -73.633 | MINEROLA                | 135  | 1938-1990 | 307246 | 43.233 | -75.417 | ROME GRIFFISS FIELD      | 495  | 1889-1917 |
| 305420 | 41.767 | -74.150 | MOHONK LAKE             | 1254 | 1896-1990 | 307250 | 42.750 | -76.833 | ROMULUS                  | 719  | 1891-1922 |
| 305430 | 44.833 | -74.567 | MOIRA                   | 200  | 1900-1930 | 307270 | 43.150 | -76.883 | ROSE                     | -999 | 1907-1908 |
| 305441 | 41.050 | -71.950 | MONTAUK                 | 17   | 1973-1979 | 307317 | 42.283 | -74.567 | ROXBURY                  | 1494 | 1915-1972 |
| 305490 | 43.385 | -74.733 | MORRHOUSEVILLE          | 1697 | 1908-1915 | 307356 | 44.050 | -74.633 | SABATTIS WHITNEY PARK    | 1735 | 1956-1958 |
| 305500 | 40.783 | -72.750 | Moriches Light Boat Stn | 22   | 1973-1979 | 307405 | 43.167 | -73.317 | SALEM                    | 498  | 1889-1990 |
| 305512 | 42.850 | -75.650 | MORRISVILLE 3 S         | 1305 | 1912-1990 | 307413 | 43.167 | -74.867 | SALISBURY                | 1304 | 1906-1973 |
| 305578 | 43.200 | -73.750 | MT. MCGREGOR            | 1060 | 1914-1944 | 307472 | 44.333 | -74.133 | SARANAC LAKE             | 1554 | 1889-1966 |
| 305597 | 42.733 | -77.900 | MOUNT MORRIS 2 W        | 886  | 1890-1990 | 307480 | 43.100 | -73.833 | SARATOGA SPRINGS 4 NW    | 554  | 1942-1951 |
| 305604 | 42.450 | -76.367 | MT PLEASANT FARM        | 1655 | 1957-1978 | 307484 | 43.033 | -73.817 | SARATOGA SPRINGS 4 Sw    | 307  | 1895-1990 |
| 305612 | 40.900 | -73.833 | MOUNT VERNON            | 155  | 1931-1941 | 307497 | 40.983 | -73.800 | SCARSDALE                | 205  | 1904-1990 |
| 305635 | 42.617 | -77.400 | NAPLES                  | 757  | 1969-1987 | 307498 | 40.983 | -73.767 | Scarsdale 2 ESE          | 215  | 1948-1990 |
| 305711 | 43.967 | -74.217 | NEWCOMB 3 W             | 1627 | 1911-1977 | 307513 | 42.833 | -73.917 | SCHENECTADY              | 228  | 1898-1985 |
| 305714 | 43.967 | -74.100 | NEWCOMB 3 E             | 1660 | 1984-1990 | 307514 | 42.800 | -73.917 | SCHENECTADY              | 360  | 1988-1990 |
| 305728 | 41.633 | -73.883 | NEW HACKENSACK          | 154  | 1948-1948 | 307515 | 42.817 | -73.950 | Schenectady River        | 209  | 1988-1990 |
| 305748 | 42.553 | -75.242 | NEW LISSON              | 1234 | 1891-1923 | 307524 | 43.833 | -73.767 | SCHROON LAKE             | 866  | 1948-1967 |
| 305759 | 41.683 | -74.133 | NEW PALTZ 4 SW          | 427  | 1972-1983 | 307578 | 42.017 | -77.750 | SCOTTSVILLE              | 565  | 1948-1990 |
| 305769 | 43.200 | -75.017 | NEWPORT 6 NE            | 1708 | 1985-1990 | 307617 | 43.583 | -76.200 | Selkirk Shores           | 260  | 1948-1990 |
| 305796 | 40.600 | -73.983 | NEW YORK AVE V BROOKLYN | 20   | 1953-1990 | 307633 | 40.967 | -73.100 | SETAUKBT                 | 400  | 1889-1990 |
| 305798 | 40.600 | -73.967 | NEW YORK BENSONHURST    | 20   | 1951-1953 | 307636 | 40.950 | -73.100 | Setauket 2               | 40   | 1948-1990 |
| 305799 | 40.867 | -73.883 | N Y BOTANICAL GARDENS   | 97   | 1973-1976 | 307659 | 42.800 | -74.600 | SHARON SPRINGS 1N        | 824  | 1914-1953 |
| 305801 | 40.783 | -73.967 | New York Central Park   | 130  | 1889-1990 | 307664 | 42.783 | -74.667 | SHARON SPRINGS 2SW       | 1364 | 1916-1951 |
| 305803 | 40.650 | -73.783 | N Y KENNEDY WSO AP      | 24   | 1908-1990 | 307705 | 42.650 | -75.483 | SHERBURNE 2 S            | 1086 | 1986-1990 |
| 305804 | 40.733 | -73.933 | New York Laurel Hill    | 10   | 1951-1983 | 307732 | 42.957 | -77.227 | SHORTSVILLE              | 660  | 1900-1936 |
| 305811 | 40.767 | -73.900 | N Y LAGUARDIA WSO AP    | 25   | 1910-1990 | 307742 | 41.333 | -73.833 | SHRUB OAK                | 425  | 1950-1971 |
| 305816 | 40.700 | -74.017 | NEW YORK WB CITY        | 15   | 1889-1960 | 307745 | 43.717 | -73.500 | SILVER BAY               | 350  | 1920-1926 |
| 305821 | 40.600 | -74.167 | N Y WESTERLEIGH STAT IS | 85   | 1951-1990 | 307799 | 42.017 | -77.417 | SLIDE MOUNTAIN           | 2654 | 1961-1990 |
| 305840 | 43.100 | -78.950 | NIAGARA FALLS INT'L AP  | 519  | 1989-1990 | 307842 | 43.200 | -77.017 | SODUS CENTER             | 445  | 1923-1990 |
| 305925 | 43.700 | -73.983 | NORTH CREEK             | 898  | 1908-1990 | 307900 | 43.133 | -76.767 | SOUTH BUTLER             | -999 | 1903-1904 |
| 305950 | 44.448 | -75.695 | NORTH HAMMOND           | 300  | 1889-1907 | 307918 | 42.183 | -77.550 | SOUTH CANISTEO           | 1564 | 1889-1908 |
| 305987 | 43.533 | -74.950 | NORTH LAKE              | 1834 | 1896-1948 | 307980 | 42.333 | -74.750 | SOUTH KORTRIGHT          | 1527 | 1889-1905 |
| 306019 | 40.900 | -73.350 | NORTHPORT               | 24   | 1948-1953 | 308036 | 43.783 | -73.800 | SOUTH SCHROON            | 981  | 1901-1965 |
| 306030 | 43.188 | -76.890 | NORTH ROSE              | 390  | 1919-1921 | 308058 | 42.717 | -78.600 | SOUTH WALES EMERY PARK   | 1094 | 1932-1979 |
| 306085 | 42.517 | -75.517 | NORWICH                 | 1126 | 1907-1990 | 308068 | 43.733 | -76.217 | Southwick Beach          | 260  | 1948-1979 |
| 306090 | 43.717 | -75.201 | NUMBER FOUR             | 1571 | 1889-1904 | 308080 | 43.500 | -74.367 | SPECULATOR               | 1746 | 1948-1978 |
| 306100 | 42.580 | -77.940 | NUNDA                   | -999 | 1898-1903 | 308088 | 42.200 | -76.567 | SPENCER 3 W              | 1006 | 1948-1990 |
| 306164 | 44.733 | -75.433 | OGDENSBURG 4 NE         | 284  | 1891-1990 | 308096 | 42.333 | -73.550 | SPENCERTOWN              | 634  | 1930-1959 |
| 306184 | 43.717 | -74.983 | OLD FORGE               | 1726 | 1908-1990 | 308104 | 43.233 | -73.750 | SPIER FALLS              | 397  | 1902-1973 |
| 306210 | 43.093 | -75.653 | ONEIDA                  | 500  | 1914-1914 | 308152 | 42.983 | -78.083 | STAFFORD                 | 914  | 1932-1967 |
| 306224 | 42.450 | -75.067 | ONEONTA 1 S             | 1084 | 1902-1956 | 308248 | 43.883 | -75.033 | STILLWATER RESERVOIR     | 1705 | 1893-1990 |
| 306225 | 42.450 | -75.067 | ONEONTA                 | 1155 | 1908-1958 | 308290 | 43.833 | -76.267 | Stony Point 2 E          | 257  | 1948-1967 |
| 306229 | 42.450 | -75.000 | ONEONTA 3 SE            | 1166 | 1948-1969 | 308300 | 42.233 | -76.450 | STRAITS CORNERS          | 1062 | 1896-1904 |
| 306232 | 42.467 | -75.067 | ONEONTA STATE UNIV      | 1407 | 1894-1983 | 308304 | 41.533 | -73.733 | STORMVILLE               | 915  | 1990-1990 |
| 306239 | 43.100 | -76.217 | ONONDAGA                | 1260 | 1893-1893 | 308321 | 41.117 | -74.117 | SUFFERN 2 E              | 424  | 1942-1955 |
| 306301 | 41.150 | -73.867 | OSSINING SING SING      | 35   | 1941-1959 | 308322 | 41.117 | -74.150 | SUFFERN WATER WORKS      | 275  | 1956-1990 |
| 306314 | 43.467 | -76.500 | OSWEGO EAST             | 358  | 1889-1990 | 308383 | 43.117 | -76.117 | SYRACUSE WSO AP          | 425  | 1891-1990 |
| 306340 | 42.362 | -78.797 | OTTO                    | 1260 | 1903-1912 | 308388 | 43.300 | -75.617 | TABERG                   | 515  | 1906-1907 |
| 306356 | 42.083 | -76.317 | OWEGO 3 WSW             | 817  | 1891-1891 | 308503 | 43.850 | -73.417 | TICONDEROGA              | 164  | 1898-1911 |
| 306365 | 42.443 | -75.600 | OXFORD                  | 976  | 1890-1913 | 308506 | 43.883 | -73.400 | TICONDEROGA 3 NE         | 217  | 1897-1948 |
| 306390 | 43.333 | -76.367 | PALERMO                 | 460  | 1889-1901 | 308550 | 42.350 | -76.967 | TOWNSEND                 | 1350 | 1920-1921 |
| 306400 | 43.050 | -77.233 | PALMYRA                 | -999 | 1889-1891 | 308578 | 43.267 | -75.150 | TRENTON FALLS            | 804  | 1948-1957 |
| 306441 | 40.800 | -73.017 | PATCHOGUE 2 N           | 24   | 1939-1990 | 308600 | 42.750 | -73.683 | TROY LOCK AND DAM NO. 2  | 240  | 1914-1990 |
| 306459 | 44.433 | -74.267 | PAUL SMITHS             | 1635 | 1904-1966 | 308625 | 42.833 | -76.033 | TULLY 4 NE.              | 1307 | 1979-1990 |
| 306464 | 42.883 | -78.033 | PAVILION                | 946  | 1987-1990 | 308627 | 42.767 | -76.083 | TULLY-HEIBERG FOREST     | 1907 | 1967-1990 |
| 306510 | 42.667 | -77.067 | PENN YAN                | 725  | 1889-1984 | 308631 | 44.233 | -74.433 | TUPPER LAKE SUNMOUNT     | 1684 | 1911-1990 |
| 306517 | 42.650 | -77.083 | PENN YAN 8 W            | 1008 | 1984-1990 | 308635 | 43.650 | -75.417 | TURIN 1 N                | 1326 | 1889-1967 |
| 306530 | 42.500 | -76.652 | P                       |      |           |        |        |         |                          |      |           |

| STN #  | LAT    | LOX     | STATION NAME            | ELEV | POR              |
|--------|--------|---------|-------------------------|------|------------------|
| 308790 | 42.767 | -78.317 | VARYSBURG               | 1113 | 1893-1896        |
| 308831 | 42.100 | -76.050 | VESTAL                  | 824  | 1969-1977        |
| 308833 | 42.050 | -76.050 | VESTAL                  | 1497 | 1977-1985        |
| 308839 | 42.983 | -77.417 | VICTOR                  | 645  | 1891-1898        |
| 308860 | 42.167 | -79.617 | VOLUSIA                 | 1560 | 1900-1920        |
| 308870 | 42.650 | -73.900 | VOORHEESVILLE           | 330  | 1925-1941        |
| 308902 | 41.567 | -74.167 | WALDEN 2 NE             | 405  | 1925-1959        |
| 308906 | 41.550 | -74.167 | WALDEN 1 ESE            | 387  | 1973-1990        |
| 308910 | 42.750 | -78.517 | WALEX                   | 1090 | <b>1986-1990</b> |
| 308935 | 42.233 | -75.083 | WALTON 5 NE             | 1804 | 1948-1956        |
| 308936 | 42.167 | -75.133 | WALTON                  | 1245 | 1900-1990        |
| 308944 | 44.150 | -74.900 | WANAKENA RANGER SCHOOL  | 1515 | 1911-1990        |
| 308946 | 40.650 | -73.517 | WANTAGH CEDAR CREEK     | 17   | 1976-1990        |
| 308949 | 41.650 | -73.867 | WAPPINGERS FALLS        | 115  | <b>1893-1950</b> |
| 308962 | 42.683 | -78.200 | WARSAW 5 SW             | 1727 | 1952-1990        |
| 309000 | 43.967 | -75.867 | WATERTOWN               | 504  | <b>1891-1990</b> |
| 309005 | 44.000 | -76.017 | WATERTOWN FAA AP        | 327  | 1949-1990        |
| 309020 | 42.367 | -76.867 | WATKINS GLEN            | 466  | 1894-1977        |
| 309021 | 42.400 | -76.900 | WATKINS GLEN 2 NW       | 807  | 1970-1976        |
| 309030 | 42.010 | -76.537 | WAVERLY                 | 845  | <b>1890-1914</b> |
| 309047 | 42.000 | -76.553 | WAVERLY                 | 85   | <b>1988-1990</b> |
| 309055 | 44.300 | -76.033 | WELLESLEY ISLAND        | 287  | 1974-1990        |
| 309060 | 43.392 | -74.290 | WELLS                   | 850  | 1901-1913        |
| 309100 | 42.635 | -74.138 | WEST BERNE              | 936  | 1898-1932        |
| 309117 | 40.733 | -73.600 | <b>WESTBURY</b>         | 98   | <b>1980-1990</b> |
| 309130 | 44.822 | -73.508 | <b>WEST CHAZY</b>       | -999 | <b>1894-1902</b> |
| 309140 | 41.067 | -73.683 | WESTCHESTER CO AP       | 447  | 1974-1990        |
| 309189 | 42.283 | -79.600 | WESTFIELD 3 SW          | 1054 | <b>1896-1990</b> |
| 309270 | 41.083 | -73.967 | WEST NYACK              | 190  | 1990-1990        |
| 309292 | 41.383 | -73.967 | WEST POINT              | 324  | <b>1890-1990</b> |
| 309381 | 44.367 | -73.917 | <b>WHITEFACE MT.</b>    | 4860 | 1938-1938        |
| 309389 | 43.550 | -73.400 | WHITEHALL               | 124  | 1937-1990        |
| 309400 | 41.017 | -73.733 | WHITE PLAINS MAPLE MOOR | 155  | 1889-1889        |
| 309405 | 41.067 | -73.717 | WHITE PLAINS AIRPORT    | 404  | <b>1890-1973</b> |
| 309480 | 44.367 | -73.433 | WILLSBORO               | -999 | 1934-194s        |
| 309514 | 42.300 | -74.250 | <b>WINDHAM</b>          | 1506 | <b>1908-1913</b> |
| 309516 | 42.300 | -74.217 | <b>WINDHAM 2 E</b>      | 1727 | 1900-1907        |
| 309533 | 42.500 | -78.067 | WISCOY 1 E              | 1147 | 1941-1960        |
| 309571 | 42.067 | -77.417 | <b>WOODHULL</b>         | 1830 | 1933-1941        |
| 309655 | 42.867 | -77.883 | YORK                    | 760  | 1912-1926        |
| 309660 | 41.267 | -73.767 | YORKTOWN HEIGHTS        | 424  | <b>1948-1950</b> |
| 309670 | 41.267 | -73.800 | YORKTOWN HEIGHTS 1 W    | 670  | 1967-1990        |

