

U.S. Historical Climate Network

A list of Historical Climate Network (HCN) Stations in the NWS Central Region begins on page 3 of this document. They are arranged in alphabetical order by state.

The Historical Climate Network (HCN) is made of Coop Stations having at least 80 years of high quality data in a stable environment. The HCN has been identified as the data source of choice for climate change research. The HCN was compiled in response to the need for an accurate, unbiased, modern historical climate record for climate change research. The Carbon Dioxide Research Program of the U. S. Department of Energy and the National Climatic Data Center (NCDC) of the National Oceanic and Atmospheric Administration (NOAA) established a network of 1219 stations in the contiguous United States for the specific purpose of compiling a data set suitable for detecting and monitoring climate change over the past two centuries.

The HCN was revised in 1994 and several stations have been added (54) and deleted (52). Twenty-five of these additions/deletions involved stations where the official station name and number changed, but the station did not move. There are now 1221 HCN stations.

One of the objectives in establishing the U.S. HCN was to detect secular changes of regional rather than local climate. Therefore, only those stations that were not believed to be influenced to any substantial degree by artificial changes of local environments were included in the network. Some of the stations in the U.S. HCN are first order weather stations, but the majority were selected from U.S. Cooperative Weather Stations. To be included in the U.S. HCN, a station had to be active and have at least 80 years of mean monthly temperature and total monthly precipitation data, and have experienced few station changes. An additional criterion that was used in selecting the 1221 U.S. HCN stations, which sometimes compromised the preceding criteria, was the desire to have a uniform distribution of stations across the United States.

The 1221 station U.S. HCN database contains station histories, monthly temperature (maximum, minimum, and mean) data, and total monthly precipitation data that were compiled by NCDC after being extracted from digital and nondigital data sets archived at NCDC. These data sets originated from a variety of sources, including climatological publications, universities, federal agencies, individuals, and data archives. All stations were quality controlled by NCDC with the use of outlier and areal edits, and each station in the network was corrected for time-of-observation differences, instrument changes, instrument moves, station relocations, and urbanization effects. A unique feature of the data set is that, within most temperature and precipitation data files, both original and adjusted estimates are given, along with confidence factors for each adjusted estimate. Another unique feature of the database is that in relation to the long periods of record, a small portion of the data are represented as missing. In order to make the U.S. HCN record as serially complete as possible, missing data have been estimated by using data from neighboring stations. The majority of the 1221 stations have had data records that are serially complete since 1900; where serially complete is defined as having original or adjusted data available for all months after the reported serially complete date for a given station.

The U.S. HCN database represents the best monthly temperature and precipitation data set available for the contiguous United States. Unlike many data sets that have been used in past climate studies, these data have been adjusted to remove biases introduced by station moves, instrument changes, time-of-observation differences, and urbanization effects. It provides an accurate, serially complete, modern historical climate record that is suitable for detecting and monitoring longterm climatic changes on a regional scale and may be used for studies attempting to determine the climatic impacts of increased concentrations of greenhouse gases. The U.S. HCN climate record may also be used by dendrochronologists and paleoclimatologists for calibrating tree ring growth, pollen, and marine plankton data or by those studying the climatic impacts of periodic events such as El Nino/Southern Oscillation or volcanic eruptions. Those studying longterm climatic changes on smaller scales, may want to review the information given in the appendices in order to identify the stations most suitable for their research needs.

The station inventory file that follows provides a list of the 404 Central Region Stations in the HCN. The file provides essential information about each station. Each record contains the state number, station number, latitude and longitude coordinates, station elevation, station name, two letter state code, beginning year of record in the station history file, ending year of record in the station history file, beginning year of record for the minimum, mean, average, maximum temperatures, and precipitation in the HCN files, and the beginning year of record for minimum, mean, average, and maximum temperatures in the urban files.

After the State abbreviation, eleven sets of numbers (years) are listed. They correspond to what is listed below.

- 1 - BYRSHF is the beginning year of record in the station history file.
- 2 - EYRSHF is the ending year of record in the station history file (9999 indicates the station is still in operation).
- 3 - HCNMN is the beginning year of record for a station in the minimum temperature data file.
- 4 - HCNAVG is the beginning year of record for a station in the mean temperature data file.
- 5 - HCNAV2 is the beginning year of record for a station in which both the maximum and minimum temperature data are available.
- 6 - HCNMX is the beginning year of record for a station in the maximum temperature data file.
- 7 - HCNPCP is the beginning year of record for a station in the precipitation temperature data file.
- 8 - URMN is the beginning year of record for a station in the minimum temperature, urban heat island effect data file. (NCDC generated temperature files in which the biases introduced by urbanization effects were removed).
- 9 - URAVG is the beginning year of record for a station in the mean temperature, urban heat island effect data file.
- 10 - URAV2 is the beginning year of record for a station in which both the maximum and minimum urban heat island effect temperature data are available.
- 11 - URMX is the beginning year of record for a station in the maximum temperature, urban heat island effect data file.

HCN Stations in the Central Region

Colorado

050848 40.00 -105.27 5484 BOULDER 1895 1893 1893 1893 1893	CO 1893 9999 1893 1893 1896 1893
051294 38.42 -105.23 5330 CANON CITY 1890 1889 1887 1889 1889	CO 1886 9999 1888 1886 1889 1888
051528 39.22 -105.28 6880 CHEESMAN 1903 1902 1902 1902 1902	CO 1902 9999 1903 1903 1905 1903
051564 38.82 -102.35 4250 CHEYENNE WELLS 1898 1889 1897 1889 1897 1897	CO 1889 9999 1898 1890 1897
051741 39.25 -107.97 5980 COLLBRAN 1893 1900 1900 1900 1900	CO 1892 9999 1900 1902 1902 1900
052184 37.67 -106.35 7880 DEL NORTE 1893 1904 1904 1904 1904	CO 1889 9999 1896 1892 1900 1896
052281 39.63 -106.03 9065 DILLON 1E 1888 1910 1910 1910 1910	CO 1888 9999 1910 1910 1910 1910
052432 37.28 -107.88 6600 DURANGO 1887 1894 1889 1894 1894	CO 1886 1991 1895 1887 1895 1895
052446 38.48 -102.78 4211 EADS 2S 1907 1907 1907 1907	CO 1907 9999 1908 1907 1908 1908 1908
053005 40.58 -105.08 5004 FORT COLLINS 1873 1888 1873 1888 1888	CO 1872 9999 1889 1872 1888 1889
053038 40.22 -103.80 4331 FORT MORGAN 2S 1898 1895 1897 1897 1897 1897	CO 1895 9999 1898 1898 1899
053146 39.17 -108.75 4480 FRUITA 1W 1890 1893 1893 1893 1893	CO 1889 9999 1891 1889 1896 1891
053662 38.53 -106.97 7640 GUNNISON 3SW 1885 1893 1886 1893 1893	CO 1884 9999 1895 1887 1896 1895
053951 37.77 -107.13 9000 HERMIT 7ESE 1894 1894 1894 1894 1894	CO 1894 9999 1895 1895 1895 1895
054076 38.05 -102.12 3390 HOLLY 1899 1899 1899 1899	CO 1894 9999 1899 1900 1902 1900 1895
054770 38.08 -102.62 3627 LAMAR 1889 1893 1889 1893 1893	CO 1889 9999 1891 1890 1892 1889
054834 38.07 -103.22 3890 LAS ANIMAS 1867 1891 1888 1891 1891	CO 1867 9999 1891 1868 1892 1892
055322 37.17 -105.95 7690 MANASSA 1892 1893 1892 1893 1893	CO 1892 9999 1893 1894 1894 1894
055722 38.48 -107.88 5785 MONTROSE #2 1886 1895 1895 1895 1895	CO 1885 9999 1894 1885 1896 1893

057167 38.03 -103.70 4170 ROCKY FORD 2SE CO 1888 9999 1891 1889 1893
1889 1889 1889 1888 1889 1889
057337 38.08 -106.13 7692 SAGUACHE CO 1886 9999 1894 1886 1896 1895
1886 1894 1892 1894 1894
057936 40.50 -106.83 6840 STEAMBOAT SPRINGS CO 1891 9999 1891 1893 1892
1892 1892 1894 1891 1894 1894
058204 37.95 -107.87 8672 TELLURIDE CO 1900 9999 1900 1901 1901 1901
1901 1900 1900 1900 1900
058429 37.17 -104.48 6030 TRINIDAD CO 1877 9999 1900 1886 1903 1901
1877 1899 1889 1899 1899
059243 40.07 -102.23 3535 WRAY CO 1890 9999 1894 1894 1895 1895 1891
1893 1893 1893 1893

Illinois

110072 41.23 -90.73 720 ALEDO IL 1874 9999 1901 1880 1903 1901 1876
1901 1887 1901 1901
110187 37.47 -89.23 640 ANNA 1E IL 1875 9999 1897 1876 1899 1897 1876
1896 1887 1896 1896
110338 41.75 -88.35 640 AURORA IL 1857 9999 1888 1858 1891 1888 1858
1891 1885 1891 1891
111280 39.28 -89.87 630 CARLINVILLE IL 1891 9999 1894 1892 1894 1894
1891 1893 1891 1893 1893
111436 39.48 -88.17 680 CHARLESTON IL 1896 9999 1897 1897 1899 1897
1898 1896 1896 1896 1896
112140 40.13 -87.65 558 DANVILLE IL 1895 9999 1898 1896 1901 1898 1895
1897 1895 1897 1897
112193 39.83 -89.02 620 DECATUR IL 1868 9999 1893 1876 1896 1893 1869
1893 1889 1893 1893
112348 41.83 -89.52 700 DIXON 1NW IL 1881 9999 1887 1881 1888 1887
1883 1891 1889 1891 1891
112483 37.98 -89.20 420 DUQUOIN 4SE IL 1886 9999 1888 1886 1893 1888
1887 1893 1887 1893 1893
113335 41.17 -90.05 860 GALVA IL 1862 9999 1893 1862 1893 1893 1862
1893 1888 1893 1893
113717 39.72 -90.73 700 GRIGGSVILLE IL 1882 9999 1887 1882 1889 1887
1883 1887 1882 1887 1887
113879 37.73 -88.52 365 HARRISBURG IL 1898 9999 1898 1898 1900 1898
1899 1898 1898 1898 1898
114108 39.15 -89.48 630 HILLSBORO IL 1895 9999 1896 1895 1896 1896
1896 1895 1895 1895 1895
114198 40.47 -87.67 710 HOOPESTON 1NE IL 1887 9999 1887 1889 1887 1887
1888 1893 1887 1893 1893
114442 39.73 -90.20 610 JACKSONVILLE 2E IL 1858 9999 1895 1860 1898 1895
1862 1895 1888 1895 1895

114823 40.58 -90.97 700 LA HARPE 1895 1895 1895 1895	IL 1895 9999 1896 1896 1897 1896 1895
115079 40.15 -89.40 590 LINCOLN 1906 1906 1906 1906	IL 1906 9999 1907 1906 1908 1907 1908
115326 42.25 -88.60 820 MARENGO 1857 1893 1856 1893 1893	IL 1855 9999 1893 1857 1896 1893
115515 38.10 -88.50 480 MCLEANSBORO 2ENE 1890 1883 1893 1882 1893 1893	IL 1882 9999 1890 1882 1889
115712 40.90 -89.05 750 MINONK 1896 1892 1896 1896	IL 1886 9999 1898 1888 1897 1898 1887
115768 40.92 -90.63 770 MONMOUTH 1883 1893 1887 1893 1893	IL 1881 9999 1893 1881 1895 1893
115833 41.82 -89.97 603 MORRISON 1880 1895 1891 1895 1895	IL 1880 9999 1896 1880 1899 1896
115901 42.10 -89.98 640 MOUNT CARROLL 1888 1897 1891 1897 1897	IL 1887 9999 1898 1888 1900 1898
115943 38.35 -88.87 490 MT VERNON 3NE 1878 1895 1887 1895 1895	IL 1878 9999 1895 1879 1895 1895
116446 38.70 -88.07 480 OLNEY 2S 1896 1887 1896 1896	IL 1887 9999 1897 1888 1896 1897 1887
116526 41.33 -88.92 525 OTTAWA 4SW 1856 1887 1878 1887 1887	IL 1854 9999 1888 1855 1887 1888
116558 39.00 -87.62 520 PALESTINE 1893 1882 1893 1893	IL 1882 9999 1894 1883 1896 1894 1882
116579 39.38 -89.08 700 PANA 1893 1887 1893 1893	IL 1869 9999 1894 1870 1893 1894 1871
116610 39.62 -87.70 720 PARIS WATERWORKS 1893 1886 1893 1886 1893 1893	IL 1886 9999 1893 1887 1893
116910 40.88 -88.63 650 PONTIAC 1903 1891 1903 1903	IL 1885 9999 1903 1887 1905 1903 1885
117551 40.12 -90.55 660 RUSHVILLE 1891 1893 1889 1893 1893	IL 1889 9999 1893 1891 1893 1893
118147 38.17 -89.70 520 SPARTA 3N 1893 1887 1893 1893	IL 1887 1993 1894 1888 1897 1894 1888
118740 40.10 -88.23 743 URBANA 1893 1888 1893 1889	IL 1888 9999 1889 1889 1889 1889 1889
118916 41.55 -89.60 690 WALNUT 1893 1892 1893 1893	IL 1892 9999 1893 1892 1896 1893 1892
119241 39.43 -90.38 580 WHITE HALL 1E 1855 1894 1882 1894 1894	IL 1854 9999 1895 1855 1894 1895
119354 39.43 -88.60 685 WINDSOR 1893 1887 1893 1893	IL 1885 9999 1888 1887 1887 1888 1886

Indiana

120177 40.10 -85.72 845 ANDERSON SEWAGE PLANT IN 1895 9999 1896 1895
1898 1896 1895 1895 1895 1895 1895
120200 41.63 -84.98 1010 ANGOLA IN 1884 9999 1887 1887 1889 1887 1885
1887 1885 1887 1887
120676 40.67 -84.95 860 BERNE IN 1910 9999 1911 1910 1911 1911 1911
1910 1910 1910 1910
120784 39.17 -86.52 825 BLOOMINGTON IN UNIV IN 1868 9999 1898 1869 1898
1898 1870 1896 1884 1896 1896
121030 39.42 -85.02 760 BROOKVILLE IN 1882 9999 1925 1885 1928 1925
1883 1925 1902 1925 1925
121229 39.87 -85.18 999 CAMBRIDGE CITY IN 1892 9999 1892 1892 1893 1892
1893 1892 1892 1892 1892
121425 38.37 -85.68 525 CHARLESTOWN ORD PLT IN 1895 9999 1896 1896 1897
1896 1897 1895 1895 1895 1895
121747 39.20 -85.92 621 COLUMBUS IN 1884 9999 1895 1884 1896 1895
1884 1893 1884 1893 1893
121873 39.97 -86.93 762 CRAWFORDSVILLE 5S IN 1885 9999 1894 1886 1892
1894 1885 1892 1885 1892 1892
122149 40.62 -86.67 560 DELPHI 3NNE IN 1885 9999 1887 1886 1893 1887
1886 1887 1885 1887 1887
123418 41.57 -85.83 805 GOSHEN COLLEGE IN 1914 9999 1914 1915 1916 1914
1914 1914 1914 1914 1914
123513 39.63 -86.85 860 GREENCASTLE 1SE IN 1882 9999 1896 1886 1898 1896
1882 1895 1884 1895 1895
123527 39.78 -85.75 865 GREENFIELD IN 1883 9999 1903 1884 1905 1903
1884 1903 1884 1903 1903
124008 41.55 -87.28 640 HOBART 2WNW IN 1919 9999 1919 1919 1920 1919
1920 1919 1919 1919 1919
124181 40.85 -85.50 725 HUNTINGTON IN 1882 9999 1894 1894 1895 1894
1883 1893 1893 1893 1893
124837 41.60 -86.72 810 LAPORTE IN 1849 9999 1898 1851 1901 1898 1849
1904 1904 1904 1904
125237 38.73 -85.40 455 MADISON SEWAGE PLANT IN 1854 9999 1893 1855 1894
1893 1860 1893 1883 1893 1893
125337 40.57 -85.67 790 MARION 2N IN 1885 9999 1892 1886 1894 1892
1886 1891 1885 1891 1891
126001 37.95 -87.88 415 MOUNT VERNON IN 1887 9999 1894 1888 1896 1894
1887 1893 1887 1893 1893
126580 38.88 -86.55 650 OOLITIC PURDUE EXP FM IN 1893 9999 1894 1894 1893
1894 1893 1893 1893 1893 1893
126705 38.55 -86.48 560 PAOLI IN 1898 9999 1899 1898 1901 1899 1899
1898 1898 1898 1898
127125 38.35 -87.58 480 PRINCETON 1W IN 1882 9999 1900 1884 1900 1900
1883 1899 1884 1899 1899

127298 40.93 -87.15 650 RENSSELAER IN 1864 9999 1900 1865 1900 1900
 1865 1900 1885 1900 1900
 127482 41.07 -86.22 770 ROCHESTER IN 1904 9999 1904 1904 1904 1904
 1905 1904 1904 1904 1904
 127522 39.77 -87.23 690 ROCKVILLE IN 1860 9999 1887 1862 1890 1887
 1860 1887 1883 1887 1887
 127646 39.60 -85.45 955 RUSHVILLE SEWAGE PL IN 1881 9999 1887 1884 1892
 1887 1882 1887 1883 1887 1887
 127755 38.62 -86.08 800 SALEM IN 1882 9999 1897 1884 1898 1897 1884
 1897 1884 1897 1897
 127875 38.70 -85.77 550 SCOTTSBURG IN 1894 9999 1896 1894 1896 1896
 1894 1896 1894 1896 1896
 127935 38.98 -85.90 573 SEYMOUR 2N IN 1887 9999 1893 1887 1892 1893
 1887 1915 1915 1915 1915
 128036 38.67 -86.80 550 SHOALS HIGHWAY 50 BRIDGE IN 1911 9999 1913 1913
 1913 1913 1911 1912 1912 1912 1912
 129080 38.75 -85.07 470 VEVAY IN 1864 9999 1887 1865 1887 1887 1865
 1887 1864 1887 1887
 129113 38.73 -87.50 450 VINCENNES 5NE IN 1882 9999 1894 1895 1894 1894
 1883 1894 1894 1894 1894
 129253 38.67 -87.18 485 WASHINGTON IN 1896 9999 1896 1896 1899 1896
 1896 1896 1896 1896 1896
 129511 41.25 -87.08 655 WHEATFIELD 4NNW IN 1916 9999 1917 1916 1920
 1917 1916 1916 1916 1916 1916
 129557 40.00 -86.35 935 WHITESTOWN IN 1896 9999 1897 1896 1898 1897
 1896 1896 1896 1896 1896
 129670 41.02 -86.58 690 WINAMAC 2SSE IN 1897 9999 1898 1897 1899 1898
 1897 1902 1902 1902 1902