STN # - STATION NUMBER, LAT - LATITUDE, LON - LONGITUDE, ELEV - ELEVATION, POR - PERIOD OF RECORD, 99.999 - UNKNOWN LATITUDE, 999.999 - UNKNOWN LONGITUDE, -999 - UNKNOWN ELEVATION

## OHIO

| STN #  | LAT    | LON     | STATION NAME             | ELEV | POR       | STN #  | LAT    | LON     | STATION NAME            | ELEV | POR       |
|--------|--------|---------|--------------------------|------|-----------|--------|--------|---------|-------------------------|------|-----------|
| 330058 | 40.917 | -81.433 | AKRON-CANTON WSO AP      | 1217 | 1948-1990 | 332267 | 40.533 | -81.483 | WVER                    | 884  | 1900-1937 |
| 330061 | 41.083 | -81.517 | AKRON                    | 1088 | 1897-1990 | 332433 | 40.683 | -80.633 | EAST LIVERPOOL          | 1164 | 1940-1948 |
| 330063 | 41.033 | -81.450 | AKRON WB AIRPORT         | 1045 | 1948-1952 | 332485 | 39.733 | -84.633 | EATON                   | 1008 | 1956-1990 |
| 330141 | 39.400 | -81.967 | AMESVILLE                | 667  | 1905-1930 | 332599 | 41.383 | -82.067 | ELYRIA 3 E              | 734  | 1897-1990 |
| 330170 | 40.333 | -80.833 | ANNAPOLIS, JEFFERSON CO. | 1100 | 1901-1902 | 332651 | 39.350 | -84.583 | FAIRFIELD               | 588  | 1985-1990 |
| 330180 | 41.180 | -84.742 | ANTWERP, PAULDING CO.    | -999 | 1912-1913 | 332766 | 39.117 | -84.700 | FERNBANK                | 506  | 1950-1974 |
| 330195 | 41.167 | -81.083 | APCO RAVENNA ARSENAL     | 1005 | 1948-1966 | 332786 | 41.017 | -83.667 | FINDLAY FAA AIRPORT     | 805  | 1897-1990 |
| 330251 | 40.867 | -82.300 | ASHLAND                  | 1056 | 1897-1967 | 332920 | 39.417 | -83.167 | FINDLAY SEWAGE PLANT    | 778  | 1931-1990 |
| 330256 | 40.833 | -82.350 | ASHLAND 2 SW             | 1278 | 1936-1990 | 332928 | 39.550 | -84.317 | FRANKFORT               | 745  | 1897-1921 |
| 330264 | 41.850 | -80.800 | ASHTABULA                | 695  | 1897-1990 | 332956 | 40.417 | -82.533 | FRANKLIN                | 677  | 1948-1990 |
| 330274 | 39.383 | -82.180 | ATHENS 5 NW              | 685  | 1950-1980 | 332974 | 41.333 | -83.117 | FREDERICKTOWN 4 S       | 1058 | 1941-1990 |
| 330279 | 39.333 | -82.100 | ATHENS                   | 708  | 1931-1990 | 333029 | 38.817 | -82.183 | FREMONT                 | 608  | 1909-1990 |
| 330400 | 40.600 | -82.500 | BANGORVILLE              | 1327 | 1897-1938 | 333042 | 40.383 | -82.400 | GALLIPOLIS              | 587  | 1934-1990 |
| 330430 | 39.983 | -81.150 | BARNESVILLE-FRIENDS SCH  | 1258 | 1940-1990 | 333071 | 41.417 | -81.600 | GAMBIER                 | 1097 | 1919-1919 |
| 330460 | 39.117 | -84.167 | BATAVIA 4 N              | 854  | 1916-1951 | 333085 | 41.300 | -81.117 | GARFIELD HEIGHTS        | 937  | 1971-1978 |
| 330563 | 40.350 | -83.767 | BELLEFONTAINE SEWAGE     | 1198 | 1897-1990 | 333094 | 41.767 | -81.000 | GARRETTSVILLE           | 1005 | 1898-1914 |
| 330573 | 39.117 | -81.750 | BELLEVILLE LOCK & DAM    | 568  | 1970-1977 | 333094 | 41.767 | -81.000 | GENEVA 3 S              | 860  | 1917-1965 |
| 330581 | 39.983 | -80.983 | BELMONT 4 SE             | 1334 | 1931-1949 | 333095 | 41.750 | -80.950 | GENEVA 3 S              | 757  | 1970-1983 |
| 330622 | 41.017 | -83.817 | BENTON RIDGE             | 800  | 1897-1926 | 333120 | 39.633 | -84.400 | GERMANTOWN DAM          | 745  | 1915-1930 |
| 330663 | 39.400 | -84.400 | BETHANY                  | 990  | 1898-1902 | 333125 | 39.667 | -84.333 | GERMANTOWN 3 NE         | 795  | 1931-1952 |
| 330745 | 41.400 | -81.367 | BISSELLS                 | 1116 | 1897-1897 | 333144 | 41.667 | -82.817 | GERMANTOWN 3 NE         | 585  | 1953-1959 |
| 330775 | 40.300 | -82.300 | BLADENSBURG              | 1100 | 1897-1915 | 333345 | 38.633 | -83.317 | GIBRALTER ISLAND        | 500  | 1900-192s |
| 330862 | 41.383 | -83.633 | BOWLING GREEN SEWAGE PL  | 688  | 1897-1990 | 333356 | 39.350 | -83.400 | GREEN                   | 977  | 1897-1925 |
| 330950 | 40.283 | -80.667 | BRIGHTON                 | 700  | 1913-1922 | 333364 | 39.267 | -84.517 | GREENFIELD 1 WNW        | 815  | 1897-1925 |
| 331072 | 40.817 | -82.967 | BUCYRUS                  | 967  | 1897-1990 | 333375 | 40.100 | -84.650 | GREENHILLS              | 1026 | 1897-1990 |
| 331152 | 40.267 | -81.000 | CADIZ                    | 1266 | 1903-1990 | 333478 | 39.400 | -84.583 | GREENVILLE WATER PL     | 654  | 1914-1930 |
| 331177 | 39.733 | -81.583 | CALDWELL 4 W             | 1004 | 1934-1955 | 333482 | 39.400 | -84.567 | HAMILTON                | 597  | 1918-1918 |
| 331178 | 39.817 | -81.600 | CALDWELL 6 NW            | 985  | 1936-1990 | 333483 | 39.350 | -84.583 | HAMILTON 2              | 587  | 1931-1985 |
| 331197 | 40.017 | -81.583 | CAMBRIDGE WATER PLANT    | 808  | 1897-1990 | 333483 | 39.350 | -84.583 | HAMILTON-FAIRFIELD      | 627  | 1975-1990 |
| 331202 | 40.083 | -81.583 | CAMBRIDGE STATE HOSP     | 854  | 1931-1963 | 333500 | 39.667 | -80.867 | HANNIBAL LOCK + DAM     | 997  | 1898-1920 |
| 331220 | 39.217 | -84.283 | CAMP DENNISON            | 570  | 1898-1899 | 333750 | 41.733 | -81.017 | HILL HOUSE              | 1107 | 1897-1990 |
| 331245 | 41.017 | -80.767 | CANFIELD 1 S             | 1146 | 1917-1990 | 333758 | 39.200 | -83.617 | HILLSBORO               | 1237 | 1897-1990 |
| 331250 | 40.800 | -81.383 | CANTON REPOSITORY        | 1055 | 1953-1969 | 333801 | 41.250 | -84.150 | HOLGATE                 | 714  | 1929-1951 |
| 331254 | 40.867 | -81.400 | CANTON 5 N               | 1134 | 1893-1948 | 333874 | 41.217 | -83.767 | HOYTVILLE 2 NE          | 707  | 1952-1990 |
| 331278 | 40.500 | -82.900 | CARDINGTON               | 1011 | 1897-1917 | 333876 | 41.250 | -81.250 | HUDSON                  | 1125 | 1899-1921 |
| 331288 | 39.200 | -82.283 | CARPENTER 4 NW           | 887  | 1963-1990 | 333971 | 38.533 | -82.683 | IRONTON                 | 547  | 1900-1982 |
| 331310 | 40.567 | -81.083 | CARROLLTON               | 1154 | 1897-1898 | 333975 | 38.533 | -82.667 | IRONTON                 | 678  | 1982-1985 |
| 331353 | 41.550 | -82.850 | CATAWBA ISLAND 1 SW      | 605  | 1921-1959 | 333987 | 40.117 | -83.483 | IRWIN                   | 1014 | 1941-1990 |
| 331390 | 40.567 | -84.533 | CELINA 3 NE              | 868  | 1897-1990 | 334004 | 39.067 | -82.650 | JACKSON 2 NW            | 705  | 1914-1990 |
| 331404 | 40.300 | -82.700 | CENTERBURG 2             | 1318 | 1950-1990 | 334006 | 39.500 | -84.017 | JACKSONBURG             | 975  | 1903-1911 |
| 331458 | 41.583 | -81.183 | CHARDON                  | 1137 | 1945-1990 | 334047 | 41.733 | -80.767 | JEFFERSON               | 965  | 1930-1942 |
| 331466 | 40.733 | -82.367 | CHARLES MILL LAKE        | 1038 | 1939-1987 | 334184 | 40.633 | -83.617 | KENTON OHIO POWER CO    | 1005 | 1898-1898 |
| 331497 | 38.833 | -83.567 | CHERRY FORK              | 939  | 1940-1946 | 334189 | 40.633 | -83.600 | KENTON                  | 1008 | 1897-1990 |
| 331502 | 38.417 | -82.500 | CHESAPEAKE HUNTG FAA AP  | 565  | 1948-1960 | 334220 | 40.517 | -81.983 | KILLBUCK                | 1087 | 1897-1918 |
| 331515 | 39.150 | -84.617 | CHEVIOT                  | 968  | 1970-1990 | 334242 | 41.900 | -80.717 | KINGSVILLE              | 700  | 1915-1915 |
| 331523 | 39.333 | -82.967 | CHILLICOTHE              | 627  | 1905-1972 | 334258 | 39.733 | -82.633 | KIRTLAND-HOLDEN         | 758  | 1988-1990 |
| 331528 | 39.383 | -83.000 | CHILLICOTHE-MOUND CITY   | 657  | 1972-1990 | 334378 | 39.733 | -82.633 | LANCASTER 2 NW          | 865  | 1897-1952 |
| 331536 | 38.800 | -84.167 | CHILO MELDAHL DAM        | 508  | 1922-1990 | 334383 | 39.733 | -82.633 | LANCASTER 2 NW          | 865  | 1904-1990 |
| 331541 | 41.067 | -81.900 | CHIPPEWA LAKE            | 1068 | 1895-1990 | 334440 | 38.967 | -83.483 | LAWESHE                 | 900  | 1908-1910 |
| 331550 | 39.117 | -84.700 | CINCINNATI-FERNBANK      | 507  | 1898-1990 | 334495 | 40.550 | -82.650 | LEVERING                | 1250 | 1898-1898 |
| 331561 | 39.150 | -84.517 | CINCINNATI ABBE WSMO     | 767  | 1899-1982 | 334551 | 40.717 | -84.133 | LIMA SEWAGE PLANT       | 857  | 1902-1990 |
| 331566 | 39.133 | -84.417 | CINCINNATI AULT PARK     | 774  | 1942-1957 | 334581 | 40.017 | -83.000 | LINDEN HEIGHTS          | 830  | 1931-1936 |
| 331568 | 39.217 | -84.483 | CINCINNATI HARTWELL      | 530  | 1951-1961 | 334672 | 39.567 | -82.383 | LOGAN HIWAY DEPT        | 728  | 1897-1898 |
| 331569 | 39.150 | -84.417 | CINCINNATI OAKLEY        | 606  | 1951-1961 | 334681 | 39.883 | -83.450 | LONDON WATER WORKS      | 1025 | 1920-1990 |
| 331570 | 39.100 | -84.550 | CINCINNATI PRICE HILL    | 880  | 1951-1961 | 334700 | 41.150 | -80.867 | LORDSTOWN               | 1000 | 1898-1899 |
| 331576 | 39.100 | -84.433 | CIN MUNI-LUNKEN FLD      | 496  | 1897-1990 | 334815 | 41.767 | -81.083 | MADISON                 | 610  | 1922-1929 |
| 331581 | 39.100 | -84.517 | CINCINNATI WSO CI        | 557  | 1948-1971 | 334865 | 40.817 | -82.517 | MANSFIELD WSO AP        | 1307 | 1948-1990 |
| 331592 | 39.617 | -82.950 | CIRCLEVILLE              | 678  | 1897-1990 | 334872 | 40.750 | -82.517 | MANSFIELD               | 1283 | 1931-1937 |
| 331600 | 39.800 | -80.833 | CLARINGTON LOCK 14       | 644  | 1903-1926 | 334874 | 40.767 | -82.617 | MANSFIELD 5 W           | 1357 | 1916-1990 |
| 331618 | 39.433 | -83.983 | CLARKSVILLE              | 1020 | 1897-1908 | 334924 | 39.417 | -81.450 | MARIETTA LOCK 1         | 615  | 1897-1930 |
| 331650 | 41.367 | -81.667 | CLEVELAND SEVEN HILLS    | 1154 | 1897-1949 | 334927 | 39.417 | -81.433 | MARIETTA SEWAGE TRMT PL | 586  | 1902-1990 |
| 331652 | 41.483 | -81.717 | CLEVELAND-LUTHERAN MC    | 697  | 1897-1978 | 334929 | 39.433 | -81.467 | MARIETTA WATER WORKS    | 835  | 1916-1963 |
| 331653 | 41.467 | -81.567 | CLEVELAND SHAKER HTS     | 985  | 1897-1953 | 334937 | 40.583 | -83.133 | MARION                  | 984  | 1897-1949 |
| 331657 | 41.417 | -81.867 | CLEVELAND WSO AP         | 777  | 1948-1990 | 334942 | 40.617 | -83.133 | MARION 2 N              | 977  | 1936-1990 |
| 331662 | 41.500 | -81.667 | CLEVELAND 2717 EUCLID AV | 665  | 1948-1957 | 334979 | 40.233 | -83.367 | MARYSVILLE              | 1006 | 1917-1990 |
| 331755 | 41.533 | -80.767 | COLEBROOK                | 100  | 1897-1905 | 335021 | 39.250 | -82.483 | MCARTHUR                | 740  | 1897-1944 |
| 331770 | 40.883 | -80.683 | COLUMBIANA               | 1116 | 1914-1915 | 335029 | 39.250 | -82.483 | MCARTHUR                | 796  | 1918-1918 |
| 331778 | 40.000 | -83.017 | COLUMBUS OHIO STA UNIV   | 765  | 1897-1957 | 335041 | 39.650 | -81.850 | MC CONNELLSVILLE LOCK 7 | 667  | 1897-1990 |
| 331781 | 39.950 | -83.117 | COLUMBUS SULLIVANT AVE   | 887  | 1897-1983 | 335118 | 41.133 | -81.867 | MEDINA HIGHWAY DEPT     | 1040 | 1897-1948 |
| 331782 | 40.000 | -83.050 | COLUMBUS UNIV FARM       | 806  | 1957-1970 | 335215 | 39.083 | -82.067 | MIDDLEPORT              | 575  | 1921-1930 |
| 331783 | 39.900 | -82.917 | COLUMBUS VALLEY CROSS    | 758  | 1931-1990 | 335265 | 39.167 | -84.300 | MILFORD                 | 575  | 1951-1969 |
| 331786 | 40.000 | -82.883 | COLUMBUS WSO AP          | 817  | 1948-1990 | 335268 | 39.183 | -84.300 | MILFORD WATER WORKS     | 526  | 1969-1990 |
| 331788 | 39.983 | -83.000 | COLUMBUS                 | 707  | 1948-1973 | 335296 | 40.567 | -81.917 | MILLERSBURG             | 815  | 1923-1953 |
| 331818 | 41.983 | -80.567 | CONNEAUT WATER WORKS     | 648  | 1911-1913 | 335297 | 40.550 | -81.933 | MILLERSBURG 1 W         | 828  | 1919-1990 |
| 331890 | 40.250 | -81.867 | COSHOCOTON SEWAGE PLANT  | 768  | 1915-1990 | 335310 | 39.750 | -82.100 | MILLIGAN                | 875  | 1897-1916 |
| 331905 | 40.367 | -81.800 | COSHOCOTON AGR RSCH STA  | 1147 | 1956-1990 | 335315 | 40.717 | -80.900 | MILLPORT 2 NW           | 1157 | 1893-1990 |
| 332038 | 41.500 | -81.833 | DANBURY                  | 580  | 1916-1937 | 335356 | 41.150 | -80.783 | MINERAL RIDGE WATER WKS | 897  | 1940-1990 |
| 332044 | 40.433 | -82.300 | DANVILLE 2 W             | 976  | 1963-1990 | 335438 | 41.583 | -84.617 | MONTPELIER 1 WSW        | 868  | 1897-1990 |
| 332067 | 39.767 | -84.183 | DAYTON                   | 756  | 1897-1990 | 335505 | 41.300 | -80.767 | MOSQUITO CREEK LAKE     | 918  | 1948-1955 |
| 332075 | 39.900 | -84.200 | DAYTON WSO AP            | 1008 | 1912-1990 | 335543 | 39.283 | -84.567 | MT HEALTHY EXP FARM     | 854  | 1914-1955 |
| 332090 | 39.633 | -83.217 | DEER CREEK LAKE          | 868  | 1970-1987 | 335585 | 40.283 | -82.550 | MT VERNON (NEAR)        | 987  | 1927-1943 |
| 332098 | 41.283 | -84.383 | DEPIANCE                 | 708  | 1897-1990 | 335664 | 41.383 | -84.117 | NAPOLEON                | 684  | 1897-1962 |
| 332119 | 40.283 | -83.067 | DELAWARE                 | 878  | 1898-1990 | 335669 | 41.383 | -84.133 | NAPOLEON WATER WORKS    | 686  | 1962-1990 |
| 332156 | 40.400 | -81.350 | DENNISON                 | 855  | 1900-1959 | 335708 | 40.417 | -82.100 | NELLIE                  | 800  | 1904-1914 |
| 332160 | 40.383 | -81.333 | DENNISON WATER WORKS     | 866  | 1988-1990 | 335747 | 40.083 | -82.417 | NEWARK WATER WORKS      | 846  | 1934-1990 |
| 332251 | 41.683 | -80.667 | DORSET                   | 987  | 1956-1990 | 335750 | 40.900 | -81.450 | NEW BERLIN              | 1100 | 1907-1912 |
|        |        |         |                          |      |           | 335767 | 40.433 | -84.383 | NEW BREMEN              | 940  | 1897-1943 |
|        |        |         |                          |      |           | 335795 | 40.283 | -81.600 | NEWCOMERTOWN 1 NNE      | 965  | 1897-1897 |