Iowa

130112 41.07 -92.78 880 ALBIA 3NNE IA 1887 9999 1898 1891 1897 1898
 1891 1897 1891 1897 1897
 130133 43.07 -94.30 1230 ALGONA 3W IA 1861 9999 1893 1861 1895 1893
 1861 1893 1887 1893 1893
 130600 41.90 -92.27 840 BELLE PLAINE IA 1889 9999 1892 1890 1894 1892
 1891 1890 1889 1890 1890
 131402 43.05 -92.67 1013 CHARLES CITY IA 1875 9999 1891 1892 1894 1891
 1877 1891 1891 1892 1892
 131533 40.73 -95.03 1050 CLARINDA IA 1865 9999 1890 1873 1893 1890
 1873 1890 1879 1890 1890
 131635 41.80 -90.27 585 CLINTON #1 IA 1857 9999 1894 1858 1895 1894
 1860 1893 1878 1893 1893
 132724 43.42 -94.83 1302 ESTHERVILLE 2N IA 1895 9999 1896 1895 1899 1896
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132789 41.03 -91.95 740 FAIRFIELD 1893 1880 1893 1893	IA 1855 9999 1891 1855 1894 1891 1859
132864 42.85 -91.80 1050 FAYETTE 1893 1888 1893 1893	IA 1888 9999 1893 1889 1895 1893 1888
132977 43.28 -93.63 1300 FOREST CITY 2NNE 1895 1894 1894 1894 1894	IA 1894 9999 1894 1894 1898 1894
132999 42.50 -94.20 1115 FORT DODGE 1852 1900 1887 1900 1900	IA 1851 9999 1900 1851 1902 1900
134063 41.37 -93.55 940 INDIANOLA 1876 1890 1883 1890 1890	IA 1875 9999 1890 1882 1892 1890
134142 42.52 -93.25 1130 IOWA FALLS 1863 1893 1887 1893 1893	IA 1863 9999 1894 1864 1894 1894
134735 42.78 -96.17 1195 LE MARS 1896 1896 1896 1896	IA 1876 9999 1897 1897 1899 1897 1877
134894 41.63 -95.78 990 LOGAN 1890 1886 1890 1890	IA 1866 9999 1891 1867 1894 1891 1866
135769 40.68 -94.30 1240 MOUNT AYR 4SW 1892 1892 1892 1892 1892	IA 1892 9999 1892 1892 1895 1892
135796 40.95 -91.55 730 MOUNT PLEASANT 1SSW 1899 1864 1898 1878 1898 1898	IA 1863 9999 1899 1865 1898
135952 43.07 -92.32 1160 NEW HAMPTON 1897 1897 1897 1897 1897	IA 1897 9999 1898 1897 1899 1898
137147 43.43 -96.17 1350 ROCK RAPIDS 1894 1893 1893 1893 1893	IA 1893 9999 1893 1894 1897 1893
137161 42.40 -94.62 1210 ROCKWELL CITY 1893 1894 1894 1894 1894	IA 1893 9999 1895 1895 1898 1895
137979 42.63 -95.18 1425 STORM LAKE 2E 1876 1891 1889 1891 1891	IA 1876 9999 1891 1891 1893 1891
138296 41.98 -92.58 890 TOLEDO 1895 1894 1895 1895	IA 1894 9999 1895 1895 1895 1895 1894
138688 41.28 -91.68 756 WASHINGTON 1876 1892 1879 1892 1892	IA 1861 9999 1891 1875 1894 1891

Kansas

140264 37.15 -98.08 1340 ANTHONY 1897 1906 1906 1906 1906	KS 1896 9999 1906 1907 1909 1906
140365 37.20 -99.77 1970 ASHLAND 1889 1889 1888 1889 1889	KS 1888 9999 1890 1888 1889 1890
140405 39.57 -95.12 945 ATCHISON 1866 1891 1865 1891 1891	KS 1865 9999 1892 1866 1893 1892
141704 37.27 -99.33 2083 COLDWATER 1889 1889 1888 1890 1890	KS 1888 9999 1889 1889 1891 1889
141740 37.17 -94.85 900 COLUMBUS 1SW 1890 1891 1891 1891 1891	KS 1889 9999 1892 1892 1891 1892

142401 37.82 -96.83 1340 EL DORADO 1887 1893 1891 1893 1893	KS 1886 9999 1894 1887 1893 1894
142459 38.72 -98.23 1530 ELLSWORTH 1866 1891 1891 1891 1891	KS 1866 9999 1888 1868 1888 1888
142602 38.85 -96.10 1420 ESKRIDGE 1SE 1898 1897 1897 1897 1897	KS 1897 9999 1898 1898 1901 1898
142835 37.85 -94.70 845 FORT SCOTT 1844 1896 1868 1896 1896	KS 1843 9999 1897 1844 1900 1897
143527 38.87 -99.33 2010 HAYS 1S 1893 1885 1893 1893	KS 1867 9999 1894 1886 1893 1894 1867
143810 39.67 -95.52 1030 HORTON 1889 1890 1888 1890 1890	KS 1888 9999 1891 1888 1892 1891
143954 37.25 -95.70 780 INDEPENDENCE 1872 1888 1872 1888 1888	KS 1872 9999 1888 1874 1889 1888
144087 38.25 -99.97 2270 JETMORE 12NNW 1902 1900 1901 1901 1901	KS 1900 9999 1901 1901 1904 1902
144464 37.93 -101.25 2998 LAKIN 1889 1889 1889 1889	KS 1889 9999 1889 1889 1890 1890 1890
144530 38.18 -99.10 1995 LARNED 1891 1891 1891 1891	KS 1860 9999 1891 1860 1897 1893 1861
144559 38.97 -95.27 980 LAWRENCE 1861 1894 1864 1894 1894	KS 1857 9999 1895 1858 1894 1894
144588 39.32 -94.93 910 LEAVENWORTH 1836 1901 1878 1901 1901	KS 1830 9999 1901 1832 1901 1901
144695 37.05 -100.92 2834 LIBERAL 1893 1896 1894 1896 1896	KS 1892 9999 1893 1892 1896 1893
144972 39.20 -96.58 1065 MANHATTAN 1859 1893 1858 1893 1893	KS 1858 9999 1894 1858 1894 1894
145152 38.38 -97.67 1495 MCPHERSON 1877 1891 1891 1891 1891	KS 1876 9999 1892 1892 1894 1891
145173 37.28 -98.58 1500 MEDICINE LODGE 1895 1891 1895 1895 1895 1895	KS 1891 9999 1896 1895 1898
145363 39.13 -97.70 1310 MINNEAPOLIS 1889 1889 1889 1889 1889	KS 1889 9999 1889 1889 1892 1890
145856 39.70 -99.83 2360 NORTON 9SSE 1891 1891 1891 1891 1891	KS 1890 9999 1891 1891 1892 1890
145906 39.83 -100.52 2540 OBERLIN 1E 1889 1913 1913 1913 1913	KS 1887 9999 1915 1914 1916 1914
145972 38.88 -94.77 1055 OLATHE 3E 1864 1893 1864 1893 1893	KS 1864 9999 1894 1865 1895 1893
146128 38.62 -95.28 900 OTTAWA 1895 1895 1895 1895	KS 1895 9999 1896 1895 1896 1896 1896
146374 39.73 -99.32 1907 PHILLIPSBURG 1SSE 1891 1892 1891 1891 1891 1891	KS 1891 9999 1892 1893 1891

147093 39.77 -101.80 3362 SAINT FRANCIS	KS 1908 9999 1909 1908 1909 1908
1908 1908 1908 1908 1908	
147271 38.48 -100.90 2970 SCOTT CITY	KS 1889 9999 1895 1890 1895 1896
1890 1895 1891 1895 1895	
147305 37.13 -96.18 880 SEDAN	KS 1885 9999 1887 1886 1888 1887 1885
1887 1885 1887 1887	
148495 39.02 -99.88 2450 WAKEENEY	KS 1883 9999 1894 1883 1894 1893
1883 1893 1883 1893 1893	