STN # - STATION NUMBER, LAT - LATITUDE, LON - LONGITUDE, ELEV - ELEVATION, POR - PERIOD OF RECORD, 99.999 - UNKNOWN LATITUDE, 999.999 - UNKNOWN LONGITUDE, -999 - UNKNOWN ELEVATION

| STN #  | LAT    | LOX     | STATION NAME                   | ELEV | POR              |
|--------|--------|---------|--------------------------------|------|------------------|
| 335830 | 39.567 | -83.250 | NEW HOLLAND                    | 868  | 1898-1898        |
| 335857 | 39.733 | -82.217 | NEW LEXINGTON 2 NW             | 897  | 1942-1990        |
| 335894 | 40.500 | -81.450 | NEW PHILADELPHIA               | 906  | <b>1948-1990</b> |
| 335908 | 38.967 | -84.283 | NEW RICHMOND                   | 788  | <b>1900-1908</b> |
| 335939 | 39.400 | -81.217 | NEWPORT                        | 678  | <b>1888-1990</b> |
| 336030 | 41.700 | -82.817 | NORTH BASS ISLAND              | 580  | 1924-1930        |
| 336075 | 40.683 | -83.567 | NORTH LEWISBURG                | 1095 | <b>1897-1908</b> |
| 336085 | 41.217 | -81.750 | NORTH <b>ROYALTON</b>          | 1000 | 1906-1921        |
| 336118 | 41.267 | -82.617 | NORWALK SEWAGE PLANT           | 678  | <b>1894-1990</b> |
| 336196 | 41.300 | -82.217 | OBERLIN                        | 828  | <b>1893-1990</b> |
| 336231 | 39.600 | -83.617 | OCTA                           | 1044 | 1922-1925        |
| 336333 | 41.333 | -80.550 | ORANGEVILLE                    | 945  | <b>1897-1908</b> |
| 336337 | 41.017 | -84.050 | OTTAWA                         | 724  | 1897-1949        |
| 336346 | 41.600 | -83.200 | OTTAWA NWR                     | 587  | 1972-1989        |
| 336389 | 41.750 | -81.300 | PAINESVILLE 4 NW               | 606  | 1950-1990        |
| 336405 | 40.950 | -83.967 | PANDORA                        | 778  | 1949-1990        |
| 336465 | 41.117 | -84.600 | <b>PAULDING</b>                | 737  | 1915-1990        |
| 336493 | 38.950 | -83.417 | PEEBLES                        | 818  | 1911-1985        |
| 336498 | 38.933 | -83.417 | PEEBLES 1 S                    | 834  | 1936-1962        |
| 336501 | 38.917 | -83.300 | PEEBLES 5 SE                   | 645  | 1931-1936        |
| 336545 | 41.783 | -81.117 | PERRY <b>CAA</b> AP            | 704  | 1948-1949        |
| 336590 | 39.867 | -81.900 | PHILO                          | 756  | 1897-1965        |
| 336600 | 39.833 | -81.917 | PHILO 3 SW                     | 1024 | 1913-1990        |
| 336675 | 39.417 | -83.117 | PLATTSBURG                     | 1130 | 1897-1915        |
| 336729 | 40.983 | -82.700 | PLYMOUTH 2 WSW                 | 967  | 1933-1982        |
| 336781 | 38.733 | -82.967 | PORTSMOUTH                     | 548  | <b>1897-1990</b> |
| 336796 | 39.000 | -83.000 | PORTSMOUTH AREA WB             | 675  | 1953-1955        |
| 336872 | 39.233 | -83.850 | PULSE                          | 1000 | 1904-1907        |
| 336882 | 41.650 | -82.800 | PUT IN BAY PERRY MON           | 587  | 1917-1990        |
| 337065 | 40.433 | -83.300 | <b>RICHWOOD</b>                | 944  | <b>1898-1903</b> |
| 337080 | 41.450 | -84.267 | RIDGEVILLE CORNERS             | 741  | 1897-1899        |
| 337120 | 38.783 | -83.800 | RIPLEY <b>EXP</b> FARE         | 886  | <b>1897-1990</b> |
| 337145 | 40.967 | -81.733 | <b>RITTMAN</b>                 | 990  | 1907-1911        |
| 337231 | 41.600 | -80.883 | ROME                           | 888  | 1909-1909        |
| 337447 | 41.450 | -82.717 | SANDUSKY                       | 586  | <b>1897-1990</b> |
| 337559 | 39.917 | -81.433 | SENECAVILLE LAKE               | 888  | 1939-1987        |
| 337650 | 40.917 | -82.500 | <b>SHENANDOAH</b>              | 1100 | 1900-1912        |
| 337693 | 40.267 | -84.150 | SIDNEY 1 S                     | 947  | <b>1899-1990</b> |
| 337700 | 40.317 | -84.167 | SIDNEY 2 N                     | 1045 | 1931-1978        |
| 337800 | 39.833 | -82.317 | SOMERSET                       | 1080 | <b>1906-1918</b> |
| 337857 | 38.417 | -82.583 | SOUTH POINT                    | 553  | 1990-1990        |
| 337925 | 39.917 | -83.817 | SPRINGFIELD                    | 1024 | 1943-1969        |
| 337935 | 39.967 | -83.817 | SPRINGFIELD <b>NEW WTR</b> WKS | 936  | 1969-1990        |
| 338025 | 40.383 | -80.633 | STUEBENVILLE WATER WKS         | 998  | 1941-1990        |
| 338148 | 39.817 | -81.300 | <b>SUMMERFIELD</b> 2 NE        | 987  | <b>1908-1930</b> |
| 338308 | 38.933 | -82.450 | THURMAN                        | 696  | 1897-1917        |
| 338313 | 41.117 | -83.167 | <b>TIFFIN</b>                  | 748  | <b>1897-1990</b> |
| 338318 | 41.100 | -83.183 | <b>TIFFIN</b> WATER WORKS      | 756  | 1960-1960        |
| 338325 | 40.217 | -80.767 | TILTONVILLE                    | 660  | 1921-1927        |
| 338342 | 40.083 | -82.233 | TOBOSO                         | 789  | 1913-1930        |
| 338351 | 41.650 | -83.517 | TOLEDO <b>ACME</b> STATION     | 625  | 1897-1951        |
| 338353 | 41.683 | -83.483 | TOLEDO SEWAGE                  | 578  | 1905-1971        |
| 338356 | 41.567 | -83.467 | TOLEDO WB AIRPORT              | 625  | 1929-1954        |
| 338357 | 41.583 | -83.800 | TOLEDO <b>EXPRESS</b> WSO AP   | 677  | 1955-1990        |
| 338366 | 41.650 | -83.533 | TOLEDO BLADE                   | 605  | <b>1948-1990</b> |
| 338378 | 39.550 | -82.067 | TOM JENKINS LAKE               | 768  | 1953-1987        |
| 338382 | 40.483 | -80.600 | TORONTO POWER PLANT            | 700  | 1948-1948        |
| 338526 | 40.000 | -83.067 | UPPER ARLINGTON                | 835  | 1951-1963        |
| 338534 | 40.833 | -83.283 | UPPER SANDUSKY                 | 855  | <b>1897-1990</b> |
| 338547 | 40.117 | -83.767 | URBANA JR COLLEGE              | 1050 | <b>1898-1930</b> |
| 338552 | 40.100 | -83.783 | URBANA SEWAGE PLANT            | 1008 | 1931-1990        |
| 338598 | 39.900 | -84.200 | VANDALIA WB AIRPORT            | 1004 | <b>1948-1950</b> |
| 338609 | 40.867 | -84.583 | VAN <b>WERT</b>                | 808  | <b>1897-1990</b> |
| 338630 | 41.417 | -82.383 | VERMILLION                     | 603  | 1900-1901        |
| 338656 | 41.367 | -82.967 | VICKERY 2 NW                   | 595  | 1897-1952        |
| 338746 | 40.567 | -84.200 | WAPAKONETA                     | 898  | 1913-1930        |
| 338764 | 41.233 | -80.817 | WARREN                         | 983  | <b>1897-1990</b> |
| 338769 | 41.200 | -80.817 | WARREN 3 S                     | 907  | 1931-1990        |
| 338794 | 39.517 | -83.417 | WASHINGTON COURT HOUSE         | 967  | 1916-1990        |
| 338822 | 41.517 | -84.150 | WAUSEON WATER PLANT            | 757  | <b>1897-1990</b> |
| 338830 | 39.117 | -82.983 | WAVERLY                        | 567  | <b>1897-1990</b> |
| 338870 | 39.533 | -84.067 | WAYNESVILLE                    | 700  | 1898-1927        |
| 338915 | 41.167 | -82.250 | WELLINGTON                     | 856  | 1900-1910        |
| 338951 | 40.133 | -82.950 | WESTERVILLE WATER PL           | 818  | <b>1897-1990</b> |
| 339185 | 41.683 | -81.383 | WILLOUGHBY                     | 635  | 1948-1953        |
| 339219 | 39.483 | -83.850 | WILMINGTON 2 NEW               | 1038 | <b>1918-1990</b> |
| 339312 | 40.783 | -81.917 | WOOSTER <b>EXP</b> STATION     | 1026 | <b>1893-1990</b> |
| 339322 | 40.783 | -81.933 | WOOSTER 2 SE                   | 1107 | 1914-1959        |
| 339332 | 40.167 | -83.017 | WORTHINGTON 5 N                | 955  | 1951-1952        |
| 339356 | 39.733 | -83.933 | XENIA                          | 844  | 1918-1925        |
| 339361 | 39.617 | -83.900 | <b>XENIA</b> 5 SSE             | 978  | 1931-1990        |
| 339406 | 41.250 | -80.667 | YOUNGSTOWN WSO AP              | 1187 | <b>1897-1990</b> |
| 339417 | 39.950 | -81.900 | ZANESVILLE FAA AIRPORT         | 885  | 1946-1990        |

STN # - STATION NUMBER, LAT - LATITUDE, LON - LONGITUDE, ELEV - ELEVATION, POR - PERIOD OF RECORD, 99.999 - UNKNOWN LATITUDE, 999.999 - UNKNOWN LONGITUDE, -999 - UNKNOWN ELEVATION

PENNSYLVANIA

| STN #  | LAT    | LON     | STATION NAME            | ELEV | POR       | STN #  | LAT    | LON     | STATION NAME             | ELEV | POR       |
|--------|--------|---------|-------------------------|------|-----------|--------|--------|---------|--------------------------|------|-----------|
| 360062 | 41.900 | -80.367 | ALBION                  | 925  | 1944-195s | 362320 | 41.533 | -76.367 | DUSHORE 2 E              | 1788 | 1897-1909 |
| 360106 | 40.650 | -75.433 | ALLENTOWN WSO AP        | 397  | 1924-1990 | 362343 | 41.400 | -76.583 | EAGLES MERE              | 1997 | 1942-1987 |
| 360111 | 40.600 | -75.467 | ALLENTOWN GAS CO        | 254  | 1931-1965 | 362363 | 40.983 | -79.617 | EAST BRADY               | 857  | 1949-1977 |
| 360130 | 40.300 | -78.317 | ALTOONA FAA AP          | 1487 | 1896-1990 | 362423 | 40.683 | -75.200 | EASTON                   | 164  | 1896-1909 |
| 360134 | 40.500 | -78.483 | ALTOONA HORSESHOE CURVE | 1504 | 1931-1967 | 362442 | 41.000 | -75.167 | EAST STROUDSBURG S C     | 528  | 1975-1978 |
| 360139 | 40.517 | -78.450 | ALTOONA MILL RUN RES    | 1360 | 1948-1967 | 362459 | 40.350 | -77.550 | EAST WATERFORD 3 E       | 2135 | 1943-1955 |
| 360140 | 40.500 | -78.467 | ALTOONA 3 W             | 1327 | 1897-1990 | 362466 | 40.483 | -78.717 | EBENSBURG                | 2095 | 1917-1963 |
| 360217 | 40.000 | -75.283 | ARDMORE                 | 340  | 1931-1942 | 362470 | 40.467 | -78.733 | EBENSBURG SEWAGE PLANT   | 1947 | 1964-1990 |
| 360229 | 39.917 | -77.300 | ARENDTSMILLE            | 714  | 1918-1971 | 362514 | 41.867 | -80.133 | EDINBORO                 | 1225 | 1896-1897 |
| 360256 | 39.750 | -78.433 | ARTEMAS                 | 925  | 1950-1953 | 362532 | 40.183 | -80.133 | EIGHTY FOUR              | 1030 | 1949-1977 |
| 360259 | 39.750 | -78.467 | ARTEMAS 1 WNW           | 1255 | 1953-1957 | 362537 | 39.817 | -77.267 | EISENHOWER NATL HIST SIT | 527  | 1982-1990 |
| 360313 | 42.000 | -77.533 | AUSTINBURG 2 W          | 1597 | 1961-1981 | 362629 | 41.500 | -78.233 | EMPORIUM                 | 1047 | 1896-1990 |
| 360359 | 40.850 | -75.983 | AVOCA CAA AP            | 925  | 1938-1955 | 362633 | 41.517 | -78.217 | EMPORIUM 1 E             | 1165 | 1931-1956 |
|        |        |         | BAKERSTOWN 3 WNW        | 1237 | 1948-1990 | 362634 | 41.467 | -78.250 | EMPORIUM 2 SSW           | 1745 | 1956-1960 |
| 360455 | 41.117 | -75.733 | BEAR CREEK DAM          | 1516 | 1962-1963 | 362635 | 41.533 | -78.233 | EMPORIUM 1 N             | 1566 | 1960-1969 |
| 360470 | 40.667 | -80.350 | BEAVER DAM              | 700  | 1914-1936 | 362644 | 41.433 | -77.283 | ENGLISH CENTER           | 887  | 1960-1984 |
| 360482 | 40.767 | -77.150 | BEAVERTOWN 1 NE         | 547  | 1946-1990 | 362662 | 40.167 | -76.167 | EPHRATA                  | 518  | 1899-1984 |
| 360494 | 40.017 | -78.500 | BEDFORD                 | 1100 | 1931-1943 | 362677 | 42.117 | -80.083 | ERIE W B CITY            | 665  | 1896-1953 |
| 360530 | 40.850 | -77.783 | BELLEFONTE 4 S          | 1115 | 1900-1973 | 362682 | 42.083 | -80.183 | ERIE WSO AP              | 737  | 1926-1990 |
| 360560 | 40.767 | -75.733 | BELTZVILLE DAM          | 747  | 1971-1990 | 362721 | 40.017 | -78.367 | EVERETT                  | 1008 | 1897-1990 |
| 360611 | 41.067 | -76.250 | BERWICK                 | 577  | 1944-1978 | 362814 | 41.217 | -80.517 | FARRELL-SHARON           | 857  | 1931-1980 |
| 360629 | 40.617 | -75.383 | BETHLEHEM               | 246  | 1896-1925 | 362838 | 39.983 | -77.400 | FAYETTEVILLE 9 NE        | 2050 | 1982-1990 |
| 360634 | 40.600 | -75.367 | BETHLEHEM LEHIGH UNIV   | 366  | 1931-1964 | 362868 | 40.283 | -78.917 | FERNDALE                 | 1200 | 1949-1977 |
| 360656 | 39.933 | -77.250 | BIGLERVILLE             | 727  | 1923-1990 | 362942 | 40.717 | -79.500 | FORD CITY 4 S DAN        | 938  | 1943-1990 |
| 360734 | 40.433 | -79.183 | BLAIRSVILLE 5 E 2       | 1868 | 1986-1988 | 363018 | 41.117 | -75.733 | FRANCIS E WALTER DAM     | 1518 | 1963-1990 |
| 360736 | 40.450 | -79.150 | BLAIRSVILLE 6 ENE       | 2045 | 1945-1976 | 363028 | 41.383 | -79.817 | FRANKLIN                 | 995  | 1897-1990 |
| 360738 | 40.433 | -79.150 | BLAIRSVILLE 7 E         | 1847 | 1976-1986 | 363047 | 40.433 | -75.667 | FREDERICKSVILLE 2 SE     | 955  | 1943-1955 |
| 360763 | 40.267 | -77.367 | BLOERSVILLE 1 N         | 657  | 1914-1990 | 363056 | 41.017 | -75.900 | FREELAND                 | 1907 | 1920-1989 |
| 360777 | 40.333 | -78.567 | BLUE KNOB 2 S           | 2440 | 1953-1957 | 363155 | 40.017 | -77.217 | GARDNERS                 | 800  | 1982-1990 |
| 360778 | 40.300 | -78.583 | BLUE KNOB 4 S           | 3030 | 1953-1957 | 363200 | 40.217 | -74.933 | GEORGE SCHOOL            | 140  | 1907-1978 |
| 360785 | 40.383 | -76.033 | BLUE MARSH LAKE         | 357  | 1978-1990 | 363211 | 41.650 | -77.667 | GERMANIA                 | 1948 | 1973-1977 |
| 360865 | 41.800 | -78.633 | BRADFORD FAA AIRPORT    | 2146 | 1916-1990 | 363218 | 39.833 | -77.233 | GETTYSBURG               | 547  | 1896-1982 |
| 360867 | 41.950 | -78.650 | BRADFORD CNTRL FIRE STA | 1504 | 1931-1933 | 363295 | 39.817 | -78.833 | GLENCOE 1 E              | 1890 | 1948-1990 |
| 360868 | 41.950 | -78.733 | BRADFORD 4 W RES 1      | 1684 | 1941-1990 | 363316 | 40.800 | -78.500 | GLEN HOPE                | 1370 | 1990-1990 |
| 360905 | 40.000 | -78.233 | BREEZEWOOD              | 1354 | 1942-1943 | 363379 | 40.750 | -76.333 | GORDON                   | 904  | 1903-1955 |
| 360999 | 41.167 | -79.067 | BROOKVILLE              | 1230 | 1911-1942 | 363394 | 41.250 | -75.450 | GOULDSBORO               | 1894 | 1924-1942 |
| 361002 | 41.150 | -79.100 | BROOKVILLE FAA AIRPORT  | 1425 | 1896-1962 | 363435 | 40.233 | -75.450 | GRATERFORD               | 157  | 1957-1958 |
| 361004 | 41.150 | -79.083 | BROOKVILLE SEWAGE PLANT | 1216 | 1963-1990 | 363437 | 40.233 | -75.433 | GRATERFORD 1 E           | 247  | 1960-1990 |
| 361080 | 40.517 | -75.200 | BROOKVILLE              | 568  | 1978-1987 | 363438 | 40.633 | -76.717 | GRATZ 1 N                | 765  | 1952-1960 |
| 361105 | 40.367 | -80.433 | BURGETTSTOWN 2 W        | 980  | 1948-1989 | 363488 | 40.383 | -75.533 | GREEN LANE 3 NW          | 307  | 1948-1955 |
| 361115 | 40.083 | -77.867 | BURNT CABINS 2 NE       | 994  | 1942-1976 | 363503 | 39.783 | -79.917 | GREENSBORO LOCK 7        | 794  | 1896-1901 |
| 361130 | 40.867 | -79.900 | BUTLER                  | 1104 | 1899-1965 | 363510 | 40.267 | -79.550 | GREENSBURG 2 S           | 984  | 1908-1952 |
| 361133 | 40.883 | -79.983 | BUTLER 5 WNW            | 1336 | 1966-1967 | 363516 | 40.283 | -79.500 | GREENSBURG 3 SE UNITY    | 1245 | 1934-1942 |
| 361139 | 40.850 | -79.917 | BUTLER 2 SW             | 1008 | 1967-1990 | 363526 | 41.417 | -80.367 | GREENVILLE 2 NE          | 1137 | 1897-1990 |
| 361212 | 41.650 | -76.850 | CANTON                  | 1167 | 1976-1990 | 363568 | 41.167 | -80.083 | GROVE CITY               | 1256 | 1907-1942 |
| 361215 | 41.667 | -76.867 | CANTON 1 NW             | 1525 | 1944-1975 | 363632 | 40.550 | -75.983 | HAMBURG                  | 358  | 1896-1990 |
| 361234 | 40.200 | -77.217 | CARLISLE                | 470  | 1896-1980 | 363662 | 39.800 | -76.983 | HANOVER                  | 604  | 1904-1990 |
| 361255 | 40.583 | -78.700 | CARROLLTOWN 2 SSE       | 2045 | 1971-1990 | 363699 | 40.217 | -76.850 | HARRISBURG FAA AP        | 347  | 1896-1990 |
| 361281 | 40.950 | -76.450 | CATAWISSA               | 520  | 1909-1937 | 363706 | 40.250 | -76.867 | HARRISBURG RIVER GAGE    | 290  | 1948-1990 |
| 361314 | 40.833 | -77.683 | CENTER HALL             | 1320 | 1896-1942 | 363758 | 41.483 | -75.167 | HAWLEY                   | 898  | 1897-1990 |
| 361350 | 39.850 | -79.583 | CHALK HILL 2 ENE        | 1987 | 1977-1990 | 363761 | 41.467 | -75.183 | HAWLEY 1 S DAN           | 1205 | 1934-1958 |
| 361354 | 39.933 | -77.633 | CHAMBERSBURG 1 ESE      | 647  | 1896-1990 | 363762 | 41.467 | -75.133 | HAWLEY 3 ESE             | 850  | 1948-1958 |
| 361423 | 39.850 | -75.367 | CHESTER                 | 95   | 1951-1958 | 363859 | 41.467 | -75.183 | HAWLEY 1 S DAM           | 1180 | 1948-1951 |
| 361475 | 40.300 | -79.867 | CLAIRTON                | 1020 | 1931-1940 | 363897 | 39.733 | -78.533 | HEWITT 2 S               | 844  | 1944-1950 |
| 361485 | 41.200 | -79.433 | CLARION 3 SW            | 1117 | 1943-1990 | 363952 | 40.250 | -77.250 | HOGESTOWN                | 351  | 1948-1990 |
| 361512 | 40.117 | -80.467 | CLAYSVILLE 3 W          | 1005 | 1904-1971 | 364001 | 40.433 | -78.417 | HOLLIDAYSBURG 2 NW       | 997  | 1896-1898 |
| 361513 | 40.100 | -80.433 | CLAYSVILLE 2 SW         | 1247 | 1951-1974 | 364019 | 39.833 | -76.333 | HOLTWOOD                 | 202  | 1920-1990 |
| 361519 | 41.017 | -78.450 | CLEARFIELD              | 1147 | 1908-1942 | 364076 | 40.200 | -75.783 | HOPEWELL VILLAGE         | 557  | 1979-1990 |
| 361522 | 41.117 | -78.533 | CLEARFIELD 8 NW NURSERY | 2125 | 1952-1955 | 364118 | 40.250 | -76.733 | HUMMELSTOWN 2 W          | 490  | 1979-1990 |
| 361584 | 40.753 | -78.533 | CLERMONT 4 NW           | 1627 | 1961-1990 | 364141 | 41.250 | -76.050 | HUNLOCK CREEK 4 N        | 1187 | 1971-1973 |
|        |        |         | COALPORT                | 1484 | 1944-1949 | 364159 | 40.500 | -78.017 | HUNTINGDON               | 677  | 1896-1969 |
| 361589 | 39.967 | -75.833 | COATESVILLE 1 SW        | 345  | 1897-1982 | 364190 | 39.817 | -78.733 | HYNDMAN                  | 966  | 1906-1937 |
| 361591 | 39.983 | -75.867 | COATESVILLE 2 W         | 648  | 1983-1990 | 364214 | 40.600 | -79.117 | INDIANA 3 SE             | 1107 | 1896-1990 |
| 361594 | 39.983 | -75.817 | COATESVILLE             | 344  | 1896-1896 | 364219 | 40.617 | -79.167 | INDIANA                  | 1304 | 1898-1952 |
| 361646 | 40.250 | -76.483 | COLEBROOK               | 560  | 1916-1943 | 364276 | 40.333 | -79.700 | IRWIN                    | 1104 | 1896-1957 |
| 361675 | 40.033 | -76.500 | COLUMBIA                | 305  | 1943-1959 | 364311 | 41.617 | -75.267 | JADWYN DAN               | 1100 | 1971-1973 |
| 361705 | 39.800 | -79.367 | CONFLUENCE 1 SW DAM     | 1496 | 1897-1990 | 364325 | 41.500 | -80.467 | JAMESTOWN 2 NW           | 1047 | 1932-1990 |
| 361719 | 41.733 | -80.283 | CONNEAUTVILLE 4 ESE     | 1278 | 1976-1990 | 364363 | 41.200 | -77.250 | JERSEY SHORE             | 617  | 1921-1967 |
| 361720 | 41.750 | -80.367 | CONNEAUTVILLE           | 977  | 1959-1976 | 364370 | 40.867 | -75.750 | JIM THORPE               | 837  | 1954-1959 |
| 361790 | 41.917 | -79.633 | CORRY                   | 1447 | 1915-1990 | 364385 | 40.333 | -78.917 | JOHNSTOWN                | 1217 | 1896-1990 |
| 361804 | 41.783 | -78.017 | COUDERSPORT 1 NNE       | 1695 | 1903-1954 | 364397 | 40.617 | -76.467 | JOLIETT                  | 1625 | 1954-1959 |
| 361805 | 41.800 | -78.050 | COUDERSPORT 2 NW        | 2225 | 1954-1956 | 364432 | 41.683 | -78.800 | KANE 1 NNE               | 1757 | 1940-1990 |
| 361806 | 41.833 | -78.067 | COUDERSPORT 4 NW        | 2307 | 1956-1986 | 364437 | 41.600 | -78.767 | KANE 5 SE                | 2014 | 1932-1940 |
| 361815 | 41.850 | -78.050 | COUDERSPORT 5 NW        | 2188 | 1987-1990 | 364450 | 41.117 | -78.100 | KARHTHAUS                | 957  | 1963-1972 |
| 361881 | 40.683 | -79.200 | CREEKSIDE               | 1057 | 1931-1940 | 364477 | 41.100 | -78.150 | KEWAYDIN                 | 1377 | 1973-1975 |
| 361961 | 40.967 | -78.517 | CURWENSVILLE 1 S        | 1157 | 1948-1949 | 364481 | 39.983 | -78.717 | KEGG                     | 1285 | 1951-1990 |
| 361966 | 41.050 | -78.583 | CURWENSVILLE WB AP      | 2225 | 1943-1952 | 364545 | 41.367 | -77.933 | KETTLE CREEK DAN         | 930  | 1973-197s |
| 362108 | 40.300 | -79.333 | DEERY 4 SW              | 1067 | 1896-1990 | 364570 | 40.300 | -79.350 | KINGSTON                 | 1032 | 1948-1956 |
| 362116 | 40.083 | -75.550 | DEVAULT 1 W             | 365  | 1951-1988 | 364699 | 41.000 | -78.167 | KYLERTOWN                | 1700 | 1929-1942 |
| 362171 | 41.567 | -75.900 | DIXON                   | 626  | 1949-1969 | 364758 | 40.050 | -76.283 | LANCASTER 2NE PUMP STN   | 264  | 1896-1974 |
| 362183 | 40.133 | -79.400 | DONEGAL 2 NW            | 1806 | 1943-1990 | 364763 | 40.050 | -76.283 | LANCASTER 2 NE FILT PL   | 278  | 1976-1990 |
| 362190 | 40.167 | -79.867 | DONORA 1 SW             | 76   |           |        |        |         |                          |      |           |