Kentucky

150254 38.45 -82.62 560 ASHLAND	KY 1882 9999 1893 1882 1896 1895
1883 1893 1882 1893 1893	
150619 37.57 -84.30 1070 BERE A COLLEGE	KY 1901 9999 1901 1901 1902
1902 1902 1901 1901 1901 1901	
150909 36.97 -86.43 528 BOWLING GREEN FAA AP	KY 1878 9999 1890 1879 1892
1890 1880 1890 1878 1890 1890	
152791 38.12 -83.55 680 FARMERS 2S	KY 1904 9999 1905 1906 1905 1905
1904 1904 1904 1904 1904	
153028 38.23 -84.87 500 FRANKFORT LOCK 4	KY 1881 9999 1896 1882 1895
1895 1884 1895 1881 1895 1895	
153430 37.25 -85.50 590 GREENSBURG	KY 1887 9999 1896 1893 1896 1897
1887 1896 1892 1896 1896	
153994 36.83 -87.50 590 HOPKINSVILLE	KY 1896 9999 1896 1896 1896 1898
1896 1896 1896 1896 1896	
154703 37.52 -86.30 620 LEITCHFIELD 2N	KY 1895 9999 1895 1895 1896 1895
1896 1895 1895 1895 1895	
155389 36.60 -83.73 1175 MIDDLESBORO	KY 1891 1991 1892 1892 1892 1893
1891 1893 1891 1893 1893	
156091 37.77 -87.15 405 OWENSBORO 3W	KY 1896 9999 1896 1897 1899
1898 1897 1896 1896 1896 1896	
157324 38.20 -85.20 730 SHELBYVILLE 1E	KY 1888 9999 1889 1889 1893 1889
1889 1889 1888 1889 1889	
158709 36.73 -84.17 1000 WILLIAMSBURG	KY 1887 9999 1893 1892 1896
1893 1887 1893 1892 1893 1893	
158714 38.65 -84.62 940 WILLIAMSTOWN 3NW	KY 1902 9999 1902 1902 1902
1902 1903 1902 1902 1902 1902	

Michigan

200032 41.92 -84.02 760 ADRIAN 2NNE	MI 1870 9999 1889 1872 1888 1887
1871 1887 1882 1887 1887	
200128 42.58 -85.78 750 ALLEGAN 5NE	MI 1886 9999 1890 1891 1891 1891
1888 1890 1890 1890 1890	
200146 43.38 -84.67 760 ALMA	MI 1887 9999 1888 1889 1887 1889 1888
1889 1887 1889 1889	

200230 42.30 -83.72 900 ANN ARBOR UNIV OF MI MI 1849 9999 1890 1854 1890
 1889 1850 1889 1876 1889 1889
 200779 43.70 -85.48 930 BIG RAPIDS WATERWORKS MI 1887 9999 1888 1888
 1890 1887 1888 1887 1887 1887 1887
 201439 46.52 -87.98 1565 CHAMPION VAN RIPER PK MI 1898 9999 1899 1899 1900
 1898 1899 1898 1898 1898 1898
 201486 46.33 -86.92 870 CHATHAM EXP FARM #2 MI 1900 9999 1901 1901 1900
 1900 1901 1900 1900 1900 1900
 201492 45.65 -84.47 590 CHEBOYGAN MI 1890 9999 1891 1891 1890 1890
 1891 1891 1890 1891 1891
 201675 41.95 -85.00 984 COLDWATER STATE SCHOOL MI 1868 9999 1887 1868
 1892 1888 1868 1887 1885 1887 1887
 202423 44.28 -83.50 586 EAST TAWAS MI 1883 9999 1887 1883 1890 1888
 1885 1891 1884 1891 1891
 202737 45.67 -86.72 745 FAYETTE 4SW MI 1920 9999 1920 1920 1922 1921
 1920 1920 1920 1920 1920
 203632 43.68 -86.35 700 HART MI 1887 9999 1887 1887 1891 1888 1889
 1891 1887 1891 1891
 203823 41.93 -84.63 1080 HILLSDALE MI 1880 9999 1897 1880 1897 1898
 1881 1897 1885 1897 1897
 204090 45.78 -88.08 1060 IRON MOUNTAIN KINGSFORD WWTP MI 1899 9999 1901
 1900 1901 1899 1900 1899 1899 1899 1899
 204104 46.47 -90.18 1430 IRONWOOD MI 1901 9999 1901 1901 1902 1902
 1901 1901 1901 1901 1901
 204244 42.28 -85.60 950 KALAMAZOO STATE HOSPITAL MI 1876 9999 1893 1877
 1894 1892 1877 1892 1876 1892 1892
 205434 43.62 -84.22 640 MIDLAND MI 1896 9999 1896 1898 1899 1897
 1896 1896 1896 1896 1896
 205650 42.62 -82.83 580 MOUNT CLEMENS ANG BASE MI 1896 9999 1897 1896
 1896 1896 1896 1896 1896 1896 1896
 205662 43.58 -84.77 796 MOUNT PLEASANT UNIVERSITY MI 1887 9999 1897 1888
 1896 1895 1888 1895 1887 1895 1895
 205690 46.42 -86.67 680 MUNISING MI 1896 9999 1897 1898 1898 1897
 1896 1896 1896 1896 1896
 205816 46.33 -85.50 875 NEWBERRY STATE HOSPITAL MI 1896 9999 1897 1896
 1899 1897 1897 1896 1896 1896 1896
 206300 43.03 -84.18 740 OWOSSO 3NNW MI 1896 9999 1898 1896 1900 1898
 1897 1896 1896 1896 1896
 207690 42.40 -86.28 620 SOUTH HAVEN MI 1895 9999 1895 1896 1895 1895
 1897 1895 1895 1895 1895
 207812 46.05 -88.62 1560 STAMBAUGH 2SSE MI 1896 9999 1897 1896 1900
 1897 1897 1896 1896 1896 1896

Minnesota

210018 47.30 -96.52 910 ADA MN 1892 9999 1894 1892 1893 1894 1893
 1893 1892 1893 1893
 210075 43.62 -93.42 1230 ALBERT LEA 3SE MN 1885 9999 1892 1885 1895 1892
 1886 1892 1887 1892 1892
 210515 48.72 -94.62 1075 BAUDETTE MN 1908 9999 1909 1909 1913 1909
 1910 1909 1909 1909 1909
 211465 44.80 -93.58 720 CHASKA MN 1892 9999 1893 1892 1897 1893
 1888 1893 1892 1893 1893
 211630 46.70 -92.52 1265 CLOQUET MN 1911 9999 1911 1911 1912 1911
 1912 1911 1911 1911 1911
 212142 46.83 -95.85 1375 DETROIT LAKES 1NNE MN 1895 9999 1896 1895 1898
 1896 1895 1895 1895 1895 1895
 212645 47.47 -92.57 1445 EVELETH WASTE WATER PL MN 1893 9999 1894 1893
 1896 1894 1893 1893 1893 1893 1893
 212698 43.63 -94.47 1187 FAIRMONT MN 1887 9999 1893 1888 1893 1893
 1889 1892 1887 1892 1892
 212737 44.67 -93.18 980 FARMINGTON 3NW MN 1888 9999 1893 1890 1894
 1893 1888 1892 1888 1892 1892
 212916 47.57 -95.73 1310 FOSSTON MN 1909 9999 1909 1910 1912 1909
 1910 1909 1909 1909 1909
 213290 43.70 -92.57 1350 GRAND MEADOW MN 1887 9999 1893 1887 1896
 1893 1887 1893 1887 1893 1893
 213455 48.77 -96.95 810 HALLOCK MN 1899 9999 1900 1900 1899 1900
 1899 1899 1899 1899 1899
 214106 47.22 -95.20 1490 ITASCA U OF MN MN 1911 9999 1911 1913 1915 1911
 1912 1911 1911 1911 1911
 214652 47.25 -94.22 1302 LEECH LAKE DAM MN 1887 9999 1897 1888 1898
 1897 1887 1897 1887 1897 1897
 215400 45.13 -95.93 1020 MILAN 1NW MN 1893 9999 1894 1894 1896 1894
 1894 1893 1893 1893 1893
 215435 44.88 -93.22 834 MINNEAPOLIS WSFO AP MN 1819 9999 1890 1821 1890
 1890 1836 1890 1887 1890 1890
 215563 44.93 -95.75 985 MONTEVIDEO 1SW MN 1889 9999 1894 1889 1897
 1894 1890 1893 1889 1893 1893
 215615 45.88 -93.30 1005 MORA MN 1904 9999 1905 1904 1905 1905 1905
 1904 1904 1904 1904
 215638 45.58 -95.88 1140 MORRIS WC EXPERIMENT STATION MN 1885 9999 1886
 1886 1887 1886 1885 1886 1885 1886 1886
 215887 44.30 -94.45 860 NEW ULM MN 1864 9999 1895 1866 1893 1895
 1865 1893 1889 1893 1893
 216152 44.72 -94.93 1100 OLIVIA 3SE MN 1885 9999 1893 1885 1894 1893
 1886 1892 1889 1892 1892
 216360 46.90 -95.07 1443 PARK RAPIDS 2S MN 1885 9999 1893 1885 1896 1893
 1886 1893 1885 1893 1893