| STN #  | LAT    | LO      | STATION NAME             | ELEV | POR       | STN #  | LAT    | LO      | STATION NAME            | ELEV | POR       |
|--------|--------|---------|--------------------------|------|-----------|--------|--------|---------|-------------------------|------|-----------|
| 364893 | 40.350 | -76.483 | LEBANON 4 WNW            | 596  | 1962-1965 | 367417 | 41.200 | -76.100 | RETREAT 1 SW            | 574  | 1933-1953 |
| 364896 | 40.333 | -76.467 | LEBANON 2 W              | 457  | 1965-1990 | 367477 | 41.417 | -78.750 | RIDGWAY                 | 1366 | 1913-1990 |
| 364972 | 41.683 | -76.717 | LE ROY                   | 1044 | 1896-1917 | 367480 | 41.417 | -78.733 | RIDGWAY 1 NE            | 1355 | 1948-1990 |
| 364982 | 40.967 | -76.867 | LEWISBURG                | 465  | 1964-1990 | 367578 | 40.550 | -75.717 | RODALE RESEARCH CTR.    | 558  | 1983-1990 |
| 364992 | 40.583 | -77.583 | LEWISTOWN                | 468  | 1938-1990 | 367782 | 40.517 | -79.550 | SALINA 3 W              | 1115 | 1953-1990 |
| 365050 | 41.650 | -80.433 | LINESVILLE 1 S           | 1038 | 1952-1990 | 367851 | 41.050 | -77.633 | SAYERS DAM              | 676  | 1948-1990 |
| 365104 | 41.133 | -77.417 | LOCK HAVEN               | 557  | 1896-1977 | 367902 | 41.417 | -75.667 | SCRANTON                | 755  | 1896-1974 |
| 365109 | 41.117 | -77.450 | LOCK HAVEN SEW PLT       | 577  | 1977-1990 | 367905 | 41.333 | -75.733 | SCRANTON WB AIRPORT     | 935  | 1955-1963 |
| 365212 | 40.450 | -79.483 | LOYALHANNA LAKE          | 998  | 1989-1990 | 367931 | 40.800 | -76.867 | SELINGSGROVE            | 428  | 1896-1990 |
| 365259 | 40.233 | -79.400 | LYCIPPUS 1 E             | 1424 | 1897-1942 | 368073 | 40.050 | -77.517 | SHIPPENSBURG            | 688  | 1932-1990 |
| 365336 | 40.833 | -78.433 | MADERA                   | 1608 | 1949-1990 | 368078 | 40.617 | -80.433 | SHIPPINGPORT WB         | 745  | 1955-1957 |
| 365390 | 39.817 | -75.417 | MARCUS HOOK              | 17   | 1920-1990 | 368184 | 41.050 | -80.067 | SLIPPERY ROCK 1 SSW     | 1258 | 1949-1990 |
| 365408 | 40.750 | -79.033 | MARION CENTER 2 SE       | 1616 | 1903-1990 | 368190 | 41.817 | -78.433 | SMETHPORT               | 1477 | 1896-1905 |
| 365454 | 40.300 | -78.317 | MARTINSBG FAA AP/ALT/    | 1486 | 1942-1977 | 368244 | 40.000 | -79.083 | SOMERSET                | 2106 | 1896-1925 |
| 365470 | 41.367 | -74.700 | MATAMORAS                | 408  | 1963-1990 | 368249 | 40.017 | -79.083 | SOMERSET MAIN ST        | 2155 | 1917-1958 |
| 365479 | 40.867 | -75.750 | MAUCH CHUNK              | 835  | 1896-1954 | 368359 | 41.800 | -80.383 | SPRINGBORO              | 905  | 1955-1959 |
| 365573 | 40.350 | -79.867 | MC KEESPORT              | 724  | 1987-1990 | 368395 | 39.733 | -79.167 | SPRINGS 1 SW            | 2504 | 1931-1958 |
| 365606 | 41.633 | -80.167 | MEADVILLE 1 S            | 1076 | 1928-1990 | 368449 | 40.800 | -77.867 | STATE COLLEGE           | 1177 | 1896-1990 |
| 365649 | 41.283 | -80.200 | MERCER WB AIRPORT        | 1294 | 1938-1948 | 368452 | 40.800 | -77.867 | STATE COLLEGE 2         | 1180 | 1948-1990 |
| 365650 | 41.200 | -80.350 | MERCER 6 W               | 1284 | 1949-1949 | 368469 | 41.400 | -78.017 | STEVENSON DAM           | 937  | 1969-1990 |
| 365651 | 41.217 | -80.233 | MERCER                   | 1228 | 1950-1990 | 368560 | 40.100 | -78.950 | STOYSTOWN               | 1807 | 1961-1990 |
| 365652 | 41.283 | -80.283 | MERCER 4 NW              | 1325 | 1950-1955 | 368596 | 41.000 | -75.183 | STROUDSBURG             | 486  | 1911-1990 |
| 365662 | 39.833 | -77.900 | MERCERSBURG              | 547  | 1960-1990 | 368635 | 40.317 | -76.917 | SUMMERDALE (NEAR)       | 500  | 1935-1941 |
| 365703 | 40.183 | -76.767 | MIDDLETOWN OLMSTED FLD   | 305  | 1931-1959 | 368668 | 40.850 | -76.800 | SUNBURY                 | 446  | 1957-1976 |
| 365710 | 40.633 | -80.467 | MIDLAND DAM 7            | 694  | 1936-1961 | 368673 | 40.883 | -76.783 | SUNBURY 2 N AIRPORT     | 454  | 1942-1949 |
| 365726 | 40.567 | -77.417 | MIFFLINTOWN              | 620  | 1903-1938 | 368674 | 40.833 | -76.833 | SUNBURY RIVER GAGE      | 408  | 1948-1949 |
| 365738 | 41.667 | -75.067 | MILANVILLE               | 766  | 1963-1975 | 368725 | 41.283 | -76.133 | SWEET VALLEY            | 1346 | 1965-1970 |
| 365817 | 41.100 | -76.567 | MILLVILLE 2 SW           | 867  | 1960-1990 | 368770 | 41.400 | -77.850 | TAMARACK 2 S FIRE TOWER | 2226 | 1943-1960 |
| 365902 | 40.650 | -80.383 | MONTGOMERY LOCK AND DAM  | 696  | 1962-1990 | 368776 | 41.033 | -75.300 | TANNERSVILLE            | 910  | 1965-1970 |
| 365915 | 41.833 | -75.867 | MONTROSE                 | 1567 | 1903-1990 | 368873 | 41.483 | -79.433 | TIONESTA 2 SE DAM       | 1205 | 1921-1990 |
| 365956 | 40.150 | -75.900 | MORGANTOWN               | 595  | 1951-1986 | 368880 | 41.600 | -79.667 | TITUSVILLE 2 S          | 1524 | 1943-1954 |
| 366028 | 40.233 | -76.433 | MT GREINA 2 SE           | 675  | 1951-1972 | 368888 | 41.633 | -79.700 | TITUSVILLE WATER WORKS  | 1227 | 1954-1990 |
| 366039 | 40.383 | -80.050 | MT. LEBANON              | 1200 | 1931-1945 | 368893 | 41.183 | -75.417 | TOBYHANNA               | 1948 | 1961-1990 |
| 366050 | 41.117 | -75.367 | MOUNT POCONO             | 1720 | 1963-1975 | 368905 | 41.750 | -76.417 | TOWANDA 1 ESE           | 758  | 1896-1990 |
| 366055 | 41.150 | -75.367 | MOUNT POCONO 2 N         | 1925 | 1915-1960 | 368908 | 40.583 | -76.567 | TOWER CITY              | 864  | 1949-1951 |
| 366090 | 41.217 | -76.133 | MUHLENBURG 1 SE          | 1115 | 1953-1960 | 368912 | 40.583 | -76.517 | TOWER CITY 2E           | 846  | 1961-1965 |
| 366098 | 41.350 | -76.583 | MUNCY VALLEY             | 940  | 1909-1942 | 368982 | 41.567 | -75.900 | TWKHANNOCK              | 627  | 1945-1973 |
| 366174 | 40.667 | -77.917 | NEFFS MILLS 3 NE         | 905  | 1941-1954 | 369050 | 39.917 | -79.717 | UNIONTOWN 1 NE          | 967  | 1890-1990 |
| 366194 | 40.150 | -74.950 | NESHAMINY FALLS          | 67   | 1896-1990 | 369058 | 41.283 | -76.533 | WITYVILLE 3 NW          | 1340 | 1961-1965 |
| 366216 | 40.417 | -77.183 | NEW BLOOMFIELD           | 715  | 1937-1947 | 369074 | 39.967 | -75.300 | UPPER DARBY             | 2005 | 1950-1958 |
| 366225 | 40.150 | -77.617 | NEWBURG 3 W              | 744  | 1942-1959 | 369103 | 40.100 | -75.100 | VALLEY FORGE NATL PARK  | 160  | 1950-1958 |
| 366233 | 41.017 | -80.367 | NEW CASTLE 1 N           | 838  | 1914-1990 | 369128 | 40.600 | -79.550 | VANDERGRIFT             | 804  | 1914-1947 |
| 366246 | 40.083 | -79.900 | NEWELL                   | 817  | 1920-1980 | 369298 | 41.850 | -79.150 | WARREN                  | 1217 | 1896-1990 |
| 366297 | 40.483 | -77.133 | NEWPORT                  | 384  | 1948-1990 | 369318 | 40.150 | -80.267 | WASHINGTON 2 SW         | 1288 | 1975-1990 |
| 366310 | 40.233 | -79.617 | NEW STANTON 1 NW         | 958  | 1963-1990 | 369322 | 40.100 | -80.317 | WASHINGTON 6 SW         | 1248 | 1981-1981 |
| 366370 | 40.117 | -75.350 | NORRISTOWN               | 75   | 1951-1987 | 369362 | 39.900 | -80.217 | WAYNESBURG 2 W          | 984  | 1931-1962 |
| 366508 | 39.800 | -76.050 | OCTORARO LAKE            | 267  | 1978-1990 | 369367 | 39.900 | -80.167 | WAYNESBURG 1 E          | 947  | 1948-1990 |
| 366689 | 40.800 | -75.617 | PALMERTON                | 415  | 1919-1990 | 369407 | 41.750 | -77.283 | WELLSBORO               | 1324 | 1896-1990 |
| 366734 | 40.850 | -76.117 | PARK PLACE WB            | 1935 | 1931-1954 | 369408 | 41.700 | -77.267 | WELLSBORO 3 S           | 1867 | 1948-1950 |
| 366792 | 40.867 | -75.333 | PEN ARGYL                | 718  | 1948-1954 | 369420 | 40.050 | -76.950 | WELLSVILLE              | 504  | 1946-1958 |
| 366840 | 40.367 | -75.300 | PERKASIE                 | 406  | 1969-1978 | 369464 | 39.967 | -75.633 | WEST CHESTER 1 W        | 457  | 1896-1990 |
| 366879 | 39.950 | -75.183 | PHILADELPHIA DREKEL U    | 37   | 1948-1978 | 369490 | 41.983 | -77.567 | WESTFIELD 5 N           | 1888 | 1981-1988 |
| 366881 | 40.050 | -75.133 | PHILADELPHIA EAST OAK LA | 224  | 1948-1978 | 369503 | 39.800 | -75.800 | WEST GROVE 1 SE         | 456  | 1963-1976 |
| 366882 | 39.967 | -75.183 | PHILADELPHIA FAIRMOUNT D | 574  | 1948-1978 | 369702 | 41.283 | -75.850 | WILKES-BARRE 4 NE       | 668  | 1896-1910 |
| 366884 | 39.967 | -75.167 | PHILA FRANKLIN INST      | 104  | 1948-1951 | 369705 | 41.333 | -75.733 | W BARRE SCRANT WSO AP   | 937  | 1964-1990 |
| 366888 | 39.950 | -75.150 | PHILADELPHIA WSFO        | 217  | 1974-1979 | 369723 | 41.217 | -76.950 | WILLIAMSPORT 4 SE TWR   | 1994 | 1896-1925 |
| 366889 | 39.883 | -75.233 | PHILADELPHIA WSO AP      | 18   | 1948-1990 | 369728 | 41.250 | -76.917 | WILLIAMSPORT WSO AP     | 528  | 1948-1990 |
| 366894 | 39.883 | -75.167 | PHILADELPHIA NAVY YARD   | 15   | 1926-1941 | 369733 | 41.233 | -77.000 | WILLIAMSPORT            | 504  | 1931-1944 |
| 366899 | 39.917 | -75.200 | PHILADELPHIA PT BREEZE   | 35   | 1926-1963 | 369741 | 40.583 | -76.633 | WILLIAMSTOWN            | 784  | 1931-1949 |
| 366904 | 40.033 | -75.250 | PHILADELPHIA SHAWMONT    | 74   | 1931-1957 | 369742 | 40.583 | -76.617 | WILLIAMSTOWN 1 NE       | 1185 | 1951-1951 |
| 366907 | 39.967 | -75.283 | PHILA UPPER DARBY        | 244  | 1949-1949 | 369933 | 39.917 | -76.750 | YORK 3 SSW PUMP STA     | 394  | 1896-1990 |
| 366909 | 39.950 | -75.150 | PHILADELPHIA CITY        | 35   | 1948-1963 | 369950 | 40.117 | -76.717 | YORK HAVEN              | 317  | 1964-1979 |
| 366910 | 39.950 | -75.167 | PHILADELPHIA 10TH CHESTN | 190  | 1965-1978 | 369982 | 40.700 | -76.383 | ZERBEY AIRPORT          | 1708 | 1965-1979 |
| 366916 | 40.900 | -78.083 | PHILIPSBURG FAA AP       | 2008 | 1942-1990 | 369990 | 40.900 | -76.217 | ZION GROVE              | 947  | 1963-1973 |
| 366927 | 40.117 | -75.500 | PHOENIXVILLE 1 E         | 118  | 1915-1990 |        |        |         |                         |      |           |
| 366932 | 40.133 | -75.533 | PHOENIXVILLE TELEMARK    | 105  | 1948-1990 |        |        |         |                         |      |           |
| 366944 | 41.033 | -75.500 | PIMPLE HILL              | 2225 | 1949-1959 |        |        |         |                         |      |           |
| 366976 | 41.183 | -78.150 | PIPER                    | 2080 | 1948-1990 |        |        |         |                         |      |           |
| 366992 | 40.350 | -79.933 | PTSBGH ALGY CO CAA AP    | 127  | 1896-1952 |        |        |         |                         |      |           |
| 366993 | 40.500 | -80.217 | PITTSBURGH WSCOM 2 AP    | 1157 | 1921-1990 |        |        |         |                         |      |           |
| 366997 | 40.450 | -80.000 | PITTSBURGH WSO CI        | 757  | 1897-1979 |        |        |         |                         |      |           |
| 367029 | 41.733 | -75.450 | PLEASANT MOUNT 1 W       | 1807 | 1951-1990 |        |        |         |                         |      |           |
| 367073 | 39.717 | -79.900 | POINT MARION LOCK 8      | 810  | 1948-1979 |        |        |         |                         |      |           |
| 367116 | 40.583 | -76.033 | PORT CLINTON             | 450  | 1931-1979 |        |        |         |                         |      |           |
| 367149 | 40.250 | -75.650 | POTTSTOWN                | 127  | 1896-1901 |        |        |         |                         |      |           |
| 367167 | 40.650 | -78.550 | PRINCE GALLITZIN ST PAR  | 1528 | 1982-1990 |        |        |         |                         |      |           |
| 367183 | 41.300 | -75.217 | PROMISED LAND ST PARK    | 1758 | 1951-1990 |        |        |         |                         |      |           |
| 367186 | 41.583 | -75.317 | PROMPTON DAM             | 1500 | 1951-1990 |        |        |         |                         |      |           |
| 367217 | 40.950 | -79.000 | PUNKSUTAWNEY             | 1307 | 1913-1919 |        |        |         |                         |      |           |
| 367229 | 40.933 | -79.283 | PUTNEYVILLE 2 SE DAM     | 1287 | 1943-1990 |        |        |         |                         |      |           |
| 367239 | 40.433 | -75.333 | QUAKERTOWN               | 496  | 1896-1969 |        |        |         |                         |      |           |
| 367285 | 41.633 | -78.567 | RASSELAS                 | 2100 | 1948-1990 |        |        |         |                         |      |           |
| 367312 | 40.433 | -78.000 | RAYSTOWN LAKE 2          | 847  | 1974-1990 |        |        |         |                         |      |           |
| 367314 | 40.483 | -78.000 | RAYSTOWN DAM             | 625  | 1974-1990 |        |        |         |                         |      |           |
| 367318 | 40.333 | -75.967 | READING WB CITY          | 275  | 1897-1973 |        |        |         |                         |      |           |
| 367322 | 40.367 | -75.933 | READING 3 N              | 270  | 1896-1990 |        |        |         |                         |      |           |
| 367409 | 41.333 | -77.733 | RENOVO                   | 667  | 1898-1990 |        |        |         |                         |      |           |
| 367411 | 41.367 | -77.733 | RENOVO 3 NNE             | 164  | 1972-1973 |        |        |         |                         |      |           |

STN # - STATION NUMBER, LAT - LATITUDE, LO - LONGITUDE, ELEV - ELEVATION, POR - PERIOD OF RECORD, 99.999 - UNKNOWN LATITUDE, 999.999 - UNKNOWN LONGITUDE, -999 - UNKNOWN ELEVATION

**WISCONSIN**

| STN #  | LAT    | LONG    | STATION NAME                    | ELEV | POR       | STN #  | LAT    | LONG    | STATION NAME             | ELEV | POR       |
|--------|--------|---------|---------------------------------|------|-----------|--------|--------|---------|--------------------------|------|-----------|
| 470045 | 42.617 | -89.067 | <b>AFTON</b>                    | 747  | 1987-1990 | 474367 | 43.817 | -91.233 | LA CROSSE STATE U        | 656  | 1955-1970 |
| 470124 | 44.333 | -91.933 | ALMA DAM 4                      | 677  | 1949-1990 | 474370 | 43.867 | -91.250 | LA CROSSE FAA AP         | 657  | 1896-1990 |
| 470175 | 45.300 | -92.367 | AMERY                           | 1076 | 1922-1990 | 474375 | 43.800 | -91.250 | LA CROSSE WB CITY        | 715  | 1948-1952 |
| 470205 | 44.467 | -98.283 | AMHERST, PORTAGE CO.            | 1194 | 1896-1908 | 474391 | 45.467 | -91.083 | LADYSMITH                | 1168 | 1949-1983 |
| 470239 | 45.133 | -89.150 | <b>ANTIGO 1 SSW</b>             | 1456 | 1896-1990 | 474396 | 45.467 | -91.133 | LADYSMITH RANGER STA     | 1166 | 1901-1906 |
| 470265 | 44.250 | -88.383 | APPLETON                        | 758  | 1901-1990 | 474457 | 42.600 | -88.433 | LAKE GENEVA              | 884  | 1946-1990 |
| 470273 | 43.033 | -89.433 | ARBORETUM U OF WISC             | 877  | 1971-1990 | 474482 | 43.067 | -88.917 | LAKE MILLS               | 857  | 1907-1990 |
| 470307 | 43.333 | -89.367 | ARLINGTON                       | 1044 | 1931-1971 | 474523 | 45.333 | -88.500 | <b>LAKEWOOD 3 NE</b>     | 1296 | 1968-1990 |
| 470308 | 43.300 | -89.350 | ARLINGTON UNIV FARM             | 1088 | 1962-1990 | 474546 | 42.833 | -90.783 | LANCASTER 4 WSW          | 1047 | 1986-1990 |
| 470349 | 46.567 | -90.967 | ASHLAND EXPERIMENT FARM         | 656  | 1905-1990 | 474555 | 46.167 | -89.217 | <b>LAND 0 LAKES</b>      | 1715 | 1941-1954 |
| 470516 | 43.467 | -89.733 | <b>BARABO</b>                   | 824  | 1949-1990 | 474582 | 45.517 | -88.750 | LANONA 6 SW              | 1537 | 1927-1990 |
| 470565 | 45.500 | -91.833 | <b>BARRON, BARRON CO.</b>       | 1115 | 1896-1920 | 474821 | 43.200 | -90.183 | LONE ROCK FAA AP         | 717  | 1947-1983 |
| 470603 | 43.480 | -90.817 | <b>BAYFIELD 6 N</b>             | 825  | 1896-1990 | 474829 | 45.900 | -89.133 | LONG LAKE DAM            | 1634 | 1908-1990 |
| 470645 | 43.450 | -88.850 | BEAVER DAM                      | 845  | 1953-1990 | 474894 | 45.567 | -92.467 | LUCK                     | 1227 | 1971-1990 |
| 470696 | 42.500 | -89.030 | BELOIT                          | 785  | 1896-1990 | 474937 | 43.217 | -91.100 | LYNXVILLE DAM 9          | 636  | 1945-1990 |
| 470740 | 43.983 | -88.950 | BERLIN                          | 768  | 1904-1906 | 474953 | 46.833 | -90.633 | MADELINE ISLAND          | 624  | 1944-1990 |
| 470773 | 45.550 | -89.950 | BIG FALLS GERMAIN               | 1228 | 1983-1990 | 474961 | 43.133 | -89.333 | MADISON WSO AP           | 867  | 1948-1990 |
| 470786 | 45.917 | -89.533 | BIG SAINT HYDRO DAM             | 1627 | 1931-1971 | 474966 | 43.083 | -89.400 | MADISON WB CITY          | 945  | 1896-1963 |
| 470882 | 44.300 | -91.233 | BLAIR                           | 867  | 1925-1990 | 475017 | 44.100 | -87.633 | MANITOWOC                | 666  | 1896-1990 |
| 470904 | 45.100 | -91.483 | BLOOMER                         | 987  | 1947-1990 | 475091 | 45.100 | -87.633 | MARINETTE                | 615  | 1919-1990 |
| 470991 | 44.867 | -88.983 | BOWLER                          | 1085 | 1959-1990 | 475120 | 44.150 | -90.133 | MARSHFIELD EXP FARM      | 1257 | 1913-1990 |
| 471044 | 45.050 | -88.417 | BREED 6 SSE                     | 877  | 1959-1990 | 475164 | 44.683 | -90.367 | <b>MATHER 3 NW</b>       | 977  | 1903-1990 |
| 471078 | 42.617 | -89.383 | BRODHEAD                        | 796  | 1898-1990 | 475178 | 43.783 | -90.067 | MAUSTON 1 SE             | 1006 | 1905-1990 |
| 471139 | 45.950 | -88.217 | BRULE ISLAND                    | 1257 | 1936-1989 | 475236 | 44.233 | -90.233 | MEADOW VALLEY R S        | 875  | 1931-1947 |
| 471205 | 42.667 | -88.267 | BURLINGTON                      | 765  | 1951-1990 | 475255 | 45.133 | -90.350 | MEDFORD                  | 1477 | 1896-1990 |
| 471213 | 43.467 | -88.700 | BURNETT3 S                      | 976  | 1903-1990 | 475286 | 44.400 | -88.467 | <b>MELLEN 4 NE</b>       | 1307 | 1926-1990 |
| 471245 | 46.018 | -90.492 | BUTTERNUT, ASHLAND CO.          | 1508 | 1896-1908 | 475298 | 46.200 | -89.317 | MONTELO                  | 786  | 1954-1990 |
| 471280 | 43.750 | -90.783 | <b>CASHTON</b>                  | 1386 | 1949-1990 | 475300 | 44.867 | -91.917 | MONOMONIE                | 895  | 1938-1957 |
| 471282 | 43.717 | -90.767 | <b>CASHTON 2 S</b>              | 1336 | 1966-1968 | 475335 | 44.883 | -91.933 | MONOMONIE                | 786  | 1957-1990 |
| 471416 | 43.050 | -89.467 | CHARMANYFARM                    | 917  | 1959-1990 | 475364 | 45.183 | -89.683 | MERRILL                  | 1257 | 1905-1990 |
| 471568 | 44.033 | -88.150 | CHILTON                         | 846  | 1896-1990 | 475469 | 43.033 | -87.967 | MILWAUKEE MARQ HIGH      | -999 | 1948-1951 |
| 471578 | 44.933 | -88.383 | CHIPPEWA FALLS                  | 856  | 1924-1930 | 475474 | 43.067 | -88.033 | MILWAUKEE MT MARY COL    | 726  | 1946-1990 |
| 471676 | 44.617 | -91.750 | CLINTONVILLE                    | 805  | 1952-1990 | 475477 | 43.117 | -87.933 | MILWAUKEE N SIDE         | 637  | 1949-1976 |
| 471708 | 44.367 | -89.533 | CODDINGTON 1 E                  | 1068 | 1921-1984 | 475484 | 42.950 | -87.900 | MILWAUKEE WSO AP         | 677  | 1927-1990 |
| 471836 | 46.867 | -91.083 | CORNUCOPIA                      | 640  | 1912-1937 | 475484 | 43.033 | -87.900 | MILWAUKEE WB CITY        | 625  | 1896-1954 |
| 471847 | 45.867 | -91.450 | COUDERAY 7 W                    | 1307 | 1951-1990 | 475516 | 45.883 | -89.733 | MINOCQUA DAM             | 1594 | 1903-1990 |
| 471875 | 45.567 | -88.900 | <b>CRANFORD RANGER STATION</b>  | 1644 | 1896-1919 | 475525 | 46.083 | -91.917 | MINONG 5 WSW             | 1086 | 1961-1990 |
| 471897 | 45.283 | -88.200 | CRIVITZ HIGH FALLS              | 1058 | 1931-1990 | 475563 | 44.567 | -91.683 | MONDOVI                  | 838  | 1908-1990 |
| 471923 | 45.533 | -92.017 | CUMBERLAND                      | 1246 | 1932-1990 | 475581 | 43.800 | -89.317 | MONTELO                  | 786  | 1954-1990 |
| 471970 | 43.650 | -89.200 | DALTON                          | 864  | 1944-1990 | 475677 | 43.000 | -89.767 | <b>MOUNT HOREB 1 WSW</b> | 1225 | 1904-1920 |
| 471978 | 46.017 | -92.367 | DANBURY                         | 955  | 1920-1990 | 475718 | 44.300 | -90.433 | MUSCODA                  | 718  | 1909-1990 |
| 472001 | 42.683 | -90.117 | DARLINGTON                      | 937  | 1901-1990 | 475786 | 44.033 | -90.083 | NECEDAH                  | 937  | 1953-1990 |
| 472050 | 42.633 | -88.317 | DELEVAN, WALWORTH CO.           | 920  | 1896-1922 | 475808 | 44.533 | -90.633 | NEILLSVILLE 3 SW         | 1056 | 1896-1990 |
| 472165 | 44.133 | -91.550 | <b>DODGE</b>                    | 685  | 1959-1990 | 475863 | 45.783 | -88.700 | NEWALD 4 N               | 1547 | 1959-1990 |
| 472173 | 42.967 | -90.117 | WDGEVILLE 1 N                   | 1118 | 1896-1990 | 475932 | 44.383 | -88.733 | NEW LONDON               | 767  | 1896-1990 |
| 472209 | 45.050 | -92.110 | DOWNING, DUNN CO.               | 983  | 1902-1937 | 475948 | 45.133 | -92.550 | NEW RICHMOND, ST. CROIX  | 986  | 1905-1918 |
| 472240 | 46.333 | -91.267 | DRUMMOND                        | 1347 | 1962-1990 | 476122 | 45.633 | -89.250 | NORTH PELICAN            | 1615 | 1948-1990 |