216547 46.67 -94.12 1250 PINE RIVER DAM MN 1887 9999 1898 1888 1898 1898
 1887 1897 1887 1897 1897
 216565 44.02 -96.32 1705 PIPESTONE MN 1898 9999 1899 1900 1901 1899
 1892 1899 1899 1899 1899
 216612 47.25 -93.58 1280 POKEGAMA DAM MN 1887 9999 1898 1887 1898
 1898 1887 1897 1887 1897 1897
 217087 48.85 -95.73 1047 ROSEAU 1E MN 1894 9999 1895 1894 1898 1895
 1895 1895 1894 1895 1895
 217405 44.30 -93.97 850 SAINT PETER 2SW MN 1877 9999 1893 1878 1895 1893
 1888 1893 1887 1893 1893
 217460 46.80 -93.32 1234 SANDY LAKE DAM LIBBY MN 1892 9999 1898 1894
 1897 1898 1892 1897 1892 1897 1897
 218419 47.02 -91.67 625 TWO HARBORS MN 1894 9999 1894 1894 1895 1894
 1894 1894 1894 1894 1894
 218618 47.07 -94.58 1410 WALKER AH-GWAH-CHING MN 1907 9999 1908 1908
 1907 1908 1908 1907 1907 1907 1907
 219046 43.77 -94.17 1110 WINNEBAGO MN 1894 9999 1896 1895 1897 1896
 1895 1895 1894 1895 1895
 219059 47.43 -94.05 1315 WINNIBIGOSHISH DAM MN 1887 9999 1897 1888 1899
 1897 1888 1897 1887 1897 1897
 219249 44.30 -92.67 985 ZUMBROTA MN 1894 9999 1904 1896 1906 1904
 1895 1903 1895 1903 1903

Missouri

230204 38.20 -94.03 800 APPLETON CITY MO 1889 9999 1893 1890 1893 1894
 1890 1893 1890 1893 1893
 230856 39.37 -91.18 710 BOWLING GREEN 2NE MO 1878 9999 1897 1884 1900
 1898 1879 1897 1886 1897 1897
 231037 39.42 -93.12 645 BRUNSWICK MO 1874 9999 1895 1891 1893 1893
 1875 1893 1889 1893 1893
 231364 36.20 -89.67 280 CARUTHERSVILLE MO 1878 9999 1899 1895 1900
 1898 1878 1898 1893 1898 1898
 231711 38.40 -93.77 770 CLINTON MO 1906 9999 1907 1908 1906 1906
 1907 1906 1906 1906 1906
 231822 40.25 -94.68 1108 CONCEPTION MO 1883 9999 1893 1889 1894 1894
 1883 1893 1888 1893 1893
 232289 36.58 -90.82 330 DONIPHAN MO 1904 9999 1904 1904 1907 1905
 1905 1904 1904 1904 1904
 232809 37.78 -90.40 900 FARMINGTON MO 1878 9999 1897 1879 1899 1896
 1878 1896 1879 1896 1896
 234271 38.58 -92.18 670 JEFFERSON CITY WATER PLANT MO 1891 9999 1894 1891
 1896 1893 1891 1893 1891 1893 1893
 234705 37.50 -94.27 980 LAMAR MO 1877 9999 1894 1885 1894 1893 1877
 1893 1885 1893 1893

234825 37.67 -92.65 1279 LEBANON 2W MO 1878 9999 1893 1891 1896 1894
 1879 1893 1890 1893 1893
 234850 38.88 -94.33 1000 LEE'S SUMMIT REED WLR MO 1863 9999 1893 1863
 1893 1894 1864 1893 1884 1893 1893
 234904 39.20 -93.87 825 LEXINGTON 3NE MO 1875 9999 1898 1879 1898 1896
 1876 1896 1878 1896 1896
 235027 37.38 -93.95 1080 LOCKWOOD MO 1903 9999 1904 1905 1907 1905
 1905 1904 1904 1904 1904
 235253 37.30 -89.97 390 MARBLE HILL MO 1891 9999 1895 1891 1896 1893
 1893 1893 1891 1893 1893
 235541 39.17 -91.90 770 MEXICO MO 1878 9999 1894 1892 1893 1893 1895
 1893 1892 1893 1893
 235671 39.40 -92.43 840 MOBERLY MO 1899 9999 1900 1900 1901 1901
 1900 1899 1899 1899 1899
 235834 37.15 -92.27 1450 MOUNTAIN GROVE 2N MO 1901 9999 1903 1903 1902
 1901 1901 1901 1901 1901 1901
 235976 36.87 -94.37 1011 NEOSHO MO 1878 9999 1893 1878 1895 1894
 1894 1893 1888 1893 1893
 237263 37.95 -91.77 1180 ROLLA UNIV OF MO MO 1866 9999 1907 1868 1907
 1908 1896 1907 1883 1907 1907
 237963 40.25 -93.72 875 SPICKARD 7W MO 1895 9999 1895 1895 1898 1897
 1896 1895 1895 1895 1895
 238051 39.97 -91.88 690 STEFFENVILLE MO 1893 9999 1899 1897 1900 1898
 1897 1897 1897 1897 1897
 238223 38.97 -93.42 680 SWEET SPRINGS MO 1868 9999 1900 1869 1899 1899
 1897 1899 1883 1899 1899
 238466 38.25 -93.37 632 TRUMAN DAM & RESERVOIR MO 1892 9999 1893 1893
 1897 1894 1892 1893 1893 1893 1893
 238523 40.48 -93.00 1062 UNIONVILLE MO 1893 9999 1893 1893 1895 1894
 1894 1937 1937 1937 1937
 238725 38.82 -91.13 845 WARRENTON IN MO 1859 9999 1893 1860 1893
 1893 1895 1893 1883 1893 1893

Nebraska

250070 41.67 -97.98 1745 ALBION NE 1892 9999 1895 1893 1897 1893 1892
 1893 1892 1893 1893
 250130 42.10 -102.90 3994 ALLIANCE 1WNW NE 1889 9999 1902 1890 1902
 1900 1889 1900 1894 1900 1900
 250375 41.05 -96.35 1070 ASHLAND 2 NE 1883 9999 1894 1889 1897 1893
 1883 1893 1888 1893 1893
 250420 42.53 -98.98 2110 ATKINSON NE 1906 9999 1907 1906 1907 1908
 1907 1906 1906 1906 1906
 250435 40.37 -95.75 930 AUBURN 5ESE NE 1874 9999 1899 1875 1902 1900
 1874 1899 1887 1899 1899

250622 40.30 -96.75 1297 BEATRICE 1N 1892 1893 1891 1893 1893	NE 1891 9999 1894 1891 1895 1895
250640 40.13 -99.83 2160 BEAVER CITY 1890 1893 1890 1893 1893	NE 1890 9999 1893 1890 1897 1894
251145 41.67 -103.10 3666 BRIDGEPORT 1898 1897 1897 1897 1897	NE 1897 9999 1897 1898 1898 1898
251200 41.42 -99.68 2500 BROKEN BOW 2W 1901 1895 1901 1894 1901 1901	NE 1894 9999 1902 1894 1904
252020 40.62 -96.95 1435 CRETE 1893 1885 1893 1893	NE 1880 9999 1895 1882 1897 1893 1880
252100 40.67 -100.50 2721 CURTIS 3NNE 1893 1893 1893 1893 1893	NE 1893 9999 1894 1893 1894 1893
252205 41.27 -97.12 1610 DAVID CITY 1889 1897 1888 1897 1897	NE 1888 9999 1898 1890 1900 1899
252820 40.15 -97.17 1430 FAIRBURY 1875 1895 1892 1895 1895	NE 1875 9999 1895 1893 1895 1896
252840 40.63 -97.58 1640 FAIRMONT 1894 1896 1894 1896 1896	NE 1894 9999 1897 1895 1896 1896
253035 40.10 -98.97 1855 FRANKLIN 1888 1890 1888 1890 1890	NE 1887 1990 1889 1888 1888 1888
253175 40.53 -97.60 1630 GENEVA 1891 1893 1893 1893 1893	NE 1890 9999 1893 1894 1897 1894
253185 41.45 -97.77 1590 GENOA 2W 1875 1893 1888 1893 1893	NE 1875 9999 1893 1875 1894 1894
253365 40.93 -100.17 2585 GOTHENBURG 1894 1894 1894 1894 1894	NE 1894 9999 1895 1894 1897 1894
253540 41.90 -100.32 2705 HALSEY 2W 1903 1903 1903 1903 1903	NE 1903 9999 1903 1903 1905 1904
253615 42.68 -103.88 4850 HARRISON 1893 1914 1906 1914 1914	NE 1893 9999 1914 1894 1917 1915
253630 42.60 -97.27 1370 HARTINGTON 1892 1893 1891 1893 1893	NE 1891 9999 1894 1892 1896 1895
253660 40.65 -98.38 1940 HASTINGS 4N 1881 1907 1890 1907 1907	NE 1880 9999 1907 1892 1908 1908
253715 42.50 -102.70 3805 HAY SPRINGS 12S 1886 1893 1886 1893 1893	NE 1885 9999 1893 1887 1896 1894
253735 40.17 -97.58 1480 HEBRON 1888 1893 1886 1893 1893	NE 1886 9999 1893 1886 1894 1894
253910 40.43 -99.37 2320 HOLDREGE 1891 1901 1894 1901 1901	NE 1890 9999 1902 1892 1904 1901
254110 40.52 -101.63 3278 IMPERIAL 1890 1894 1890 1894 1894	NE 1890 9999 1894 1891 1898 1895
254440 41.25 -103.67 4760 KIMBALL 1888 1893 1887 1893 1893	NE 1887 9999 1893 1887 1895 1894