| 472314 | 45.917 | -89.250 | EAGLE RIVER                     | 1657 | 1990-1990 | 476200 | 43.100 | -88.500 | <b>OCONOMOC</b>          | 867  | 1944-1990 |
| 472423 | 44.817 | -91.500 | <b>EAU CLAIRE</b>               | 775  | 1897-1960 | 476208 | 44.900 | -87.950 | OCONTO 4 W               | 666  | 1896-1990 |
| 472428 | 44.867 | -88.500 | EAU CLAIRE FAA AIRPORT          | 896  | 1949-1990 | 476320 | 45.367 | -92.750 | OSCEOLA, POLK CO.        | 806  | 1898-1920 |
| 472507 | 43.800 | -88.633 | <b>EL DORADO 1 SSW</b>          | 898  | 1939-1981 | 476330 | 44.050 | -88.550 | OSHKOSH                  | 758  | 1896-1990 |
| 472556 | 44.733 | -92.483 | ELLSWORTH                       | 1038 | 1908-1990 | 476357 | 44.950 | -90.533 | OWEN                     | 1525 | 1910-1990 |
| 472678 | 44.600 | -90.967 | FAIRCHILD RANGER STA            | 1085 | 1959-1990 | 476398 | 45.933 | -90.450 | PARK FALLS               | 1525 | 1910-1990 |
| 472820 | 45.93  | -88.25  | FLORENCE, FLORENCE CO.          | 1290 | 1896-1930 | 476594 | 44.183 | -89.033 | PINE RIVER 3 NE          | 908  | 1896-1982 |
| 472839 | 43.800 | -88.450 | <b>FOND DU LAC</b>              | 766  | 1896-1990 | 476622 | 44.433 | -90.133 | PITTSVILLE               | 1037 | 1938-1987 |
| 472844 | 42.550 | -88.583 | FONT ATKINSON                   | 1057 | 1959-1968 | 476646 | 42.750 | -90.483 | PLATTEVILLE              | 1026 | 1947-1943 |
| 472869 | 42.883 | -88.833 | FORT WINN                       | 807  | 1941-1990 | 476667 | 45.317 | -86.950 | PLUM ISLAND, DOOR CO.    | 588  | 1908-1990 |
| 472889 | 46.500 | -92.283 | FOXBORO                         | 936  | 1963-1990 | 476678 | 43.750 | -87.983 | PLYMOUTH                 | 876  | 1910-1990 |
| 472893 | 46.417 | -92.250 | FOXBORO 6 SSE                   | 1266 | 1960-1963 | 476718 | 43.533 | -89.433 | PORTAGE                  | 808  | 1896-1990 |
| 472934 | 45.650 | -92.467 | FREDERICK                       | 1247 | 1952-1970 | 476750 | 44.333 | -89.883 | PORT EDWARDS, WOOD CO.   | 969  | 1910-1919 |
| 473022 | 43.317 | -90.850 | FRAYS MILLS                     | 708  | 1986-1990 | 476764 | 43.383 | -87.867 | PORT WASHINGTON          | 605  | 1896-1990 |
| 473038 | 43.567 | -91.233 | GENOA DAM 8                     | 846  | 1945-1990 | 476772 | 46.767 | -91.383 | PORT WING 2 E            | 858  | 1948-1985 |
| 473058 | 43.217 | -88.117 | GERMANTOWN                      | 656  | 1944-1990 | 476827 | 43.033 | -91.150 | PRAIRIE DU CHIEN         | 666  | 1896-1990 |
| 473174 | 45.617 | -88.350 | GOODMAN                         | 1397 | 1959-1990 | 476838 | 43.317 | -89.733 | PRAIRIE DU SAC 2 N       | 785  | 1911-1990 |
| 473186 | 46.250 | -91.800 | <b>GORDON</b>                   | 1047 | 1951-1990 | 476854 | 45.550 | -90.300 | PRENTICE                 | 1546 | 1900-1902 |
| 473214 | 43.767 | -89.300 | GRAND RIVER LOCK                | 774  | 1908-1954 | 476859 | 45.517 | -90.283 | PRENTICE 2               | 1547 | 1899-1990 |
| 473242 | 45.783 | -92.683 | GRANTSBURG                      | 1104 | 1896-1950 | 476929 | 42.717 | -87.783 | RACINE                   | 608  | 1896-1990 |
| 473244 | 45.783 | -92.700 | GRANTSBURG                      | 997  | 1950-1990 | 476932 | 45.833 | -89.550 | RAINBOW RESERVOIR        | 1607 | 1946-1990 |
| 473269 | 44.483 | -88.133 | GREEN BAY WSO AP                | 687  | 1896-1990 | 477052 | 43.533 | -90.017 | REEDSBURG                | 916  | 1914-1990 |
| 473332 | 46.467 | -90.500 | GURNEY                          | 986  | 1952-1990 | 477092 | 46.133 | -89.883 | REST LAKE                | 1604 | 1913-1990 |
| 473405 | 44.117 | -89.533 | <b>HANCOCK EXPERIMENT FARM</b>  | 1085 | 1903-1990 | 477113 | 45.500 | -91.750 | RHINELANDER              | 1586 | 1908-1990 |
| 473453 | 43.317 | -88.400 | HARTFIELD 2 W                   | 988  | 1953-1990 | 477132 | 45.000 | -91.750 | RICE LAKE                | 1136 | 1952-1990 |
| 473471 | 44.400 | -90.733 | HATFIELD HYDRO PLANT            | 956  | 1908-1990 | 477158 | 43.333 | -90.383 | <b>RICHLAND CENTER</b>   | 734  | 1908-1990 |
| 473511 | 46.000 | -91.483 | HAYWARD RANGER STATION          | 1205 | 1896-1974 | 477174 | 45.217 | -91.883 | RIDGELAND 1 NNE          | 966  | 1961-1990 |
| 473550 | 46.833 | -91.263 | HERBSTER, BAYFIELD CO.          | -999 | 1907-1909 | 477209 | 43.867 | -88.750 | <b>RIPON 5 NE</b>        | 934  | 1910-192s |
| 473649 | 43.650 | -90.333 | HILLSBORO                       | 1004 | 1896-1958 | 477226 | 44.867 | -92.617 | RIVER FALLS              | 905  | 1918-1990 |
| 473654 | 43.650 | -90.333 | HILLSBORO                       | 945  | 1959-1990 | 477349 | 44.767 | -89.250 | ROSHOLT 9 NNE            | 1168 | 1947-1990 |
| 473698 | 45.217 | -91.133 | HOLCOMBE                        | 1035 | 1942-1990 | 477464 | 45.417 | -92.650 | ST CROIX FALLS           | 776  | 1950-1990 |
| 473756 | 43.450 | -88.633 | HORICON                         | 887  | 1970-1990 | 477480 | 45.900 | -89.450 | SAINT GERMAIN 2 SE       | 1637 | 1910-1990 |
| 473800 | 45.417 | -90.167 | HURLEY                          | -999 | 1987-1990 | 477612 | 46.500 | -90.383 | SAXON 1 NE               | 1105 | 1948-1950 |
| 473917 | 46.567 | -91.403 | <b>IRON RIVER, BAYFIELD CO.</b> | 1096 | 1909-1947 | 477708 | 44.767 | -88.617 | SHAWANO                  | 817  | 1896-1990 |
| 4      |        |         |                                 |      |           |        |        |         |                          |      |           |

| STN #  | LAT    | Lon     | STATION NAME            | ELEV | POR       |
|--------|--------|---------|-------------------------|------|-----------|
| 478171 | 44.500 | -89.567 | STEVENS POINT           | 1085 | 1896-1990 |
| 478229 | 42.917 | -89.217 | STOUGHTON               | 847  | 1948-1990 |
| 478267 | 44.867 | -87.333 | STURGEON BAY EXP FARM   | 665  | 1905-1990 |
| 478349 | 46.700 | -92.017 | SUPERIOR                | 636  | 1909-1990 |
| 478528 | 45.433 | -89.750 | TOMAHAWK SPIRIT RES     | 1444 | 1902-1977 |
| 478561 | 45.333 | -88.583 | TOWNSEND                | 1365 | 1945-1968 |
| 478589 | 44.000 | -91.433 | TREMPEALEAU DAM 6       | 666  | 1948-1990 |
| 478672 | 44.150 | -87.567 | TWO RIVERS              | 605  | 1950-1990 |
| 478805 | 44.000 | -90.450 | VALLEY JUNCTION, MONROE | 929  | 1896-1916 |
| 478827 | 43.567 | -90.900 | VIROQUA                 | 1208 | 1896-1990 |
| 478872 | 42.533 | -88.567 | WALWORTH                | 1005 | 1958-1958 |
| 478905 | 45.367 | -86.933 | WASHINGTON ISLAND       | 616  | 1944-1990 |
| 478919 | 43.200 | -88.717 | WATERTOWN               | 828  | 1896-1990 |
| 478937 | 43.017 | -88.233 | WAUKESHA                | 865  | 1896-1987 |
| 478951 | 44.350 | -89.067 | WAUPACA                 | 846  | 1896-1990 |
| 478963 | 44.867 | -89.650 | WAUSAU                  | 1186 | 1896-1930 |
| 478968 | 44.917 | -89.617 | WAUSAU FAA AIRPORT      | 1205 | 1941-1990 |
| 478971 | 44.950 | -89.617 | WAUSAU RECORD HERALD    | 1225 | 1900-1960 |
| 478978 | 45.383 | -87.950 | WAUSAUKEE               | 755  | 1897-1902 |
| 479046 | 43.017 | -87.983 | WEST ALLIS              | 725  | 1951-1987 |
| 479050 | 43.400 | -88.183 | WEST BEND               | 946  | 1896-1990 |
| 479119 | 43.900 | -91.083 | WEST SALEM              | 744  | 1944-1954 |
| 479144 | 45.400 | -91.383 | WEYERHAUSER 2 SSE       | 1208 | 1906-1990 |
| 479190 | 42.850 | -88.733 | WHITWATER               | 805  | 1949-1990 |
| 479226 | 42.583 | -88.533 | WILLIAMS BAY            | 895  | 1921-1958 |
| 479236 | 45.717 | -89.850 | WILLOW RESERVOIR        | 1564 | 1934-1990 |
| 479304 | 45.883 | -91.067 | WINTER 6 NNW            | 1316 | 1915-1990 |
| 479319 | 43.633 | -89.783 | WISCONSIN DELLS         | 848  | 1931-1990 |
| 479335 | 44.383 | -89.800 | WISCONSIN RAPIDS        | 1045 | 1920-1990 |

STN # - STATION NUMBER, LAT - LATITUDE, Lon - LONGITUDE, ELEV - ELEVATION, POR - PERIOD OF RECORD, 99.999 - UNKNOWN LATITUDE, 999.999 - UNKNOWN LONGITUDE, -999 - UNKNOWN ELEVATION

Appendix B: Listing of Stations with Identical Data by  
State, Stations, and Year(s)

| State     | No. of<br>Station<br>Pairs | Page |
|-----------|----------------------------|------|
| Illinois  | 2                          | 39   |
| Indiana   | 4                          | 39   |
| Michigan  | 0                          | 39   |
| Minnesota | 4                          | 39   |
| New York  | 27                         | 39   |
| Ohio      | 2                          | 41   |
| Penn.     | 50                         | 41   |
| Wisconsin | 1                          | 44   |

| ILLINOIS  | stations                | years with identical data  |
|-----------|-------------------------|--|
|           | 111572: 111582          | 1907, 1908, 1912, 1914, 1915, 1916, 1918, 1919, 1920, 1921, 1923, 1924, 1925   |
|           | 118179: 118184          | 1955   |
| INDIANA   | stations                | years with identical data  |
|           | 122813: 127090          | 1902   |
|           | 124113: 125080          | 1905, 1906, 1907, 1908, 1909   |
|           | 126462: 129557          | 1898, 1899, 1900   |
|           | 126465: 128187          | 1939   |
| MICHIGAN  | stations                | years with identical data  |
|           | NO IDENTICAL DATA FOUND |  |
| MINNESOTA | stations                | years with identical data  |
|           | 213793: 213795          | 1920   |
|           | 216780: 216795          | 1926, 1927, 1928, 1929, 1930   |
|           | 216785: 216795          | 1908, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1921, 1923, 1924   |
|           | 217377: 217740          | 1956   |
| NEW YORK  | stations                | years with identical data  |
|           | 300047: 300049          | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970   |
|           | 300360: 300362          | 1948, 1949, 1950, 1951, 1952, 1953, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990                               |
|           | 300889: 301285          | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|           | 301101: 301103          | 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966   |
|           | 301272: 301415          | 1948, 1949, 1950, 1951   |
|           | 302615: 302675          | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960   |
|           | 303102: 303553          | 1948, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978   |
|           | 305441: 305500          | 1973, 1974, 1975, 1976, 1977, 1978, 1979   |
|           | 306301: 306546          | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959   |

| NY (cont.) | stations       | years with identical data  |
|------------|----------------|--|
|            | 306441: 306768 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 306464: 306701 | 1987, 1988, 1989, 1990   |
|            | 306820: 306823 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 306820: 306825 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 306820: 306827 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 306823: 306825 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 306823: 306827 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 306825: 306827 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 307077: 307160 | 1948, 1949, 1950, 1951, 1952   |
|            | 307167: 307578 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 307167: 307617 | 1948, 1949, 1950, 1951, 1952, 1953, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990   |

| NY (cont.) | stations       | years with identical data  |
|------------|----------------|--|
|            | 307497: 307498 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 307514: 307515 | 1988, 1989, 1990   |
|            | 307578: 307617 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 307633: 307636 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 308058: 308068 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979   |
|            | 308152: 308290 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967   |
|            | 308248: 308631 | 1935   |

| OHIO | stations       | years with identical data  |
|------|----------------|--|
|      | 331541: 335118 | 1897, 1899, 1900, 1904, 1907, 1908, 1910, 1911, 1912, 1914, 1915, 1916, 1918, 1919, 1920, 1921, 1922, 1924, 1926, 1929, 1930 |
|      | 334872: 334874 | 1931, 1932, 1933, 1934, 1935, 1936   |

| PENNSYLVANIA | stations       | years with identical data  |
|--------------|----------------|--|
|              | 360134: 360139 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967   |
|              | 360259: 360777 | 1954, 1956, 1957   |
|              | 360259: 360778 | 1954, 1956, 1957   |
|              | 360777: 360778 | 1953, 1954, 1955, 1956, 1957   |
|              | 361581: 361961 | 1948, 1949   |
|              | 362116: 362215 | 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988 |
|              | 362363: 362532 | 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977   |

| PA (cont.) | stations                  | years with identical data   |
|------------|---------------------------|---|
|            | 362363: 362868            | 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956<br>1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964,<br>1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972:<br>1973, 1974, 1975, 1976, 1977  |
|            | 362532: 362868            | 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956<br>1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964:<br>1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972,<br>1973, 1974, 1975, 1976, 1977  |
|            | 362537: 362838            | 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989,<br>1990   |
|            | 362537: 363155            | 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989,<br>1990   |
|            | 362838: 363155            | 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989,<br>1990   |
|            | 362942: 363295            | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955<br><del>1954</del> , <del>1955</del> , <del>1956</del> , 1959, 1960, 1961, <del>1960</del> : 1963:<br>1967, 1968, 1969, 1971<br>1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979'<br>1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987',<br>1988, 1989, 1990                                    |
|            | <del>363699: 363706</del> | 1948, 1950, 1951, 1952, 1953, 1954, 1955<br>1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955<br>1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963'<br>1964, 1965, 1966, 1967, 1968, 1969: 1970, 1971'<br><del>1980</del> , <del>1981</del> , <del>1982</del> , 1975, 1976, 1977, 1978, 1979:<br>1988, 1989, 1990 1983, 1984, 1985, 1986, 1987, |
|            | 363699: 363952            | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955<br>1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963'<br>1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971'<br><del>1980</del> , <del>1981</del> , <del>1982</del> , 1975, 1976, <del>1985</del> : 1978, 1979:<br>1988, 1989, 1990 1983, 1984, 1986, 1987,                                       |
|            | 363706: 363952            | <del>1958</del> , <del>1959</del> , 1958, 1951, 1952, 1953, <del>1954</del> , 1955,<br>1964, 1965, 1966, 1959, 1960, 1961, 1970, 1963,<br>1972, 1973, 1974, 1967, 1968, 1969, 1971,<br>1975, 1976, 1977, 1978, 1979<br><del>1988</del> , <del>1989</del> , <del>1990</del> , 1983, 1984, 1985, 1986, 1987:                                |
|            | 363761: 363762            | <del>1958</del> , 1949, 1950, 1952, 1953, 1954, 1956, 1957,   |
|            | 363761: 363859            | 1948, 1949  |
|            | 363762: 363859            | 1948, 1949  |
|            | 364076: 364118            | <del>1979</del> , <del>1980</del> , <del>1981</del> , <del>1980</del> , 1983, 1984, 1985, 1986,<br><del>1987</del> , <del>1988</del> , <del>1989</del> , <del>1990</del>  |
|            | 364141: 364311            | 1971, 1972, 1973  |
|            | 364214: 364219            | 1947  |
|            | <del>364276: 364390</del> | 1948, 1949, 1951, 1952, 1953, 1955, 1956<br>1954, 1955, 1956, 1957, 1958, 1959  |
|            | 364477: 364545            | 1973, 1974, 1975  |
|            | 364778: 364792            | <del>1950</del> , <del>1951</del> , <del>1952</del> , 1955, 1956, 1957, 1958, 1959,<br>1968, 1969, 1970, 1963, 1964, 1965, 1966, 1967,<br>1976, 1977, 1978, 1971, 1972, 1973, 1974, 1975,<br>1984, 1985, 1986, 1979, 1980, 1981, 1982, 1983,<br>1987, 1988, 1989  |

| PA (cont.) | stations       | years with identical data  |
|------------|----------------|--|
|            | 364853: 364982 | 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990   |
|            | 365738: 366050 | 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975   |
|            | 366734: 366792 | 1948, 1949, 1950, 1951, 1952, 1953, 1954   |
|            | 366879: 366881 | 1954, 1957, 1960, 1961, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978   |
|            | 366879: 366882 | 1954, 1957, 1960, 1961, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978   |
|            | 366881: 366882 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978   |
|            | 366916: 366976 | 1948, 1949, 1950, 1951, 1952, 1954, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990                   |
|            | 366916: 367285 | 1948, 1949, 1950, 1951, 1952, 1954, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990                   |
|            | 366927: 366932 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 366976: 367285 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 366997: 367073 | 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979   |
|            | 367029: 367183 | 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990                   |
|            | 367183: 367186 | 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990                   |

| PA (cont.) | stations       | years with identical data  |
|------------|----------------|--|
|            | 367183: 367186 | 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990                   |
|            | 367312: 367314 | 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990   |
|            | 367477: 367480 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 367477: 367851 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 367480: 367851 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 368449: 368452 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990       |
|            | 368673: 368674 | 1948, 1949   |
|            | 368725: 368776 | 1965, 1966, 1967, 1968, 1969, 1970   |
|            | 368912: 369058 | 1961, 1962, 1963, 1964, 1965   |
|            | 369074: 369103 | 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958   |

| WISCONSIN | stations       | years with identical data |
|-----------|----------------|---------------------------|
|           | 473405: 473649 | 1903                      |

**Appendix B: Listing of Stations with Identical Data by  
State, Stations, and Year(s)**

| <b>State</b> | <b>No. of<br/>Station<br/>Pairs</b> | <b>Page</b> |
|--------------|-------------------------------------|-------------|
| Illinois     | 2                                   | 46          |
| Indiana      | 4                                   | 46          |
| Michigan     | 0                                   | 46          |
| Minnesota    | 4                                   | 46          |
| New York     | 27                                  | 46          |
| Ohio         | 2                                   | 48          |
| Penn.        | 50                                  | 48          |
| Wisconsin    | 1                                   | 51          |

| ILLINOIS  | stations                | years with identical data  |
|-----------|-------------------------|--|
|           | 111572: 111582          | 1907, 1908, 1912, 1914, 1915, 1916, 1918, 1919, 1920, 1921, 1923, 1924, 1925   |
|           | 118179: 118184          | 1955   |
| INDIANA   | stations                | years with identical data  |
|           | 122813: 127090          | 1902   |
|           | 124113: 125080          | 1905, 1906, 1907, 1908, 1909   |
|           | 126462: 129557          | 1898, 1899, 1900   |
|           | 126465: 128187          | 1939   |
| MICHIGAN  | stations                | years with identical data  |
|           | NO IDENTICAL DATA FOUND |  |
| MINNESOTA | stations                | years with identical data  |
|           | 213793: 213795          | 1920   |
|           | 216780: 216795          | 1926, 1927, 1928, 1929, 1930   |
|           | 216785: 216795          | 1908, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1921, 1923, 1924   |
|           | 217377: 217740          | 1956   |
| NEW YORK  | stations                | years with identical data  |
|           | 300047: 300049          | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970   |
|           | 300360: 300362          | 1948, 1949, 1950, 1951, 1952, 1953, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990                               |
|           | 300889: 301285          | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|           | 301101: 301103          | 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966   |
|           | 301272: 301415          | 1948, 1949, 1950, 1951   |
|           | 302615: 302675          | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960   |
|           | 303102: 303553          | 1948, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978   |
|           | 305441: 305500          | 1973, 1974, 1975, 1976, 1977, 1978, 1979   |
|           | 306301: 306546          | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959   |

| NY (cont.) | stations       | years with identical data  |
|------------|----------------|--|
|            | 306441: 306768 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 306464: 306701 | 1987, 1988, 1989, 1990   |
|            | 306820: 306823 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 306820: 306825 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 306820: 306827 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 306823: 306825 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 306823: 306827 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 306825: 306827 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 307077: 307160 | 1948, 1949, 1950, 1951, 1952   |
|            | 307167: 307578 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 307167: 307617 | 1948, 1949, 1950, 1951, 1952, 1953, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990   |

| NY (cont.) | stations       | years with identical data   |
|------------|----------------|---|
|            | 307497: 307498 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955,<br>1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963,<br>1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971,<br>1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979,<br>1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987,<br>1988, 1989, 1990 |
|            | 307514: 307515 | 1988, 1989, 1990  |
|            | 307578: 307617 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955,<br>1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963,<br>1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971,<br>1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979,<br>1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987,<br>1988, 1989, 1990 |
|            | 307633: 307636 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955,<br>1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963,<br>1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971,<br>1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979,<br>1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987,<br>1988, 1989, 1990 |
|            | 308058: 308068 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955,<br>1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963,<br>1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971,<br>1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979   |
|            | 308152: 308290 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955,<br>1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963,<br>1964, 1965, 1966, 1967  |
|            | 308248: 308631 | 1935  |

| OHIO | stations       | years with identical data  |
|------|----------------|--|
|      | 331541: 335118 | 1897, 1899, 1900, 1904, 1907, 1908, 1910, 1911,<br>1912, 1914, 1915, 1916, 1918, 1919, 1920, 1921,<br>1922, 1924, 1926, 1929, 1930 |
|      | 334872: 334874 | 1931, 1932, 1933, 1934, 1935, 1936   |

| PENNSYLVANIA | stations       | years with identical data  |
|--------------|----------------|--|
|              | 360134: 360139 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955,<br>1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963,<br>1964, 1965, 1966, 1967   |
|              | 360259: 360777 | 1954, 1956, 1957   |
|              | 360259: 360778 | 1954, 1956, 1957   |
|              | 360777: 360778 | 1953, 1954, 1955, 1956, 1957   |
|              | 361581: 361961 | 1948, 1949   |
|              | 362116: 362215 | 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1959,<br>1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967,<br>1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975,<br>1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983,<br>1984, 1985, 1986, 1987, 1988 |
|              | 362363: 362532 | 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956,<br>1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964,<br>1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972,<br>1973, 1974, 1975, 1976, 1977  |

| PA (cont.) | stations | years with identical data  |
|------------|----------|--|
| 362363:    | 362868   | 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977   |
| 362532:    | 362868   | 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977   |
| 362537:    | 362838   | 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990   |
| 362537:    | 363155   | 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990   |
| 362838:    | 363155   | 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990   |
| 362942:    | 363295   | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
| 363379:    | 363488   | 1948, 1950, 1951, 1952, 1953, 1954, 1955   |
| 363699:    | 363706   | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
| 363699:    | 363952   | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
| 363706:    | 363952   | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
| 363761:    | 363762   | 1948, 1949, 1950, 1952, 1953, 1954, 1956, 1957, 1958   |
| 363761:    | 363859   | 1948, 1949   |
| 363762:    | 363859   | 1948, 1949   |
| 364076:    | 364118   | 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1983, 1990   |
| 364141:    | 364311   | 1971, 1972, 1973   |
| 364214:    | 364219   | 1947   |
| 364276:    | 364570   | 1948, 1949, 1951, 1952, 1953, 1955, 1956   |
| 364370:    | 364397   | 1954, 1955, 1956, 1957, 1958, 1959   |
| 364477:    | 364545   | 1973, 1974, 1975   |
| 364778:    | 364792   | 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989                               |

| PA (cont.) | stations        | years with identical data  |
|------------|-----------------|--|
|            | 364853: 364982  | 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990   |
|            | 365738: 366050  | 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975   |
|            | 366734: 366792  | 1948, 1949, 1950, 1951, 1952, 1953, 1954   |
|            | 366879: 366881  | 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978   |
|            | 366879: 366882  | 1954, 1957, 1960, 1961, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978   |
|            | 366881: 366882  | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978   |
|            | 366916: 366976  | 1948, 1949, 1950, 1951, 1952, 1954, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990                   |
|            | 366916: 367285  | 1948, 1949, 1950, 1951, 1952, 1954, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990                   |
|            | 366927 : 366932 | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 366976: 367285  | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
|            | 366997 : 367073 | 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979   |
|            | 367029: 367183  | 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990                   |
|            | 367183: 367186  | 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990                   |

| PA (cont.) | stations | years with identical data  |
|------------|----------|--|
| 367183:    | 367186   | 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990                   |
| 367312:    | 367314   | 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990   |
| 367477:    | 367480   | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
| 367477:    | 367851   | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
| 367480:    | 367851   | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990 |
| 368449:    | 368452   | 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990       |
| 368673:    | 368674   | 1948, 1949   |
| 368725:    | 368776   | 1965, 1966, 1967, 1968, 1969, 1970   |
| 368912:    | 369058   | 1961, 1962, 1963, 1964, 1965   |
| 369074:    | 369103   | 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958   |

| WISCONSIN | stations | years with identical data |
|-----------|----------|---------------------------|
| 473405:   | 473649   | 1903                      |