254900 41.15 -102.63 3832 LODGEPOLE 1895 1894 1894 1894 1894	NE 1894 9999 1894 1894 1894 1895
254985 41.28 -98.97 2065 LOUP CITY 1895 1902 1895 1902 1902	NE 1894 9999 1902 1896 1905 1903
255080 41.83 -97.45 1580 MADISON 1884 1898 1890 1898 1898	NE 1884 9999 1898 1885 1898 1899
255310 40.20 -100.60 2530 MCCOOK 1883 1909 1889 1909 1909	NE 1882 9999 1909 1884 1912 1910
255470 42.92 -101.68 3250 MERRIMAN 1900 1915 1915 1915 1915	NE 1897 9999 1915 1916 1918 1916
255565 40.52 -98.95 2160 MINDEN 1900 1884 1900 1900	NE 1878 9999 1901 1884 1900 1900 1880
256040 41.50 -98.77 1960 NORTH LOUP 1887 1895 1890 1895 1895	NE 1887 9999 1896 1888 1895 1895
256135 42.07 -97.97 1710 OAKDALE 1883 1893 1888 1893 1893	NE 1883 9999 1893 1889 1893 1894
256570 40.10 -96.15 1185 PAWNEE CITY 1880 1903 1887 1903 1903	NE 1878 9999 1903 1882 1905 1904
256970 42.07 -100.25 2690 PURDUM 1903 1902 1902 1902 1902	NE 1902 9999 1902 1902 1902 1903
257070 40.10 -98.52 1720 RED CLOUD 1873 1901 1895 1901 1901	NE 1872 9999 1901 1872 1903 1902
257515 41.27 -98.47 1775 SAINT PAUL 1897 1900 1895 1900 1900	NE 1895 9999 1901 1897 1903 1902
257715 40.90 -97.10 1480 SEWARD 1888 1900 1885 1900 1900	NE 1885 9999 1900 1887 1903 1901
258395 40.67 -96.18 1100 SYRACUSE 1871 1894 1871 1894 1894	NE 1871 9999 1894 1872 1895 1895
258465 40.37 -96.22 1150 TECUMSEH 1879 1893 1884 1893 1893	NE 1878 9999 1893 1885 1897 1894
258480 41.77 -96.22 1040 TEKAMAH 1891 1893 1890 1893 1893	NE 1890 9999 1893 1890 1894 1894
258915 42.27 -96.87 1390 WAKEFIELD 1894 1897 1897 1897 1897	NE 1894 9999 1899 1898 1900 1897
259090 40.87 -96.15 1100 WEEPING WATER 1909 1879 1907 1882 1907 1907	NE 1878 9999 1908 1882 1907
259510 40.87 -97.60 1610 YORK 1901 1892 1901 1901	NE 1884 9999 1902 1893 1904 1903 1885

North Dakota

320941 48.83 -100.45 1640 BOTTINEAU 1893 1892 1892 1892 1892	ND 1892 9999 1893 1892 1893 1892
321871 48.90 -103.30 1952 CROSBY 1907 1907 1907 1907 1907	ND 1907 9999 1909 1908 1909 1908

322188 46.88 -102.80 2460 DICKINSON EXP STN ND 1891 9999 1895 1892 1893
1894 1891 1893 1891 1893 1893
322365 47.35 -102.65 2232 DUNN CENTER 2SW ND 1918 9999 1920 1920 1921
1919 1920 1919 1919 1919 1919
323207 46.05 -100.67 1675 FORT YATES 4SW ND 1882 9999 1892 1883 1895
1893 1883 1892 1882 1892 1892
323287 46.15 -98.40 1435 FULLERTON 1ESE ND 1898 9999 1899 1898 1898
1899 1899 1898 1898 1898 1898
323594 48.42 -97.42 827 GRAFTON ND 1891 9999 1893 1891 1895 1893
1892 1892 1891 1892 1892
323621 47.93 -97.08 830 GRAND FORKS UNIVERSITY ND 1887 9999 1892 1887
1896 1893 1887 1892 1887 1892 1892
324178 45.98 -102.65 2680 HETTINGER ND 1905 9999 1908 1907 1907 1907
1908 1907 1907 1907 1907
324203 47.45 -97.07 910 HILLSBORO 3N ND 1905 9999 1906 1905 1908 1905
1906 1905 1905 1905 1905
324418 46.88 -98.68 1467 JAMESTOWN STATE HOSPITAL ND 1891 9999 1894 1892
1896 1893 1892 1893 1892 1893 1893
324958 48.75 -98.33 1615 LANGDON EXPERIMENT STN ND 1896 9999 1897 1897
1898 1897 1897 1897 1896 1897 1897
325220 46.43 -97.68 1110 LISBON ND 1897 9999 1904 1898 1903 1904 1898
1903 1897 1903 1903
325479 46.80 -100.90 1750 MANDAN EXPERIMENT STN ND 1913 9999 1913 1913
1916 1914 1913 1913 1913 1913 1913
325660 47.50 -97.32 935 MAYVILLE ND 1893 1988 1895 1896 1896 1893
1895 1893 1893 1893 1893
326015 46.67 -100.25 1800 MOFFIT 3SE ND 1889 9999 1894 1890 1898 1896
1889 1894 1889 1894 1894
326155 46.38 -102.33 2515 MOTT ND 1907 9999 1909 1907 1910 1908 1908
1907 1907 1907 1907
326255 46.50 -99.77 1980 NAPOLEON ND 1889 9999 1894 1889 1893 1893
1890 1892 1889 1892 1892
326315 46.55 -102.87 2639 NEW ENGLAND ND 1888 9999 1894 1888 1896
1896 1889 1894 1889 1894 1894
326947 48.97 -97.23 790 PEMBINA ND 1871 9999 1899 1871 1899 1898
1872 1898 1889 1898 1898
327530 46.88 -102.32 2470 RICHARDTON ABBEY ND 1916 9999 1917 1917 1920
1916 1918 1916 1916 1916 1916
328792 48.35 -100.40 1480 TOWNER 2NE ND 1896 9999 1897 1897 1898 1896
1898 1898 1898 1898 1898
329100 46.32 -96.60 956 WAHPETON 3N ND 1889 9999 1892 1889 1893 1893
1889 1892 1889 1892 1892
329445 48.62 -100.30 1460 WILLOW CITY ND 1891 9999 1893 1891 1894 1892
1892 1892 1891 1892 1892

Ohio

331072 40.82 -82.97 955 BUCYRUS OH 1889 9999 1893 1889 1896 1894
1891 1893 1889 1893 1893

331152 40.27 -81.00 1260 CADIZ OH 1903 9999 1904 1904 1904 1904 1903
1903 1903 1903 1903

331541 41.05 -81.93 1180 CHIPPEWA LAKE OH 1857 9999 1895 1859 1899
1896 1858 1895 1882 1895 1895

331592 39.62 -82.95 673 CIRCLEVILLE OH 1887 9999 1896 1896 1898 1895
1887 1895 1895 1895 1895

331890 40.25 -81.87 760 COSHOCTON WPC PLANT OH 1908 9999 1916 1916 1919
1916 1908 1915 1915 1915 1915

332119 40.28 -83.07 868 DELAWARE OH 1896 9999 1896 1896 1897 1896
1897 1896 1896 1896 1896

332791 41.05 -83.67 768 FINDLAY WPCC OH 1886 9999 1894 1887 1894 1893
1888 1893 1886 1893 1893

333375 40.10 -84.65 1024 GREENVILLE WATER PLANT OH 1885 9999 1893 1886
1896 1895 1887 1893 1886 1893 1893

333758 39.20 -83.62 1100 HILLSBORO OH 1836 9999 1893 1836 1894 1894
1855 1893 1885 1893 1893

333780 41.30 -81.15 1230 HIRAM OH 1855 9999 1895 1855 1894 1894 1856
1893 1874 1893 1893

334189 40.65 -83.60 995 KENTON OH 1862 9999 1894 1862 1896 1893 1863
1893 1881 1893 1893

335041 39.65 -81.85 660 MCCONNELLSVILLE LOCK 7 OH 1884 9999 1895 1885
1894 1894 1885 1893 1884 1893 1893

335297 40.55 -81.92 819 MILLERSBURG OH 1916 9999 1920 1919 1922 1919
1916 1919 1919 1919 1919

335315 40.72 -80.90 1145 MILLPORT 2NW OH 1892 9999 1895 1893 1895 1893
1894 1893 1893 1893 1893

335669 41.37 -84.15 682 NAPOLEON OH 1885 9999 1893 1886 1893 1893
1885 1893 1885 1893 1893

336118 41.27 -82.62 670 NORWALK WWTP OH 1861 9999 1896 1861 1896
1896 1862 1894 1885 1894 1894

336196 41.27 -82.22 816 OBERLIN OH 1849 9999 1891 1855 1892 1891 1856
1891 1882 1891 1891

336600 39.83 -81.92 1020 PHILO 3SW OH 1895 9999 1895 1897 1896 1895
1895 1895 1895 1895 1895

336781 38.75 -82.88 540 PORTSMOUTH-SCIOTOVILLE OH 1824 9999 1894 1826
1893 1894 1830 1893 1858 1893 1893

338313 41.12 -83.17 740 TIFFIN OH 1873 9999 1894 1873 1895 1894 1875
1893 1882 1893 1893

338534 40.83 -83.28 854 UPPER SANDUSKY OH 1882 9999 1893 1883 1893
1893 1883 1893 1882 1893 1893

338552 40.10 -83.78 1000 URBANA WWTP OH 1832 9999 1895 1855 1897

1895 1853 1895 1883 1895 1895
 338769 41.20 -80.82 900 WARREN 3S OH 1882 9999 1894 1883 1894 1894
 1882 1893 1885 1893 1893
 338822 41.52 -84.15 750 WAUSEON WATER PLANT OH 1869 9999 1894 1871
 1896 1894 1873 1893 1870 1893 1893
 338830 39.12 -82.98 560 WAVERLY OH 1883 9999 1893 1883 1894 1893
 1883 1893 1883 1893 1893
 339312 40.78 -81.92 1020 WOOSTER EXP STN OH 1864 9999 1891 1864 1894
 1891 1869 1891 1882 1891 1891

South Dakota

390020 45.45 -98.43 1296 ABERDEEN WSO AP SD 1890 9999 1894 1892 1897
 1894 1890 1893 1890 1893 1893
 390043 43.50 -99.07 1680 ACADEMY 2NE SD 1898 9999 1898 1898 1899 1898
 1899 1898 1898 1898 1898
 390128 43.65 -97.78 1350 ALEXANDRIA SD 1882 9999 1893 1882 1897 1893
 1883 1893 1887 1893 1893
 391392 43.30 -96.67 1345 CANTON 4WNW SD 1889 9999 1896 1889 1897 1896
 1889 1896 1890 1896 1896
 391739 44.88 -97.73 1780 CLARK SD 1889 9999 1894 1889 1895 1894 1889
 1893 1890 1893 1893
 391972 43.97 -101.87 2414 COTTONWOOD 2E SD 1909 9999 1910 1910 1910
 1910 1909 1909 1909 1909 1909
 392429 45.05 -101.60 2370 DUPREE SD 1922 9999 1923 1923 1923 1923 1922
 1922 1922 1922 1922
 392797 45.78 -99.63 1870 EUREKA SD 1897 9999 1897 1897 1897 1897 1899
 1898 1898 1898 1898
 392927 45.03 -99.13 1570 FAULKTON 1NW SD 1892 9999 1894 1893 1895 1894
 1893 1893 1892 1893 1893
 393029 44.03 -98.07 1231 FORESTBURG 3NE SD 1891 9999 1894 1891 1893
 1894 1891 1893 1891 1893 1893
 393217 44.07 -99.07 1720 GANN VALLEY 4NW SD 1886 9999 1894 1889 1895
 1894 1888 1893 1889 1893 1893
 393832 44.52 -99.47 1890 HIGHMORE 1W SD 1887 9999 1894 1887 1898 1894
 1888 1894 1887 1894 1894
 394007 43.43 -103.47 3560 HOT SPRINGS SD 1897 9999 1898 1898 1900 1898
 1899 1897 1897 1897 1897
 394037 44.02 -97.52 1560 HOWARD SD 1890 9999 1895 1892 1896 1895
 1890 1893 1890 1893 1893
 394516 43.92 -99.87 1700 KENNEBEC SD 1892 9999 1894 1892 1894 1894
 1893 1893 1892 1893 1893
 395456 45.15 -98.50 1290 MELLETTE SD 1892 9999 1896 1893 1898 1896
 1893 1895 1892 1895 1895
 395481 43.23 -97.58 1324 MENNO SD 1896 9999 1896 1896 1898 1896 1896

1896 1896 1896 1896
 395536 45.20 -96.63 1160 MILBANK 2SSW SD 1889 9999 1893 1890 1896 1893
 1889 1893 1890 1893 1893
 395891 43.88 -100.70 2320 MURDO SD 1907 9999 1908 1909 1908 1908
 1907 1908 1908 1908 1908
 396170 44.45 -100.42 1660 OAHE DAM SD 1909 9999 1910 1909 1913 1910
 1909 1909 1909 1909 1909
 396597 44.38 -100.28 1726 PIERRE FAA AP SD 1866 9999 1891 1868 1894 1891
 1868 1891 1890 1891 1891
 396947 44.12 -103.28 3450 RAPID CITY SD 1888 9999 1888 1890 1891 1888
 1889 1894 1894 1894 1894
 398622 42.75 -96.92 1190 VERMILLION 2SE SD 1883 9999 1894 1885 1893 1894
 1883 1893 1890 1893 1893
 398932 44.92 -97.15 1746 WATERTOWN FAA AP SD 1891 9999 1894 1891 1896
 1894 1892 1893 1891 1893 1893
 399442 43.50 -100.48 2180 WOOD SD 1913 9999 1914 1913 1914 1914 1913
 1913 1913 1913 1913

Utah

420086 37.43 -112.48 7040 ALTON UT 1915 9999 1916 1917 1917 1916 1917
 1915 1915 1915 1915
 420519 38.30 -112.65 5940 BEAVER UT 1889 1990 1893 1894 1899 1893
 1890 1911 1911 1911 1911
 420738 37.62 -109.48 6040 BLANDING UT 1904 9999 1904 1904 1908 1904
 1905 1906 1906 1906 1906
 420788 37.28 -109.55 4315 BLUFF UT 1911 9999 1911 1911 1915 1911 1911
 1911 1911 1911 1911
 421731 41.55 -112.12 4220 CORINNE UT 1870 9999 1897 1870 1899 1898
 1870 1897 1874 1897 1897
 422101 39.28 -112.65 4590 DESERET UT 1891 9999 1893 1892 1895 1891
 1892 1893 1891 1893 1893
 422253 40.17 -110.40 5520 DUCHESNE UT 1906 9999 1906 1906 1906 1908
 1908 1906 1906 1906 1906
 422418 39.95 -111.95 4690 ELBERTA UT 1902 1992 1904 1903 1904 1903
 1903 1902 1902 1902 1902
 422592 37.77 -111.60 5810 ESCALANTE UT 1901 9999 1901 1903 1901 1902
 1902 1901 1901 1901 1901
 422828 38.95 -112.32 5120 FILLMORE UT 1892 9999 1895 1893 1895 1894
 1893 1893 1892 1893 1893
 422996 40.28 -109.87 5050 FORT DUCHESNE UT 1887 9999 1898 1887 1897
 1897 1888 1909 1887 1909 1909
 423418 39.00 -110.17 4070 GREEN RIVER AVIATION UT 1893 9999 1893 1893 1894
 1894 1893 1893 1893 1893

423611 38.37 -110.72 4308 HANKSVILLE UT 1910 9999 1911 1911 1911 1911
 1910 1910 1910 1910 1910
 423809 40.50 -111.42 5630 HEBER UT 1893 9999 1893 1893 1895 1894 1894
 1893 1893 1893 1893
 423896 39.48 -111.02 7280 HIAWATHA UT 1916 1992 1922 1923 1925 1922
 1916 1921 1921 1921 1921
 424508 37.05 -112.53 4950 KANAB UT 1872 9999 1903 1903 1905 1902 1877
 1904 1902 1905 1905
 424856 41.82 -111.32 5980 LAKETOWN UT 1900 9999 1902 1900 1902 1901
 1902 1900 1900 1900 1900
 425065 39.57 -111.87 5300 LEVAN UT 1889 9999 1896 1892 1897 1896 1890
 1895 1890 1895 1895
 425148 38.40 -111.65 7070 LOA UT 1892 9999 1894 1892 1895 1893 1893
 1895 1895 1895 1895
 425186 41.75 -111.80 4790 LOGAN USU UT 1890 9999 1893 1891 1896 1894
 1890 1893 1891 1893 1893
 425402 39.25 -111.63 5740 MANTI UT 1892 9999 1894 1894 1894 1894 1893
 1893 1893 1893 1893
 425733 38.58 -109.55 4021 MOAB UT 1889 9999 1894 1889 1896 1893 1891
 1893 1889 1893 1893
 425752 37.80 -113.92 5460 MODENA UT 1901 9999 1901 1901 1901 1901
 1903 1901 1901 1901 1901
 425826 41.03 -111.65 5080 MORGAN COMO SPRINGS UT 1903 9999 1904 1904
 1904 1904 1903 1903 1903 1903 1903
 426404 41.25 -111.95 4350 OGDEN PIONEER P H UT 1870 9999 1904 1871 1902
 1903 1871 1902 1870 1902 1902
 426601 37.82 -112.43 6610 PANGUITCH UT 1904 9999 1912 1911 1913 1912
 1904 1911 1911 1911 1911
 426686 37.83 -112.83 6000 PAROWAN POWER PLANT UT 1890 9999 1894 1890
 1893 1894 1891 1893 1890 1893 1893
 427260 38.77 -112.08 5300 RICHFIELD RADIO KSVC UT 1889 9999 1894 1890 1896
 1894 1889 1909 1909 1909 1909
 427318 41.15 -112.00 4400 RIVERDALE UT 1914 1991 1915 1914 1914 1915
 1915 1914 1914 1914 1914
 427516 37.12 -113.57 2770 SAINT GEORGE UT 1877 9999 1894 1890 1895 1893
 1878 1901 1889 1901 1893
 427714 39.25 -112.10 5300 SCIPIO UT 1894 9999 1896 1896 1895 1895 1895
 1895 1895 1895 1895
 427909 40.55 -111.50 6010 SNAKE CREEK PH UT 1914 9999 1914 1915 1914
 1916 1914 1914 1914 1914 1914
 428119 40.08 -111.60 4720 SPANISH FORK PH UT 1909 9999 1909 1910 1909
 1909 1909 1909 1909 1909 1909
 428705 38.97 -109.72 5100 THOMPSON UT 1911 9999 1911 1912 1911 1913
 1911 1911 1911 1911 1911

428771 40.53 -112.30 5070 TOOEELE UT 1896 9999 1896 1896 1899 1898
1896 1896 1896 1896 1896
428973 40.37 -111.90 4497 UTAH LAKE LEHI UT 1904 9999 1905 1905 1909
1905 1904 1905 1905 1905 1905
429111 40.45 -109.52 5260 VERNAL AP UT 1894 9999 1929 1917 1928 1929
1929 1928 1915 1928 1928
429382 40.73 -114.03 4237 WENDOVER AWOS UT 1911 9999 1911 1912 1912
1913 1911 1911 1911 1911 1911
429595 41.53 -111.15 6315 WOODRUFF UT 1897 9999 1899 1897 1900 1898
1899 1902 1902 1902 1902
429717 37.22 -112.98 4050 ZION NATIONAL PARK UT 1904 9999 1906 1905 1906
1906 1906 1904 1904 1904 1904

Wisconsin

470349 46.57 -90.97 650 ASHLAND EXPERIMENT FARM WI 1856 9999 1893 1894
1899 1894 1856 1893 1893 1893 1893
470991 44.87 -88.98 1080 BOWLER WI 1894 9999 1894 1895 1896 1895
1894 1894 1894 1894 1894
471078 42.62 -89.38 790 BROADHEAD WI 1897 9999 1898 1899 1897 1898
1898 1897 1897 1897 1897
472001 42.68 -90.12 930 DARLINGTON WI 1901 9999 1901 1902 1903 1901
1901 1901 1901 1901 1901
472839 43.80 -88.45 760 FOND DU LAC WI 1886 9999 1891 1889 1891 1892
1886 1891 1888 1891 1891
473405 44.12 -89.53 1076 HANCOCK EXPERIMENT FARM WI 1902 9999 1902 1902
1902 1902 1904 1902 1902 1902 1902
473471 44.40 -90.73 953 HATFIELD HYDRO PLANT WI 1908 1993 1910 1908 1910
1908 1909 1908 1908 1908 1908
474546 42.83 -90.78 1040 LANCASTER 4WSW WI 1888 9999 1893 1889 1894
1893 1888 1892 1888 1892 1892
475017 44.10 -87.68 660 MANITOWOC WI 1851 9999 1892 1853 1896 1893
1859 1892 1851 1892 1892
475120 44.65 -90.13 1250 MARSHFIELD EXPERIMENT FARM WI 1912 9999 1914
1913 1913 1915 1913 1913 1913 1913 1913
475255 45.13 -90.35 1470 MEDFORD WI 1889 9999 1891 1891 1891 1892
1891 1891 1890 1891 1891
475474 43.07 -88.03 726 MILWAUKEE MT MARY COL WI 1856 9999 1894 1856
1894 1895 1859 1894 1887 1894 1894
475516 45.88 -89.73 1580 MINOCQUA DAM WI 1903 9999 1905 1904 1907
1903 1904 1903 1903 1903 1903
475932 44.37 -88.72 805 NEW LONDON WI 1856 9999 1896 1856 1899 1897
1857 1896 1888 1896 1896
476208 44.90 -87.95 660 OCONTO 4W WI 1890 9999 1892 1891 1894 1892
1890 1891 1890 1891 1891

476330	44.03	-88.55	750 OSHKOSH	WI 1888 9999 1891 1888 1894 1892
1889	1891	1888	1891 1891	
476718	43.52	-89.43	800 PORTAGE	WI 1887 9999 1896 1891 1899 1897 1887
1896	1890	1896	1896	
476827	43.03	-91.15	658 PRAIRIE DU CHIEN	WI 1822 9999 1891 1830 1895 1892
1836	1891	1887	1891 1891	
476922	42.70	-87.77	595 RACINE	WI 1855 9999 1896 1856 1900 1897 1896
1896	1888	1896	1896	
478027	45.82	-91.88	1100 SPOONER EXPERIMENT FARM	WI 1894 9999 1894 1896
1894	1895	1895	1894 1894 1894 1894	
478110	44.97	-90.93	1080 STANLEY	WI 1903 9999 1904 1903 1906 1904
1904	1903	1903	1903 1903	
478827	43.57	-90.92	1185 VIROQUA 2NW	WI 1889 9999 1892 1889 1892 1891
1891	1891	1889	1891 1891	
478919	43.18	-88.73	820 WATERTOWN	WI 1891 9999 1892 1892 1892 1893
1891	1891	1891	1891 1891	

Wyoming

480140	43.78	-111.03	6430 ALTA 1NNW	WY 1909 9999 1910 1910 1910 1910
1909	1909	1909	1909 1909	
480540	44.38	-108.05	3837 BASIN	WY 1898 9999 1899 1898 1899 1899 1900
1903	1903	1903	1902	
480915	42.25	-111.03	6110 BORDER 3N	WY 1902 1993 1903 1902 1906 1903
1904	1902	1902	1902 1902	
481175	44.50	-109.18	5156 BUFFALO BILL DAM	WY 1905 9999 1906 1905 1907
1906	1907	1905	1905 1905	
481675	41.15	-104.82	6130 CHEYENNE WSFO	WY 1870 9999 1873 1872 1874
1873	1871	1884	1884 1884 1884	
481730	41.75	-104.82	5304 CHUGWATER	WY 1900 9999 1900 1901 1901 1900
1900	1900	1900	1900 1900	
481905	44.93	-104.20	3570 COLONY	WY 1914 9999 1917 1914 1916 1915
1916	1915	1914	1915 1915	
482595	43.23	-108.93	5575 DIVERSION DAM	WY 1907 9999 1908 1908 1911
1908	1907	1907	1907 1907 1907	
482715	43.57	-109.63	6960 DUBOIS	WY 1905 9999 1907 1907 1910 1908
1907	1907	1907	1907 1907	
483100	41.27	-110.95	6825 EVANSTON 1E	WY 1889 9999 1898 1889 1899 1899
1889	1898	1891	1898 1898	
484065	41.53	-109.47	6089 GREEN RIVER	WY 1897 9999 1898 1898 1903 1898
1897	1897	1897	1897 1897	
485345	44.55	-110.40	7770 LAKE YELLOWSTONE	WY 1904 9999 1905 1904 1908
1905	1904	1904	1904 1904 1904	
485415	41.32	-105.68	7266 LARAMIE AP	WY 1866 9999 1892 1866 1895 1892
1868	1892	1887	1892 1892	

485830 42.75 -104.48 5090 LUSK 2SW 1889 1893 1889 1893 1893	WY 1889 9999 1891 1889 1893 1892
486195 43.40 -106.28 4815 MIDWEST 1923 1922 1922 1922 1922	WY 1922 9999 1923 1923 1925 1924
486440 43.85 -110.58 6798 MORAN 5WNW 1912 1912 1911 1911 1911 1911	WY 1911 9999 1911 1912 1913
486660 43.85 -104.22 4315 NEWCASTLE 1906 1906 1906 1906 1906	WY 1906 9999 1906 1906 1906 1906
487105 42.47 -106.85 5930 PATHFINDER DAM 1899 1899 1899 1899 1899 1899	WY 1899 9999 1899 1899 1901
487115 43.25 -108.68 5440 PAVILLION 1919 1919 1919 1919 1919	WY 1919 9999 1919 1919 1922 1920
487240 41.17 -104.15 5180 PINE BLUFFS 5W 1901 1901 1900 1900 1900 1900	WY 1900 9999 1901 1901 1904
487260 42.87 -109.87 7175 PINEDALE 1907 1919 1906 1919 1919	WY 1906 9999 1906 1907 1907 1907
487388 44.78 -108.75 4370 POWELL FIELD STATION 1909 1908 1907 1907 1907 1907 1907	WY 1907 9999 1908 1907
487760 43.02 -108.38 4950 RIVERTON 1907 1907 1907 1907 1907	WY 1907 9999 1908 1907 1907 1908
487845 41.60 -109.07 6741 ROCK SPRINGS FAA AP 1909 1908 1908 1908 1908 1908	WY 1908 9999 1909 1908 1908
487990 41.45 -106.82 6790 SARATOGA 1891 1900 1897 1900 1900	WY 1889 9999 1900 1891 1902 1900
488160 44.83 -106.83 3750 SHERIDAN FIELD STATION 1894 1893 1891 1898 1898 1898 1898	WY 1891 9999 1892 1891
488995 42.08 -104.22 4098 TORRINGTON EXP FARM 1923 1924 1922 1922 1922 1922 1922	WY 1922 9999 1923 1923
489615 42.12 -104.95 4638 WHEATLAND 4N 1892 1889 1893 1890 1897 1897	WY 1889 9999 1891 1891 1892
489770 44.02 -107.97 4060 WORLAND 1908 1907 1907 1907 1907	WY 1907 9999 1909 1908 1909 1907
489905 44.97 -110.70 6230 YELLOWSTONE PARK MAMMOTH 1886 1888 1888 1889 1903 1903 1903 1902	WY 1886 9999 1887